

# sappi

Inspired by life



**Sappi Southern Africa**  
2016 Sustainability Report



# About this report

## About our theme

Our strategic direction encapsulated in our 2020Vision is based on using the power of One Sappi and intentional evolution to extract previously untapped value from our timber resources by unlocking and commercialising the potential of woodfibre-based bioproducts in addition to our traditional focus on value-adding pulp and paper. The theme of this report highlights that our activities not only leverage value from woodfibre, but also unlock that value for our stakeholders – including our shareholders, our employees and the communities where our operations are situated.



## Scope of this report

This Sappi Southern Africa (SSA) Sustainability Report is aligned with the Sappi Limited 2016 Annual Integrated Report and Group Sustainability Report (available online at [www.sappi.com](http://www.sappi.com)) in December and January respectively and covers the period from the beginning of October 2015 to the end of September 2016. Sappi Limited's compliance with the King III Code on Corporate Governance (King III) is also available online<sup>1</sup>.

In 2015, we stated that we would report on the contribution we made towards achieving the global sustainable development goals (SDGs) in Southern Africa. The SDG indicators are closely aligned with those of the GRI and we are pleased to report that an analysis indicated that in many cases, we already report against the SDGs in terms of our GRI reporting in our Group Sustainability Report.

## Reporting framework



We consider material issues to be those that could significantly impact our ability to create stakeholder value. In determining materiality, we consider our external environment, stakeholder concerns and expectations, as well as other risks and opportunities. In addition, we take account of our commitments in terms of our Group Sustainability Charter, internal policies and the UNGC to which we have been a signatory since 2008.

## Certifications

We use the Forest Stewardship Council® (FSC®)\* certification systems, as well as ISO 9001 and 14001 series of certifications, and OHSAS 18001. For a detailed view of our certifications per operations, please refer to the FAQs on 'Our certifications'

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

### Navigation aids:

-  Online information
-  Further reading

### Sappi's 3Ps



<sup>(1)</sup> Lignotech South Africa, our 50:50 joint venture (JV) with Borregaard at Sappi Saiccor Mill, is excluded from this report as we do not manage this operation. However, the JV is included in our safety statistics.

\* All references to the (FSC®) in this report are, according to the following definition: FSC in terms of the Forest Stewardship Council (FSC) scheme – refers to types of certification. In order for land to achieve FSC endorsement, its forest management practices must meet the FSC's 10 principles and other assorted criteria. Logs with FSC – C012316 (certified originate from own plantations as well as on the Sappi Grant Scheme (FSC – C017054) with other logs from controlled sources) is for manufacturers of forest products, including paper manufacturers like Sappi, Chain-of-Custody certification. This involves independent verification of the supply chain, which identifies and tracks the timber through all stages of the production process from the tree farm to the end product. Sappi's Mills in South Africa are licensed: Ngodwana Mill – FSC C021636, Saiccor Mill-FSC C011012, Stanger Mill – FSC C019831, Tugela Mill – FSC C012468.

**Stay informed:** For a more comprehensive overview of our social, ethics, transformation and sustainability performance, please refer to:

Annual Integrated Report and Group  
Annual Financial Statements:

[www.sappi.com/annual-reports](http://www.sappi.com/annual-reports)

Quarterly results announcements  
and analyst presentations:

[www.sappi.com/quarterly-reports](http://www.sappi.com/quarterly-reports)

Group Sustainability  
Report:

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



Through the power of One Sappi – committed to collaborating and partnering with stakeholders – we aim to be a trusted and sustainable organisation with an exciting future in woodfibre.

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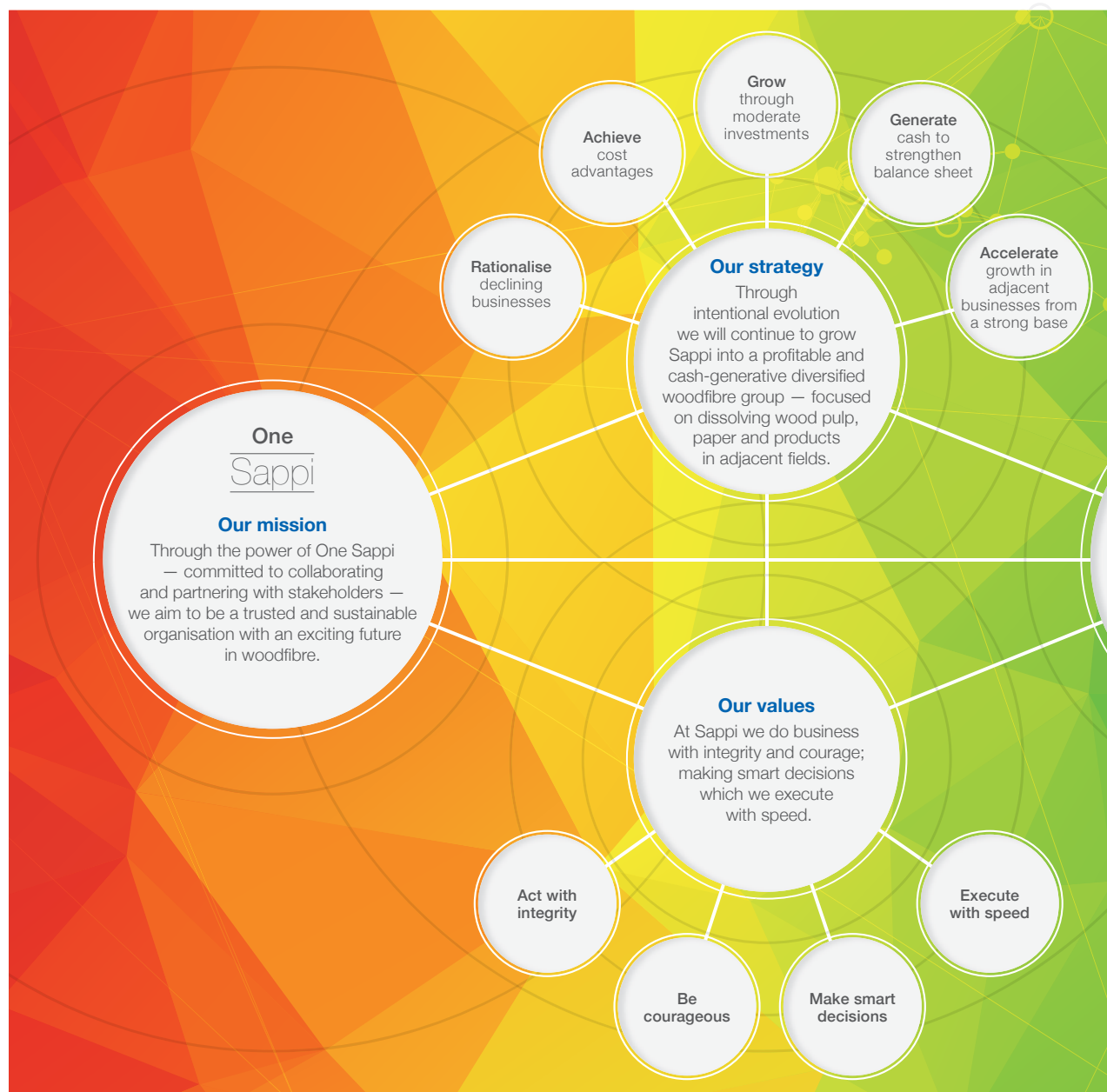
sappi | GalerieArt™

GalerieArt™ coated fine paper manufactured at Sappi's European mills is made from pulp bleached without the use of chlorine. The wood for this pulp is sourced from sustainably managed forests, plantations and controlled sources. These mills are third party certified according to internationally recognised standards including ISO 9001 quality and ISO 14001 and EMAS environmental certification. GalerieArt™ is acid free and fully recyclable.

Printed on 250 and 135g/m².

## Our mission, vision and values

### One Sappi — 2020Vision — Intentional evolution



How will you help make Sappi a better and greater company?

*S. Binnie*  
**Steve Binnie**  
Chief Executive Officer



**sappi**  
Inspired by life

## Our value-add to Southern Africa

### About Sappi Southern Africa

Sappi Southern Africa is an integrated forest products company that meets the needs of local and international customers through a wide range of products from three divisions:

- Specialised Cellulose (also known as dissolving wood pulp) is sold to converters for use in products such as textiles, clothing, cellophane wrap, pharmaceutical, beauty and household products. We are the world's largest manufacturer of dissolving wood pulp.
- The Paper and Paper Packaging division provides products including, paper pulp, newsprint, office and business papers, tissue wadding, containerboard (used to manufacture cardboard boxes) and packaging papers (for the agricultural, industrial and FMCG industries).
- Sappi Forests supplies over 82% of the woodfibre needs of Sappi Southern Africa from both our own and managed commercial plantations. All our own-grown wood is independently certified as well managed and ISO 9000 quality assured. Approximately 30% of our land is managed for biodiversity conservation, including wetlands, riparian zones and indigenous forests. Sappi supports mountain biking, trail running, birding and hiking in our plantations.

Sappi Southern Africa is a division of Sappi Limited (JSE: SAP); a global company headquartered in Johannesburg, South Africa, with approximately 12,000 employees worldwide, and manufacturing operations on three continents in seven countries and customers in over 150 countries. Learn more about Sappi at [www.sappi.com](http://www.sappi.com).

### Overview of the Southern African forestry sector

The forest sector (forestry and forest products) 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 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, and 6,000 in the timber board and 2,200 in the mining timber industries, while a further 11,000 workers are employed in miscellaneous jobs in forestry.<sup>(1)</sup>

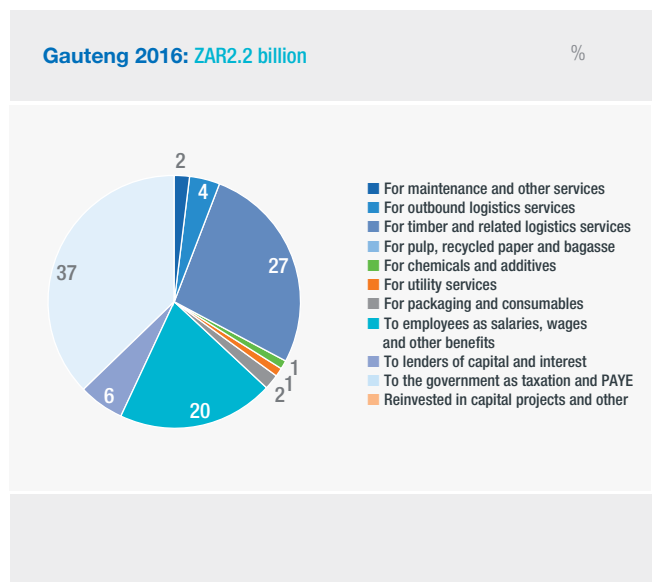
**“Today, while only 7% of the world’s forests are plantations, a third (33%) of the world’s forest products come from them. This ensures consumer demands for housing, paper and furniture can be met. In short, they are vital to the survival of the natural forest, which would otherwise be in even greater danger of over-use.”<sup>(2)</sup>**

