Our key relationships

We believe that building relationships with our stakeholders in a spirit of trust and mutual respect enables more tangible business value creation: Firstly, by communicating our performance as well as the business decisions and activities that have a material impact on our activities, we enhance our licence to trade. Secondly, by understanding the rights, needs and expectations of our stakeholders; integrating their inputs; as well as measuring and monitoring our activities; we ensure alignment with our strategic goals, including shared value.

Recognising the strong link between stakeholder inclusiveness and materiality, we use stakeholder engagement as a tool to assist in the identification and prioritisation of material issues. Materiality takes into account substantial economic, environmental and social factors in addition to financial factors. By determining our most material issues through stakeholder engagement, we clarify and confirm the strategic themes that ascertain our most significant risks and opportunities and ultimately, driving the long-term success of our business.

Accordingly, we engage with a broad range of stakeholders through a variety of formal and informal channels – from ongoing engagement across all our stakeholder groupings, including investors, government, industry bodies, customers, communities and NGOs, to collective public meetings with stakeholders by our mills, as well as surveys of selected groups such as employees, customers and investors and audits with suppliers. We view stakeholder engagement not as a once-off annual intervention but as an ongoing dynamic process able to respond to the changing nature of issues of interested and affected parties.

Our approach to engagement with all stakeholder groupings is based on the principles of:
- **Materiality** – identifying the material concerns of stakeholder groupings
- **Relevance** – focusing on those issues of material concern to our stakeholders and to Sappi and identifying how best to address them for our mutual benefit
- **Completeness** – understanding the views, needs, performance expectations and perceptions associated with these material issues and assessing them against prevailing local and global trends, and
- **Responsiveness** – engaging with stakeholders on these issues and giving regular, comprehensive, coherent feedback.

Our main stakeholder groupings, as set out in our Group Stakeholder Engagement Policy (available on [www.sappi.com](http://www.sappi.com)), are set out in this section, together with selected examples of engagement undertaken during the reporting period. As a global business, with our products sold into more than 150 countries, our ability to connect with stakeholders as One Sappi, motivated by our revised mission, strategy and shared values, gives us a clear advantage and for our stakeholders a connection they can trust to add value.

A key development in FY2017 aimed at enhancing stakeholder engagement was the relaunch of our website [www.sappi.com](http://www.sappi.com) with significant updates and now being optimised for mobile access. Regional information is now all consolidated in one hub, in line with our One Sappi strategy.

The website features full descriptions of products and services offered; comprehensive award-winning educational materials for customers; in-depth sustainability reporting; easy access to corporate social responsibility efforts like Ideas that Matter; dynamic portals for customers and investors and a prominent social media presence. The site is being updated on an ongoing basis in line with our engagement principles of completeness, relevance, materiality and responsiveness.
Employees

Management approach
We invest in future talent while challenging our people so that they are able to seize the opportunities presented by global megatrends. We make resources available to enable our people to grow intellectually, fulfill their potential and drive innovation within Sappi.

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

Ongoing avenues of engagement
- Our group and regional CEOs engage with staff through regular site visits, presentations and discussions; suggestion lines exist at some facilities, and unions have formal channels through which they engage with management.
- We encourage full engagement between managers and their staff.
- Other avenues of engagement include:
  - Global, regional and local newsletters
  - Our global intranet
  - Letters, roadshows and presentations by the group CEO as well as regional CEOs
  - Operating unit meetings, briefings and workshops, and
  - Various forums (SA):
    - National Employment Equity and Learning Forum
    - Shop Steward Forum
    - National Partnership Forum
    - Transformation Steering Committee
  - Global Employee Engagement Survey (every second year)
  - Wellbeing committees at mills and business units
  - Health and safety committees at mills
  - Global Technical Innovation Awards and Global Sappi Limited CEO Award for Excellence
  - Regional recognition awards:
    - SEU: the annual Coryphaena Award
    - SNA: the quarterly Risk Taking and Ingenuity Awards
    - SSA: the Excellence in Achievement Awards (EAA), and
    - Sappi Trading: the SMART Awards
  - Ongoing training and development initiatives, training targets in each region
  - Targeted training and engagement programmes in each region regarding sustainability
  - In Europe, we train and develop young apprentices
  - In Southern Africa (SA), we operate bursary and training programmes and support Further Education and Training (FET) colleges
  - In SA, our employees also have access to the Earthkind Agent eLearning game by which they are exposed to Sappi’s sustainability information in a new and innovative platform. A tablet version of the game enables children and family and friends of employees to access the game.

Engagement in 2017
- We completed an engagement survey in all regions to assess levels of connection to our business
- In all regions, we encouraged employees to participate in outreach and community projects. For example, in Southern Africa, employees are encouraged to participate in Mandela Day
- In Europe, we:
  - Linked the eco-effectiveness campaign to the annual Sappi safety week so that corporate responsibility is seen within its broadest context, and
  - Continued to attract top internal talent to the SEU Leadership Academy. The group of 16 employees who started in September 2016 and will complete in October 2017, while a new intake of 25 employees began in June 2017
- In North America, we:
  - Continued with our Sustainability Ambassador, Enhancing Development and Growth through Engagement (EDGE) and Leadership Excellence and Development (LEADS) programmes. The latter focused on resourcefulness while our sustainability ambassadors developed training modules to broaden understanding of the business units within SNA (pulp, coated, packaging and casting and release papers)
  - Established a peer recognition programme called TOUTS which enables employees to offer feedback and recognition to one another
  - Launched the Employee Ideas that Matter (EITM) initiative which builds on the successful Ideas that Matter (ITM) programme by supporting worthy causes identified by Sappi employees, and
  - Introduced the Udemy online learning tool which was rolled out in Southern Africa in 2016
- In Southern Africa, we:
  - Embedded the utilisation of online video-based training though the deployment of five core programmes to all employees in skills technical and higher-level roles
  - Renewed focus on the Young Talent programmes as a mechanism to address our technical skills shortages. These programmes include engineers in training, apprenticeships, mill and forestry technical trainees, corporate functions learners, learnerships for people with disabilities and bursaries
  - Initiated a 21 module, 10-month Sappi Manager in Training programme, and
  - Successfully deployed Anti-Bribery, Competition Law and Code of Ethics courses, all in online format.

Value add
- Engaged employees are pivotal to the success of our business – alignment with our strategic direction enables our people to contribute more positively to the business as well as their personal and career development
- By building our human capital, we enable delivery of our 2020Vision and establish a base of the technical skills needed by the industry.
Our key relationships continued

→ Unions

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

Areas of mutual interest
In addition to meeting with local union leadership for the purposes of remuneration, working hours, and other conditions of service as well as resolving grievances, Sappi relies on local unions to demonstrate their commitment to the safety and wellbeing of their members through active support, participation in and contributions to company safety and wellness initiatives, as well as various forms of community outreach.

Ongoing avenues of engagement

- **SEU**: Negotiations occur at the various country and industry-specific collective labour associations, and the contract terms range from one to two years. The labour framework in Europe consists of works councils and collective labour agreements and differs from country to country.

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

- **SSA**: Our wage negotiations with recognised trade unions take place at the Pulp and Paper and Sawmilling Chambers under the auspices of the Bargaining Council for the Wood and Paper Sector in South Africa, and our agreements are generally annual. In this region, we also engage on broader issues with the recognised trade unions at the National Employment Equity and Skills Development Forum, the Shop Steward Forum and the National Partnership Forum.

Engagement in 2017

Overall, FY2017 was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies. More comprehensive details are provided on page 52 of this report.

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

- Improved relationships
- More stable labour force
- Safer work conditions and safer behaviour from employees, and
- Enhanced productivity.
Management approach

Having a mutually respectful relationship with the communities in which our business is situated is critical to our success. We work to incorporate the communities close to our operations into our journey of intentional evolution, which recognises the importance of conserving natural resources, uplifting people so that they are able to develop and create opportunities in their immediate environment as well as thrive in our increasingly inter-connected world and also through sharing value.

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

Areas of mutual interest

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

Ongoing avenues of engagement

There are various formats of community engagement meetings held by our mills in the regions where they operate. These range from broad liaison forums for business, local government and communities to legally mandated environmental forums which form part of the licensing conditions of mills. In Southern Africa, there are local farmer and community forums related to our forestry communities. We also support direct community engagement initiatives.

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

- **SEU:** Each Sappi mill and sales offices support various local education, cultural and environmental projects based on annual requests and identified needs. We also have established extensive internship programmes at all of our mills.

- **SNA:**
  - Each business location has a team of sustainability ambassadors who are responsible for supporting sustainability communication, conducting training and fostering community engagement through local projects
  - Education programmes are supported at targeted colleges and universities as are programmes to encourage study in fields relevant to our operations
  - Corporate sponsorships support organisations like Living Lands & Waters focused on environmental stewardship and education.

- **SSA:** We support:
  - SANBI (South African National Biodiversity Institute)
  - Birdlife SA
  - WWF-SA
  - The Honorary Rangers of the Kruger National Park
  - The UCT Animal Demography Unit (ADU) Indigenous tree mapping project
  - 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
  - The development of early childhood education capacity within our communities
  - The promotion of an asset-based community development approach within our forestry communities to enable new businesses to develop and existing businesses to improve.

