Seeds are magic potent vessels of nature. They hold entire intelligent blueprints for life. They can lie dormant for ages until the conditions are ripe for them to burst into life. As a beautiful metaphor for consciousness, a seed represents the divine design in all things.
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2017 Group Sustainability Report

About our theme

Our 2017 theme Investing for growth, reflects our belief that success in the future will come from the seeds we sowed yesterday and continue to sow today.

Towards our 2020Vision

Our 2020Vision was formulated as a strategic response to the megatrends which are changing the world in which we live and work, as set out on page 7. We have worked tirelessly to refocus and restructure our business so that we are better placed to respond to these megatrends and serve existing and new markets and customers. Our 2020Vision is well on track as we continued to focus on being a leader in our industry and a valued member of our local communities beyond 2020.

Getting around

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

Best viewed

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

Certification bodies

Certification bodies, eg FSC® and PEFC™, are referenced throughout this report, without providing detailed information about each of our operations’ certification status in each instance, to ensure ease of reading. Certification information for each mill can also be obtained from our website, www.sappi.com.

Intellectual property

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

Conventions

Billion

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

Specific

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

Tons

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

Exchange rates

We have used the following exchange rates:

US$/ZAR: 13.4
US$/EUR: 1.1
About this report

Scope of this report

This report is aligned with our Annual Integrated Report and covers the period from the beginning of October 2016 to the end of September 2017. We report on a regional and global basis, wherever possible presenting data over five years to make the information relevant, accessible and comparable. Safety, health, quality and environmental data is compiled according to international best practice. Commentary is provided on graphs to enhance understanding and specific measurement criteria – as well as instances where these have changed – are clearly spelled out.

Reporting framework

As Sappi Limited is headquartered in South Africa and we have our primary listing on the Johannesburg Stock Exchange (JSE), we abide by the King IV Code on Corporate Governance (King IV). Our Annual Integrated Report provides a very clear link between sustainability and strategy and sets out how we are sustainably manufactured products derived from renewable resources are more important than ever before. These trends occur in the broader context of a world where climate change concerns and resource scarcity are raising expectations to make more and better with less and where sustainability focus areas that affect the long-term success of our business, and that relate to any significant impacts we have substantively affect – either positively or negatively – our ability to facilitate or inhibit our One Sappi strategy and that could substantively influence the assessments and decisions of stakeholders. We publish our performance against targets both in the group report and our regional reports, transparently reporting on success or lack thereof in achieving these targets.

Defining report content

Determining materiality

We consider material matters to be those matters that could facilitate or inhibit our One Sappi strategy and that could substantively affect – either positively or negatively – our ability to create stakeholder value over the short-, medium- and long-term. The information presented has been determined on the basis of our ongoing extensive engagement with our stakeholders and has been assessed against the backdrop of current business operations, as well as the opportunities, challenges and prevailing trends in our industry and the global economy. These trends occur in the broader context of a world where climate change concerns and resource scarcity are raising expectations to make more and better with less and where sustainably manufactured products derived from renewable resources are more important than ever before.

Based on this context, we have realigned our strategy to maintain our position as a global forest products leader and developed a global vision based on the power of One Sappi. In preparing this report we have tracked environmental findings and research, public opinion, employee views and attitudes, the interests and priorities of environmental and social groups, as well as the activities, profiles and interests of investors, employees, suppliers, customers, communities, governments and regulatory authorities.

Throughout the report, qualitative text is backed up by quantitative information, generally in the form of graphs illustrating performance over five years between 2012 and 2017. We aim to present information that is material, accurate, comparable, relevant and complete. The information presented covers topics and indicators that reflect our significant economic, environmental, and social impacts, as well as issues that would substantively influence the assessments and decisions of stakeholders. We publish our performance against targets in both the group report and our regional reports, transparently reporting on success or lack thereof in achieving these targets.

Identifying stakeholders

We have identified the stakeholders we expect to use our report on the basis of our ongoing engagement— formal and informal — with them. The various ways in which we engage our stakeholders are set out in detail in the People section of this report. The stakeholders we expect to use this report include investors, customers, suppliers, employees, communities, governmental and non-governmental organisations, environmental bodies and all those who are affected by our activities.

External assurance

We have conducted an internal assurance readiness review with an accredited third party and will be conducting external assurance in 2018. In the interim, assurance of sustainability information continues to be conducted by our internal audit team. Their verification process includes reviewing the procedures applied for collecting and/or measuring, calculating and validating non-financial data, as well as reviewing reported information and supporting documentation.

In practice, most of our key operations undergo external verification including the Eco-Management Audit System (EMAS) in Europe, ISO 50001 energy certification in Europe and Southern Africa and globally, ISO 14001 environmental certification, 9001 quality certification and OHSAS 18001 certification. We are also assessed in terms of the forest certification systems we use, and in South Africa, our Broad-based Black Economic Empowerment (BBBEE) performance is assessed by an external ratings agency.

In addition, in FY2017 Sappi Limited was a constituent of the FTSE/JSE Responsible Investment Index. Being included in this index means that our sustainability performance has been externally assessed. Collectively, these external assessments and certifications as well as interaction with our stakeholders give us confidence that our performance indicators are reliable, accurate and pertinent.

The Social, Ethics, Transformation and Sustainability (SETS) Committee reviews the efficacy of conducting external assurance annually. The committee is satisfied that the sustainability information presented in this report has been provided with a reasonable degree of accuracy.

Global Reporting Initiative

We have reported in terms of the Global Reporting Initiative’s (GRI’s) G4 Sustainability Reporting Guidelines (Core). We have included a GRI Index and a separate section communicating our progress in terms of the United Nations Global Compact (UNGC).

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Pristriixs content

This report is structured along Sappi’s well-established ‘3Ps’ of sustainability: Prosperity, People and Planet. It covers material sustainability topics and indicators that reflect our significant economic, environmental, and social impacts, as well as issues that would substantively influence the assessments and decisions of stakeholders. We publish our performance against targets in both the group report and our regional reports, transparently reporting on success or lack thereof in achieving these targets.

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The Social, Ethics, Transformation and Sustainability (SETS) Committee provides oversight of the group’s policies and initiatives around sustainability, ethics, labour and employment, social and economic development and, with regards to the group’s Southern African subsidiaries, the strategic business priority of transformation. As a company heavily reliant on natural resources, sustainability is integral to our business strategy – an area of great potential for differentiation, but also one of potential risk. At the SETS Committee level, our agenda is framed around discussion of emerging issues that could present material opportunity or risk for our businesses around the globe. Recent topics include safety, forestry, water, and climate change. Approaching each topic this way provides the committee with a more holistic view on how a given issue affects Sappi overall.

Valli Moosa
Chairman
Social, Ethics, Transformation and Sustainability Committee
Dear stakeholders,

2017 was again a good year for Sappi, with the focus and energy of our people enabling us to deliver another strong set of results. However, although we managed to build on the momentum of past years, we slipped in one crucial area.

Satisfaction with our performance has to be tempered by our collective grief at the fatalities we suffered this year in our operations. We display a strong commitment to our values and our Code of Ethics, but the deaths of two colleagues in Southern Africa and two in Europe came as a great shock to us all and made us realise that our current approach to safety is just not good enough.

Safety in Sappi comes before everything else. If we are not a safe company for our people, we cannot claim to be a top performing company. We do not accept that injuries and accidents are inevitable. The time has come for us to break the emerging cycle of increased incidents – we must change our own behaviour and approach and we must be pro-active as regards any unsafe behaviour we see.

I am calling on our people to display the same determination, vigour, courage, innovation and enthusiasm around safety as they have shown in embracing our 2020Vision, our strategic diversification and our values.