**Kim Carstensen**

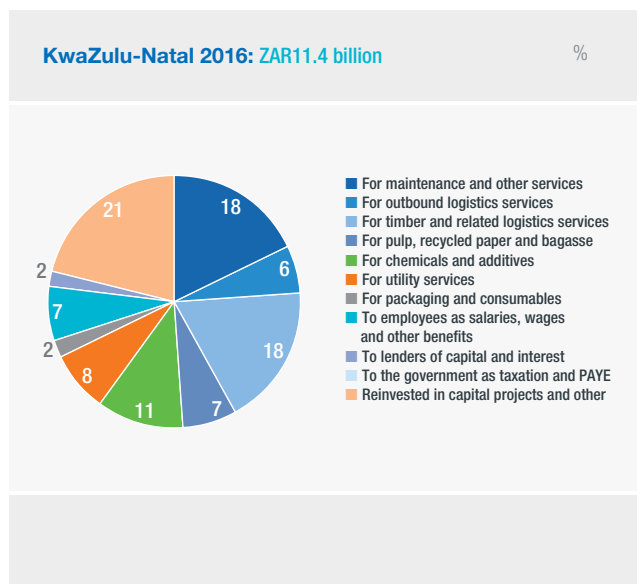
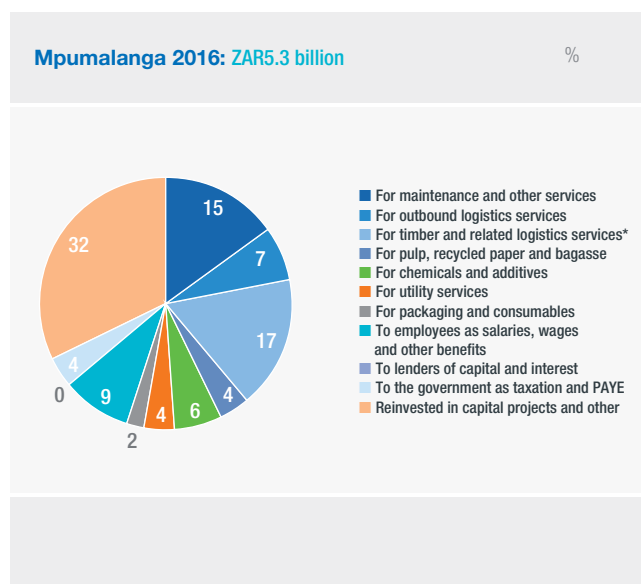
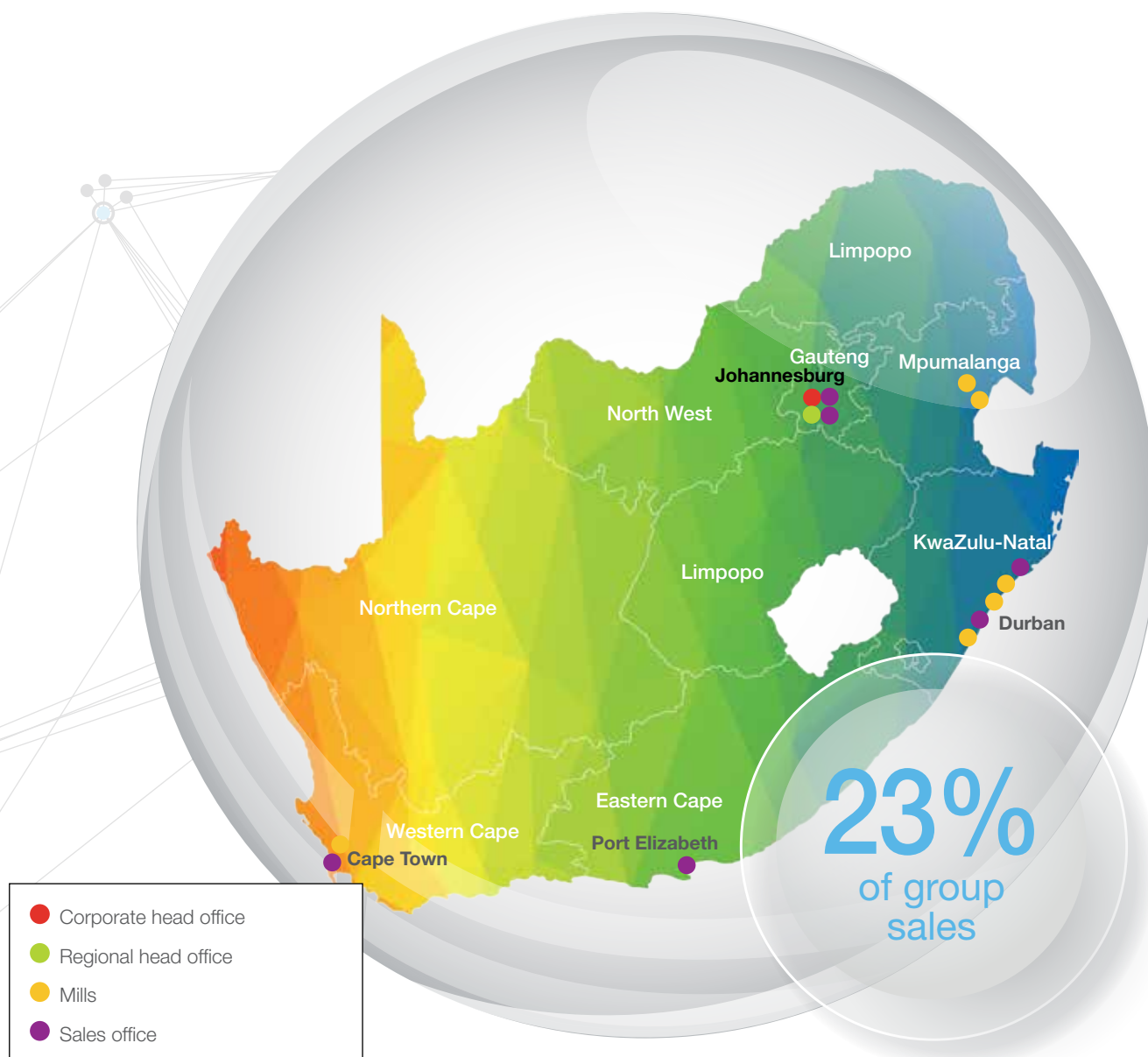
*Director-General of the Forest Stewardship Council*

<sup>(1)</sup> <http://www.gov.za/about-sa/forestry>

<sup>(2)</sup> <https://ic.fsc.org/en/news/the-root-of-the-matter/id/1351>



## Where we operate in Southern Africa





# Our sustainable business model in Southern Africa

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

## Inputs

### Financial capital (Sappi Southern Africa)

We manage our financial capital, including shareholders' equity, debt and reinvested capital to maintain a solid balance between growth, profitability and liquidity.

- Total assets: **ZAR24,650 million**

### Manufactured capital (Sappi Southern Africa)

Investing in building, maintaining, operating and improving this infrastructure requires significant financial capital, together with human and intellectual capital.

- Two paper mills, one paper and specialised cellulose mill, one specialised cellulose mill and one sawmill.

### Intellectual capital (Sappi group)

Our technology centres and research and development (R&D) initiatives promote a culture of innovation to support the development of commercially and environmentally sustainable solutions for the company. Our intellectual capital is closely aligned with our human capital.

- R&D spend: **US\$26 million** (including Exciter projects)
- Technology centres **in each region**



Prosperity

### Human capital (Sappi Southern Africa)

By creating a safe and healthy workplace for our people in which diversity is encouraged and valued, and providing them with ongoing development opportunities, we enhance productivity and our ability to service global markets.

- **4,644 employees, 130 fixed-term contractors**
- **70.5 average training hours per employee.**

### Social capital (Sappi Southern Africa)

Building relationships with our key stakeholders in a spirit of trust and mutual respect enhances both our licence to trade and our competitive advantage, thereby enabling more tangible business value creation.

- **Ongoing stakeholder engagement**
- CSR spend: **ZAR51 million**



People

### Natural capital (Sappi Southern Africa)

Recognising that our business depends on natural capital, we focus on managing and mitigating our impacts.

- **86MW power purchased, 135MW generated**
- Specific process water **extracted 49.3m³/adt**
- **388,000ha owned or leased plantations**, 100% FSC®-certified, with approximately **28.6 million tons** of standing timber
- Contracted supply covers a further almost **103,000ha**



Planet

\* IIRC – International Integrated Reporting Council.

\*\* Further information of Sappi's FSC®-certification is available in the glossary.

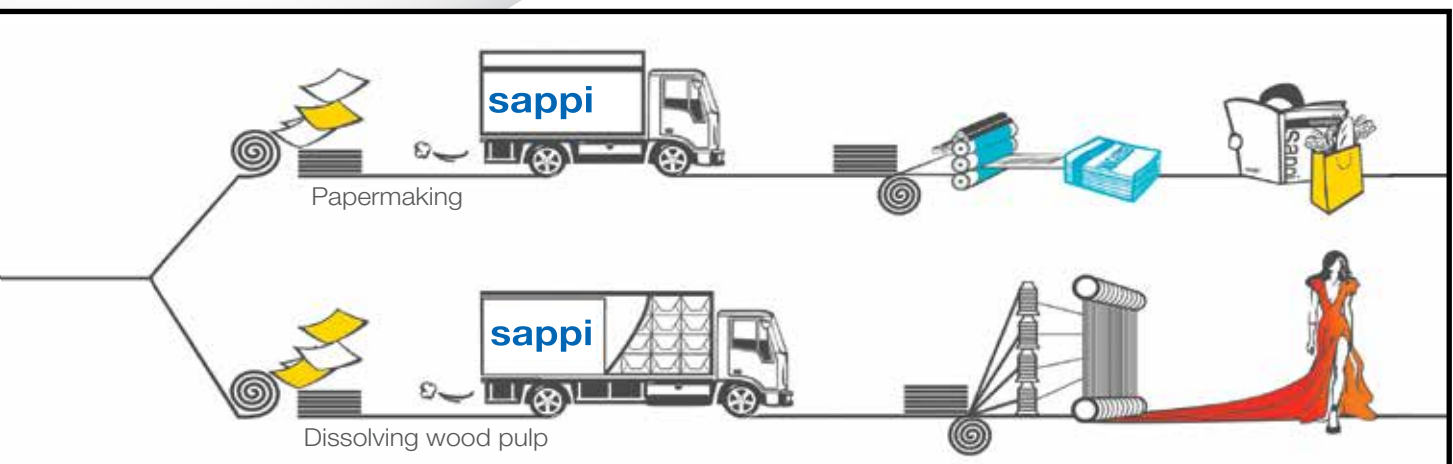
## Our processes



The papermaking and specialised cellulose (dissolving wood pulp) processes



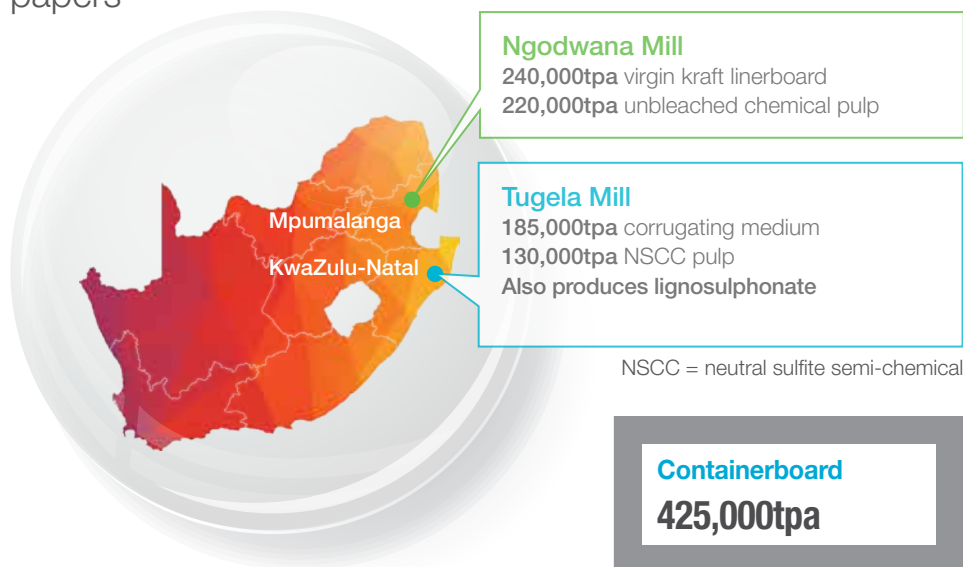
Currently, **natural capital, financial capital and human capital** are the most important in our drive to position Sappi as a **profitable and cash-generative diversified woodfibre group – focused on dissolving wood pulp, paper and products in adjacent fields.**



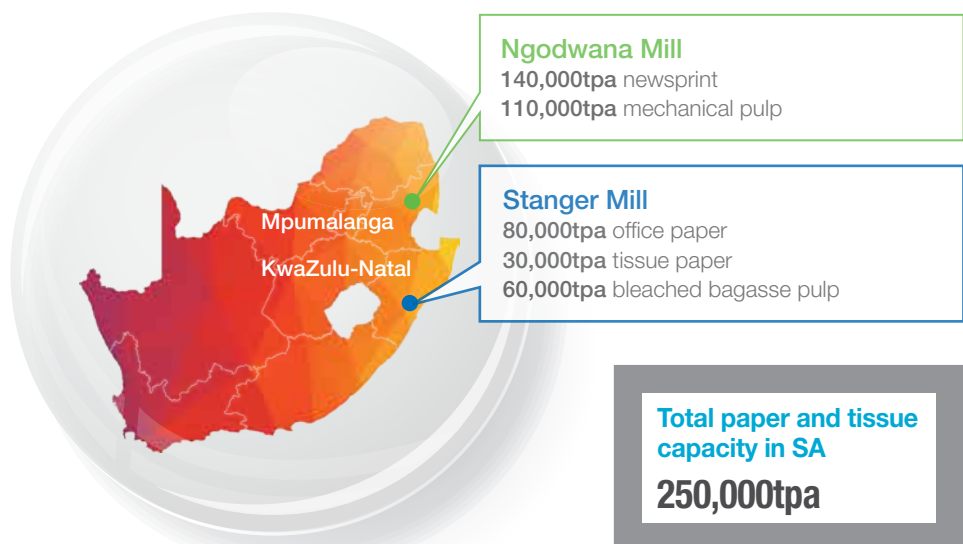
## Our operations

### Packaging and speciality papers

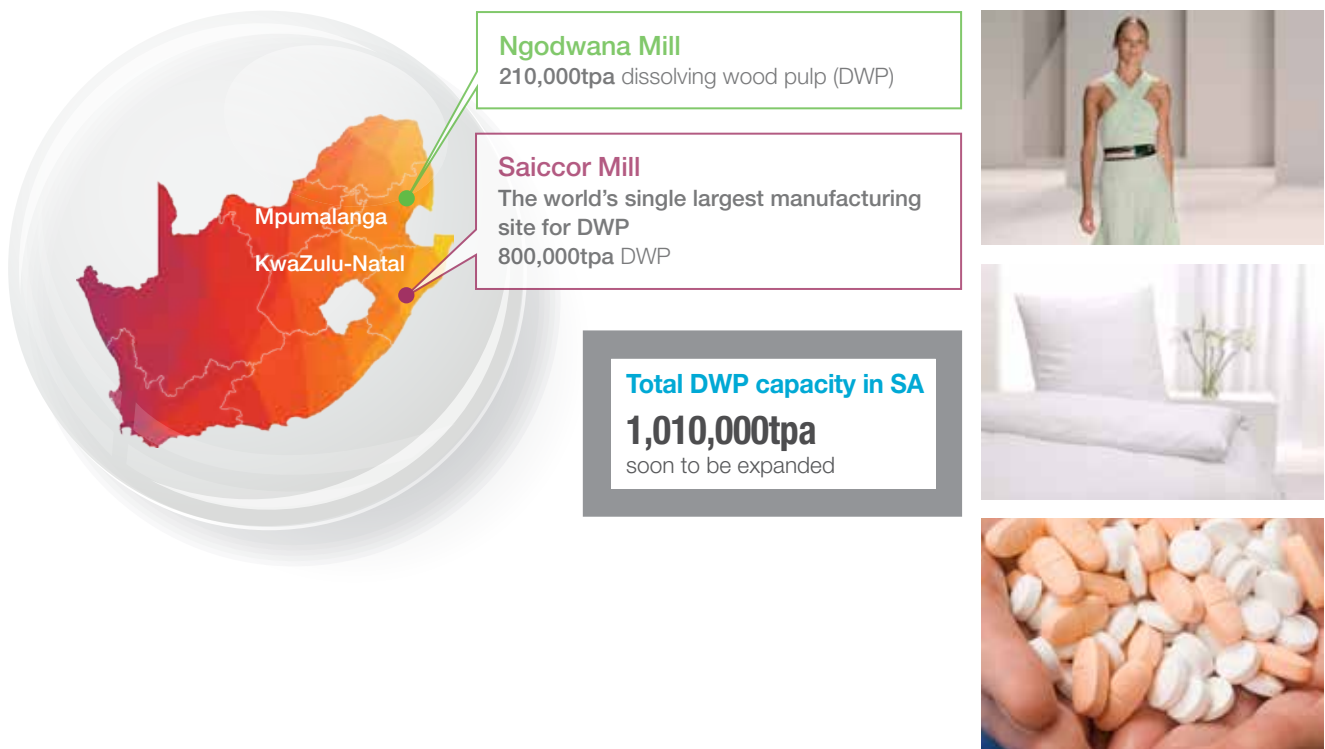
Please note that the figures given below are capacity figures.