Engagement in 2017

- **In Europe** all mills continued to offer paper and financial sponsorship to local schools, sport and hobby clubs, forest products industry students, local safety/environmental organisations, and also support local charities

- **In North America,** we:
  - Supported the Hurricane Harvey relief effort by matching employee donations to the American Red Cross
  - Continued with the Ideas that Matter programme which recognises and rewards designers who support good causes. Since 1999 the programme has funded over 500 non-profit projects and has contributed more than US$13 million to a wide range of causes around the world that use design as a positive force for good in society

- **In Southern Africa,** we continued to work with local government and communities to accelerate afforestation in the northern region of the Eastern Cape through our Sappi Khulisa enterprise and supplier development scheme. We also continued to be active in land reform

- **In North America,** we:
  - We created two technical training facilities using our existing infrastructure at Ngodwana and Saiccor Mills in May 2017. The centres will cater for basic handyman training for local unemployed youth with a view of enabling them to create micro-enterprises. In addition, Sappi’s intake of apprentices will be doubled and the centres will provide high-quality specialist technical training to mill employees. The first handyman trainees joined in October as a pilot and the centres will be fully operational by January 2018

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More detailed information about our initiatives can be found on pages 52 to 53 of this report.

Value add

Engagement with communities:

- Enhances our licence to operate
- Promotes socio-economic development which could in the long term lead to increased demand for our products
- Helps to develop the rural economy, and
- Initiates real social mobilisation and change for the better.
Our key relationships continued

→ Customers

Management approach
We adopt a partnership approach, whereby we develop long-term relationships with global, regional and local customers. We also accommodate more transactional customers. We offer customers innovative products and high levels of service that enable them to meet the needs of the rapidly changing world of tomorrow. We also review our go-to-market strategy where relevant to ensure that we align our interests and the interests of our end-users. Where relevant, we will also conduct R&D and develop products to suit customers’ specific needs.

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

Ongoing avenues of engagement
• The group follows an approach of regular engagement with customers by senior and executive management in support of the ongoing engagement by the relevant sales and marketing teams. In North America, we also meet annually with the Sappi Merchant Association
• Trade shows and exhibitions
• Online, print education and technical platforms include:
  – SEU: The Sappi Houston online knowledge platform
  – SNA: Environmental Quotient (eQ) and Education, Training and Consulting (ETC). Free and fully searchable, the Sappi ETC site covers everything from basic paper and sustainability resources to advanced print and design techniques, including colour management, printer technical tips, special effects, varnishes, folding, designing for direct mail, and
  – SSA: Our paper and paper pulp product offerings are supported by strong technical teams at each mill and the technology centre in Pretoria.

Engagement in 2017
• We introduced several new products
• We showcased our packaging papers from Europe and North America at FachPack 2017 and Labelexpo Europe 2017. At the former, we featured solutions and information for brand owners, packaging companies, converters, printers and print finishers, designers and advertising agencies. Our primary focus at the latter, under the theme ‘People, Paper, Possibilities’ was our innovations in the Release Liner and Label Paper product groups
• In Europe, we:
  – Held the eighth annual Sappi Football Cup, which challenges our customers, printers and publishers to show their skills in table football. Qualifying matches follow the rules issued by the International Table Soccer Federation. Sappi Europe welcomed this year’s 13 qualifying teams to Brussels, Belgium to compete for the Sappi Cup Table Football Tournament title on 20 April 2017. In total, 26 players from an original pool of close to 180 teams made the trip, representing Austria, CEE – Hungary and Serbia, France, Germany, Italy, Poland, Spain, and Switzerland
  – Provided our customers with information and solutions through the Sappi&You online portal which continued to gain traction
  – Are supporting printers’ needs for digital transformation through OctoPrint by becoming a software solution provider and selling software licences and services, and
  – Continued to enable customer engagement through our eco-effectiveness campaign which promotes individual action and recognition to make efforts to be sustainable and effective. It is about highlighting those who make the efforts to help improve our eco-effectiveness. Investments and innovations are also made to meet customer expectations of increased efficiencies, reduced impacts and products which will enhance their own social responsibility journey. The personal stories from Sappi’s eco-effectiveness campaign can be found at: http://www.sappi.com/eco-effective-stories
### Ongoing avenues of engagement

- **We provide extensive technical support:**
  - Globally, a series of technical brochures is available on our website [www.sappi.com](http://www.sappi.com)
  - We host customer and investor visits to the various mills
  - In **Europe** and **Southern Africa**, we publish paper profiles and information sheets for our papers. These give details regarding the composition of our papers, as well as key environmental parameters related to our pulp and paper production processes and information on environmental management systems and woodfibre sourcing policies, and
  - In **North America**, we use GreenBlue’s Environmental Paper Assessment Tool (EPAT) which enables buyers to evaluate our performance on a mill-by-mill basis
- **Our customers can also make use of the following:**
  - In terms of specialised cellulose, technical centres of excellence are located at Salcor and Cloquet Mills
  - A competence centre for specialty papers and paper laboratory at Alfeld Mill, and
  - In North America, the Sustainability Customer Council provides candid feedback and helps to identify emerging issues.

### Engagement in 2017

- **In North America:**
  - Our Sustainability Customer Council continued to provide candid feedback and valuable input on emerging issues. The council comprises Sappi customers, representing multiple customer segments of the coated papers and casting and release papers business, including merchants, printers, publishers, corporate paper buyers and graphic designers. Online and print education platforms in this region include the Environmental Quotient (eQ) and Education, Training and Consulting (ETC)
  - We continued to support the Paper and Packaging Board (P+PB), of which we are a member, in rolling out a public, consumer-facing integrated marketing campaign on behalf of the paper and packaging industry
  - We announced the winners of the 2017 Sappi North America Printer of the Year competition, chosen as the most outstanding print submissions from nearly 1,500 entries, and
  - We also continued to support the ‘Paper Checkoff’, a consumer campaign aimed at helping reverse the decline in printing and writing papers as well as boost demand for paper-based packaging using TV, print, billboards and the internet.
- **In Southern Africa,**
  - Sponsored the graphic design category in the Student Gold Pack Awards held under the auspices of the Institute of Packaging SA and we also sponsored paper for the Citrus Research Institute annual report in addition to sponsoring their annual symposium, and
  - Sponsored the ‘Help Colour My Dreams’ initiative, in partnership with the Nashua Children’s Charity Foundation (NCCF) which supports 75 charities. For every ream of Nashua-wrapped A4 paper produced by Sappi and sold through Nashua franchises, a certain amount of money was donated to the initiative.

### Value add

Ongoing engagement with our customers enables us to:
- Meet their needs for products with an enhanced environmental profile
- Innovate to align with evolving market trends
- Heightened awareness of the importance of sustainability
- Promote our customers’ own sustainability journeys
- Keep abreast of market developments, and
- Showcase our products and promote the Sappi brand.

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At Labelexpo 2017, Sappi presented two new Face Stock label papers in the form of Parade Face Stock C1S and Parade Face Stock Vellum, both of which are approved for direct contact with food and conform to DIN EN 71 for toy safety. The range of applications for these self-adhesive label papers include decorative labels for tins, glass containers, single-use and multi-use bottles and stickers or price labels (such as those found in the fruit and vegetable aisle) and more. Thanks to their excellent surface properties, these label papers ensure a brilliant appearance and excellent print results. Single-side-coated semi-gloss-paper Parade Face Stock C1S can be processed with all standard printing processes, while Parade Face Stock Vellum meets the requirements for a high-quality result in thermal transfer printing. Parade Face Stock C1S is available in a weight of 80g/m², and Parade Face Stock Vellum in grammages of 70 and 80g/m². Both papers are also available in FSC®-certified versions.
Our key relationships continued

→ **Industry bodies**

**Management approach**
We partner with industry and business bodies to showcase the role of business in building society, to provide input into issues and regulations that affect and are relevant to our businesses and industries. We also support and partner with industry initiatives aimed at addressing broad-ranging social issues and promoting the use of our products.