As reflected in the theme of this report we are investing in growth in all areas – Prosperity, People and Planet.

Shortly after year-end we announced that we would be acquiring the specialities and packaging papers business of Cham Paper Group Holding AG (CPG) for approximately US$149 million. The transaction includes all brands and know-how, the Carrignano and Condino Mills in Italy, as well as their digital imaging business and facility situated in Cham, Switzerland. The acquisition aligns with our stated diversification strategy and 2020Vision to grow in higher margin growth segments. It also increases our relevance in speciality paper, opening up new customers and markets to our existing products and generating economies of scale and synergies. In addition, it will also enable us to gain greater share-of-wallet with valued brand owners; accelerating innovation and new product development.

We continued to invest in our people with world-class training programmes, and in promoting skills and socio-economic growth in the communities close to our areas of operation. Our approach within these communities is to create shared value by finding business opportunities in social problems.

Our customers benefitted from more focused market-facing initiatives, new products and market-leading innovations. We also continued our collaborative work with technology partners and industry bodies to accelerate our move into adjacent markets and also to develop more sustainable approaches to the task of balancing socio-economic growth and natural capital.

As the world population approaches the eight-billion mark, with concomitant pressure on water and land, so the need to use natural capital responsibly becomes increasingly important. Recognising this, we work to reduce our environmental impact across the group. As just one example – renewable energy generated in our operations now stands at over 45%, a notable achievement in a carbon-constrained world.

At Sappi we firmly believe that sustainable growth has to emanate from a solid foundation which means that we do not focus exclusively on profits, but rather, that we balance our need to generate Prosperity by promoting the interests of People while respecting the boundaries of the Planet. The 2017 Group Sustainability Report indicates how we are succeeding in this regard.

Finally, operating as One Sappi will accelerate our growth. I am pleased to be able to say that our drive to work as One Sappi is bearing fruit, enabling us to better respond to market dynamics and geo-political challenges. It is clear to me that our value statement ‘At Sappi we do business with integrity and courage, making smart decisions which we execute with speed’, is guiding people towards the right behaviour and is providing the foundation for further growth.

Steve Binnie
Chief Executive Officer
Sappi Limited
To reshape Sappi’s future, our 2020Vision draws on the power of One Sappi as we move beyond pulp and paper to unlock and commercialise the potential of woodfibre-derived bioproducts. Our strategic evolution is underpinned by a commitment to collaborating and partnering with our stakeholders, and aims to position Sappi as a trusted and sustainable organisation with an exciting future in woodfibre.
Our approach to sustainability is framed in terms of Prosperity, People and Planet — referred to internally as the "3Ps" — and is set out in our Group Sustainability Charter. This in turn is underpinned by the Code of Ethics and our group value statement:

At Sappi we do business with integrity and courage, making smart decisions which we execute with speed.

Regional Sustainability Councils (RSCs) operate in Europe, North America and Southern Africa. Each RSC focuses on key material issues relevant to their specific region and on incorporating sustainability into everyday business processes. These RSCs report to the Group Sustainable Development Council which in turn reports to the Social, Ethics, Transformation and Sustainability Committee which in turn reports to the board. Sustainability ambassadors in Europe and North America and brand ambassadors in Southern Africa help to entrench an holistic approach to the "3Ps" of Prosperity, People and Planet throughout the group.
Our performance against our global sustainability goals in 2017

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 2016-2020. Capital spend budget over five years will be used to determine targets in various elements. Our performance in 2017, together with commentary, is set out alongside.

Our targets reflect issues that are important to our sustainability as a business and are a key element in our work to continually improve our performance in terms of the ‘3Ps’. Progress – or lack thereof – against our targets is monitored and reported on regularly to management, the Regional Sustainability Councils, the Global Sustainable Development Council and ultimately, to the SETS Committee, a fully constituted board committee.

<table>
<thead>
<tr>
<th>Target Category</th>
<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 (Return on capital employed)</td>
<td>10.8%</td>
<td>18%</td>
<td>67% Improvement</td>
<td>12% ROCE minimum</td>
<td>15%</td>
</tr>
<tr>
<td>LTIFR (Combined own and contractor employees)</td>
<td>0.53</td>
<td>0.44</td>
<td>17% Improvement</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>Sustainable engagement – increase level of survey participation</td>
<td>Not measured (2015: 74%)</td>
<td>85%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCE</td>
<td>10.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTIFR</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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 22.92 GJ/adt.)
Our performance against our global sustainability goals in 2017 continued

**Prosperity**

**ROCE:**

The 67% improvement compared to 2014 base reflects the ongoing successful implementation of our One Sappi strategy and 2020 Vision. 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%.

Plantations in KwaZulu-Natal.
## Our performance against regional targets

<table>
<thead>
<tr>
<th>Target</th>
<th>2017 Performance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>RONOA = 10%, EBITDA = 10% by 2017.</td>
<td>9.8%</td>
</tr>
<tr>
<td></td>
<td>European Trading Scheme (ETS) – stay at level or ahead of European ETS cost increase.</td>
<td>Yes</td>
</tr>
<tr>
<td>North America</td>
<td>Achieve or exceed an annual 12% return on net operating assets (RONOA).</td>
<td>4.7%</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>EBITDA margin greater than 20%.</td>
<td>25.1%¹</td>
</tr>
<tr>
<td></td>
<td>Sustainable cut above four million wet white tons per annum.</td>
<td>3.8 million</td>
</tr>
</tbody>
</table>

*Defined as cash generated by operations.

### Comment

**North America:** Looking forward, investments in higher margin packaging products and rising operating rates in the graphics market will enhance margins.

**Southern Africa:** We did not achieve our sustainable cut target due to the impact from drought and animal damage, as well as the downward correction of certain specie predictions.
### People

#### Our performance against regional targets

<table>
<thead>
<tr>
<th>Target</th>
<th>2017 Performance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Europe</strong> Engaged employees in terms of <strong>participation and commitment</strong>.</td>
<td>Participation in engagement survey 87%, level of engagement 78%</td>
<td>Participation achieved, level of engagement improved</td>
</tr>
<tr>
<td>LTIFR</td>
<td>0.77</td>
<td>Not achieved</td>
</tr>
<tr>
<td><strong>North America</strong> Offer training at average of 60 hours per employee per year to enhance job performance and management skills.</td>
<td>80</td>
<td>Exceeded</td>
</tr>
<tr>
<td>Safety (LTIFR)</td>
<td>0.43</td>
<td>Improving</td>
</tr>
<tr>
<td>Achieve zero workplace injuries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Africa</strong> Achieve Level 4 compliance in BBBEE (in respect of the new forestry codes).</td>
<td>Level 3</td>
<td>Exceeded</td>
</tr>
<tr>
<td>Improvement of 2% every other year of engaged employees in terms of participation and commitment.</td>
<td>Participation in engagement survey 89%, level of engagement 76%</td>
<td>Participation achieved, level of engagement constant</td>
</tr>
<tr>
<td>Combined Lost Time Injury Frequency Rate (LTIFR) for own employees and contractors to be better than best ever achieved on a continuous 12-month basis (0.27) and Lost Time Injury Severity rate to be below 25.</td>
<td>LTIFR 0.32 and LTISR 85.6</td>
<td>Not achieved</td>
</tr>
</tbody>
</table>

### Comment

**North America:** We exceeded our training goal with ongoing training in support of safety, operations and management skills. Our safety performance was equivalent to our best year ever. We remain committed to zero workplace injuries.
### Our performance against regional targets