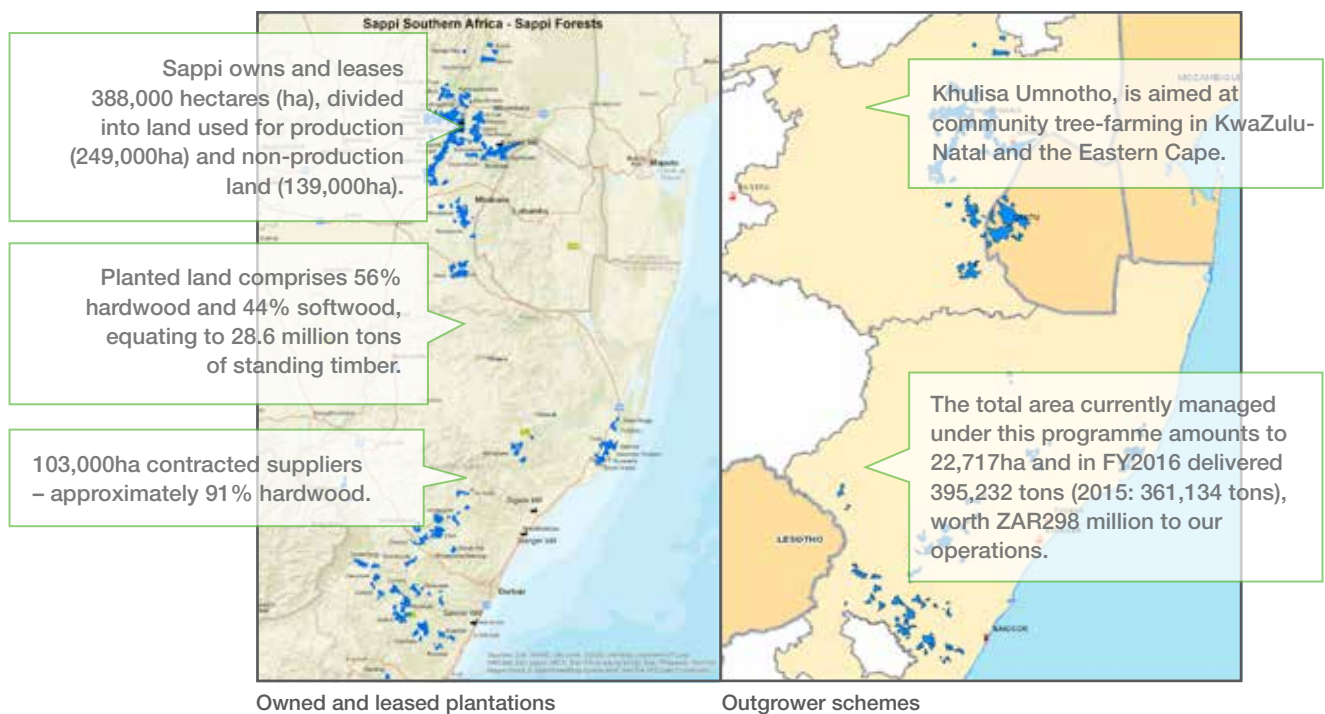
### Graphic papers



## Specialised cellulose



## Forests (own and outgrowers)





## Messages from our leadership

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 Prosperity, People and Planet 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 (SETS) Committee*

Sappi Southern Africa made a significant contribution to Sappi's financial performance in 2016, in terms of which the group achieved the targeted leverage of less than two times net debt to earnings before interest, taxes, depreciation and amortisation, earlier than expected.

In Southern Africa, specifically, sales of Ultraflute® were up by 23% and there was strong demand for dissolving wood pulp (DWP).

All our people have worked very hard to achieve this impressive result and I congratulate them on the agility and commitment they have demonstrated in embracing our intentional evolution strategy, 2020Vision and the One Sappi approach.

### An intensified focus on safety

Regrettably, our sound financial performance was overshadowed by our disappointing safety performance. There were four fatalities in our sawmilling and forestry operations involving one employee and three contractor fatalities. On behalf of Sappi, I would like to extend my sincere condolences to the families of the deceased.

While forestry is internationally regarded as one of the most dangerous occupations in the world, we are determined that all our people should go home safely at the end of every shift. Our view is that even one injury is one too many and accordingly, we have engaged experts from around the world to advise us on how we can improve our systems, training and overall approach. I urge all our employees and contractors to become involved in making our company a safer place to work. We cannot achieve our 2020Vision if we do not improve our safety performance.

### Treading more lightly on the planet

On a more positive note, we met our targets in terms of specific energy and water usage and continued to align with our goal of treading more lightly on the planet: renewable energy generated is now 44.6% – an increase of 9% over five years, while our energy self-sufficiency has increased by 10% over five



years and Scope 1 and 2 greenhouse gas emissions have declined by 16% and 17% respectively over five years. In addition, our energy costs as a percentage of costs of sales have decreased by 13% over five years.

Our high levels of renewable energy generated and energy self-sufficiency have meant that we have been able to insulate our business for the most part from interrupted power supply and also been able to expand our business by selling power back to the grid.

### Improving the lives of people

Our strategy of intentional evolution depends on our people being self-motivated, flexible and equipped to deal with the challenges of a constantly changing marketplace. To achieve this, we make ongoing investments in training. Over the past year, we spent ZAR7,480 per employee on training in Sappi Southern Africa, with the average number of training hours per employee amounting to 70.5. We are also looking to enhance skills development outside our own immediate area of operations by providing training to participants in our Khulisa Umnotho (Project Grow) forestry enterprise development scheme.

Currently, the total area managed under this scheme amounts to 22,717 hectares and continues to grow as a source of fibre. In FY2016, under the programme, 395,232 tons (2015: 361,134 tons), worth ZAR298 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 involved in this programme.

This is a good example of where our goal of uplifting people intersects with our focus on growing prosperity in both our own operations and the communities surrounding them – in areas of low employment and restricted economic activity, our activities offer these communities an economic lifeline.

Against this backdrop, we find government limitations on afforestation extremely frustrating in light of the urgent need to promote socio-economic development in South Africa's rural areas. Our efforts to progress Khulisa Umnotho in the Eastern Cape are being hampered by bureaucracy and red tape, which is concerning both for us and for potential participants in the scheme.

### Going forward

We have identified the potential to improve our power generation capacity and we will be increasing DWP capacity by roughly 10%. We have also identified projects to expand our containerboard business.

We see real growth and investment opportunities in most of our businesses including packaging and speciality papers, DWP and by-products from our pulping liquor streams.



### Summing up

Sappi is firmly on an upward growth trajectory and we aim to continue to innovate, manage costs and grow our business to secure success into the future. We are guided by our value statement: "At Sappi we do business with integrity and courage, making smart decisions which we execute with speed."

#### Alex Thiel

*Chief Executive Officer, Sappi Southern Africa*

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 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, a dividend of 11 US cents for the year ended 25 September 2016 – 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 by US\$800 million 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 (LTIFR) 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 globally 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*

## Review of our 2016 targets

Sustainability is foremost on our minds at Sappi as we embark on our revised strategic direction. We continue, as before, to take cognisance of our impact – both positive and negative – as we focus on creating value for our shareholders. In line with our evolutionary strategy and 2020Vision, in 2015 we introduced new measurements and targets to be implemented from 2016 through to 2020, using 2014 as a base.

Prosperity 		
Target and rationale	2016 performance and explanation	Status
<b>PROSPERITY</b> <i>Drives our overall growth.</i>		
<b>EBITDA margin greater than 20%.</b> <i>Profitability is the foundation of our capacity to generate value for all stakeholders.</i>	<b>25%</b>  Our improved performance can be attributed to improved margins in all our businesses in 2016. The new business strategy of diversifying out of graphic papers into a diversified woodfibre group has allowed the business to focus on higher value-add businesses.	
<b>Sustainable cut above four million wet white tons per annum.</b> <i>'Sustainable cut' indicates the quantity of wood which grows in one year on land we own or lease. It equates to the quantity of wood which is available to harvest each year without reducing the overall quantity of wood standing on the land. This allows us to determine the mean annual increment (MAI) of our woodfibre base and the overall sustainability of this base.</i>	<b>3.8 million tons</b>  Despite the good work being done on improving our growth rates of our trees, the impact of the drought this year has been severe and is the main reason for non-achievement of the target.	

People 		
Target and rationale	2016 performance and explanation	Status
<b>People underpin our business success.</b> Combined Lost Time Injury Frequency Rate (LTIFR) for own employees and contractors to be better than best ever achieved on a continuous 12-month basis and Lost Time Injury Severity Rate (LTISR) to be below 25.  <i>Safety is a moral and business issue which impacts on the quality of life of our employees and contractors on productivity, costs and reputation. Everyone returning home safely, every day, is key to our success.</i>	<b>0.32 LTIFR and 117.7 LTISR</b>  Despite the improvement in the LTIFR year-on-year, we have not managed to achieve our best ever year.  We sadly also had four fatalities during the year; this has contributed to the high injury severity rate. There is accelerated focus on safety to ensure that we have no fatalities going forward.	
<b>Achieve Level 4 compliance in BBBEE (in respect of the new Forestry Codes).</b> <i>Transformation is a pragmatic growth strategy that aims to realise the country's full economic potential.</i>	Level 3 BBBEE status – 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.	
<b>Improvement of 2% every other year of engaged employees in terms of participation, commitment and issues closed out.</b> <i>Our success as a business depends on a committed and engaged workforce which takes ownership of our vision, mission and strategy.</i>	We have a formal Employee Engagement Survey every second year and this will take place again in 2017. In 2015, 78% of our employees participated in the survey, which indicated an engagement level of 76%.	Not applicable



## Planet



Target and rationale	2016 performance and explanation	Status
<p><b>Natural resources are the foundation of our business.</b></p> <p>Achieve 10% reduction in specific purchased fossil energy by 2020 with 2014 as the base year.</p> <p><i>Because purchased energy is one of our highest input costs, it makes sense to aggressively manage its usage. Reducing purchased fossil energy usage also has a positive impact on greenhouse gas emissions.</i></p>	<p><b>6.1% reduction</b></p> <p>We achieved better than we had targeted for 2016 and we have projects planned going forward to ensure that we achieve our 2020 target.</p>	
<p><b>Achieve a 10% reduction in total specific fresh water usage by 2020 with 2014 as a base year.</b></p> <p><i>Water is critical for our processes. However, South Africa is a water-stressed country and we have a responsibility to manage and minimise our use of water.</i></p>	<p><b>15.2% reduction</b></p> <p>We exceeded our 2020 goal, however, the significant reduction during the current year is not sustainable as we curtailed production at certain mills due to the severe drought in the current year. We do, however, have projects planned to ensure we achieve our 2020 goal.</p>	
<p><b>Achieve a 10% reduction in specific solid waste landfilled by 2020 using 2014 as a base year.</b></p> <p><i>In our strategic focus on adjacent markets, waste streams offer revenue opportunities. In addition, by reducing the amount of waste sent to landfill, we are helping to mitigate global warming, as landfills generate methane, a greenhouse gas with 25 times the global warming potential of carbon dioxide.</i></p>	<p><b>12.9% increase</b></p> <p>In the base year, Saiccor Mill was selling or benefiting most waste streams. However, following changes in legislation necessitated the mill sending some of its waste to landfill. This has resulted in our waste to landfill increasing in FY2016. There are plans in place which we believe will allow us to achieve our goal by 2020.</p>	
<p><b>100% certification of own timber, 70% certification of Chain-of-Custody for our manufacturing plants.</b></p> <p><i>Forest certification provides our customers with the assurance that the trees used in our pulp and papermaking processes originate from plantations that are managed according to the standards and requirements of sustainable forest management.</i></p>	<p><b>100%</b></p> <p>of own timber is certified, and 82% of all timber used in our mills is certified.</p>	

- Achieved
- Excelled
- Not achieved

## Our approach to sustainability

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

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 on a daily basis. Our sustainability

governance structure is underpinned by a number of globally and locally applicable policies which guide our performance in terms of the 3Ps. These policies, together with our governance structure, are set out at the back of this report.

Sappi Limited is a constituent of:

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

### Accolades in 2016

- KZN 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 Africa 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 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.

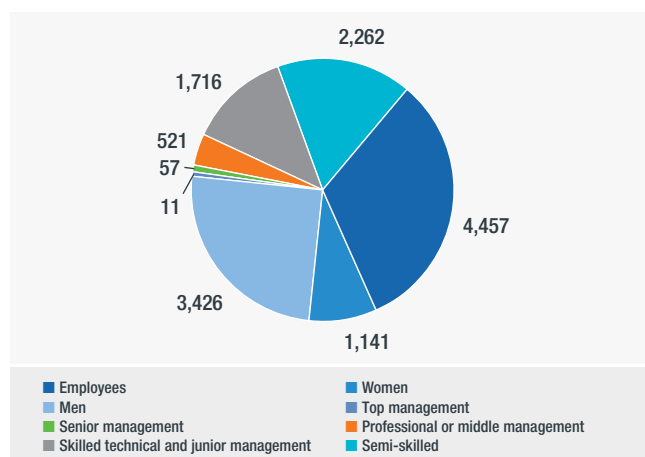


Delighted at winning the award, Morgan Moodley, the general manager of Sappi Export Services (second left) with Karl Socikwa (left), the chief executive of Transnet Port Terminals, Dumile Cele (second right), the chief executive of the Durban Chamber of Commerce and Industry and Zeph Ndlovu, President of the Durban Chamber of Commerce and Industry.