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

**Ongoing avenues of engagement Engagement in 2017**

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<tr>
<th>SEU</th>
<th>Engagement in 2017</th>
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<tr>
<td>- Sappi has been a signatory to the UN Global Compact since 2008</td>
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<tr>
<td>- In Europe and North America, close engagement is maintained directly and through the respective industry bodies CEPI and AF&amp;PA. In Europe we also engage with FSC®, WWF International and with the Programme for the Endorsement of Forest Certification (PEFC™). In North America, Sappi is a member of the economic chamber of both FSC® US and SFI® and actively engages with these organisations through a variety of working groups and committee activities. In Southern Africa, Sappi is a member of the local WWF organisation as well as FSC®.</td>
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<td>- SEU Conf federation of European Paper Industries (CEPI)</td>
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<td>- Eurograph</td>
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<td>- European Joint Undertaking on Bio-based Industries</td>
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<td>- Print Power</td>
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<td>- The Alliance of Energy-intensive industries</td>
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<td>- The Two Team Project (focusing on breakthrough technology concepts in the industry which could enable a more competitive future)</td>
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<td>- TwoSides.</td>
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<th>SNA</th>
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<td>- American Forests and Paper Association (AF&amp;PA)</td>
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<td>- Paper and Paper Packaging Board</td>
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<td>- Agenda 2020 Technology Alliance</td>
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<td>- Sustainable Packaging Coalition (SPC)</td>
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<td>- Forest Products Working Group</td>
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<td>- The Recycling Partnership</td>
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<td>- TwoSides.</td>
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- We continued to support targeted communication campaigns help to promote the value of paper-based communication and support the efforts of marketers and communicators in their search for responsible choices. Examples include support for the TwoSides organisations in Europe, North America, South America, South Africa and Australia and the Print Power campaign in Europe.
- Sappi Forests continues to be involved in the development of an FSC® National Forest Steward Standard for South Africa, as well as a PEFC™ standard for the country.
- Under the umbrella of the European Pulp and Paper Chemicals Group AISBL (EPCG), SEU is working on an industry solution for an online information exchange between chemical suppliers and pulp and paper manufacturers.
- SEU contributed to the report European industry in the 21st century: New models for resource productivity published by the University of Cambridge’s Institute for Sustainability Leadership (CISL).
- SEU has been intensively working with CEPI to ensure that the revised criteria of the EU Ecotagel remain achievable.
Ongoing avenues of engagement

SSA
- Business Unity South Africa
- Business Leadership South Africa
- Energy Intensive Users’ Group
- Fibre Processing and Manufacturing Skills Education and Training Authority (SETA)
- Forestry South Africa
- Forest Stewardship Council® (FSC®)
- Packaging SA
- Paper Manufacturers’ Association of South Africa (PAMSA)
- Paper Recycling Association of South Africa (PRASA)
- Printing SA (PIFSA) Manufacturing Circle
- South African Chamber of Commerce and Industry (SACCI) and local chambers of commerce and industry
- The CEO initiative
- TwoSides.

Sappi Forests is a member of the Institute for Commercial Forestry Research (ICFR) and is a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute (FABI) at the University of Pretoria. Through the TPCP we also belong to the internationally collaborative programme Biological Control of Eucalyptus Pests (BiCEP) at the Australian Centre for Industrial and Agricultural Research (ACIAR).

In addition, we belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria and to CAMCORE, an international non-profit organisation dedicated to the conservation and utilisation of subtropical and tropical tree species.

Sappi Speciality Papers is a member of the Save Food initiative which aims to eliminate food waste and loss globally.

Sappi Limited supports the Technical Association of the Pulp and Paper Industry (TAPPI).

Engagement in 2017
- In 2016, in response to a sovereign ratings downgrade in South Africa, the CEO initiative, of which Sappi is a member, was established. The initiative launched three major workstreams in 2016: one focusing on youth employment, which endeavours to create one million internships for unemployed youth across the private sector; the second, the investment workstream, seeks to bring private money into sectors such as agriculture and tourism, while also developing black industrialists and the third, the small and medium-sized enterprises (SMEs) fund aims to provide capital to existing fund managers already investing in SMEs. The latter workstream progressed further in 2017.

Value add
- Work with industry and business associations through collective initiatives to support societal change and deal with societal challenges
- Collaborate on legislative trends such as carbon tax and carbon budgets
- Maintain and expand markets for our products
- Demonstrate the value-add of the forest products industry
- Dispel myths and promote understanding of our industry.
Our key relationships continued

Investors

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

Areas of mutual interest
- Information on Sappi’s strategy
- Return on investment
- Transparent information about risks, opportunities and ESG performance.

Ongoing avenues of engagement
- Our investor relations (IR) team engages with shareholders and analysts on an ongoing basis. This team has direct access to the executive directors and any issues shareholders raise that would be relevant for the board are channelled through the IR team. Our Chairman also engages with shareholders on relevant issues.
- We conduct ad hoc mill visits and road shows, and issue announcements through Stock Exchange News Service (SENS), in the press and on our website www.sappi.com.
- We publish our Annual Integrated Report and sustainability report on the company website.
- Shareholders can attend and participate in the AGM as well as the four quarterly financial results briefings.
- Our CFO and Head of Treasury engage with bondholders, banks and rating agencies on an ongoing basis regarding the performance of the company.
- We participate in the Carbon Disclosure and Forest Footprint Disclosure projects every year, making our submissions publicly available.

Engagement in 2017
In 2017, we continued to engage with our investors through the avenues set out on the left.

Value add
- Understanding of and support for our strategic direction
- Enhanced reputation
- Greater investment confidence
- Broader licence to invest.
Suppliers and contractors

Management approach
We are committed to establishing mutually respectful relationships with our suppliers and encouraging them to join our commitment to economic, social and environmental responsibility and to creating an environment that shares our commitment to doing business with integrity and courage, making smart decisions which we execute with speed. We aim to build long-term value partnerships.

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

Areas of mutual interest
• Transparent information
• Forest certification
• Increased value and decreased costs
• Corporate responsibility
• Security of fibre supply, income generation and job creation.

Ongoing avenues of engagement Engagement in 2017

• SEU: A joint sourcing partnership assists in negotiating better terms with timber and other suppliers. In addition, the Confederation of European Paper Industries (CEPI), of which Sappi Europe is a member, participates in actions supporting and promoting the development of sustainable forestry management tools – including forest certification – all over the world, particularly in less developed countries
• SNA: The Sappi Forestry Programme assists forest landowners to meet their objectives for managing their woodland. Sappi's trained foresters are able to develop a forest management plan geared to the interests of the landowner including wildlife management and aesthetics, marketing of timber to generate maximum return
• SSA: Qualified extension officers provide growers in our Sappi Khulisa enterprise and supplier development scheme with ongoing growing advice and practical assistance.

• In SA, the intake at our Khulisa Ulwazi (Growing Knowledge) training centre aimed at developing small growers and other forestry value chain participants more than doubled to over 1,000 people
• In SSA, contractors participated in creating and living our Stop and Think before you Act safety initiative, described on page 51.

Value add
• Security of woodfibre supply
• Improved supplier relations
• Better understanding of the requirements of the Sappi group
• Expanded basket of certified fibre.
Our key relationships continued

Civil society (Media)

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

We continue to update the media regarding our strategic shifts to extract value from woodfibre in line with future trends as well as Sappi’s positive impact in the communities where we operate. We engage with civil society organisations on issues of mutual interest and belong to key organisations relevant to our operations.

Areas of mutual interest
• Business developments
• The future of our industry
• Our impacts on our communities
• Protecting biodiversity/the environment.

Ongoing avenues of engagement
• We join key credible organisations as members
• We develop personal relationships and engage on an ongoing basis
• We provide support to and sponsorship for key organisations on issues of mutual interest
• In SSA, our forestry operations belong to a number of fire associations, given that fire is a key risk on our plantations. Our innovative Abashintshi project continued to gain traction, helping to prevent the spread of fires. This has also been helped by the African Honey Bee project on our plantations. For further details, go to page 53 of this report.

Engagement in 2017
Engagement in 2017 took place through the avenues outlined on the left.

Value add
• Opportunity to inform and educate media
• Transparent, two-way communication and opportunity for dialogue.
Government and regulatory bodies

Management approach
We engage with government departments and regulatory bodies to provide input into issues and regulations that affect our industry. We also engage with regional and local governments and local authorities to obtain support for our operations and show how our activities contribute to local economic and social development.

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

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

Engagement in 2017
Across all regions we continue to engage with region-wide, national, state and local authorities to ensure that our interests are raised and protected.

In South Africa, we continued to engage with government organisations regarding the transformation agenda and in particular the new Broad-based Black Economic Empowerment (BBBEE) Forestry Charter following the gazetting of the Amended Forestry Sector Code in April. We trust that the delayed biomass energy project at Ngodwana Mill will move ahead by the end of November 2017.

Value add
Engagement helps to promote understanding of the issues and challenges we face and resolve certain challenges.

Value added statement (%)

- To employees as salaries, wages and other benefits
- Reinvested to grow the business
- To lenders of capital as interest
- To government as taxation
- To shareholders as dividends

<table>
<thead>
<tr>
<th>Year</th>
<th>Value added statement (%): To employees as salaries, wages and other benefits</th>
<th>Reinvested to grow the business</th>
<th>To lenders of capital as interest</th>
<th>To government as taxation</th>
<th>To shareholders as dividends</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>32</td>
<td>52</td>
<td>8</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
<td>54</td>
<td>8</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>26</td>
<td>57</td>
<td>12</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Our global sustainability goals

In line with our 2020Vision and One Sappi strategic approach, in 2015 we established ambitious global sustainability targets. Regional targets are aligned to these goals. The base year is 2014, with five-year targets from 2016 to 2020.