<table>
<thead>
<tr>
<th>Region</th>
<th>Target</th>
<th>2017 Performance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>Reduction of specific direct fossil CO₂ emissions including purchased power emissions (calculated at 400g/KWh) by 5% by 2017 (base year 2012, saleable production).</td>
<td>626kg/t</td>
<td>Not achieved</td>
</tr>
<tr>
<td></td>
<td>Maintain a high level of certified fibre delivered to our mills (FSC®- or PEFC™-certified, or equivalent).</td>
<td>74.1</td>
<td>Exceeded</td>
</tr>
<tr>
<td></td>
<td>Energy intensity GJ/adt, under performance.</td>
<td>100GJ/adt</td>
<td>Not achieved</td>
</tr>
<tr>
<td>North America</td>
<td>Procure 60% certified fibre to meet customer demands for certified products.</td>
<td>54%</td>
<td>Not achieved</td>
</tr>
<tr>
<td></td>
<td>Reduce the amount of total energy expended in making each ton of product by 5% by 2020.</td>
<td>2% reduction</td>
<td>Achieved</td>
</tr>
<tr>
<td></td>
<td>Reduce paper mill raw material waste by 5% by 2020.</td>
<td>Not available</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Reduce pulp mill raw material waste by 10% by 2020.</td>
<td>17.7%</td>
<td>Exceeded</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>Achieve 10% reduction in specific purchased fossil energy by 2020 with 2014 as the base year.</td>
<td>8.2%</td>
<td>Achieved</td>
</tr>
<tr>
<td></td>
<td>Achieve a 10% reduction in total specific fresh water usage by 2020 with 2014 as a base year.</td>
<td>21%</td>
<td>Exceeded</td>
</tr>
<tr>
<td></td>
<td>Achieve a 10% reduction in specific solid waste landfilled by 2020 using 2014 as a base year.</td>
<td>20% increase</td>
<td>Not achieved</td>
</tr>
<tr>
<td></td>
<td>100% certification of own timber.</td>
<td>100% Own timber</td>
<td>Exceeded</td>
</tr>
<tr>
<td></td>
<td>70% certification of Chain of Custody for our manufacturing plants.</td>
<td>83.1% Chain of Custody</td>
<td></td>
</tr>
</tbody>
</table>

### Comment

**North America:** While we were below target in terms of certified fibre, we are meeting customer demands for certified products. In terms of reducing paper mill raw material waste, we are restating our target due to baseline error – we remain committed to 5% reduction by 2020.

**Southern Africa:** We did not achieve our target in terms of solid landfilled waste, but have interventions in place to achieve our 2020 target.
Our accolades

Introduced to the market in 2016, Sappi Guard barrier packaging papers from Sappi’s functional papers product group were not only winners in the WorldStar 2017 awards, but also won the prestigious German Packaging Award in the New Materials category in 2016.

Europe
- Berry Wiersum, CEO of Sappi Europe, was named as the RISI European CEO of the Year for 2017.
- Shortly after year end, Mr Wiersum was also recognised by PPI (Pulp and Paper International) as International CEO of the Year.

North America
- We were recognised for our innovations in paper by interzum, the world’s leading trade fair for furniture production and interior design, when Neoterix™ ST release paper won the Intelligent Material & Design Award.

Southern Africa
- In the 2017 KwaZulu-Natal Exporter of the Year Awards, SSA was honoured as Large Exporter of the Year and as Manufacturers of the Year.
- Development Communication Specialists (DevCom) won a Golden Loerie Award in the Shared Value category for their innovative work in partnership with Sappi Southern Africa on the Abashintshi programme. For further details on the Abashintshi programme, click here.

- Sappi Limited is listed on the Responsible Investment Index of the Johannesburg Stock Exchange (JSE).
- We have been rated “Prime” by Oekom Research, meaning that we fulfill the research company's demanding requirements regarding sustainability performance in our sector.
- We have been included in the Vigeo Eiris Best Emerging Market Performers Ranking. The companies in the ranking are the 100 best performing companies from emerging markets in a best in class approach. www.vigeo-eiris.com

Neoterix™ ST is the result of Sappi’s collaboration with Sharklet Technologies, Inc, with whom we entered an exclusive, worldwide licence agreement in 2016 to manufacture and distribute casting and release paper and film that features the groundbreaking Sharklet™ microtexture. Neoterix™ ST creates surfaces that resist bacterial attachment and growth without the use of toxic additives or chemicals.

www.sappi.com
Our business model

### Financial capital
We manage our financial capital, including shareholders' equity, debt and reinvested capital to maintain a solid balance between growth, profitability and liquidity.
- Total assets: US$5,247 billion
- Total debt: US$86 million
- Cash and cash equivalents: US$550 million

### Manufacturing capital
Investing in building, maintaining, operating and improving our infrastructure requires significant financial capital, together with human and intellectual capital.
- A combined own employee and contractor LTIFR: 0.44 (three own employee fatalities, one contractor fatality)
- 62% of training spend allocated to skills development and 38% to compliance
- Positive, measurable impact on communities

### Intellectual capital
Our technology centres and research and development (R&D) initiative promotes a culture of innovation to support the development of commercially and environmentally sustainable solutions for the company.
- New Code of Ethics launched in 2016
- Technology centres in each region
- Technology investments in 2017

### Human capital
By creating a safe and healthy workplace for our people in which diversity is encouraged and valued, and providing them with ongoing development opportunities, we enhance productivity and our ability to service global markets.
- 11,146 employees including 851 fixed-term contractors
- US$514 average training spend per employee

### Social capital
Building relationships with our key stakeholders in a spirit of trust and mutual respect enhances both our license to trade and our competitive advantage, thereby enabling shared value creation.
- Ongoing stakeholder engagement
- CSR spend: US$5.3 million

### Natural capital
Recognising that our business depends on natural capital, we focus on managing and mitigating our impacts.
- 2,734MW energy purchased, 1,893MW generated
- Specific energy usage: 22.77GJ/adt
- Specific process water extracted: 33.74m3/adt
- 479,000ha owned or leased plantations with approximately 27.4 million tons of standing timber
- Contracted supply covers a further almost 92,000ha

### Our processes
- Nanocellulose, sugars, lignins, furfural, biocomposites, bio-energy
- Unlocking the chemistry of trees in adjacent markets

### Outputs
- 6.4 million tons of saleable production
- Return on net debt
- 6%
- 46% of timber used certified
- 73.5% of fibres used certified
- 1,503,014 tons of waste, of which almost 405,385 tons sent to landfill

### Material issues
- Stakeholder relationships
- Governance
- Cost containment and capital allocation
- Growth in the packaging sector
- Declining for graphic paper
- Growing popularity of cellulose-based fibres
- Adjacent markets
- Safety
- Labour relations
- Community investment
- Sustainability of our woodfibre base and climate change
- Emissions regulations and carbon tax
- Energy
- Water

### Governance
- Board of directors with diverse experience and expertise
- Social, Ethics, Transformation and Sustainability Committee ensures sustainability is integrated into business strategy
- Other board committees cover all governance aspects
- New Code of Ethics launched in 2016

### Specialities and packaging papers
- Papermaking and specialised cellulosic (dissolving wood pulp) processes

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

Our customers rely on us for technical, operational and market expertise.

We support local communities and livelihoods by creating employment and business.

In Southern Africa, our operations provide employment for just over 10,300 contractor employees.

Our engaged, motivated workforce enable realisation of our 2020 Vision, with engagement monitored by a global target.

Our specialised, sustainable packaging solutions:

• Preserve and protect
• Convey information
• Offer convenience, and
• Communicate and enhance brand image.

We support local communities and livelihoods by creating employment and business.

In Southern Africa, our operations provide employment for just over 10,300 contractor employees.