The eighteen new 2016 recruits undergoing initial ABCD training. The communications programme supporting the Abashintshi community initiative recently won a Gold Quill award from the International Association of Business Communicators (IABC).

# Our engagement with our stakeholders



## Employees

### Management approach

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

### Our ongoing engagement avenues

- Employee Engagement Survey (most recent survey completed in 2015)
- Quarterly staff feedback sessions
- Global, regional and local newsletters
- Global Intranet
- Letters, roadshows and presentations by the global and regional CEOs
- Employee wellbeing committees at business units
- Health and safety committees at mills
- Various forums:
  - SA Transformation Steering Committee
  - National Employment Equity and Learning Forum, a formalised structure consisting of trade unions, management representatives and other employees elected to represent the interest of employees from different occupational categories and levels
  - Business Unit Employment Equity and Learning Forum
- Wellbeing committees at mills and business units
- Health and safety committees at mills
- Bursary programmes and Engineers-in-Training and Foresters-in-Training programmes, support for Further Education and Training Colleges
- Earth Kind Agent eLearning game.

### Key stakeholder issues

- Understanding of, and alignment with, Sappi's strategy and values.
- Alignment with the Sappi brand.
- Understanding of the manner in which sustainability is incorporated into Sappi's everyday business activities.
- Effective consultation on conducting of employment equity and skills development plans.
- Participation in Sappi's concerted safety drive.

## Engagement in 2016

- Four tragic fatalities which we deeply regret. Concerted focus on re-energising our safety initiatives.
- We conducted a global roll-out of our revised Code of Ethics.
- 19 formally trained brand ambassadors in the Mpumalanga region continued to represent Sappi at various events.
- Over 900 employees have played the Earth Kind Agent eLearning game which exposes players to Sappi's sustainability information in a new and innovative platform.
- We communicated on an ongoing basis with our employees regarding the sales of Cape Kraft and Enstra Mills which were finalised shortly after the FY2015 year-end.
- 15 employees completed the Sappi Leadership Academy programme and a new group of 24 employees began the programme in August 2016.
- Focus on first line manager development.
- A new learning management IT solution was implemented (see page 31 for details).

## Trade unions

### Management approach

We aim to develop a constructive relationship with trade unions by maintaining direct, open lines of communication, informing and consulting the representatives of recognised trade unions about important business developments.

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 done 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 this is regulated by ministerial sectoral determination. The normal notice period applies.

### Our ongoing engagement avenues

- Shop Steward forum
- National Partnership Forum
- National Employment Equity and Skills Development Forum

### Key stakeholder issues

- Safety
- Remuneration

## Engagement in 2016

- We formally consulted with all recognised trade unions regarding the sale of Cape Kraft and Enstra Mills. The consultation process concluded shortly after year-end.
- 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 2016 was extremely tough, we once again successfully concluded wage negotiations without industrial action in all sectors – forestry, pulp and paper as well as sawmilling.



# Our engagement with our stakeholders continued

## Communities

### Management approach

Having a mutually respectful relationship with the communities in which we operate is critical to our success. We also try to motivate and encourage communities situated close to our operations to share our commitment of treading more lightly on the planet. In terms of social projects, we engage with communities on a case-by-case basis and encourage projects which facilitate partnerships and collaboration between communities, government and the private sector.

### Our ongoing engagement avenues

**Social issues:** Engagement takes place on a regular basis with the communities close to our operations, in respect of their needs and concerns.

**Environmental issues:** We have environmental liaison committees at most of the mills and forestry operations.

These committees include members from various regulatory authorities, residents' associations, conservancies, municipal representatives and NGOs. (See the table on page 19 for further details). Members of the public and other parties participate in the environmental impact assessments (EIAs) conducted before the start of any major project.

### Key stakeholder issues

- Understanding of social challenges and help in overcoming these.



By contributing to the *Warburgia salutaris* project, Sappi is ensuring the sustainability of these valuable trees and making its products more readily available to local communities in and around the Kruger National Park.

### Engagement in 2016

- Following a series of fires on our plantations, in 2014 we launched the Abashintshi (the 'changers' in Zulu) training programme in KwaZulu-Natal. The aim of the programme is twofold: to reduce fires and uplift communities. The Abashintshi programme has exceeded all expectations across all communities in terms of community contact and engagement, shift in perceptions and reduction in the number of fires. Further details on page 33 of this report.
- Employee wellbeing committees (EWB) at each Sappi operation supported local community projects based on requests and identified needs.
- Project support was provided to Sappi forestry community schools based on requests and needs analyses. Projects include fresh water, ablution facilities, fencing, buildings and structures and vegetable gardens. Hospices are supported in each community.
- We continue to support blockmakers by giving them ash from Saiccor Mill.
- Details of various community initiatives are provided on page 32–33 of this report.
- All mills offer paper and financial sponsorship to local schools, sport and hobby clubs, forest products industry students, local safety/environmental organisations and also support local charities.

### We continued to support:

- Mountain biking which promotes 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
- *Warburgia salutaris* (Pepper Bark Tree) project in the Kruger National Park, and
- The African Honey Bee Trust
- Afforestation in the Eastern Cape through our Khulisa Umnotho initiative.

## Suppliers and contractors

### Management approach

We aim to build long-term value partnerships. Through contractor and supplier development programmes, we contribute to their growth and sustainability.

### Our ongoing engagement avenues

- Our foresters work extensively with contractors and timber supply communities.
- Launched in 1983, Khulisa Umnotho is a tree-farming scheme that gives subsistence farmers the opportunity to participate in the forestry industry, creating sustainable livelihoods in rural areas, fostering economic growth and entrepreneurship. These growers range from small individual growers to larger community projects.
- We have expanded Khulisa Umnotho beyond the borders of KwaZulu-Natal to the Eastern Cape. In addition, we are working with communities in the Eastern Cape to help them obtain water-use licences for the establishment of new plantations.
- We are active in the land reform area and are assisting several land reform beneficiaries (communities) with the management of their plantations.

### Key stakeholder issues

- Enterprise and supplier development
- Safety

### Engagement in 2016

- Training for Khulisa Umnotho participants.



Khulisa Umnotho tree growers in the Eastern Cape.

## Customers

### Management approach

Promote an understanding of how our products can help them in their own sustainability journey and provide them with information regarding the sustainability benefits of products made from woodfibre, which is natural and renewable.

### Our ongoing engagement avenues

- Paper profiles and information sheets give details regarding the composition of our papers, as well as key environmental parameters relating to our pulp and paper production processes and information on environmental management systems and woodfibre sourcing policies.
- We also respond to ad hoc requests from customers to meet their specific needs.
- Participation in various industry forums and bodies such as the CRI, Printing SA, TwoSides SA, Paper Manufacturers' Association of South Africa (PAMSA) and Packaging SA.

### Key stakeholder issues

- Consumers and retailers are increasingly looking for more natural and renewable options, which plays to the strengths of Sappi's products.
- Customers require lighter packaging to reduce transport costs without sacrificing other properties.

### Engagement in 2016

- A tablet version (iPad and Android) of the Earth Kind Agent sustainability game was launched in April 2015 giving access to our suppliers, customers and other stakeholders. The game for laptops and the links to the applications can be found at <http://www.sappi.com/earthkindagent>.
- In 2016, we were once again a primary sponsor of 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 have partnered with Nashua and its franchisees to raise funds for their Children's Trust through the sale of Sappi copy paper.
- We have 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.
- Following a customer request, we completed an Ecovadis questionnaire and were awarded a gold recognition level, putting us among the top 5% of performers evaluated by Ecovadis.

## Our engagement with our stakeholders continued

Civil society, government, industry and regulatory bodies

### Management approach

We engage with government, civil society, our communities, industry and regulatory bodies to provide input into issues and regulations that affect the industry and society; and improve understanding of our operations and our contractors' operations. We work to realise the goals of the National Development Plan, particularly the regeneration of the rural economy and the reduction of CO<sub>2</sub> emissions by 34% by 2020 and 42% by 2025.

### Our ongoing engagement avenues

- Membership of various industry organisations such as BUSA, BACSA, CDE, Energy Intensive Users' Group, FMF, PAMSA, PRASA, FSA and Packaging SA through which Sappi protects and promotes its and industry's interests and contributes as a responsible corporate citizen.
- Membership of the Manufacturing Circle.
- The CEO initiative.
- Tree Protection Co-operative Programme.
- Eucalyptus Genome Network (EUCAGEN) and CAMCORE.
- Membership of the NBI to promote sustainable choices and actions amongst businesses.
- Participate in regular structured forums of dialogue between provincial governments and the private sector.
- Ongoing interaction with the SA Department of Rural Development and Land Reform over land claims.



During 2016, Sappi Lomati Mill donated water storage tanks and smaller water containers to local community organisations and its members.

### 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.
- 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 had 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.

- We are involved in the CEO Initiative which mobilised around an action plan focused on helping government avert any sovereign credit rating downgrade; increasing the focus on anti-corruption effort in government; strengthening Chapter 9 institutions (oversight bodies of Parliament); and developing plans to enhance job creation and skills development.


#### We continued to support:

- SANBI (South African National Biodiversity Institute)
- Birdlife SA
- WWF-SA
- The Honorary Rangers of the Kruger National Park
- The UCT ADU (Animal Demography Unit) indigenous tree mapping project.

*Note: Investors are an important stakeholder group for Sappi, but as a global company, our approach is global, rather than regional. Details of our engagement with investors can be found on page 29 of our 2016 Annual Integrated Report, available at [www.sappi.com](http://www.sappi.com).* 



## Community engagement forums

Operation	Key issues
<b>Lomati Sawmill</b>	Local; engagement with local authorities and local communities – in particular those living next to Lomati Sawmill.
<b>Ngodwana Mill</b>	Ngodwana Environmental Liaison Committee: local; open-ended stakeholder forum which also monitors compliance with the mill's Integrated Water Use Licence (IWUL), Atmospheric Emission Licence (AEL) and various Waste Management Licences (WMLs).
<b>Saiccor Mill</b>	<ul style="list-style-type: none"> <li>Coastal Advisory Forum: open to anyone, but mostly attended by non-governmental organisations (NGOs) and authorities.</li> <li>Thinasonke (working together) Forum: local; open-ended stakeholder forum, established in 2015; not specific to the mill, but – incorporates whole community. Saiccor Mill uses the forum to give feedback annually to the community.</li> </ul>
<b>Stanger Mill</b>	The KwaDukuza Environmental Working Group (EWG) emerged from the original Sappi Stanger Environmental Liaison Forum (SSELC). The EWG is an open-ended stakeholder forum ensuring that issues are dealt with in a holistic manner.
<b>Tugela Mill</b>	Simunye Forum, an open-ended stakeholder forum ensuring that issues are dealt with in a holistic manner.
<b>All Sappi Forests areas of operation/communities</b>	<ul style="list-style-type: none"> <li>Local community forums: focused on local stakeholders</li> <li>Khulisa Umnotho forums in areas of operation – KwaZulu-Natal (KZN) and the Eastern Cape</li> <li>Sappi Forests Abashintshi programme: piloted in nine priority KZN South Sappi Forests communities. (For further details of this programme please refer to page 33 of this report.) </li> </ul>



The communities around Sappi's mills and business units each year benefit from such outreach programmes as Mandela Day.



# Prosperity

- Ultraflute® sales up 23%
- Strong downstream demand for DWP
- Increased wood and chemicals prices offset by lower energy and raw material usage improvements
- Energy costs as a percentage of costs of sales decreased by 13% over five years

Our **2020Vision** envisages that we will continue to grow Sappi into a profitable and cash-generative diversified woodfibre group.

# Profitability and innovation

## Adapting to changing markets

Our 2020Vision aimed to reduce debt, strengthen our balance sheet and direct resources to high-growth opportunities.

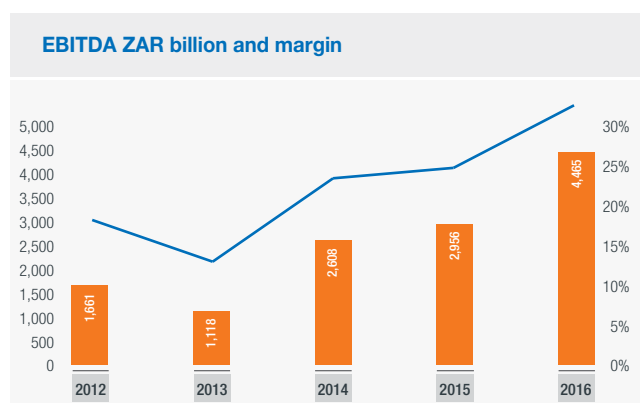
In Southern Africa, the route we have followed to achieve this has involved matching our machines more closely to changing markets, reducing costs, improving efficiencies and streamlining our product offering to focus on DWP, virgin packaging paper, tissue, office paper, newsprint and energy generation. Today, approximately 8% of Sappi Southern Africa's sales volumes are generated by graphic paper and newsprint.

The graph below setting out earnings before interest, taxes, depreciation and amortisation (EBITDA) indicates that we are succeeding in achieving the group vision.

## Aligning with our strategy



We finalised the sales of Enstra and Cape Kraft Mills in October and November 2015, respectively. The proceeds from the two sales amounted to just under ZAR600 million.



- Following the sale of Enstra Mill, the production of our popular Typek brand moved to Stanger Mill, where we invested ZAR30 million in upgrades to the paper machine in 2015, investing a further ZAR70 million in the sheeting and finishing operations at the mill in 2016. In terms of Typek, these investments have the following benefits:
  - Paper bulk and stiffness improvement for better runnability in printers and copiers as the product now contains sugar cane bagasse pulp, and
  - A smoother surface for excellent print quality.
- In terms of DWP, in Southern Africa we have a strong competitive advantage based on a low-cost, fast-growing woodfibre base from state-of-the-art plantations and a favourable currency trend.