Our performance in 2017, together with commentary, is set out below:

**PROSPERITY**

<table>
<thead>
<tr>
<th>Global target</th>
<th>2014 base</th>
<th>2017 performance</th>
<th>2017 compared to 2014</th>
<th>2020 goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCE</td>
<td>10.8%</td>
<td>18%</td>
<td>67% improvement</td>
<td>12% ROCE minimum</td>
</tr>
</tbody>
</table>

**PEOPLE**

<table>
<thead>
<tr>
<th>Global target</th>
<th>2014 base</th>
<th>2017 performance</th>
<th>2017 compared to 2014</th>
<th>2020 goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIFR (Combined own and contractor employees)</td>
<td>0.53</td>
<td>0.44</td>
<td>17% improvement</td>
<td>Target zero LTIFR with minimum 10% improvement year-on-year</td>
</tr>
<tr>
<td>Sustainable engagement – increase level of survey participation</td>
<td>Not measured (2015: 74%)</td>
<td>85%</td>
<td>Not applicable</td>
<td>76%</td>
</tr>
</tbody>
</table>

**PLANET**

<table>
<thead>
<tr>
<th>Global target</th>
<th>2014 base</th>
<th>2017 performance</th>
<th>2017 compared to 2014</th>
<th>2020 goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency (Specific total energy)</td>
<td>22.77GJ/adt</td>
<td>22.77GJ/adt</td>
<td>Constant*</td>
<td>5% improvement over the period</td>
</tr>
<tr>
<td>Certified fibre</td>
<td>79%</td>
<td>73.5%</td>
<td>5.5% decline</td>
<td>Maintain or improve percentage</td>
</tr>
</tbody>
</table>

* The base figure for specific total energy has changed as we are now using net, rather than gross, calorific values. (It was previously 22.92GJ/adt.)

**Prosperity**

ROCE: The 67% improvement compared to 2014 base reflects the ongoing successful implementation of our One Sappi strategy and 2020Vision. The ongoing viability of our business and generation of value for all our stakeholders depends on our ability to generate profits and earn a return in excess of our cost of capital.

**People**

Safety: While our LTIFR improved marginally (2016: 0.46), safety performance was highly disappointing, with one fatality in Europe and three in Southern Africa.

Sustainable engagement: The high rate of participation (85%) in our engagement survey means we have already achieved our 2020 goal. In addition to measuring engagement, the survey also identifies perceived gaps in our human capital strategy and we are currently assessing these.

**Planet**

Specific total energy: Energy self-sufficiency remained stable and there was a slight increase in renewable energy.

Certified fibre: In Europe we exceeded our certified fibre procurement goal by just over 4%. In North America, certified fibre content was down from earlier years due to changes in wood procurement strategies to acquire woodfibre from sources closer to the mills. As reported last year, it was also due to a change in production strategy at Cloquet Mill which involved a change from buying 100%-certified market pulp to making our own pulp (doing so means we are limited to the amount of certified fibre available in the local wood basket). In Southern Africa, we increased the percentage of certified fibre supplied to our mills by 1.1%.
Our key material issues

Governance

→ **Material issue: Corruption affecting the national interest**

**Background**

In South Africa, a widespread patronage network which is chipping away at state institutions is undermining the country’s credibility and is causing global investor concern. Transparency International’s 2016 International Corruption Perceptions Index, published at the beginning of 2017 evaluates corruption in 176 countries. The index ranks countries based on how corrupt their public sector is perceived to be. A country’s score indicates the perceived level of corruption on a scale of 0 to 100, where 0 means that a country is perceived as highly corrupt and 100 means it is perceived as very clean. While no country has a perfect score – the global average score is 43 – over two-thirds of countries score below 50, including South Africa, indicating a serious corruption problem.

In 2016, South Africa was ranked as the 64th most corrupt country in the world out of 176 countries with a score of only 45 out of 100. In terms of the other countries in which we have significant operations, the scores were as follows: Finland scored 89 (ranked 3rd); the Netherlands scored 83 (ranked 8th); Germany scored 81 (ranked 10th); Belgium scored 77 (ranked 15th); Austria scored 75 (ranked 17th) and the United States of America scored 74 (ranked 18th)¹.

→ **Our response**

As indicated by the Corruptions Perceptions Index scores, apart from South Africa, the countries in which we operate are relatively corruption-free. However, we share investor concerns about the situation in South Africa and we remain hypervigilant in this regard. Our auditors, KPMG, have been implicated in allegations related to patronage and corruption which have caused us to reassess their provision of services to Sappi. We have engaged with KPMG International in this regard. We currently await the findings of the various inquiries and reports into KPMG. We will then revisit our decision to retain KPMG as auditors.

Sappi Limited is a member of Business Leadership South Africa (BLSA), a voluntary organisation of the approximately 70 largest listed companies on the JSE Limited. It serves as the voice of big business in South Africa facilitating engagement with the government, ratings agencies and other local and global stakeholders and also promoting the positive role of business in society. BLSA is actively working to end corruption and Sappi will be signing BLSAs pledge after year-end. This echoes and reinforces our own Code of Ethics by committing us to:

- Actively combating corrupt practices wherever we encounter them
- Not acting anti-competitively
- Having zero tolerance for corruption in our midst, and
- Protecting whistle-blowers and providing information.

→ **Material issue: A sound ethical culture**

**Background**

Employees make better decisions in less time with business ethics as a guiding principle which increases productivity and overall employee morale. Ethics – or lack thereof – can significantly impact reputation and affect stakeholders’ views of a business which in turn can impact profitability and licence to trade.

→ **Our response**

Given that Sappi operates in a number of different geographies and given our One Sappi approach, a Code of Ethics that provides simple-to-follow guidance to all our employees is a priority. Following the roll out of our revised Code of Ethics in six different languages in September 2016, we continued with a communication campaign to raise awareness of the Code. Videos, including a video on the Foreign Corrupt Practices Act, were used by the different regions to promote ethical awareness during the year.

The Code makes reference to group policies, where major risks and heightened levels of compliance are required. In familiarising themselves with the Code, employees have been encouraged to read the different policies. Story pictures have been created and distributed to the mills to assist those unable to read the policies. Ethics messages are displayed on media screens, in lift lobbies and on Sappi desk calendars to keep ethical conduct top of mind.

In addition, globally, employees have been exposed to online training relating to competition law, anti-bribery and corruption online training.

¹ https://www.transparency.org/country
Our key material issues continued

Prosperity

→ Material issue: Costs and capital allocation

**Background**
In the highly capital-intensive pulp and paper industry, cost containment and strategic capital allocation are key pillars of competitive advantage.

**Our response**

**Cost containment**
Reducing variable and fixed costs throughout the business is integral to improving margins, particularly in commodity-type businesses such as printing paper, where declining demand places additional pressure on margins and revenues. In 2016, we launched a global procurement and efficiency savings initiative which has put Sappi on track to achieve targeted groupwide cost reductions of US$100 million per annum by 2020.

In addition to our usual cost management and continuous improvement initiatives during FY2017, we realised US$157 million in savings – US$57 million more than anticipated, and three years early.

**Capital allocation**
Our 2020Vision strategy is focused on opportunities to substantially increase our group EBITDA. By making smart investment decisions – in line with our values of making smart decisions which we execute with speed – and investing in our business to pursue growing areas of demand, we can remain profitable and competitive in the global marketplace.

Given robust demand for specialities and packaging paper grades, we are leveraging our existing manufacturing base by converting existing paper machines to higher margin products, including specialities and packaging paper grades.

In Europe, we are investing US$140 million over the next three years in projects that will increase our specialities and packaging papers capacity and capability, as well as support our drive to be the lowest-cost producer of graphic papers.

Maastricht Mill in the Netherlands is being converted to focus predominantly on specialities grades and the specialities paper offering at Ehingen and Alfeld Mills in Germany will be expanded.

Lanaken Mill in Belgium will progressively transition to coated woodfree production over the next three years in line with the expected decline in the coated mechanical market.

The displaced graphic paper volumes will be assigned to other mills.

These projects will enable us to make better use of our assets to drive growth in our specialities and packaging papers business, as well as to reduce our coated graphic papers capacity by about 200,000 tons by 2020.

In **North America**, we are investing US$165 million in upgrading and enhancing the flexibility of Paper Machine 1 at Somerset Mill in Maine, to enable growth in paper-based packaging. The overall capacity of the mill, currently the largest coated mill in North America, will increase by 180,000tpa and the upgrade is expected to be completed in 2018.

In **Southern Africa**, we are investing US$55 million in an upgrade to the woodyard at Saiccor Mill which will:
- Improve mill logistics by enhancing the mill’s capability of segregating woodchip species – important because there is a distinct difference in cooking times between various species of wood based on their lignin, cellulose and hemicellulose contents
- Improve the mill’s wood screening systems for reduced silica levels and overall enhanced chip quality, and
- Enable future expansion.

Improving logistics and screening systems will ultimately lead to enhanced pulp quality, increased pulp yield and a reduction in consumption of bleaching chemicals. The modifications will be made with minimal impact on production.