We recently launched Neoterix™ ST, which creates surfaces that resist bacterial attachment and growth without the use of toxic additives or chemicals.

As a natural resources-based company, we are an attractive investment for investors looking for an alternative to fossil fuel-based materials.

Our shareholders received US$59 million in dividends.

We paid US$911 million to employees as salaries, wages and other benefits.

We reinvested US$552 million to grow the business.

Landlords of capital received US$95 million as interest.

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Our activities add value to all our stakeholders.

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Globally, we contributed US$135 million to governments as taxation.

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Our specialised, sustainable packaging solutions:

• Preserve and protect
• Convey information
• Offer convenience, and
• Communicate and enhance brand image.

We promote active environmental stewardship of our land.

Our world-leading tree improvement programmes have led to shorter growth times and enhanced fibre gain.

Over a third of customers prefer sustainable brands1 and our products help meet this need.

As a natural resources-based company, we are an attractive investment for investors looking for an alternative to fossil fuel-based materials.

Our key material issues are those most important to our own growth and prosperity, as well as our stakeholders.
Our key material issues continued

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

Governance

Material issue: 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: 89 (ranked 3rd); the Netherlands: 83 (ranked 8th); Germany: 81 (ranked 10th); Belgium: 77 (ranked 15th); Austria: 75 (ranked 17th) and the United States of America: 74 (ranked 18th).

Stockstadt MW

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 re-assess 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 Johannesburg Securities Exchange. 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 BLSA's 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' view 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 written and distributed to the mills to assist those unable to read the policies. Ethics messages are displayed on the 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.
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

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 papers grades, we are leveraging our existing manufacturing base by converting existing paper machines to higher margin products, including specialities and packaging papers 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 Eisingen 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 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 190,000tpa 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.

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 group-wide 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.
Our key material issues continued

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.

Our response

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 $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.

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 FY 2017, 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 Ul traflex, a hybrid flute and liner which offers converters strength with the ability to print, while making ordering more efficient. Research is currently underway to impart the paper with anti-microbial 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 is 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, auto, entertainment and financial services. In addition, research from Nielsen Catalonia 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.1

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 Catalonia 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 season.3

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 cotton4 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.4

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 lead farmers in other provinces to switch to other crops, with negative implications for supply.4

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 2018.5 This is well above the IMF’s predicted global growth rate of 3.7% for the same period.6

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

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, and specialties and packaging papers.

Our nanocellulose process uses unique chemistry whereby woodpulp 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.

Key components of woodfibre (%)

- Cellulose: 45%
- Hemicellulose: 30%
- Lignin: 23%
- Resins: 1%
- Inorganics: 1%

1 https://www.marketresearchengine.com/reportdetails/nanocellulose-market-report
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 Versalac® 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.

Our key material issues

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.

Ngodwana Mill

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.
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 bio-renewable 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 residues 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.

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 90,000 tpa of liquid sodium lignosulphonate and we currently have the capacity to dry 25,000 tpa of powder (±50,000 tons liquid input).

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

Bioenerg

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 REIPPP and was selected as preferred bidder. The project involves the supply of biomass from local plantations to Ngodwana Mill. This is then used as boiler fuel to produce steam which in turn 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.

www.sappi.com
Our key material issues continued

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 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).

Cumulative Global Value Generated versus Expenditure (percentages – total value vs total expenditure)

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 at Ngodwana Mill in April 2017 (described on page 23).
Our key material issues continued

People

Material issue: Safety

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.

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 on-site 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 Sappi Forests 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.

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, everyone should be responsible not only for his/her own safety but also of his/her colleague’s and family’s safety.
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, FY2017 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 Resources Director. The main purpose of the meetings is to inform and consult on business results/market developments and pan-European organisational topics.

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.
Our key material issues continued

Material issue: Sharing value

Background

Globally, companies are expanding the concept of corporate responsibility to include both corporate social investment and the concept of creating 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 and which include education, local community support, the environment and health and welfare. We encourage employees to participate in outreach and community projects.

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

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

Our CSV initiatives in 2017 are described in more detail on pages 80–83, 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 proposal 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.

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 and budgeted spend for 2018

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<thead>
<tr>
<th>Region</th>
<th>TOTAL Spend 2017</th>
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<tr>
<td>Europe</td>
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<tr>
<td>North America (ITM US$250,000)</td>
<td>US$537,000</td>
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<tr>
<td>South Africa</td>
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<td>ZAR56 million</td>
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<td>ZAR17 million</td>
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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).
Our key material issues continued

Planet

Material issue: Woodfibre

Background

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

In 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.

Our response

In Europe, we mitigate fibre supply risk through shareholdings in wood sourcing co-operatives 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 Sappi Mill (described on page 19 in Southern Africa, 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 is, with the aim of 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 PTT 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 quality
  - 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 3,500ha 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 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 the 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, and
- Measuring permanent sample plots annually (eucalypts) or bi-annually (pines) to determine the effect of drought for use in long-term planning

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.

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Material issue: Emissions regulations and carbon tax

Background

In the 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 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 not only to 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 atmosphere.¹

¹ http://www.weforest.org/page/why-it-matters
Material issue: Energy

Background

Energy is a key input for our industry. Aggressively managing energy usage leads to a reduction in carbon emissions and enhanced cost efficiencies. In 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 separating our operations from the volatility of energy prices.

We are succeeding in this regard, as indicated by our high use of renewable energy (see pages 31 and 97) 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 successfully be 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.

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Material issue: Water

Background

The United Nations estimates that global demand for water will grow by 50% by 2030.1 At the same time, globally, over 80% of the wastewater generated by society flows back into the ecosystem without being treated or reused.2 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 woodfibre, 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 Technology Centre in Pretoria (South Africa) is currently assessing the wastewater biofinery (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 have completed a project to raise the Comrie Dam wall, 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 waste water 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.

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Stakeholder engagement
Growing is enabled by fertile ground.

Ongoing, constructive engagement with our stakeholders provides the fertile soil for focused growth today and tomorrow.
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.

Enabling value creation

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 manage expectations and priorities, thereby facilitating our licence to operate, enhancing our organisational effectiveness and ultimately, driving the long-term success of our business.

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

Our approach to engagement

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

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

Our main stakeholder groupings, as set out in our Group Stakeholder Engagement Policy (available on www.sappi.com), 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 100 countries, our ability to connect with stakeholders as One Sappi, motivated by our revised mission, strategy and shared values, gives us a clear advantage and gives our stakeholders a connection they can trust to add value.

Our new website

A key development in FY2017 aimed at enhancing stakeholder engagement was the relaunch of our website www.sappi.com with significant updates, 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.
Our key relationships – Employees

Management approach

We invest in future talent while challenging our people so that they are able to seize the opportunities presented by global megatrends. We make resources available to enable our people to grow intellectually, 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, we operate bursary and training programmes and support FET (Further Education and Training) colleges.
• In Southern Africa, 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.
- 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.

Our key relationships – Employees continued

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 – Unions

Management approach

Given today’s extremely challenging global economic conditions and the current socio-economic dynamics in the South African labour market, we prioritise our relationship with our employees and their representatives. Protecting the right to freedom of association and collective bargaining are fundamental to the manner in which Sappi does business. Globally, approximately 60% of our workforce is represented by unions, with 72.6% covered by collective bargaining agreements.

Areas of mutual interest

In addition to meeting with local union leadership for the purposes of remuneration, working hours, and other conditions of service as well as resolving grievances, 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 72 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.
Our key relationships – Communities

Management approach

Having a mutually respectful relationship with the communities in which our business is situated is critical to our success. We work to incorporate the communities close to our operations into our journey of intentional evolution, which recognises the importance of conserving natural resources, uplifting people so that they are well positioned to thrive in our increasingly inter-connected world and 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, efficient water 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.