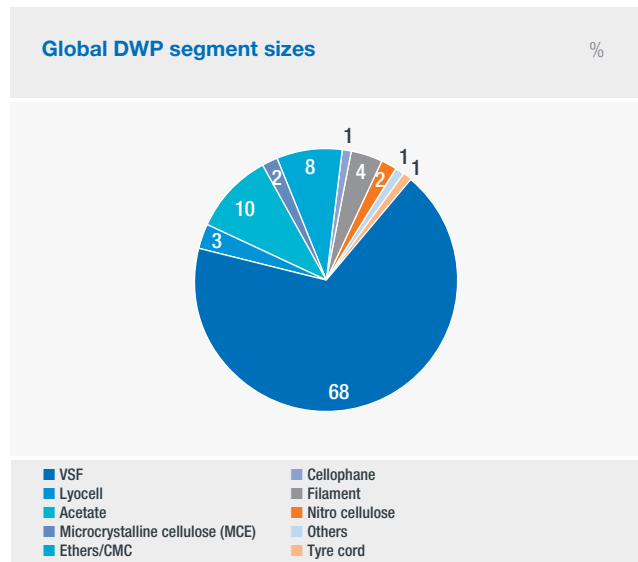
### About dissolving wood pulp (DWP)

DWP is produced from cellulose which is the most abundant natural organic polymer on earth and is found in all plant materials. In Southern Africa, at Ngodwana and Saiccor Mills, woodfibre from certified forests is processed and purified to extract the cellulose polymers from the wood. The purified natural wood cellulose fibres are further dissolved by global users of DWP and regenerated or reformed for a host of applications as indicated in the pie chart on the following page. The second pie chart on the following page indicates the DWP markets where Sappi is active.



## Profitability and innovation continued

### Aligning with our strategy continued



Demand for DWP globally is set to grow, based on a growth in population to 8.5 billion people by 2030, with growth in Asia, which is currently where the bulk of viscose fabric is sold, surging from the current population of 1.9 billion people to 2.3 billion people by 2030. In addition to population growth, Asian consumers are becoming increasingly affluent and are likely to spend US\$32 trillion per year by 2030, accounting for 43% of total global consumption. In addition, the production of cotton is forecast to remain stagnant or shrink, indicating that the growth in total fibre consumption will be covered by man-made fibres.

Against this backdrop, together with the fact that the moisture absorbency and breathability properties of cellulosic fibres cannot be substituted by oil-based synthetics, the share of cellulosic fibres produced from DWP in the textiles market is expected to grow further.



Towels are an end-product of DWP-viscose staple fibre.

We are leveraging this opportunity by planning expansions of our DWP production capacity at Ngodwana and Saiccor Mills of up to 100,000tpa, beginning in 2017.

Generate cash  
to strengthen our  
balance sheet



The proceeds from the sales of Cape Kraft and Enstra have been used to reduce debt and make further investments in our core businesses in order to increase capacity and grow our revenue line.

Once again in 2016, our strong order book and the weaker Rand helped to improve margins.

Achieve cost  
advantages



We made good progress in terms of a One Sappi cost-saving project in which we are participating. The intention is to reduce costs by US\$100 million per annum by 2020 off the 2015 cost base.

Accelerate growth  
in adjacent businesses  
from a strong base



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.

- **Treating Saiccor Mill's waste condensate**

In many of our European mills, we generate renewable energy in the form of biogas through anaerobic digestion. In 2016, we established an anaerobic digestion pilot plant at Saiccor Mill. The pilot plant will assess the possibility of treating the mill's waste condensate using 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.

- **Second-generation renewable sugar extraction demonstration plant at Ngodwana Mill**

We are looking into ways to use the sugars (as well as lignin and organic acids) extracted from 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. 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 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 cost, 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.



During 2016, an anaerobic digestion pilot plant was established at Sappi Saiccor Mill in KwaZulu-Natal.



## Profitability and innovation continued

### Aligning with our strategy continued

- **Lignosulphonate**

At Tugela Mill over the last four years we have developed saleable products based on lignosulphonate that are currently finding application in the dust suppression, concrete additive, ceramic and brickmaking markets. The lignosulphonate market has slumped, due to a downturn in the mining industry which makes use of lignosulphonate for dust suppression; and the depressed construction industry which uses lignosulphonate as a concrete additive as well as in ceramics and brickmaking.

We are currently assessing whether to produce more lignosulphonate for new export markets.



The Lignosulphonate spray dryer at Tugela Mill.



Lignosulphonate is used in the dust suppression, concrete additive, ceramic and brickmaking industries.

In March 2016, we commissioned phase 1 of a nanocellulose pilot plant at the Brightlands Chemelot Campus in Maastricht, the Netherlands. The team based at the plant has now manufactured micro-cellulose (CMF) of excellent quality when compared to our competitors and has run a successful paper machine trial at one of our mills.



Phase 1 of Sappi's nanocellulose pilot plant in the Netherlands under construction. It has recently been commissioned and started manufacturing nanocellulose in a gel form.



# Fibre supply

## Expanding access to forestry

The forestry industry is one of the strategic economic sectors in Southern Africa, with a significant contribution towards economic growth and job creation, particularly in rural areas where job opportunities are often limited.

We work to expand access to the forestry sector in a number of ways, including:

- **Khulisa Umnotho**, 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 ZAR298 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 FAQs on 'Khulisa Umnotho', available on [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, and the largest project of approximately 6.9ha belonging to the Somhlolo Community Trust (see box). 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.
- 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, with Khulisa Ulwazi ('Growing Knowledge') as its slogan, 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 for further details.)

### Working with the Somhlolo Trust

In 2007, in terms of government's land restitution programme, the Land Claims Commission purchased various farms from private commercial farmers in the Lothair area of Mpumalanga and transferred ownership to the Somhlolo Trust. In the same year, Sappi and the Somhlolo Trust signed a Plantation Management Plan (PMP) and timber supply agreement.

One of Sappi's mandates within the Somhlolo PMP agreement is to help ensure that Somhlolo assets are protected against fire, disease and timber theft. To achieve this goal, staff have to be mobile and able to respond swiftly to emergencies. Over the past six to eight years Somhlolo Trust had only one vehicle to manage their operations and their area controllers (foresters) have been using labour carriers and fire tenders to move around their plantations.

For various reasons Somhlolo did not qualify for bank financing and they were unable to purchase more vehicles. Sappi came up with an alternative proposal to enable Somhlolo to acquire additional transport. Sappi's intervention enabled Somhlolo to purchase three additional vehicles which are being paid for from their timber sales. In addition, we recently presented the trust with a second-hand vehicle. "I am very excited that I am finally going to be able to move around and visit all my teams without having to wait for a labour carrier. I am now going to be able to respond to fires like a real forester," said Somhlolo's Lindiwe Dlamini when she received the keys to the vehicle.



Handing over the keys for the second-hand vehicle to Somhlolo north area controller, Lindiwe Dlamini.

## Fibre supply continued

### Maintaining stability of fibre supply

We maintain stability of fibre supply in a number of other ways:

- **Following an integrated pest management approach**

Insect pests and fungal diseases can damage shoots, leaves and crowns, which reduce tree growth and condition and, if severe enough, cause trees to die. Insects and fungi can also reduce wood quality, resulting in lower yields and reduced timber prices. Being able to recognise, manage and mitigate the symptoms of key pests and diseases is critical for managing a healthy and productive plantation.

We follow an integrated pest management approach to dealing with the problem of pests and diseases. In support of this strategy, we work closely with other organisations to manage this problem, like the Forestry and Agricultural Biotechnology Institute (FABI), which is a flagship research centre promoting many aspects of plant improvement in South Africa and is based at the University of Pretoria.

The Cossid moth (*Coryphodema tristis*), has caused extensive damage in *Eucalyptus* (*E. nitens*) on our plantations. We have implemented an innovative strategy to deal with the problem as set out in the box alongside.

- **Mitigating climate change**

Our tree breeding programme continuously tests and selects tree genotypes which are best suited to the climate conditions in the range of sites where we operate. Having a broad genetic base enables us to utilise a variety of sites for tree planting, including harsh areas that would not normally be suitable but can be utilised due to drought-resilient tree varieties. By anticipating possible climate shifts and planting trees that are water efficient in these environments, we are able to ensure security of our supply chain going forward.



The research and development conducted at our facility at Tweedie in KwaZulu-Natal are essential to the successful tree breeding programme.

- **LiDAR technology**

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 in 2016, 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 were updated using this methodology.

In addition:

- We continue 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).
- 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 a tool for scanning chips in our pulp mills for rapid assessment of important traits such as moisture and wood density.

### Sappi innovation: Mass trapping of Cossid moths using artificial pheromones

The indigenous wood-boring Cossid moth was first reported on *Eucalyptus nitens* (*E nitens*) in Mpumalanga in 2004. Surveys to determine the extent of the infestations were conducted in 2004, 2005 and 2009. Compartments older than 10 years and on marginal sites showed the highest losses. A management decision was made to fell all the heavily infested sites, to reduce the rotation age of *E nitens* to a maximum of 10 years and to plant *E nitens* on better sites only. During 2014 and 2015 it was reported that losses due to the expanding Cossid moth infestations were becoming significant. A survey conducted during 2015 resulted in the write off of 297,783 tons of timber on Sappi land holdings.

Our partners at the tree pathology cooperative programme have identified and replicated the pheromone which attracts male moths to the females. Experiments are currently underway to lure the males out of the environment using this pheromone. It is hoped this will drastically reduce the moth population and reduce timber losses.

A researcher from FABI at the University of Pretoria highlighted the identity of three electro-physiologically and behaviourally active compounds in the Cossid moth. The research resulted in an optimised pheromone lure. Preliminary field trials conducted at our Lothair plantation in Mpumalanga during September to November 2015 investigated the optimal pheromone mixture, trap-to-trap distance and different trap types. This confirmed that mass trapping could be a possible control strategy that could be deployed on a commercial scale.

Accordingly, we have now instituted a pilot project for mass trapping of adult Cossid males in all five and six-year-old *E nitens* compartments at Lothair plantation covering an area of approximately 1,600ha during September to November 2016. During this first-of-its-kind, large-scale, mass-trapping of insects, using pheromones in South Africa, 6,500 bucket-type funnel traps are being deployed at a 50m x 50m spacing. Due to the sheer scale of the logistics involved, each trap will only be emptied once every 10 working days (620 traps per day). The numbers of male moths captured per compartment will be recorded.

The life cycle of the Cossid moth takes two years to complete and, as a result, there are usually two generations of larvae present in the trees. This means that the trial will have to be repeated in 2017 to be able to determine the impact of mass trapping on the current population.

The impact of mass trapping males will be measured by numbers of males captured over two successive seasons, numbers of new colonies established over two successive seasons, and changes in infestation levels compared to the controls.

Traps will remain in place until the end of November. We will report on the outcomes of this programme going forward.



A bucket funnel trap with panel extensions attached to a tree is used to trap adult male Cossid moths.



## Fibre supply continued

### Mulching on our plantations in KwaZulu-Natal

To date, mulching has not been accepted as standard forestry practice, due mainly to cost. However, following mulching trials which began in 2010, in 2014 Sappi Forests implemented mulching in plantations in KwaZulu-Natal where the soils are nutrient-poor. This strategy is now being applied to all Sappi's plantations in the province.

The value in mulching lies in the impact it has on the ability to reduce the temporary unplanted (TUP) area and potential improvement in mean annual increment (MAI) due to soil moisture retention, and by retaining valuable nutrients that are lost during brush burning. Mulching overcomes the problem of the short burning window which has been exacerbated by the drought the past two seasons.

TUP areas are not productive and they become a cost burden because the coppice and weed regrowth has to be treated repeatedly the longer the land lies fallow. In addition, if the drying slash cannot be burnt, it increases the fire risk.

Before the mulching strategy was implemented, TUP areas had built up because of adverse weather conditions. However, as mulching can be done any time, the TUP area has now been considerably reduced.

During the mulching process, slash and stumps are reduced to a mulch layer that covers and protects the soil from the sun and the land goes straight back into production – moisture and nutrients are retained in the soil.

Mulching:

- Improves long-term soil health – because slash is not burnt after harvesting, the soil organic matter is not reduced
- Results in improved survival and early growth of seedlings – the mulch layer protects the soil and plants from wind erosion and sand blasting, retains moisture and nutrients and translates into significant productivity gains
- Decomposing mulch releases nutrients into the soil
- Reduces soil compaction – the mulch layer provides a buffer between the tyres/tracks of heavy vehicles and the soil beneath
- Reduces TUP areas, because mulching can take place immediately after clearfelling; and prepare the soil and plant immediately after mulching
- Reduces fire risk due to the finer size of the residue and higher moisture level which reduce flame height and rate of spread
  - in addition, the absence of stumps gives fire fighting vehicles and fuel reduction equipment better access to compartments
- Gives foresters more options for choosing pitting and planting methods, as well as weeding and fuel reduction operations because of the absence of old stumps
- Means that any harvesting/extraction system can be used because there are no stumps restricting access, and
- Extends the planting season because the mulch protects and nurtures the soil. In the case of Sappi's plantations in KwaZulu-Natal, mulching extends the planting season by at least three months.



Mulching is now being undertaken in all Sappi's plantations in KwaZulu-Natal so as to improve moisture and nutrient retention.



# People

- 70.5 average number of training hours per employee
- Average training spend per employee: ZAR7,480
- CSI spend: ZAR51 million
- Khulisa Umnotho training programme established
- 50 distinctions earned in mathematics and science by matric pupils from Sappi-supported PROTEC branches
- ECD programme expanded
- Abashintshi programme expanded from 18 volunteers in 2015 to include 36 volunteers in 2016

We have numerous **internal skills development initiatives** all of which have a strong bias towards uplifting the previously disadvantaged.

## Skills and education

### Unleashing the potential of our people

In Southern Africa, our learning and development vision is: “To co-create learning experiences to unleash the potential of people to improve performance.” We balance this with training programmes focused on building a strong skills base that will help us to realise our 2020Vision. We have both a short-term process optimally reviewed annually through our workplace skills plan and a longer five-year workforce demand planning horizon that is facilitated through skills development audits which focus on ensuring we have a skill plan to replace soon-to-be retirees and are expanding critical and scarce skills.