→ Material issue: Growth in the packaging sector

**Background**
The demand for all types of products being shipped in eCommerce is expanding in line with the rapidly accelerating digital economy. At the same time, the global population and demand for natural resources are increasing and this is placing pressure on society to repurpose materials like paper and packaging. In addition, there are growing concerns about the impact of fossil-based packaging on the world’s oceans.

These factors are positive for the global sustainable packaging market which is poised to grow at a compound annual growth rate (CAGR) of around 7.7% over the next decade to reach approximately US$440.3 billion by 2025 according to a recent report.

In recent years, we have evolved from being a pure substrate supplier to a provider of complete paper and carton packaging solutions. Our focus is on innovative products designed to find intelligent answers to issues and trends in the packaging market, thereby growing the contribution of this sector of our business to 25% of EBITDA by 2020.

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One such topical issue that our packaging papers are addressing is the issue of food waste. Four years ago, Sappi was the world's first manufacturer to present a new specialty paper with a mineral oil barrier integrated directly in the paper, as well as including heat sealing properties. In FY2017, we built on this successful foundation by:

- Establishing a collaboration agreement with the global manufacturing Felix Schoeller Group (Felix Schoeller) based in Germany. Felix Schoeller produces high-quality papers for analogue and digital photographic print, non-wovens for the wallpaper industry, as well as release liners and décor papers. In addition, the company has been developing flexible food packaging for some years and has built particularly strong process technology expertise in the production of photographic and digital printing papers.
- The agreement covers the joint development of sustainable barrier paper solutions for flexible packaging applications. The collaboration has already resulted in the development of a paper-based, sealable packaging solution with high barriers against water vapour, oxygen and grease. This was presented to trade customers at Interpack 2017, the world's largest trade fair.

- Acquiring the barrier film technology of Rockwell Solutions. This will enable us to offer our customers an even wider range of barrier coated solutions and could enable us to support market needs for more sustainable and recyclable packaging solutions by offering a replacement to fossil-based packaging material. In addition, the acquisition has enhanced our insight into the packaging market in terms of product performance, cost benchmark and market dynamics.

- Extending the manufacture of Algro Design and Algro Design Duo bleached board grades to Maastricht Mill. By producing this high-quality carton at two locations, we can now respond even more quickly to customer requirements.

- Introducing new face stock label papers Parade Face Stock C1S and Parade Face Stock Vellum, both of which are approved for direct contact with food and conform to DIN EN 71 for toy safety. The range of applications for these self-adhesive label papers includes decorative labels for tins, glass containers, single-use and multi-use bottles and stickers or price labels, such as those found in the fruit and vegetable aisle and more. Parade Face Stock C1S is available in a weight of 80g/m², and Parade Face Stock Vellum in grammages of 70 and 80g/m².

- Launching a new Clay Coated Kraft (CCK) carrier paper, Sappi Sol DNC. The satin finish of this paper significantly improves surface quality and results in lower overall silicone consumption, a condition that is important to label converters, and

- Developing Ultraflex, a hybrid flute and liner which offers converters strength with the ability to print, while making ordering more efficient. Research is currently under way to impart the paper with antimicrobial properties.

At Interpack 2017, Sappi was presented with the international WorldStar Packaging Award for foodstuffs. This follows our receipt of the 2016 German Packaging Award in the 'New Materials' category.

Material issue: Declining demand for graphics paper

Background

News, entertainment and information are increasingly consumed via computers, tablets and mobile phones instead of paper with an obvious impact on demand for graphics paper.

Our response

Part of our longer-term strategy is to reduce our exposure to graphic paper. We manage our capacity to strengthen our leadership position in this market, realising its strategic importance to the group and maximising its significant cash flow generation. Accordingly, we continue to develop and enhance our portfolio of products to meet the needs of customers who recognise the value of print.

In FY2017, we added Somerset 9-point (9pt) Gloss to our Somerset Mill product line. The new line offers an 8% yield advantage over competitive 9pt grades and increased cost savings for customers.

In this market, we continue to provide innovations, including Spraytec technology which produces a unique gloss surface with an enhanced bulky feel to the paper. The result is an uncompromised, high bulk paper with a glossy and even print surface.

In Europe, Sappi&You, our updated customer portal and the shift towards a direct-to-market strategy is paying dividends by positioning Sappi as the preferred go-to partner in print.

Research from Millward Brown Digital, an industry-leading research company, analysed more than 100 market mix client studies. The print campaign analysis shows magazines increase both upper-and-lower funnel metrics, from awareness through to purchase intent, for all four studied advertiser categories – consumer packaged goods, auto, entertainment and financial services. In addition, research from Nielsen Catalina Solutions (NCS), which compiled data from more than 1,400 product studies, showed that magazines had the highest return on advertising spend by a wide margin. For each US$1 invested in magazine media, the advertisers averaged a US$3.94 return, according to NCS.²

→ **Material issue: Growing demand for cellulosic-based fibres**

**Background**
As viscose technology improves and gains market acceptance, so the economic and environmental case versus cotton and petroleum-based fibres grows. The popularity of cellulosic-based fibres is based on their high levels of absorbency, breathability and softness, as well as wash and wear characteristics.

A potential shortage of cotton supply is expected to accelerate demand for dissolving wood pulp (DWP). The initial US Department of Agriculture cotton projections for 2017/18 indicate that world cotton consumption will rise slightly and exceed production for the third consecutive season4.

This supply/demand deficit is expected to be exacerbated by Chinese cotton policies. India, China and the United States of America are the world's largest suppliers of cotton by a long way. In 2016/2017, China was the world's second largest producer of cotton5 accounting for 34% of global supply. The country has historically supported spinners with a rebate on domestically purchased cotton. The policy was amended in 2014, to subsidise cotton farming. However, only Xinjiang province was offered subsidies, as China looked to unwind its stored inventories. In March 2017, it was announced that China would set target prices for cotton in Xinjiang province every three years instead of annually, even as domestic and global prices have soared.

The Chinese National Development and Reform Commission has now set a limit for how much cotton grown in Xinjiang can benefit from future subsidies, which could mean supply constraints going forward. In addition, the focus on growers in Xinjiang has led farmers in other provinces to switch to other crops, with negative implications for supply6.

→ **Our response**
Textiles are the primary market for our DWP, which is sold globally for use in viscose staple fibre (rayon) and solvent spun fibres (lyocell), and we continue to supply smaller quantities into the other DWP market segments. Sappi is the world's biggest producer of DWP, and we expect global demand for textiles continuing to grow, particularly in markets in Asia, as the region continues to be the leader of global growth in the short and longer term – the IMF predicts that growth in this region will remain strong at 5.4% in 20187. This is well above the IMF’s predicted global growth rate of 3.7% for the same period8.

Against this backdrop, we are expanding our DWP capacity at Ngodwana and Saiccor Mills by up to 100,000tpa and are debottlenecking capacity at both mills.

→ **Material issue: Our strategic move into adjacent markets: nanocellulose, sugars, lignins and bio-energy**

**Background**

<table>
<thead>
<tr>
<th>Key components of woodfibre (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulose</td>
</tr>
<tr>
<td>45</td>
</tr>
</tbody>
</table>

The key components of woodfibre include cellulose, hemicellulose, lignin and extractives. Both cellulose and hemicellulose are polysaccharides containing many different sugar monomers which can be extracted from pulping streams. New revenue opportunities include possibilities to extract biobased materials from the pre-hydrolysate kraft stream, such as hemicellulose sugars and lignin, for beneficiation to higher-value biochemicals.

→ **Our response**
Our aim is to leverage the key components of woodfibre to extract more value from each tree and in doing so, strengthen our overall core business model. Accordingly, in July 2016, we established a new business unit, Sappi Biotech, to accelerate our response to consumer trends for renewable products with a low carbon footprint, continue to innovate in new growth segments and take global responsibility for the commercialisation of new products.

**Nanocellulose**
Nanocellulose from woodfibres provides a new material platform for sustainable production of a wide range of high-performance products. The global nanocellulose market is expected to exceed more than US$700 million by 2023; growing at a CAGR of more than 33% in the given forecast period9.
Demand and value are forecast on the basis of various key applications of nanocellulose, such as composites and packaging, paper and paperboard, biomedicine, and other applications, including as a viable alternative to expensive high-tech materials such as carbon fibres and carbon nanotubes.

In March 2016, we successfully commissioned our nanocellulose pilot plant at Brightlands Chemelot Campus in Sittard-Geleen, the Netherlands. The plant has successfully produced a high quality wet micro-fibrillated and nano-fibrillated cellulose. Further commissioning will take place in Q4 2018 in order to produce dry re-dispersible nanocellulose.

To accelerate our work in this fast-developing field, we are growing our nanocellulose competency at three of our global research and development facilities and have commenced with numerous industry collaboration projects in order to promote the benefits of nanocellulose in a wide range of applications including construction chemicals, personal and homecare products, plastic composites, paint, coatings, specialities and packaging papers.

### Our nanocellulose process uses unique chemistry whereby wood pulp fibres can be easily broken down into nanocellulose without producing the large volumes of effluent associated with existing techniques using high amounts of energy. In addition, the chemicals used in the process can easily be recycled and reused without generating large amounts of effluent.