Regionally:

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

- **SA:**
  - 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, and
  - 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.

- 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 specialised 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.

- We expanded our Abashintshi forestry community engagement programme to cover all our operations (44 communities).

More detailed information about our initiatives can be found on pages 80–83 of this report.
Our key relationships – Customers

Management approach

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

Areas of mutual interest

• High service levels.
• 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 paper basic 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.
• We provide extensive technical support:
  – Globally, a series of technical brochures is available on our website 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 Saiccor 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.

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  – In terms of specialised cellulose, Technical Centres of Excellence are located at Saiccor and Cloquet Mills
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  – In North America, the Sustainability Customer Council provides candid feedback, and helps to identify emerging issues.

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.
Our key relationships – Customers continued

- 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 20th 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’ need 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 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: https://www.sappi.com/eco-effective.
- In Southern Africa, we:
  - Sponsored the graphic design category in the Student Gold Pack Awards held under the auspices of the Institute of Packaging SA and we also sponsored paper for the Citrus Research Institute annual report in addition to sponsoring their annual symposium, 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.

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 Checkout’, a consumer campaign aimed at helping reverse the decline in printing and writing papers as well as boost demand for paper-based packaging using TV, print, billboards and the internet.

At 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.

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.
Our key relationships – Industry bodies

Management approach
We partner with industry and business bodies to showcase the role of business in building society and 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
• Sappi has been a signatory to the UN Global Compact since 2008.
• In Europe and North America, close engagement is maintained directly and through the respective industry bodies CEPI and AF&PA. In Europe we also engage with the 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®.

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

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

SNA
• American Forests and Paper Association (AF&PA)
• Paper and Paper Packaging Board
• Agenda 2020 Technology Alliance
• Sustainable Packaging Coalition (SPC)
• Forest Products Working Group
• The Recycling Partnership
• TwoSides.

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 (PITSA) Manufacturing Circle
• South African Chamber of Commerce and Industry (SACCI) and local chambers of commerce and industry.
• The CEO Initiative
• TwoSides.
Our key relationships – Industry bodies continued

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

- We continued to support targeted communication campaigns that 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 Ecolabel remain achievable.
- 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 (SME) fund aims to provide capital to existing fund managers already investing in SMEs. The latter workstream progressed further in 2017.

- Sappi was a silver sponsor of the FSC®’s 2017 General Assembly.

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.
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 reports 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 above.

A eucalyptus tree in a Sappi plantation.
Our key relationships – Suppliers and contractors

Management approach

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

Given our focus on zero harm in the workplace, we work with our contractors to ensure 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

- **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, and 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.

Engagement in 2017

- **In SSA**, 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 78–79.

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 – 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 82 of this report.

Engagement in 2017 took place through the avenues outlined above.

We source woodfibre from sustainably managed forests and plantations.
Our key relationships – Government and regulatory bodies

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

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

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

Engagement in 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.

Changing the plates on the pilot refiner at the Technology Centre in Pretoria (South Africa).
Realising our strategy for growth.

In every seed there is the promise of life, transformation and growth... promise that is fulfilled when the conditions are right. Our 2020Vision is providing the right conditions for our evolutionary strategy to grow and bear fruit – not just for our shareholders, but for all our stakeholders, particularly our employees and the communities in which we operate.
Prosperity 2017 – at a glance

Group procurement initiatives > US$100m annually by 2020 – target exceeded in 2017

Dividends up by 64 US cents

Earnings per share up to 36% year-on-year

Profits up 6% year-on-year

Increase in return on capital employed 18% year-on-year

Net debt down by US$86 million year-on-year

Sales up to US$5.3bn (2016: US$5.1bn)

Overall earnings growth driven by:

- Graphic paper 25% of EBITDA
- Specialities and packaging papers 25% of EBITDA
- Dissolving wood pulp 40% of EBITDA
- New business opportunities 10% of EBITDA

Earnings per share up to 64 US cents (2016: 57 US cents)

Sales by product (%)

- Coated paper 56
- Uncoated paper 6
- Speciality paper 11
- Commodity paper 7
- Dissolving wood pulp 20
- Other 1

Successful repositioning into new higher margin growth segments

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

Group EBITDA substantial increase by 2020

A buoyant DWP market.

We enhanced our packaging expertise:

- Entered collaboration agreement with the global manufacturing Felix Schoeller Group.
- Acquired the barrier film technology of Rockwell Solutions.

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

Cost savings across the group.

Strong growth in specialities and packaging papers sales.

Overall earnings growth driven by:

- A buoyant DWP market.
- A buoyant DIW market.
- Cost savings across the group.
- New business opportunities.
- Specialities and packaging papers.
- Commodity paper.
- Graphic paper.

Our 2020Vision

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

**Note:**
The information on the following pages aims to give a snapshot of our financial performance in FY2017. A detailed analysis can be found in our 2017 Annual Integrated Report, available on www.sappi.com.

Sales by source
- North America: 26%
- Europe: 26%
- Southern Africa: 48%

Sales by destination
- North America: 28%
- Europe: 10%
- Southern Africa: 41%
- Asia and other: 23%

Net operating assets
- North America: 34%
- Europe: 38%
- Southern Africa: 29%
Our approach to **Prosperity** continued

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

Our industry stands on the cusp of renewal as plantation- and forest-derived bioproducts emerge as a global game changer in a carbon constrained future. The success of our drive to adapt our business to these and other global megatrends that are reshaping the world around us was evident in our financial performance over the past year.

Through intentional evolution, we are growing Sappi into a profitable and cash-generative diversified woodfibre group based on the following:

- Selective capital spending in adjacent, growing, and more profitable businesses, and
- Continuing to generate cash from our paper business to fund growth in:
  - Cellulose-based solutions
  - Specialties and packaging papers, and
  - Complementary products.

Going forward, we will continue to accelerate value for shareholders through debt reduction, improved profit and strategic positioning.

Capital expenditure in 2018 is expected to increase to US$450 million as we continue with projects discussed in the Key material issues section of this report. The increase in expansionary capital spending during 2018 is focused on higher margin growth segments including dissolving wood pulp and specialities and packaging papers. This will position us for stronger profitability from 2019 onwards.

Globally, there was an increase in global saleable production. Production in Europe increased as most of the mills had a full order book. Production in North America was stable, with increased specialities and packaging papers and dissolving wood pulp offsetting slight declines in graphic papers. In Southern Africa, all mills had a positive production year with the recent investments in Ngodwana, Stanger and Tugela Mills starting to bear fruit. Saiccor Mill’s economiser tubes which previously caused production interruptions were repaired. There is a high degree of confidence that production will improve incrementally in 2018 and the improvement projects underway at all of the mills will set us up for further production and efficiency increases post-2018.
In FY2017, paper accounted for 36% of operating profit, with dissolving wood pulp (DWP) making up the balance of 64%.

Recognising the declining demand for graphic paper, we manage our capacity to strengthen our leadership position in these markets, realising their strategic importance to the group and maximising their significant cash flow generation. Actions we have taken in this regard include:

- Progressively transitioning Lanaken Mill to lightweight coated woodfree production over the next three years in line with the expected decline in the coated mechanical market.
- Converting Maastricht Mill in the Netherlands to focus predominantly on specialities, and investing in enhancing the paper offering at Ehingen and Alfeld Mills in Germany.
- Upgrading and enhancing the flexibility of Paper Machine 1 at Somerset Mill in Maine, United States of America, to set a strong platform for growth in paper-based packaging.