This drive was given impetus in 2016 with the implementation of a new learning management IT solution. A number of business units are participating in a pilot in terms of this solution to complete online, job-specific skills gap analyses for their employees. This process will replace the generic personal development planning done in the past, placing emphasis on individual skills gaps and targeted learning intervention and will go live to the rest of Sappi group in 2017.



Protec Mandeni learners attended the careers day seminar at the University of Durban, Westville.

### A focused skills development strategy

Our skills development strategy, which is aligned with government's focus on integrated workplace learning and skills development, and aims to develop a pool of the scarce and critical skills needed to enhance our own sustainability and that of our industry, focuses on:

- Adult education programmes
- Apprenticeships
- Bursaries
- Learnerships
- Making subject matter experts available to the Paper Manufacturers Association of South Africa (PAMSA), thereby playing an active role in industry development
- Seconding employees to provide lectures, set exams, adjudicate and moderate marking, provide tutoring, workplace exposure and mentorship, and provide input into curriculum development and research. In this regard, we have formal agreements with the Durban University of Technology,

In Southern Africa, our skills development programmes have to meet the following statute requirements:

- Employment equity
- Skills development, and
- Broad-based Black Economic Empowerment (BBBEE).

We submit our workplace skills plan and our annual training plan to the SETA, thereby confirming our support for the development of skills in the country and meeting compliance requirements in terms of legislation on an annual basis. This is monitored by the national employment equity and learning forum, a formalised structure comprising trade unions, management representatives and other employees elected to represent the interest of employees from different occupational categories and levels for the purpose of consultation on transformation matters.



Protec Mandeni learners at the Richards Bay Science Centre.

the University of KwaZulu-Natal, the University of South Africa and Umfolozi and Ekurhuleni Technical and Vocational Education and Training (TVET) colleges

- Skills programmes
- Workplace experience
- Workplace integrated learning/internships in Sappi, and
- Rural development projects, particularly in Sappi Forests.

### Wide-ranging skills development initiatives

Currently, we are involved in the internal skills development initiatives set out in the table on the next page, all of which have a strong bias towards uplifting the previously disadvantaged. In addition:

- In FY2016, we provided training opportunities for 20 disabled learners, and
- We also renewed our focus 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.



Fields	Total	Number of previously disadvantaged individuals included in the total
Engineers in training	21	17
Foresters in training	9	6
Technicians in training	7	7
Apprenticeship/engineering/technical	98	88
Work experience learners	33	32
Learnerships	111	111
Bursars	51	35
Leadership academy	15	8
Total	345	304


**In 2016, the average number of training hours per employee in Sappi Southern Africa was 70.5, with average training spend per employee amounting to approximately ZAR7,480.**

Of our total workforce of approximately 4,600 employees in Southern Africa, 450 – or 10% – participated in a structured training programme in 2016.

We provide financial support to the Forests Molecular Genetics Programme Chair in Forest Genomics and Biotechnology at the University of Pretoria with the aim of developing and expanding the academic research programme and associated human capacity and technology platforms for molecular and genomic research on the genetic improvement of wood and fibre properties, disease resistance and other traits of interest.



Khulisa Umnotho growers attend 'in residence' training courses at the Riverdale Training Centre.

In 2016, the group launched a global video-based learning portal ([sappi.udemy.com](http://sappi.udemy.com)) which enables our people to access over 1,600 online courses on their computers, tablets or smart phones. 

The courses, powered by Udemy for Business, range from work-related training, eg how to use MS Outlook or MS Excel more effectively and finance for non-financial managers, to personal development learning, eg time management skills, stress management and other wellness courses. Courses vary from three to 80 hours, depending on the type of course, with up to 40 new courses added each month.

All employees with a Sappi eMail address have access to this online learning portal.

#### Providing training outside our own operations

Recognising that Khulisa Umnotho labour is characterised by poor efficiencies and a large turnover, we have established a training programme to address this need.

Training covers areas such as institutional governance, business courses including financial literacy, bookkeeping and entrepreneurship, as well as technical courses. The latter covers areas such as:

- Fire management
- Silviculture and harvesting planning
- Chainsaw operations and maintenance
- First aid
- Chemical weeding and chemical pump operation
- Safety, and
- Supervisor development.

As the majority of courses are presented in the rural areas where the growers and contractors are working, the facilitators need to be mobile and train in community facilities. There are three facilitators covering the area from northern KwaZulu-Natal to the Eastern Cape. Training is targeted at the level of our growers and contractors. Courses are presented in Zulu, with extensive use made of slide presentations and visuals. Learner participation is encouraged, with practical exercises to promote adult learning.

Specialised training is also presented at the Riverdale Training Centre where learners can stay over and focus on their studies.

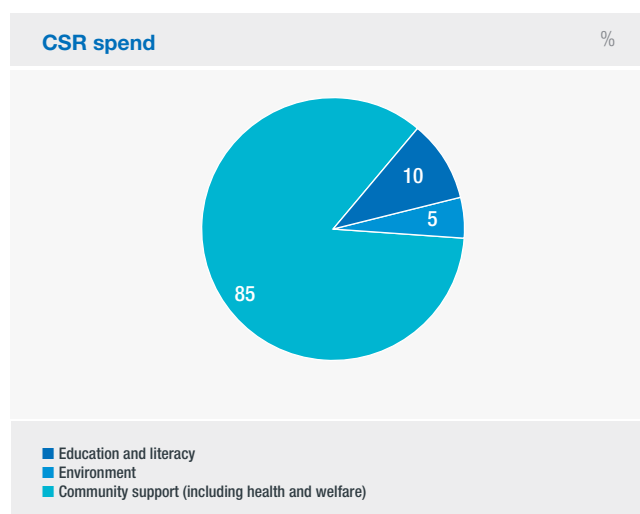
The Supervisor Development Programme takes place at the training centre which also acts as a base for the training administrator.

## Investing in communities

### Helping others to help themselves

The bulk of our corporate social responsibility (CSR) investment takes place 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 ZAR51 million in 2016 includes once-off spend by Sappi Forests on capex items for 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.



### Focusing on education:

#### • **PROTEC: Continuing to exceed national pass rates**

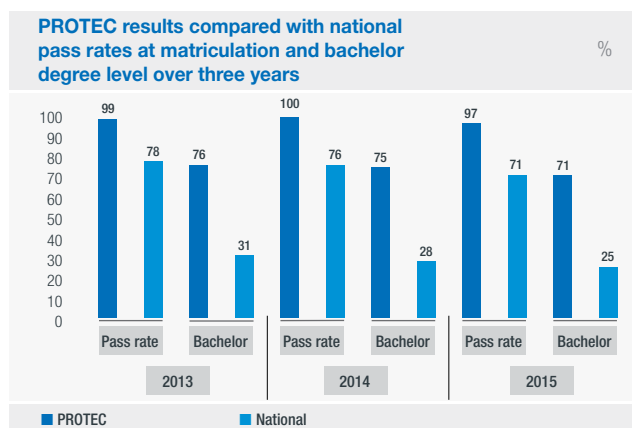
PROTEC delivers science, mathematics, technology, world-of-work and English theoretical and practical education to grades 10 to 12 learners from disadvantaged communities. The programmes are run in parallel to formal schooling and are delivered at Saturday and vacation school classes by qualified and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

We continued to offer ZAR10,000 for each distinction in mathematics and science. In 2015, 50 distinctions were earned in mathematics and science by matric pupils from the Sappi-supported PROTEC branches at Mandeni, Stanger, Umkomaas, Pietermaritzburg and Nelspruit.

- We also continued to support the [KwaDukuza Resource Centre in KwaZulu-Natal](#).



By the end of this year's training programme at Sappi's tree research facility, the 10 disabled students on the ICAN programme were working independently and since leaving Sappi they have all found permanent jobs.



#### • **Early childhood development (ECD)**

There is a proven causal link between ECD 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, 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.

Almost 60 ECD practitioners from the areas adjacent to Sappi's plantations are receiving holistic training in Early Childhood Development from TREE (Training and Resources in Early Education), through a Sappi sponsorship. Pictured here is the group of 18 centre-based practitioners that started their training in 2016.

## Focusing on empowering communities and individuals

### • The Abanakekeli

In our 2015 Sappi Southern Africa Sustainability Report, we disclosed our plans to roll out the successful alien invasive programme at Ngodwana Mill to our other mills. This process will begin in 2017 at Saiccor, Stanger 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.

### • 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 across KwaZulu-Natal to mobilise their communities to 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 ABCD concept. ABCD focuses on appreciating and mobilising individual and community talents, skills and assets (rather than focusing on problems and needs) 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 their 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
- School holiday programmes were established.

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 Warburgia salutaris 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 reintroducing 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. 12,000 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.



The Abashintshi are passionate about mobilising individual and community talents, skills and assets.



Many thousands of *Warburgia salutaris* seedlings are also being grown from cuttings at the Sappi Shaw Research Centre near Howick in KwaZulu-Natal.



# Safety, health and wellbeing

## Evaluating our safety performance

We regret to report that our safety performance in 2016 was well below acceptable levels. Our target was for the combined Lost Time Injury Frequency Rate (LTIFR) for own employees and contractors to be better than best-ever achieved on a continuous 12-month basis and for the Lost Time Injury Severity Rate (LTISR) to be below 25.

Tragically, there were four fatalities involving one own employee and three contractor employees. These accidents are reflected in the high severity rates for both own employees and contractors.

The final LTIFR for own employees for 2016 was 0.50 and for contractors 0.26.

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 reduce the number of accidents by half by 2020.

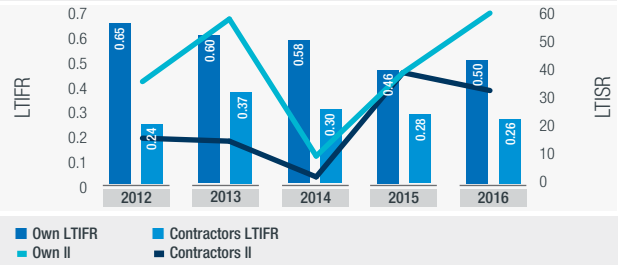
The programme will involve all employees in manufacturing and forestry from the CEO, down to line management, supervisors, unions and health and safety representatives. The programme, which will be facilitated by an industrial psychologist, will address issues like fatigue, communication, risk tolerance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

Our objectives in 2017 are to achieve:

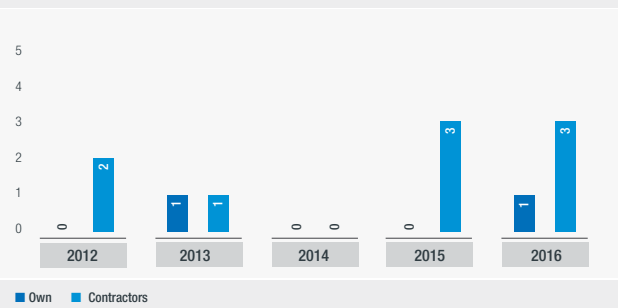
- Zero fatal accidents
- An LTIFR of better than 0.46 for own employees and contractors, and
- An LTISR of less than 25 for all categories of employees.

To achieve these objectives the focus will remain on maintaining OHSAS 18001 certification and improving the behaviour-based safety (BBS) system by critically reviewing the current status and eliminating shortfalls.

**Sappi Southern Africa  
Lost Time Injury Frequency Rate  
2012 to 2016**



**Fatalities**



## Safety, health and wellbeing continued

### Our health and wellbeing focus in 2016

- *Occupational health:* Our major challenges in respect of our work environment relate to noise, vapours, fumes and ergonomic risks. Hearing loss measurements are undertaken as part of our occupational hygiene monitoring programme and, in the few cases where hearing has deteriorated as a result of exposure at work, corrective actions have been instituted with the assistance of our risk department and line managers. The major focus is to try to reduce and eliminate noise levels in the workplace. Where this is not possible, personal protection equipment is used.
- *Primary healthcare:* We continued to focus on HIV/AIDS and tuberculosis (TB) as primary healthcare issues. Please refer to the FAQs on HIV/AIDS on [www.sappi.com](http://www.sappi.com).
- *Employee wellbeing (EWB):* Our programme includes various initiatives including substance abuse (alcohol and drugs), weight-loss programmes and awareness programmes related to cancer, testing cholesterol, blood glucose, body mass index, blood pressure, HIV/AIDS and TB. The programme also includes basic counselling for referrals to external providers, financial wellness, trauma counselling, work stress issues and other health and relationship issues.

Our focus is on educating and empowering employees with the skills to take ownership of their wellbeing to make better lifestyle choices and, where necessary, to support them and provide care and treatment.

## Transformation

### Benefiting from transformation

As a responsible corporate citizen, we believe our long-term sustainability depends on adopting a policy that is aligned with the socio-economic development policies of the country. We compete in the national market for resources, customers and talent. Our continuing business success requires interaction and collaboration between and among people of diverse racial groups, cultures, experiences and perspectives both inside the organisation and external to the organisation.

We accept that achieving a sustainable transformation state in the organisation is a complex and challenging task, however, we believe that sound transformation practices also offer numerous practical opportunities and benefits.

As the new Forestry Sector Charter Code has not yet been gazetted, in FY2016 we were again audited on the old code and achieved a Level 3 Contributor status.

We scored well in terms of ownership, preferential procurement, enterprise development and socio-economic development and improved in skills development, but lagged in terms of management and employment equity.

In view of our commitment to promoting a healthy lifestyle and nurturing an appreciation for nature and the sustainable use of renewable resources, in recent years we have increased our support for mountain biking on Sappi land. Events include Sappi Karkloof MTB (Sappi Karkloof Classic, Sappi Karkloof Trailblazer and Sappi Karkloof MTB recreational); 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.



Multi-land use on Sappi plantations includes recreational mountain biking as well as competition events, trail running, birding and hiking.