#### Sugars

In April 2017, we launched a trial sugar extraction demonstration plant at Ngodwana Mill in Mpumalanga province (South Africa). The demonstration plant is a joint development project with Valmet. It has been designed in accordance with all applicable industrial codes and regulations and will extract and make available industrial-scale samples of sugar rich pre-hydrolysate liquors. The plant can be operated independently from the day-to-day pulp mill and does not pose a productivity risk to Ngodwana Mill. The project team is resourced with skilled scientists and engineers from Sappi and Valmet and our development partners.

Following the successful commissioning of the demonstration unit, we strengthened our biotech division and bolstered our biorefining expertise through the acquisition of the Xylex® and Versacel® technologies (including the patents, know-how and equipment) owned by Plaxica Limited. Plaxica Limited is a United Kingdom technology licensing company founded in 2008 as a spin-out from Imperial College, London, and is situated in the Wilton Technology Centre in the United Kingdom. A number of key technical staff of Plaxica have joined the biotech division.

We have a high degree of confidence that the demonstration plant’s hydrolysate extraction capabilities together with the proprietary low-cost Xylex® technology acquired by Plaxica – rated as one of the most advanced to offer optimum efficiency and economics for separation and clean-up of C5 sugars from pulp mill hydrolysates – will enable us to realise our stated objective to participate in the downstream value chains which include furfural, glycols and xylitol.

The plant will also help us to:
- Evaluate the potential of the process to offer access to higher value pulp markets
- Demonstrate and optimise the extraction of co-product streams from the PHK process for sale or conversion to higher value biochemicals, and
- Establish an operating model that could be replicated at any future pulp line.

#### The sugars we are targeting are known as ‘second generation sugars’ – in other words, they are not derived from a crop like sugar cane. 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.

#### Furfural

Furfural is used as a solvent for refining lubricating oils, as a fungicide and weed killer and in the production of tetrahydrofuran, an important industrial solvent. It was one of the first biorenewable chemicals produced from biomass and has an established and growing market, where it competes with oil-based chemicals. It can be produced from the hemicellulose fraction of a number of biomass sources or agricultural resources such as bagasse and corncobs.

The xylose fraction in the pulping liquors from various mills has been identified as a possible source of furfural. The conversion and extraction of furfural from pulping liquors would be an additional source of income and could also improve the energy efficiency and environmental footprint of our pulp mills.

Sappi has partnered with Dalin Yebo to develop a business case for conversion and extraction of furfural from PHK liquor at Ngodwana Mill and acid sulphite liquor at Saiccor Mill. The project will include the design and construction of a pilot plant to remove and convert xylose into furfural.

The first phase of the project, which launched in July 2017, will include the collection of historical data, plant information and sampling campaigns to determine the best location in the process at Saiccor Mill to produce furfural. From here, a portable pilot plant will be constructed to determine the feasibility of producing furfural on a small scale and a full-scale demonstration plant could be built, depending on the results.
Our key material issues continued

Lignin
We are the world’s largest producer of lignosulphonate from our operations in Southern Africa and Europe. The material is both used internally for bio-energy generation or beneficiated and processed to technical lignins for sale to global lignin markets. Here they are commonly used as surfactants, binders, dispersers and emulsifying agents.

Development work to use lignin from Stanger and Tugela Mills in Southern Africa in phenolic resins, polyurethane foams and polyester resins is underway at our Technology Centre in Pretoria. The work is being done in collaboration with an industrial chemist consultant and relevant industry leaders in South Africa.

In 2017, our biotech division appointed CellMark, a global sales, marketing, financing and logistics business, as the non-exclusive sales agent for Sappi Biotech’s Hansa lignin products, produced in liquid and powder formats at Tugela Mill. The mill produces a total of 90,000tpa of liquid sodium lignosulphonate per year and we currently have the capacity to dry 25,000tpa of powder (±50,000 tons liquid input).

We are currently assessing the use of lignin in energy storage applications.

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

Symbio has now reached a stage where we are conducting trials with customers for special grades which have been developed for the automotive, audio, furniture and toy industries.

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

The South African government’s Renewable Energy Independent Power Producer Programme (REIPPPP) is the result of the national need to increase energy capacity and reduce carbon emissions. Sappi submitted the Energy Biomass Project at Ngodwana Mill to REIPPPP and was selected as preferred bidder. The project involves the supply of biomass from local plantations to Ngodwana Mill. This is then used as boiler fuel to produce steam which in turn would generate 25MW of electrical energy which would be fed into the national grid. To date, regulatory approval has stalled on the issue of price, but we now expect negotiations to be concluded before the end of calendar 2017.

Material issue: Innovation

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

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

Our total R&D spend in 2017 was US$29.5 million, including spend of approximately US$9.8 million on our Exciter programme which focuses on core business (Exciter I) and new and adjacent business (Exciter II).

Cost vs value of Exciter projects

In FY2017, the focus for Exciter I projects (core business) was focused on market growth, cost reduction, continuous improvement and efficiency optimisation.

In terms of Exciter II projects, the emphasis was mainly on nanocellulose and biorefinery developments. A major highlight was the opening and commissioning of the sugar demonstration plant at Ngodwana Mill in April 2017 (described on page 49).
\textbf{People}

\rightarrow \textbf{Material issue: Safety}

\textbf{Background}

Safety is first and foremost a human issue. Unsafe practices and conditions can have devastating consequences on people's lives and families. Globally, the pulp and paper industry and forestry in particular, is viewed as potentially hazardous.

\rightarrow \textbf{Our response}

At Sappi we believe that every life matters. Accordingly, we strive to ensure that all workplaces are safe and that all employees act in a safe manner. However, we recognise that about 85% of accidents are due to the behaviour of people and that safe conditions do not necessarily create a safe workplace. Only when we change the hearts and minds of every employee and contractor will we have a safe workplace.

We have a goal of zero harm in the workplace, which is supported by a culture that seeks to minimise risk. In addition to our overall safety goal, all regions have established specific safety targets to be achieved by 2020 and each region has compiled specific action plans to achieve these targets.

With shock and regret we report that tragically, there were three own employees (two in Southern Africa and one in Europe) and one contractor (Southern Africa) fatalities during the year. Unfortunately, in November there was an additional incident where one of our mill colleagues in Europe was fatally injured. We are doing everything possible to support the families and to provide support to colleagues who were affected by these tragic losses. The severity of these accidents was reflected in the increased Injury Index (II) for own employees and contractors.

At Ngodwana Mill, where two of the fatalities in FY2017 took place, a shift change programme based on sound fatigue management principles on identification of accident trends associated with the current shift system has been investigated. Once accepted by the workers unions and implemented, learnings from this programme will be rolled out to other mills.

Our further action plan for Southern Africa going forward is to critically assess the current programme and to modify it where necessary with the assistance of DuPont Sustainable Solutions. Their review will involve a ‘deep dive’ to understand operational risk profile and practices. It will cover operational data, management systems, a culture survey and onsite visits.

The fatality in Europe in FY2017 took place during an activity previously assessed as low risk. To rectify the situation, while there continued to be an average of 18 safety-based audits per calendar day, the identified actions from these audits increased to almost 27 actions to improve safety per day. We anticipate that this will improve safety performance in the region going forward.

Globally, safety performance was highly unsatisfactory. Only Sappi North America (SNA) ended the year with a lower lost-time injury frequency rate (LTIFR) than that achieved in FY2016. A month after year-end, SNA received the American Forests and Paper Association (AF&PA) 2017 Leadership in Sustainability Award for Safety.

A programme at Sappi Forests initiated to re-energise safety, yielded highly positive results. In February 2017, Sappi Forests announced a new safety target for the business: to be Twice as Safe by 2020 which meant reducing fatalities to zero and putting an end to the culture of unacceptable risk tolerance. The solution was to implement a fit for purpose, audience-appropriate communications strategy to roll out a ‘Stop and Think before you Act’ (STA) initiative in Sappi Forests, including contractor operations while improving communication and relationships. This was important, because Sappi Forests’ operations are almost 100% outsourced to 76 private contractors who employ 10,334 people (including subcontractors).

Low literacy rates required a new approach to communication. Research showed that the audience loved stories and Sappi Forests adopted a storytelling approach to safety communication using graphics and symbols. The audience connected exceptionally well with the material, and they understood and accepted that behaviour is your own choice. Many asked for posters and also implemented STA at home.

The use of a standard set of symbols throughout all safety communication created a universal language that was consistent. Colour-blind stakeholders were catered for by using symbols in the graphics. Sappi Forests’ key audiences and contractor staff responsible for training were trained at ‘Train the Trainer’ sessions.

The 12th Global Safety Awareness week was held during the week of 12 June 2017. The theme for this year was ‘Life Matters’ and it illustrated that to Sappi every life is important including that of our contractors and stakeholders. The initiative was well supported with senior managers visiting all the Sappi sites. The safety theme for FY2018 is ‘Own Safety, Share Safety’ – in other words, every individual should be responsible not only for his/her own safety but also of his/her colleague’s and family’s safety.
Our key material issues continued

→ **Material issue: Labour relations**

**Background**

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

→ **Our response**

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

Sappi promotes freedom of association and engages extensively with representative trade unions. Globally, approximately 60% of Sappi's workforce is unionised, with 72.6% belonging to a bargaining unit.