In addition: In Europe we have focused both on cost containment and our go-to-market strategy – Sappi&You – which has enabled us to be a preferred supplier in the coated woodfree grades in particular and has seen us increase market share in a declining market.

In a difficult North American market, our cost competitive manufacturing facilities, excellent service to customers and superior paper quality, allowed us to increase market share in 2017.

In Southern Africa, we have become the sole local producer of newsprint after the closure of the last competing machine. The transfer of office paper production from Enstra Mill to Stanger Mill post the disposal of Enstra Mill in December 2015 has resulted in a more cost competitive product.

We have made good progress in our aim of having a cleaner, stronger balance sheet in order to accelerate our growth in adjacent businesses. This is highlighted by the fact that over the past five years, we have managed to lower our debt below US$2 billion and have significantly reduced our net debt to EBITDA leverage. In FY2017, we reduced debt by US$86 million, bringing it down to a level of US$1.32 billion.

Our success in bringing our debt levels to below our targeted leverage ratio of less than two times net debt to earnings before interest, tax, depreciation and amortisation (EBITDA) has enabled us to increase our investments in growth projects.

We remain committed to maintaining our leverage to below two times net debt to EBITDA. Our capital expenditure plans take into account this leverage cap, as well as our intention to pay a reliable dividend at a long-term average cover ratio of three times. We focus on capital projects that achieve our strategic objectives and, as a minimum, beat our cost of capital. Typically, however, expansionary projects should earn a return on capital employed of at least 15%.

Our main focus has been on conversions of paper machines in Europe and North America to specialities and packaging papers grades and DWP de-bottlenecking projects in Southern Africa.

We work to lower fixed and variable costs, increase cost efficiencies and invest for cost advantages. Cost advantages are also achieved through our ongoing continuous improvement programmes.

In 2016 we implemented a group wide cost reduction project to lower costs through greater emphasis on global procurement, as well as local projects focused on efficiency and raw material usage. Our initial target was to achieve US$100 million in annual savings by 2020. We are pleased to report that in 2017 we achieved more than US$100 million in savings compared to our 2015 base year. Our objective is to deliver an additional US$60m in savings in 2018.

Our aim is to have a cleaner, stronger balance sheet to enable our accelerated growth in adjacent businesses.
We will continue our focus on having a cleaner, stronger balance sheet so that we can then accelerate our growth in adjacent businesses. This was underpinned by the commissioning of our nanocellulose pilot plant in the Netherlands in 2016, together with a second-generation sugar extraction demonstration plant at Ngodwana Mill in South Africa, which came on stream in April 2017. Our dedicated biotech division is making progress in consolidating and expanding our renewable biomaterials offering.

The investments announced in February 2017 to convert graphic paper machines at our Maastricht and Somerset Mills will boost our specialities capacity by approximately 550,000tpa. Sappi has a growing reputation for offering premium specialities and packaging papers and boards for the packaging industry, but market requirements are changing continuously and brand owners are aiming for more sustainable solutions without compromising functionality. Paper based barrier solutions have gained more focus as a sustainable alternative to film/foil laminate based flexible packaging materials.

Against this backdrop, in 2017 we acquired Rockwell Solutions, a firm specialising in film coatings for the packaging industry and which has recently developed a non-solvent based barrier for paper applications. This acquisition will give Sappi valuable insight into our competition in terms of film products. It will also give us product performance experience and a much deeper market insight. Our focus is to introduce paper based packaging solutions to brand owners who are used to working with plastic packaging solutions. Rockwell has been working on recyclable and compostable barrier films, making them a complementary solution to Sappi’s paper based barrier solutions.

Demand for dissolving wood pulp (DWP) has indeed exceeded our longer term 4-5% growth per annum expectation, having been closer to 10% per annum on average. Both cotton, which competes with viscose, and cotton linter pulp, an alternative feedstock to the viscose staple fibre (VSF) industry, experienced either diminishing or, at most, stable supply over the past few years. This has facilitated increased demand for VSF and consequently DWP. Our VSF customers have increased demand during this time, and have additional expansion plans over the next five years or more.

Currently we produce 1.2 million tons of DWP, with production capacity of 1.3 million tons. We operate our Cloquet Mill as a swing mill producing both paper pulp for internal use and DWP. Based on expectations of overall market growth, we believe that we need to be producing at least 1.7 million tons by 2020. Fully utilising our current capacity, and debottlenecking our existing plants will enable us to produce an additional 200,000tpa within the 2020 timeframe. In order to meet the further 300,000tpa of demand we have been looking for further investment opportunities, both internal and external to our current operations. We hope to be able to detail these plans during the first half of 2018.
Our investment case

Market leader
• Leading European coated paper producer
• Leading North American coated freesheet paper producer
• Leading Southern African graphics and packaging paper producer
• #2 Global producer of coated paper
• #1 Global producer of DWP (just under 20% of global market)

Strongly positioned in growing markets
• Paper business is highly cash generative, providing the funds for future growth into cellulose-based solutions, specialities and packaging papers and adjacent products.
• DWP’s share of the textiles market (Sappi’s primary DWP market) is expected to grow further.
  – Production of cotton is forecast to remain stagnant or shrink.
  – Cellulosic fibres are superior to cotton and polyester for many textile applications.
  – Certain moisture management properties of cellulose fibres cannot be substituted by oil-based synthetic fibres, enhancing opportunity for cellulosics.
• Our VSF customers have additional expansion plans over the next five years or more.
• The DWP market offers diversification opportunities.
• Global sustainable packaging market 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 2025.¹ We have a strong position in the specialities and packaging papers market.
• Global nanocellulose market is expected to exceed more than US$700 million by 2025; growing at a CAGR of more than 33%.²

Geographic diversification and significant assets
• Customers in 150 countries around the world.
• Our global presence allows us take advantage of opportunities where markets are strong:
  – Europe: Six paper mills and one speciality paper mill; well-invested assets at the heart of the European paper markets.
  – North America: One paper mill, one paper and specialised cellulose mill and one speciality paper mill; exposure to the most attractive end-market segments.
  – Southern Africa: Two paper mills, one specialised cellulose mill and one paper and specialised cellulose mill, 387,291ha of plantations with approximately 27.4 million tons of standing timber and access to woodfibre from a further 92,000ha via contracted timber suppliers.

Extensive fibre base in Southern Africa
• Low-cost, fast-growing woodfibre base from sustainably managed plantations.
• Forestry R&D programmes target suitability of species for changing climate conditions and end-use in terms of growth and fibre properties.
• Carbon sequestration by our plantations and forests from which we source woodfibre offers a potential buffer against carbon taxes.

Innovation
• History of industry ‘firsts’.
• Technology centres around the world.
• Development of low-cost nanocellulose process whereby chemicals can be easily recycled and reused without generating large quantities of wastewater.
• Growing our nanocellulose competency at three of our global R&D facilities.
• Collaboration with Felix Schoeller Group and acquisition of Rockwell Solutions.

Demonstrable track record of debt reduction
• Refinancing and debt reduction has led to lower finance costs.
• Have already realised our 2020 group procurement savings target.