## Transformation continued

Regarding management, we have taken certain measures which should improve our score by September 2017. We also expect employment equity to improve, following a stipulation built into our management incentives scheme in 2015 that 80% of all management appointments during any one year should be black people. Positive points during the year were that our employment of disabled personnel doubled and our score in terms of black middle management was 39.9%, up from 36% of the target. Unfortunately, this did not allow us to claim any points.

Black ownership (economic interest) declined to 45.66% (equity equivalent) mainly due to an increase in foreign ownership during the year. In terms of our Sefate shares which are held by our employees, black managers, communities and our BBBEE partners, market value is around ZAR1.8 billion (ZAR77 per share).

Skills development showed improvement following a concerted focus on improving our employees' skills and career development.

As described on page 25, our Khulisa Umnotho enterprise development initiative (formerly known as Project Grow) which has been in existence since 1983, continues to bring substantial value-add to the areas in which it operates. We are currently investigating other models and areas to expand the scheme.

Our socio-economic spend continues to focus on the rural communities in and around our operations with a clear focus on education, the environment and improving the livelihoods of the communities.

### About Sefate

In the first half of 2010, the shareholders of Sappi Limited approved a BBBEE equity transaction involving the issuing of approximately 4.5% (24.3 million shares) of the group's issued share capital, which translates into the empowerment of 30% of Sappi's Southern African business. The total value of the transaction was ZAR814 million. The share scheme, known internally as 'Sefate', meaning 'to grow', recognised the contribution made to the company by our South African employees; has helped to attract and retain staff, in particular highly skilled black managers; and has reinforced Sappi's position as a responsible corporate citizen within the communities where we operate.



As many of our employees were first-time share owners, we rolled out a communications programme to educate them about the benefits of share ownership in general and the Sefate scheme in particular.

Certificate issued	Certificate valid till	Ownership	Management	Employment equity	Skills development	Preferential procurement	Enterprise development	Socio-economic development	Total score	Level
2006	January 2007									8
January 2007	January 2008	–	2.82	1.91	5.48	7.44	15.00	4.67	37.32	8
February 2008	February 2009	–	2.82	1.91	6.83	7.56	15.00	4.67	38.79	8
April 2008	April 2009									7
August 2009	August 2010	–	4.15	2.58	10.31	17.22	15.00	4.71	53.97	6
October 2010	October 2011	15.74	4.49	3.69	9.55	18.76	14.96	8.00	75.19	3
November 2011	November 2012	15.30	6.21	2.40	9.15	18.47	15.00	8.00	74.53	4
December 2012	December 2013	15.10	5.25	2.49	8.10	19.26	15.00	8.00	73.20	4
November 2013	November 2014	15.28	5.13	2.54	9.55	17.29	15.00	8.00	72.79	4
November 2014	November 2015	24.50	4.94	2.63	9.00	19.54	15.00	8.00	83.61	3
November 2015	November 2016	24.33	2.29	2.25	9.43	18.94	15.00	8.00	80.24	3
November 2016	November* 2017	24.34	2.08	1.99	10.18	19.06	15.00	8.00	80.65	3

BBBEE certificates – validity and scores.

\* In 2015 and 2016 the BBBEE targets were increased.



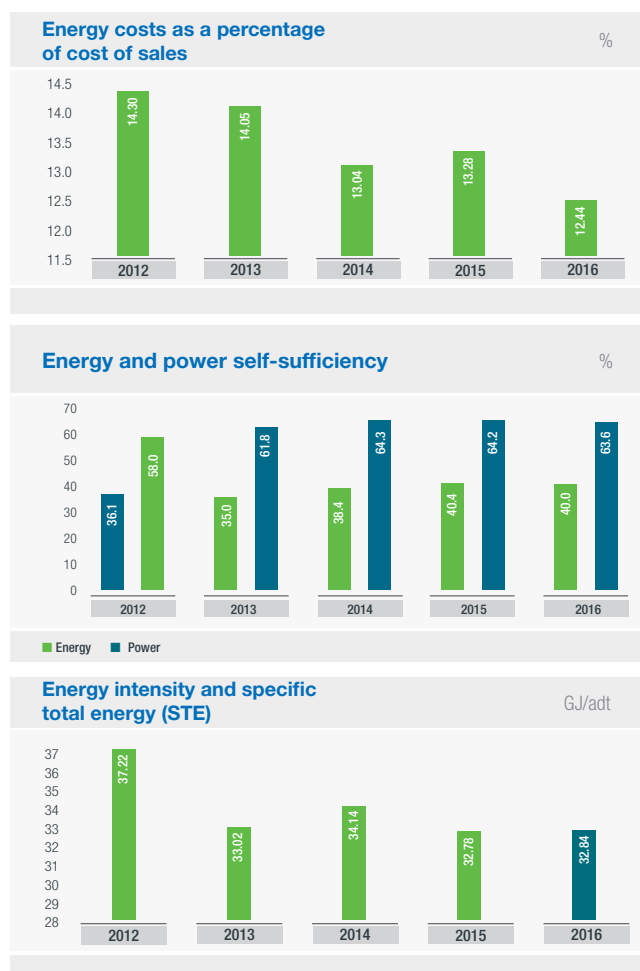


# Planet

- Renewable energy generated is now 45% – an improvement of 9% over five years
- Energy self-sufficiency: 40% – an increase of 10% over five years
- Power self-sufficiency: 64% – an improvement of 10% over five years
- Specific water extracted has decreased by 15% over five years
- Particulate matter emissions have reduced by 54% over five years
- Scope 1 and 2 greenhouse gas emissions have declined by 16% and 17%, respectively over five years
- Specific landfilled waste has reduced by 6.7% over five years

Our goal is to  
**tread more lightly**  
on the planet.

# Energy



Note: In terms of energy, we have made certain changes to align more closely with the Global Reporting Initiatives (GRI) 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.

Note: All environmental graphs exclude values for the mills sold in late 2015.

We continue to focus on making energy improvements in order to reduce greenhouse gas emissions, increase our generation of renewable energy and enhance energy efficiency and self-sufficiency. Our declining energy costs as a percentage of costs of sales show that we are succeeding in this regard, as do the other graphs in this section (summarised under 'Highlights' on page 37).

In 2016, we embarked on the following 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
- At **Saiccor Mill**, we are replacing three turbine generators with a high-efficiency steam turbine generator set. We are also adding a second turbine with full condensing capability to eliminate wasteful steam vents and improve boiler efficiency as well as the impact of an Eskom electricity supply interruption.
  - These actions will reduce the amount of imported power purchased from Eskom, thereby increasing power self-sufficiency to approximately 70% and enhancing the mill's cost competitiveness. In addition, coal-fired boiler operation will improve as the occasional over-supply 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, and



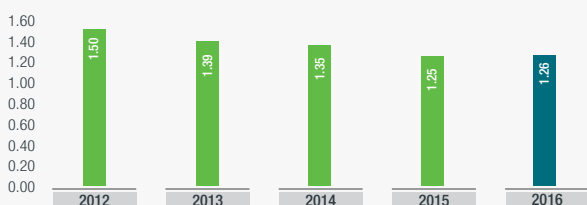
To meet energy improvement goals, a high-efficiency steam turbine generation set is currently under construction at Saiccor Mill.

- At **Ngodwana Mill**, excess energy is generated which is sold back into the power grid. We had an opportunity to expand this in 2015, when we were selected as preferred bidder in terms of the government's independent power producer programme for a project which involves the supply of biomass from local plantations to Ngodwana Mill. We are still waiting for regulatory approval.

The implementation of a carbon tax in South Africa has been delayed until 2018. 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.

#### Direct GHG emissions (Scope 1)

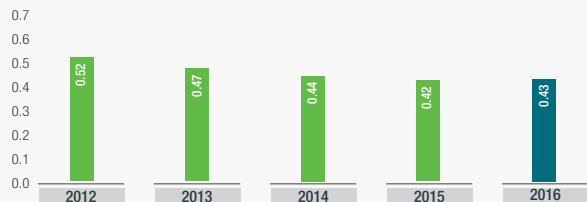
t CO<sub>2</sub>/adt



Scope 1 emissions increased slightly due to poor quality coal and recovery boiler tube leaks at Saiccor Mill which led to increased use of coal and heavy fuel oil.

#### Indirect GHG emissions (Scope 2)

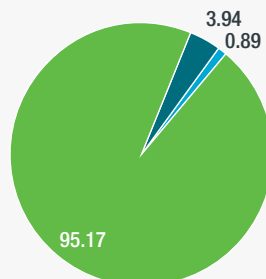
t CO<sub>2</sub>/adt



Scope 2 emissions increased slightly year-on-year because of recovery boiler issues at Saiccor Mill.

#### SA renewable energy breakdown 2016

%



Own black liquor  
Own biomass (mostly bark)  
Renewable energy in purchased power



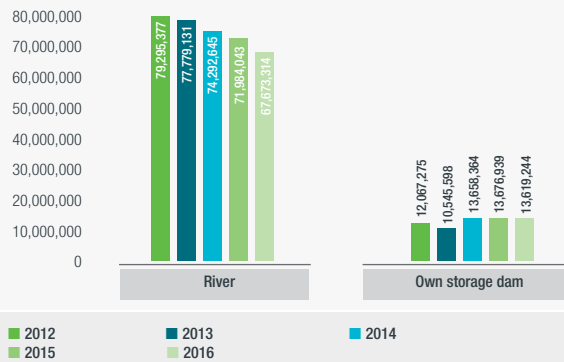
Excess energy generated at Ngodwana Mill is sold back into the grid.



# Water

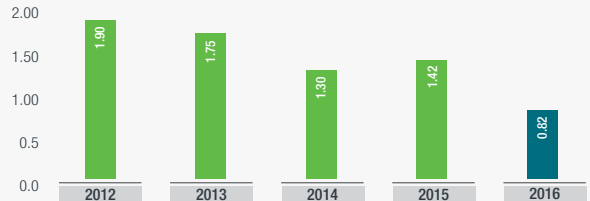
**Total water withdrawal by source**

m<sup>3</sup>/a



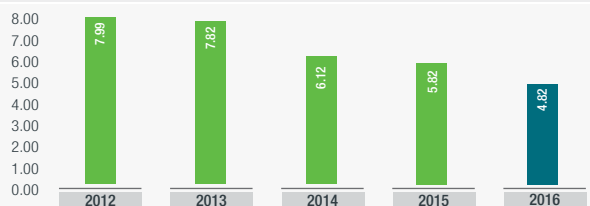
**Specific total suspended solids**

kg/adt



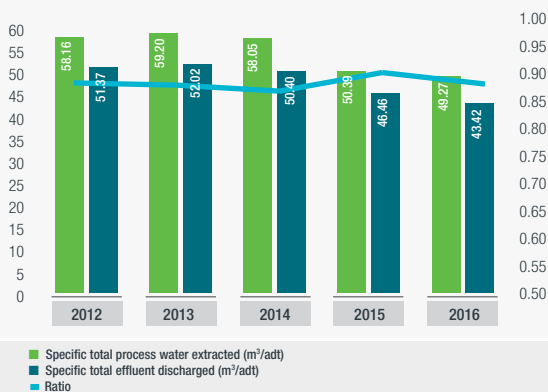
**Chemical oxygen demand (COD)**

kg/adt



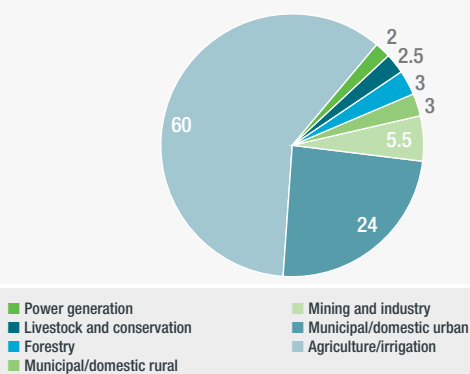
**Specific water returned to extracted**

m<sup>3</sup>/adt



**Water use by sector in South Africa**

%



Source: Department of Water Affairs 2010.

Saiccor Mill has been excluded from the TSS and COD calculations as it is the only mill in the group to use the sulphite pulping process in the production of dissolving wood pulp (DWP) (both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process to produce DWP). 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 the many years, scientific studies carried out on the marine environment have concluded that the magnitude and spacial extent of the impact is negligible with no immediate or significant ecological concern – CSIR (2008 – 2015).

Our processes are highly dependent on water, with water extracted primarily from the rivers (83%) on which our mills are situated and our own dams (17%). This extraction is regulated by strict licence conditions. Approximately 88% of the water we extract is returned to the environment.

The South African Risk and Vulnerability Atlas (SARVA) states that water resources are likely to be affected in the following ways due to the increase in extreme events, droughts and heavy precipitation:

- Decrease in water quality due to saltwater intrusion
- Increase in the occurrence of international water conflicts
- Decrease in water quality due to run-off and erosion, and
- Decrease in agricultural development and profits due to droughts.

# Waste

Against this backdrop and as responsible manufacturers, we recognise that we have a particular responsibility to reduce water usage and enhance the quality of the effluent we discharge. We are proud of the fact that specific water extracted and specific effluent discharged have decreased by 11.6% over five years.

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

Some of our stakeholders have expressed concern that forestry uses large amounts of water. However, unlike most other forms of agriculture, our plantations are not irrigated and use comparatively little water as indicated in the pie chart on the previous page. Like any other crop, plantations use both soil and water resources but these can be measured against the returns they provide.

## Sectoral multipliers per million m<sup>3</sup> water used in SA

Sector	High-level jobs	Mid-level jobs	Low-level jobs	GDP supported (ZAR million)
Agriculture (General)	10	30	210	13
Gold mining	650	2,880	11,900	1,600
General manufacturing	6,800	27,000	28,000	6,700
Pulp and paper	25,000	79,000	81,000	23,000
Beverages	38,000	131,000	158,000	37,000
Glass products	23,3000	71,6000	836,000	250,000

Source: Assessment of the Ultimate Potential and Future Marginal Cost of Water Resources in South Africa, Report no: PRSA 000/00/12610 prepared by BKS for the Department of Water Affairs, September 2010.