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

In **Europe**, approximately 68% of our employees belong to a union and are represented through Work Councils. European Works Council meetings take place twice a year at which Sappi is represented by the Chief Executive Officer and Human Resource Director. The main purpose of the meetings is to inform and consult on business results/market developments and pan-European organisational topics.

The overall labour relations climate in this region continued to be constructive and we concluded collective labour agreements (CLA) at Lanaken and Maastricht Mills.

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

There were no major disputes in this region and labour agreements were successfully concluded during FY2017.

In **Southern Africa**, approximately 48.5% of the total workforce is unionised.

We are currently reviewing our relationship/recognition agreement with the majority union, CEPPWAWU. The agreement will become a joint agreement and will include two other recognised trade unions in the region (Solidarity and UASA). We expect the agreement to be finalised by the end of November 2017.

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. In addition, in each business unit where there is a representative trade union and the majority of employees are unionised, shop steward committees have been established and meet with local management on a regular basis to discuss matters of mutual interest.

While collective bargaining during FY2017 was extremely tough, we once again successfully concluded wage negotiations without industrial action in all sectors – forestry, pulp and paper, as well as sawmilling.

→ **Material issue: Sharing value**

**Background**

Globally, companies are expanding the definition of corporate citizenship to include both corporate social investment or responsibility and the concept of corporate shared value (CSV). This involves developing profitable business strategies that deliver tangible social benefits. In other words, identifying societal challenges within a company’s sphere of operation and finding ways of addressing these for the mutual benefit of communities and the company.

→ **Our response**

We have expanded our focus to embrace the concept of CSV more fully. We take a very active approach to CSV both regionally and globally, driving key initiatives in support of our three primary stakeholder groups – employees, customers and the local communities in which we operate.

Projects are aligned with and support business priorities and needs, taking into account feedback from our stakeholders. While each region has its own programmes, these conform to common themes which are aligned with our business needs and priorities which include education, local community support, the environment and health and welfare. We encourage employees to participate in outreach and community projects.

In addition, support for activities associated with access to Sappi land and conservation efforts, such as biodiversity and species mapping, mountain biking and recreational birding continues to grow.

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

Our CSV initiatives in 2017 are described in more detail in our Group Sustainability Report, available at www.sappi.com, but initiatives in **North America** and **Southern Africa** give some idea of this approach.

Building on our long-standing, respected Ideas that Matter programme for print designers in **North America**, we launched a new programme, Employee Ideas that Matter (EITM). Through the EITM programme, we highlight the
concept of CSV by providing funding to the non-profit organisations our employees are most passionate about, thereby helping to improve lives and to promote employee morale. We have pledged US$25,000 annually to proposals submitted by Sappi employees in SNA.

In 2015, SSA’s forestry division in KwaZulu-Natal set out to establish what it could do to simultaneously provide communities with opportunities and reduce the numbers of fires in its plantations.

Research showed high unemployment within communities in Sappi regions and expectations that the company would provide more jobs than were possible, thus highlighting a critical need for enterprise development. This resulted in the implementation of a 12-month pilot community engagement and social mobilisation project, which involved the appointment of 18 unemployed youngsters called the Abashintshi (isiZulu for ‘change agents’).

Based on the asset-based community development (ABCD) methodology and with the objective of establishing and helping activate entrepreneurial enterprises among their communities, the Abashintshi were taught how to facilitate life skills and entrepreneurship training, activate the Ifa Lethu Legacy programme with elders, and offer holiday programmes for school children. They also provided Sappi with a new channel of communication, which has helped to improve the company’s reputation significantly.

The Abashintshi Social Mobilisation Project won a gold award in the ‘Shared Value’ category of the 2017 Loeries Awards, South Africa’s premier advertising and brand awards. The project also won a merit award in the 2017 International Association of Business Communicators (IABC).

Approximately 230 small businesses have either been started up or rejuvenated with the assistance of the Abashintshi while fires declined in the target areas by 89% in just two years. The programme has subsequently been extended to 43 communities in KwaZulu-Natal and Mpumalanga and today involves 88 Abashintshi.

Social investment spend in 2017

<table>
<thead>
<tr>
<th>Total</th>
<th>Spend 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>€100,000</td>
</tr>
<tr>
<td>North America (ITM US$250,000)</td>
<td>US$537,000</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>ZAR56 million</td>
</tr>
<tr>
<td>Additional once-off spend by Sappi Forests on capex items for villages including solar geysers, etc.</td>
<td>ZAR7 million</td>
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</tbody>
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→ **Material issue: Woodfibre**

**Background**

The global demand for woodfibre is expected to increase for the foreseeable future, driven partly by the demand for wood pellets rather than finite fossil fuels as a green energy source. This is expected to accelerate as more and more countries commit to mitigation actions on climate change.

In addition, climate change has the potential to seriously impact our fibre base. In all three regions where Sappi operates, climate change could alter the frequency and intensity of forest disturbances such as insect outbreaks, invasive species, wildfires, and storms. These disturbances could reduce forest productivity and change the distribution of tree species. Given that woodfibre is a key input to our manufacturing operations, maintaining continuity of supply and containing costs is integral to our sustainability as a business.

**Our position**

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

In **North America**, our US$25 million capital project to update Somerset Mill woodyard has reduced white wood losses and costs while enhancing efficiency gains through the increased production of woodchips. The commissioning of the new woodyard will be complete by the end of November 2017.

Our new woodyard at Saiccor Mill in **Southern Africa**, (described on page 15) will also result in efficiency gains.

Given **Sappi Europe’s** general risk mitigation strategy of sourcing pulp and woodfibre from a variety of sources and regions, we do not anticipate any material impact to raw material supply from climate change in the short to medium term. In **North America**, our operations do not currently face material risks associated with climate change. With the exception of fibre from Brazil for Westbrook Mill, we source from northern hardwood and softwood wood baskets that have not suffered under any drought conditions or from fire.

In **Southern Africa**, the fact that we own and lease 387,291 hectares (ha) of plantations with approximately 27.4 million tons of standing timber gives us a competitive advantage. We also have access to wood from a further 92,000ha via contracted timber suppliers. Our aim is to produce low-cost wood with the required pulping
characteristics and increase yield per hectare. We actively pursue this aim, particularly through genetic improvement of planting stock.

Work to enhance the genetic improvement and sustainability of our fibre base in SSA in FY2017 included:

- Progress in our Eucalyptus (E.) grandis x E. urophylla (GU) backcrossed genomic mapping project, which is aimed at developing DNA marker tools to enhance our tree breeding efforts, by speeding up the tree selection process. The project culminated in the testing of specific markers that are linked to or contain the genes controlling traits of interest such as growth, wood density, various sugars or metabolite levels. Based on the presence of these molecular markers in the DNA, just over 100 trees were selected for two wood property traits. These trees have now been sampled and are currently being pulped to confirm the marker predictions.

- Genomic selection, another marker-assisted breeding tool that we are in the process of developing, aims at increasing selection intensity and shortening the breeding cycle to improve our genetic gains. Working with E. dunnii, our most important eucalypt species, we have focused on developing genomic selection models for approximately 15 growth and wood property traits. The next step will involve validating these models in related and unrelated E. dunnii populations in order to confirm our predictions.

- Furthering our understanding of the molecular basis for resistance to Fusarium circinatum, a fungal disease that impacts pine species. In this regard we have been looking at the expressed genes of a resistant (Pinus [P.] tecunumani) and a susceptible (P. patula) pine species after infection with the pathogen in order to develop models for resistance versus susceptibility.

- Developing a pine hybrid in response to a severe threat from our softwood supply from the Pitch Canker Fungus (PCF). By crossing the highly PCF susceptible P. patula, until recently Sappi’s most important pine species, with the closely related but PCF tolerant P. tecunumani, a disease tolerant hybrid known as PPT was created. The hybrid holds numerous benefits:
  - 45% more productive than pure P. patula
  - Better field survival
  - Easier to propagate in the nursery
  - More broadly adapted to a greater range of sites
  - Higher density and more uniform wood qualities
  - Rapid establishment on site, and
  - Good drought tolerance.

The value of the hybrid to Sappi has been estimated at ZAR73 million over a 20-year rotation, for the 3,500 hectares of PPT already commercially planted. More will be added every year over the next 20 years as the majority of the area currently planted to P. patula in the Mpumalanga province is gradually replaced with PPT. An additional benefit of the increased yield from PPT is the opportunity to reduce the area needed for softwoods in Mpumalanga, allowing more of Sappi’s land to be converted to hardwoods, thereby increasing hardwood fibre output for the production of dissolving wood pulp.