² https://www.marketresearchengine.com/reportdetails/nanocellulose-market-report

Allentown Sheeting Facility

² https://www.marketresearchengine.com/reportdetails/nanocellulose-market-report
Our investment case

**Fibre base**
- 479,000ha forests*
- Forestry R&D
- Carbon sequestration

**Significant assets**
- EU 48% of sales
- 7 mills
- 26% of sales
- 3 mills
- 26% of sales
- 4 mills
- SA 26% of sales
- 4 mills
- ST 6 continents
- 3 sales offices

**Innovation**
- History of industry firsts
- Five technology centres
- Nanocellulose

**Well positioned**
- Current and future growth markets
- Dissolving wood pulp 40%
- Specialities and packaging papers 25%
- Graphic papers 25%
- Energy/Adjacent business 10%

**Geographic diversity**
- 13 countries
- 35%

**Our investment case continued**
- Debt reduction
- Cash reserves
- Innovation
- History of industry firsts
- Five technology centres
- Nanocellulose

**Leading producer**
- Coated paper
- Coated freesheet
- Graphic papers
- Dissolving wood pulp
- Specialities and packaging papers

* Includes 387,291ha own and leased plantations; contracted supply covers a further 92,000ha.
### Sappi’s diversified product portfolio

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

#### Specialties and packaging

- **Flexible packaging**
  - Bands (high-end pots, lids, crates), bags (carrier, dog food), sachets (food, pharmaceutical, insect), wrappers (hotdog, snacks, coffee), cigarettes (inner liner, soft pack, bundle wrap), pouches (beverages, emenpes, etc.)

- **Label papers**
  - Labels for self-adhesive applications (bars, jars, bottles)

- **Functional papers**
  - Integrated barrier (oxygen, water vapour, mineral oil) and high sealing properties for packaging for food and non-food.

- **Containerboard**
  - Topper for consumer packaging (shelf-ready packaging, paper, paperboard, automotive parts, appliances, boxes, games, gift boxes).

- **Rigid packaging**
  - Packaging for premium products (chocolate, confectionery, electronics, cosmetics, splits, perfume, pharmaceutical).

- **Technical papers**
  - Paper (printing on non-metal, steel, glass, direct thermal tickets, envelopes, labels).

- **Tissue wadding**
  - Tissue (folded paper, kitchen towels, serviettes, industrial and medical wipes).

#### Biomaterials

**Hemicellulose sugars**
- Higher value organic acids, glycols, sugar alcohols.

**Nanocellulose**
- Food additive (flavour, colour, suspending, stabilising, visco, protein), thickening agent in food, thickener (industrial applications), additive (improve mechanical properties, paper, cable, textile, thermosetting resins, starch-based substances, compositions high-tech wood fibre in motor vehicles, semipreps), strongener (concretes, adhesives).

**Lignosulphonate**
- Bonding agent (cement, briquettes, ceramics, metal bonds, dust suppressant, stabiliser, dispersing agent (water binding, concrete admixtures), paper, adhesives).

**Ethers CMC, MC, HEC (drilling fluids, detergents, mining flotation aids, food, pharmaceuticals.**

**Microcrystalline cellulose (MCC)**
- Binders (tablets), thickeners (foods, pharmaceuticals), fat replacement (yoghurt, ice cream).

**Cellophane**
- Packaging for food, alkaline batteries, photographic imaging tape.

**Exact**
- Cloths, household linen, curtains, bedding, upholstery, non-woven (apples, tomatoes).

**Ethers**
- CMC, MC, HEC (printing inks, detergents, excipients in tablets), food, pharmaceuticals.

**Microcrystalline cellulose (MCC)**
- Binders, thickeners (food, pharmaceuticals), fat replacement (yoghurt, ice cream).

**Sawn timber**
- Construction timber

**Paper**
- Paper and dissolving wood pulp.

**Forestry**
- Sawn timber

**Pulp**
- Paper pulp

### Dissolving wood pulp

- *Viscose/rayon and lyocell staple fibres*
  - Textile (clothing, household linen, curtains, bedding, upholstery, non-woven (apples, tomatoes).

- *Sawdust/pulp*
  - Paper and dissolving wood pulp.

- *Ethers*
  - CMC, MC, HEC (printing inks, detergents, excipients in tablets), food, pharmaceuticals.

- *Microcrystalline cellulose (MCC)*
  - Binders, thickeners (food, pharmaceuticals), fat replacement (yoghurt, ice cream).

- *Cellulose*
  - Packaging for food, alkaline batteries, photographic imaging tape.

- *Exact*
  - Cloths, household linen, curtains, bedding, upholstery, non-woven (apples, tomatoes).

- *Ethers*
  - CMC, MC, HEC (printing inks, detergents, excipients in tablets), food, pharmaceuticals.

- *Microcrystalline cellulose (MCC)*
  - Binders, thickeners (food, pharmaceuticals), fat replacement (yoghurt, ice cream).

- *Sawn timber*
  - Construction timber

- *Paper*
  - Paper and dissolving wood pulp.

### Graphic and printing papers

- **Office**
  - Stationery, office printing, promotional material, presentations, posters, exam pads.

- **Newspaper**
  - Newspapers, supplements, brochures, advertising inserts.

- **Graphic papers**
  - Brochures, magazines, calendars, annual reports, sustainability reports, direct mail, data processing, books, brochures, point-of-sale, promotional material, posters, catalogues.

### Glossary

**Biomaterials**
- *Hemicellulose sugars*
  - Future potential sales.

- *Nanocellulose*
  - Future potential sales.
Research and development

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

We spent US$29.5 million on R&D in 2017. Technology is a cornerstone of our business and is supported by technology centres in each region covering each section of the value chain:

**Europe**

*Maastricht Centre of Excellence*

Papermaking processes

**North America**

*Westbrook Centre of Excellence*

Coated fine paper and specialty casting release paper development

**Southern Africa**

*Forestry Research Centre (Tweedie)*

- Tree breeding
- Propagation techniques
- Silviculture

*Sappi Technology Centre (Pretoria)*

- Fibre processing
- Paper science
- Chemical sciences
- Environmental

*Sappi Specialised Cellulose Centre of Excellence (Umkomaas)*

- Applications testing
- Fundamental cellulose properties

The annual global Technical Innovation Awards promote a culture of internal innovation.

Among our innovative products are Neoterix™ ST, the first commercial casting and release paper with Sharklet™ bacteria-inhibition technology and Symbio, a composite based on cellulose fibres found in trees and polypropylene, developed primarily for injection moulding.
Our products add value to people's lives every day and are used in the following ways:

• Our dissolving wood pulp (specialised cellulose) products are used worldwide by converters to create viscose fibre for fashionable clothing and textiles, pharmaceutical products as well as a wide range of consumer and household products.

• Quality specialities and packaging papers are used in the manufacture of such products as soup sachets, luxury carry bags, cosmetic and confectionery packaging, boxes for agricultural products for export, tissue wadding for household products and castings and release papers used by suppliers to the fashion, textiles, automobile and household industries.

• Our market-leading range of graphic paper products are used by printers in the production of books, brochures, magazines, catalogues, direct mail and many other print applications.

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

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

In 2017, we added value to the Prosperity of the regions where we operate:

• By employing 12,778 employees, including 851 contractors globally. In addition, just over 10,300 people are employed by contractors working for Sappi Forests in Southern Africa.

• By creating millions of dollars’ worth of goods each year:
  In FY2017 sales per region were: Europe: €2,319 million, North America: US$1,360 million, Southern Africa: ZAR17,489 million.

• By contributing to domestic growth and the balance of payments in each region where we operate by exporting products to over 150 countries around the world.

### Value added in FY2017

- To employees as salaries, wages and other benefits: 52%
- Reinvested to grow the business: 32%
- To lenders of capital as interest: 8%
- To governments as taxation: 5%
- To shareholders as dividends: 3%

Nanocellulose composites
Nanocellulose 3D-printing
Nanocellulose cosmetics
Our value add to daily life continued

Adding value in each region where we operate

Our products play an integral part in the everyday lives of people across the country and around the world. We play an important role in society, offering efficiently manufactured, fully recyclable products, made from renewable raw materials. The forestry industry is one of the strategic economic sectors in each region where we operate, and makes a significant contribution to economic growth and job creation – particularly in rural areas, where employment and income generation opportunities are more limited than in cities.