Plantations are one of the most efficient and beneficial water users – both in respect of the timber produced and the associated carbon dioxide sequestered (absorbed) in the process<sup>(5)</sup>.

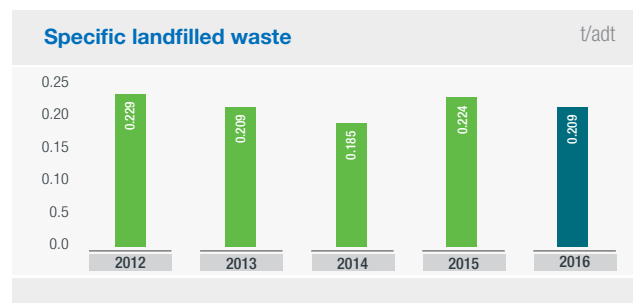
Species	Ton* water required for growth per tonne of CO <sub>2</sub> absorbed	Ton* of CO <sub>2</sub> absorbed per ha per annum
SA eucalyptus	274	26.9
Cotton	4,866	2.5
Maize	3,943	6.8
Wheat	4,776	5.1
Sugar cane molasses	3,152	2.2

<sup>(5)</sup> <http://www.thepaperstory.co.za/2016/08/celebrating-trees-wood-and-water-this-arbor-week-4-10-september/>

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

## Minimising solid waste

Reducing solid waste has positive environmental implications as solid waste is generally sent to landfill and landfills generate methane, a greenhouse gas with approximately 25 times the global warming potential of carbon dioxide. There are also positive economic implications. By re-using input materials such as chemicals, costs are reduced. Waste minimisation is also an avenue for revenue generation.



All our mills disposed of less waste to landfill. At Ngodwana Mill less waste was sent to landfill because of higher boiler ash sales and high bark usage in the PF boiler. Saiccor Mill resumed ash deliveries to local blockmakers after receiving permission to do so which resulted in lower tonnages to landfill in addition to several waste reduction initiatives implemented. At Tugela Mill, bark was beneficiated by composting and sludge generated was reduced due to reject screens optimisation which reduced fibre losses to drains.

## Composting at Tugela Mill

In terms of composting joint venture project at Tugela Mill between Sappi and a third party, 5,704 tons of bark was extracted and recycled in the past financial year. This project resulted in the following benefits:

- Additional income generated for the mill
- Extracting the bark creates additional air space on the landfill, thereby enabling landfill to decompose more quickly
- Employment opportunities (five local employees employed by the third party), and
- Supplying the agricultural industry with compost.



A successful joint venture between Sappi and a private company uses bark from the timber in the mill to produce compost.

# Our sustainability governance structure

## Our sustainability policies

Group policies include:

- Climate Change Policy
- Code of Ethics
- Corporate Social Responsibility Policy
- Environmental Policy
- Human Resources Policy
- Human Rights Policy
- Occupational Health and Safety Policy
- Stakeholder Engagement Policy
- Supplier Policy
- Sustainability Charter, and
- Wood and Fibre Procurement Policy

Policies specific to Southern Africa include:

- Forests, Safety, Health, Environment and Quality Policy
- HIV/AIDS Policy
- Occupational Health and Safety Policy
- Quality Policy
- Railway Safety Policy
- Technology Centre Quality Policy, and
- Wood, Pulp and Reclaimed Material Sourcing Policy.



These policies are all available under the sustainability tab on [www.sappi.com](http://www.sappi.com).

## External policies and charters

In terms of external policies and charters, we are guided by:

- Energy Efficiency Accord
- Eskom's 49M campaign
- The Organisation for Economic Co-operation and Development (OECD) Policy Guidelines for Preventing Corruption, which are incorporated into our Code of Ethics
- The UN Global Compact (signed by Sappi Limited in 2008)
- Universal Declaration of Human Rights, and
- International Labour Organisation.

## Memberships and associations

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 members of the internationally collaborative programme Biological Control of Eucalyptus Pests (BiCEP) (<http://bicep.net.au/>) at the Australian Centre for Industrial and Agricultural Research (ACIAR). We also belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria.



Sappi Southern Africa belongs to the following associations:

- Industry bodies:
  - Energy Intensive Users Group (EIUG)
  - Fibre Processing and Manufacturing Skills Education and Training Authority (SETA)
  - Forest Stewardship Council® (FSC®)
  - Forestry South Africa (FSA)
  - Packaging SA
  - Paper Manufacturers' Association of South Africa (PAMSA)
  - Paper Recycling Association of South Africa (PRASA)
  - Printing SA (PIFSA), and
  - South African Chamber of Commerce and Industry (SACCI) and local chambers of commerce and industry.
- Business and voluntary associations:
  - Damage-causing Animals Working Group
  - Business Against Crime (BAC)
  - Business Leadership South Africa (BLSA)
  - Business Unity South Africa (BUSA)
  - Environmental and conservancy associations (local and provincial)
  - KwaZulu-Natal Growth Coalition
  - National Business Initiative (NBI)
  - Manufacturing Circle
  - Mpumalanga Growth Coalition
  - Provincial Disaster Management Advisory Forums
  - South African Chamber of Commerce and Industry (SACCI)
  - TwoSides, and
  - Various fire and water associations, both local and national.
- Civil society:
  - Birdlife SA
  - South African National Biodiversity Institute (SANBI)
  - South African National Parks (SANParks)
  - South African Institute of Entrepreneurship (SAIE)
  - University of Cape Town (UCT) Animal Demography Unit (ADU) tree project
  - Wildlife and Environment Society of South Africa (WESSA), and
  - World Wildlife Fund South Africa (WWF-SA).

## Our sustainability governance structure

At the highest level, sustainability is overseen by the Social, Ethics, Transformation and Sustainability (SETS) Committee. This is a statutory Sappi Limited board committee which has an independent role and accountability to the board. Further detail on the work undertaken by this committee in 2016 is available in our Annual Integrated Report.

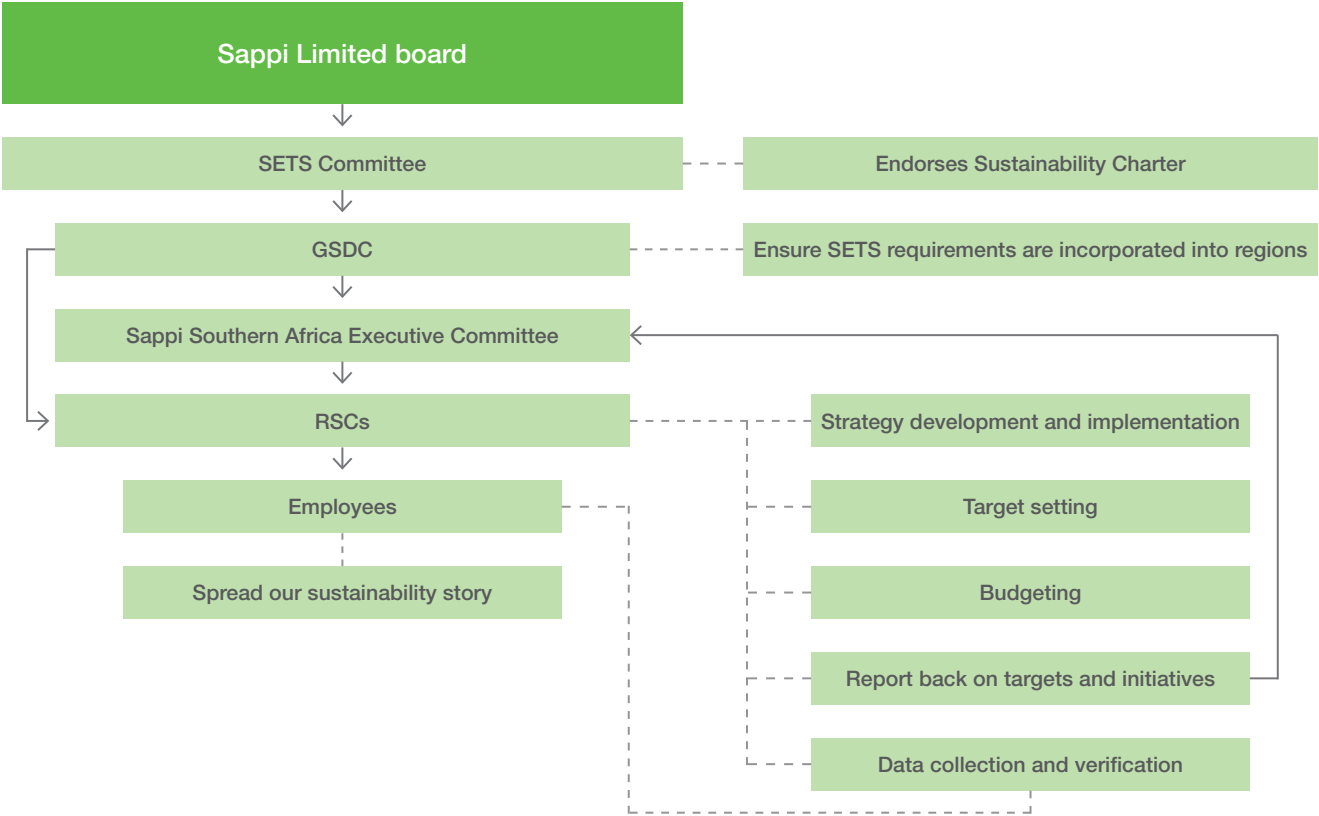
The Global Sustainable Development Council (GSDC) reports to the SETS Committee and oversees the work of the Regional Sustainability Councils (RSCs). There are RSCs in Europe, North America and Southern Africa. Each RSC focuses on key material issues relevant to their specific region and on incorporating sustainability into everyday business processes.

In Southern Africa, this is achieved by:

- Incorporating milestone setting on targets into the budgeting process and by reporting back on progress against these targets on a quarterly basis to the Sappi Southern Africa Executive Committee
- Our sustainability ambassadors and through our award-winning Earth Kind Agent game, and
- Ongoing communication with customers, investors, employees, suppliers and contractors aimed at reinforcing our sustainability messaging.



Our sustainability governance structure



# Messages from our Regional Sustainability Council

“At Sappi, we are continually unlocking value as it underpins our sustainability beliefs: doing every thing to create value over time while using fewer natural resources.”

Renée van Hoeve  
*Regional Environmental Manager, Sappi Southern Africa*

“At Sappi, we do not take for granted that our economic activities do not affect the ability of natural systems to continue to provide the resources and services we need. Nor do we assume we are having a positive social impact, we measure, manage and improve our performance of these aspects in the belief that we are contributing to the greater sustainability of our company and our country.”

David Everard  
*Divisional Environmental Manager, Sappi Forests*

“The current global picture does not paint a rosy future, the escalation of war in the east, the change in the political arena in Europe and the US, the failure of countries to deliver economic freedom for all, environment-related disasters and the destructive greed and corruption that has captured our country. We as the custodians of the future are failing our children and their children. The word ‘sustainability’ is more relevant today than it has ever been and should be ingrained in our everyday thoughts and actions; so that when we make decisions the focus on ‘unlocking value’ is not just for today, but for decades and centuries to come. Sappi is committed to working with all stakeholders and aims to be a trusted and sustainable organisation with an exciting future where all will benefit from the value add that we create.”

Tyrone Hawkes  
*Director: Strategy and Business Development, Sappi Southern Africa*

“At Sappi we have a ‘can do’ attitude towards sustainability by innovatively finding new ways of improving.

“Sustainability is our moral compass, and therefore we show progress and commitment in striving to achieve our goals.”

Liana van Zyl  
*Technical Specialist – Energy and Emissions, Sappi Limited*

“We are living in a rapidly changing world where keeping in touch requires a press of a button, commercial travel to the moon is possible and bacteria can now be programmed to kill cancer cells, yet the burning issues facing us as a society relate to basic human needs – poverty, and inequality; food and water security; and the impacts of global warming. For this reason sustainability is the most relevant social, economic and environmental topic of our times. It is about creating a society that values moderation, balance and has a sense of responsibility; a society that takes action not only focusing on growing and developing but a society that refuses to destroy.”

Krelyne Andrew  
*Business Support Manager – Technical, Sappi Specialised Cellulose*

“Sustainability has to be at the core of everything we do. The Sappi Code of Ethics requires that protecting people and the environment underpins our approach to sustainability. Whether it is how we run operations, utilise resources, develop products or treat the environment we operate in, we must always keep sustainability at the front of our minds and ensure we always act accordingly.”

Richard Wells  
*Sales and Marketing Director, Sappi Southern Africa*

“Sustainability is the best gift we can pass on to our children. It is about leaving the environment in better shape than when it was inherited. Be it Planet, People or Prosperity, it is about the symbiotic interaction of all three elements that allows us to thrive and to leave the world a better place when we move on. Simple values

that Sappi subscribes to and expects from its stakeholders.”

Pat McGrady  
*Manufacturing and Technical Director, Sappi Southern Africa*

“At Sappi we strive to add value to the daily lives of people and in doing so create a more equitable society. This can only be done through a sustainable business model that aims to unlock the value associated with our natural resources while minimising the impact on the environment and uplifting the communities in which we operate.”

Liezl Krummeck  
*Business Development Manager, Sappi Specialised Cellulose*

“Sustainability is core to how we at Sappi are doing business. It is from using our natural resources to harnessing the collective skills of our people that makes Sappi a great company to work for.”

Fergus Marupen  
*Group Head Human Resources, Sappi Limited*

“As we extract value from wood, in the form of pulp and other biorenewable products, we have to be cognisant of our responsibility to do so sustainably and responsibly. “

Nelson Sefara  
*Technology Centre Manager, Sappi Southern Africa*

“Our ultimate success is judged by the opportunities we create for people, the value our products and services bring to people’s lives and how our actions minimise the negative impacts associated with human activity and support the protection of our natural environment and heritage. We will continue to pursue these goals within Sappi and with our external stakeholders.”

André Oberholzer  
*Group Head Corporate Affairs, Sappi Limited*







**sappi**

Inspired by life

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

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