- Upgrading the existing nursery at Ngodwana and adding cutting facilities. This has helped to enhance the sustainability of our fibre base in two ways:
  - Firstly, by mitigating against crop losses in the nursery during the cold winter period, and
  - Secondly, by helping to meet our need for increased deployment of hybrid cuttings, rather than pure species seedlings, as the former are generally more disease resistant and faster growing and can only be economically deployed using cuttings.

The deployment of hybrids has become a priority in order to meet the requirement for more hardwoods, necessitated by the conversion of Ngodwana Mill to dissolving wood pulp, and also to mitigate the risks associated with climate change and increased pests and disease introductions.

Together with Clan Nursery, which was upgraded in 2015, this means that our nurseries now have capacity for 54 million plants per annum, with an equal split between seedlings and cuttings. In FY2017, our nurseries supplied approximately 38,000 plants to our own operations, 14,000 to projects such as Sappi Khulisa and 2,000 to outside operations.

The full rebuild of Ngodwana Nursery will be completed by the end of December 2017.

In terms of climate change, we mitigate risk to our plantations by:

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

In Southern Africa, we work to mitigate fibre supply risk and drive shared value by expanding access to the forestry sector in a number of ways, including:

- Sappi Khulisa (‘Khulisa’ means ‘to grow’ in isiZulu), our enterprise development initiative, previously known as Project Grow. This 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 22,362ha. In FY2017, under the programme, 448,221 tons (2016: 395,232 tons) worth approximately ZAR362 million was delivered to our operations. Since 1995, a total volume of 3,313,581 tons, to the value of ZAR1.6 billion, has been purchased from small growers in terms of this programme.

As rotation times, and the associated cash flows, in forestry are long, growers receive advances. In addition, qualified extension officers advise on all aspects of tree farming.

In recent years, we have expanded Sappi Khulisa 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 4,782ha 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 Sappi FAQs Khulisa Umnotho, available on www.sappi.com.

We are also active in land reform. As at the end of September 2017, Sappi was involved in 60 land reform projects. 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 KwaZulu-Natal (KZN). The training centre has Khulisa Ulwazi (‘Growing Knowledge’) as its slogan and is providing training to small growers, land reform beneficiaries and small-scale contractors in the technical and business aspects of forestry and small business management. In FY2017, the centre more than doubled its intake of trainees. To date, over 1,000 people have been trained.

Material issue: Emissions regulations and carbon tax

Background
In light of evidence that anthropogenic greenhouse gas (GHG) emissions are driving global warming, governments around the world are assessing national carbon taxes in an attempt to promote low-carbon economies.

Our response
We acknowledge that our industry is energy intensive, but believe that this is mitigated by our high use of renewable energy (black liquor in particular) and by the important role that sustainably managed natural forests and plantations play in mitigating global warming.

Globally, our renewable energy stands at 45.2%, of which just over 73% is own black liquor, a by-product of the pulping process in our integrated mills. Black liquor contains more than half of the energy content of the digested wood. As a renewable biomass-derived fuel, black liquor supplants fossil fuels, with a corresponding reduction in greenhouse gas emissions.

Biomass-derived energy like black liquor is fundamentally different from fossil fuel-derived energy because biomass recycles carbon whereas fossil fuels introduce carbon, that had previously been ‘locked away’, to the atmosphere. Biomass is deemed “carbon neutral” – the carbon dioxide (CO2) generated during combustion is equivalent to that which was originally bound from the atmosphere through photosynthesis.

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

In terms of global warming, the challenge is to not only reduce future carbon emissions, but to actively remove existing carbon from our atmosphere. Sustainably managed forests and plantations like Sappi’s play a vital role in this regard by:

- Balancing the earth’s water-cycle essential for cooling the climate
- Stabilising the climate by removing CO2 from the atmosphere and fixing it into soils and biomass, and
- Storing carbon – 50% of a tree’s biomass is carbon which remains stored, acting as a ‘carbon sink’, unless the tree decays or is burned.

Global forests are estimated to hold more CO2 than the atmosphere10.

10 http://www.weforest.org/page/why-it-matters
Our key material issues continued

→ **Material issue: Energy**

**Purchased energy costs as a percentage of cost of sales (COS) (%)**

![Chart showing energy costs as a percentage of cost of sales for different regions.]

**Background**

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

→ **Our response**

Energy in relation to cost of sales increased slightly in Europe. Although energy intensity remained stable, energy costs increased by 11.13% year-on-year, leading to purchased energy as a percentage of cost of sales rising from 9.37% in 2016 to 10.47% in 2017. Even though globally, our energy costs as a percentage of cost of sales have declined over five years due to actions taken, it makes business sense for Sappi to aggressively manage energy usage and promote the generation of renewable energy. Environmental impact is reduced not only by the amount of energy, but also by the type of energy consumed. We have made significant efforts to reduce reliance on fossil fuels, thereby reducing fossil-related greenhouse gas (GHG) emissions and separately our operations from the volatility of energy prices.

We are succeeding in this regard, as indicated by our high use of renewable energy (see page 44) and by the following.

Over five years, we have increased global levels of energy self-sufficiency by 8.7%, while over the same period, globally, specific direct (Scope 1) GHG emissions have reduced by 4.6% and specific indirect (Scope 2) GHG emissions have decreased by 7.42%. Overall, there has been a reduction of 5.4% in GHG emissions intensity over five years.

In addition, both Sappi Europe and Sappi Southern Africa are ISO 50001 certified. To achieve accreditation, an organisation has to prove that it is continuously reducing the amount of energy consumed.

Our energy efficiency is enhanced through our extensive use of cogeneration and through our ongoing drive to install more efficient equipment and make process improvements, for example:

- Globally, we have combusted 20.43% more waste for on-site heat use over the last five years, and
- In FY2016, we announced the establishment of a pilot scale plant at Saiccor Mill to assess the use of anaerobic technology to treat evaporator condensate which we progressed in FY2017. The technology uses organic matter in the condensate to generate methane gas. Methane gas, in turn, can be used to generate electricity or generate steam.

The pilot study showed that the technology can be successfully used to biologically convert the organic material present in the condensate into biogas (methane). The energy potential associated with the use of the generated biogas is 1.7MW electrical and 1.8MW thermal. The generated biogas has the potential to replace 17 tons of coal per day.

The assessment has now been completed and we are currently evaluating the implementation of the technology.
Material issue: Water

Background
The United Nations estimates that global demand for water will grow by 50% by 2030. At the same time, globally, over 80% of the wastewater generated by society flows back into the ecosystem without being treated or reused. In addition, partly to help maximise yields to meet demand, usage of chemical fertilisers and pesticides has increased in recent years, both in industrial and small farming, making agriculture a potential source of environmental pollution.

Our response
In terms of the concerns outlined in the paragraph above:
- Our production processes depend on water, as does wood fibre, our primary input. Globally, we return 93% of the water we extract back into the environment after it has been treated and cleaned. Of the 7% balance, approximately 4% exits the mill in the form of production, while the remaining 3% is lost to the environment.
- Globally, over five years, we have achieved a positive result in effluent concentration by reducing chemical oxygen demand (COD) by 12.9% and total suspended solids (TSS) by 35.5%.
- Our plantations are not irrigated and fertiliser is generally only used once in each rotation.
- Our Technology Centre in Pretoria (South Africa) is currently assessing the wastewater biorefinery (WWBR) concept, which involves the recovery of valuable products (eg sugars, lignin or biogas) from waste streams. An additional benefit is also the improvement of effluent quality, prior to discharge into the environment. The WWBR aims to process complex input streams to multiple products, while reducing the costs associated with conventional water treatment. While chemical and physical processes are traditionally used to reduce the toxicity of effluent streams, enzymes could potentially also be employed to reduce toxicity and increase substrate availability (in the case of bioreactors). This could, in turn, reduce the COD loading or aid in the production of biogas.

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

To mitigate the impact of low flows on the Umkomazi River, the prime source of water to Saiccor Mill, in FY2016 we completed a project to raise the Comrie Dam wall, upstream of Saiccor Mill, tripling the amount of water in the dam. We have now been awarded a water use licence from the regulatory authorities.

At Ngodwana, Tugela and Stanger Mills, we are focusing on internal modifications which involve the more efficient use of water.

Following the conversion of the PM8, Lanaken Mill (Belgium) will be switching from the use of softwood to hardwood pulp, making wastewater treatment more challenging. Accordingly, in January 2018, the mill will be building a new anaerobic wastewater treatment plant. This will produce 280% more biogas, which will generate electricity and heat. Once the plant is completed in June 2018, the old anaerobic tanks will be converted into aerobic tanks to increase the capacity and quality of wastewater treatment. As a comparison, we will go from a wastewater treatment capacity comparable with municipal wastewater of 300,000 residents to a capacity for 900,000 residents. Finally, in a third step, from September to October 2018, coating waste water will move to an existing separator and biological treatment, in order to free up capacity for effluent of the paper machine. A final step involving advanced oxidation will remove non-biodegradable COD.
Safety at Sappi comes before everything else. We do not accept that injuries and accidents are inevitable. We remain fully committed to our project zero goal of zero injuries and have increased our focus on improved personal behaviour and making safe choices.