Europe

In 2016, the pulp and paper industry provided 175,000 direct jobs in Europe directly, and had a turnover of €81 billion. The industry is a net exporter, exporting approximately 21% of its production.

North America

The pulp, paper, packaging, tissue and wood products industry is one of the largest manufacturing segments in the United States of America. The industry currently employs about 900,000 workers. The industry’s workforce is about on par with that of the automotive industry and larger than the chemical industry’s workforce. Forest products companies are among the top 10 manufacturing sector employers in 45 states. Forest products workers earn a combined total of approximately US$50 billion annually.

The industry is a major contributor to the national economy, shipping goods that are worth more than US$200 billion annually. The forest products industry represents nearly 4% of US manufacturing GDP. For every 100 jobs in the industry, the paper and allied products industry supports 325 jobs in supplier industries and local communities, while the wood products industry supports an additional 225 jobs outside the industry.

Southern Africa

According to Forestry South Africa, the forest products sector in South Africa employs approximately 158,400 people, with 60,200 people directly employed and 98,200 in indirect jobs. Overall, forestry provides livelihood support to 692,000 people. The forest sector (forestry and forest products) contributes about 1% to national GDP. In terms of regional GDP, forestry in Mpumalanga contributes 5.45% and 2.90% in KwaZulu-Natal. Total investment in 2016 stood at ZAR42.9 billion.
Growing is possible only through caring.

In every seed, there is a rainbow of possibility and potential. At Sappi, we care about people and focus on nurturing their potential and bringing it to life.
People 2017 – at a glance

Our people underpin our business success and the communities in which our operations are situated help to drive that success.

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

Globally, we spent an average per employee of US$514 on training and development.

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

We share value with communities close to our areas of operations. Approx US$5.3 million spent on social investment projects.

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

We promote health and wellbeing programmes.

12,778 people work at Sappi, including 851 contractors.

We value diversity, believing that it enhances our ability to serve global markets.

Skills centres at Saiccor and Ngodwana Mills are training Sappi employees and unemployed youth.
Our management approach

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

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

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

Diversity brings with it different skills sets and backgrounds, as well as unique ways of approaching problems and solutions. This in turn enhances our ability to service diverse, rapidly evolving global markets. We celebrate our differences in human capital and strive to create a workplace free from discrimination and harassment; acknowledging and accepting differences among our people with respect to age, class, ethnicity, gender, physical ability, race, sexual orientation and spiritual practice.

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

Women tend to be under-represented in our workforce due to the nature of our operations ie a highly capital-intensive manufacturing environment which involves shift work. All our operations employ women and ensure a safe working environment with appropriate facilities.

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

<table>
<thead>
<tr>
<th>Gender split per region</th>
<th>SEU</th>
<th>SNA</th>
<th>SSA</th>
<th>Sappi group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed term contract</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;12 months or temp or hourly</td>
<td>7</td>
<td>39</td>
<td>39</td>
<td>75</td>
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<tr>
<td>&gt;12 months</td>
<td>30</td>
<td>126</td>
<td>126</td>
<td>382</td>
</tr>
<tr>
<td>Full time permanent</td>
<td>654</td>
<td>1,187</td>
<td>1,187</td>
<td>3,028</td>
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<tr>
<td>Part time permanent</td>
<td></td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>691</td>
<td>3,372</td>
<td>3,372</td>
<td>7,435</td>
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</table>

<table>
<thead>
<tr>
<th>Male</th>
<th>SEU</th>
<th>SNA</th>
<th>SSA</th>
<th>Global</th>
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<tr>
<td>Fixed term contract</td>
<td>132</td>
<td>164</td>
<td>296</td>
<td></td>
</tr>
<tr>
<td>&lt;12 months or temp or hourly</td>
<td>203</td>
<td>150</td>
<td>353</td>
<td></td>
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<tr>
<td>&gt;12 months</td>
<td>4,376</td>
<td>3,551</td>
<td>9,721</td>
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</tr>
<tr>
<td>Full time permanent</td>
<td>4,711</td>
<td>3,865</td>
<td>10,370</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,711</td>
<td>3,865</td>
<td>10,370</td>
<td></td>
</tr>
</tbody>
</table>
### Sappi Limited board (Executive and non-executive) by age, gender and race

- **Bridgette Radebe** and **Godefridus Peter Franciscus Beurskens** both retired from the board at the end of February 2017 and are not reflected in this table.

### Sappi Group Executive Committee by age, gender and race

### Sappi Limited Executive Committee and Management Committee by age, gender and race
We view Broad-based Black Economic Empowerment (BBBEE) as a key requirement for sustainable growth and social development in South Africa.

We have long been committed to participating in the country’s transformation and development through our Southern African forestry and manufacturing operations. The South African government announced the approval of the Forestry Sector Charter in October 2016 and the gazetting took place on 21 April 2017. In terms of the revised charter, we hold a level three BBBEE contributor rating.

Our employee diversity profile is monitored quarterly by the Southern African lead team and discussed monthly at every business unit’s Equity Forum. Each Human Resources Manager and hiring manager is required to recruit in accordance with the employment equity plan in place at their site.

SSA’s BBBEE performance against 2017 targets

<table>
<thead>
<tr>
<th>Element</th>
<th>Preliminary audit score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>24.84</td>
</tr>
<tr>
<td>Management control</td>
<td>10.56</td>
</tr>
<tr>
<td>Management level</td>
<td>6.48</td>
</tr>
<tr>
<td>Employment equity level</td>
<td>4.08</td>
</tr>
<tr>
<td>Skills development</td>
<td>13.50</td>
</tr>
<tr>
<td>Supplier and enterprise development</td>
<td>36.74</td>
</tr>
<tr>
<td>Preferential procurement</td>
<td>20.06</td>
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<tr>
<td>Supplier procurement</td>
<td>6.75</td>
</tr>
<tr>
<td>Enterprise procurement</td>
<td>9.93</td>
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<tr>
<td>Socio-economic development</td>
<td>7.63</td>
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<tr>
<td>Total</td>
<td>93.27</td>
</tr>
<tr>
<td>Contributor level</td>
<td>3</td>
</tr>
</tbody>
</table>

Our focus is on promoting a learning environment.

Sappi Khulisa participants in KwaZulu-Natal province.
Great rewards

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

The primary components of pay include base salary, benefits eg medical and retirement, annual incentive awards and long-term incentives. Compensation levels are set to reflect competitive market practices and internal equity as well as company and individual performance.

We do not discriminate on the basis of gender, age, class, ethnicity, physical ability, race, sexual orientation or spiritual practice.

Amongst employees earning minimum wages, there is very little income disparity.

The income disparity at the higher levels of the organisation, where in some instances men earn more than women and vice versa, is based on differentials such as performance, length of service and on the fact that we do not remunerate at a specific rate, but rather, within a specific band.

Benefits

Europe: Both full- and part-time employees receive the same benefits, eg healthcare, disability coverage, maternity/paternity leave and retirement provisions.

North America: Permanent and part-time employees, who work 20 hours or more per week are provided with medical insurance, life insurance, disability insurance, retirement and other benefits.

Southern Africa: Employees who are on part-time or fixed-term contracts do not automatically receive retirement and medical benefits, although they have the option to do so. They also do not participate in bonus incentive schemes.

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

Minimum wages

Europe: Minimum wages in Europe across the different countries are set within the collective labour agreements.

North America: There is no industry minimum wage. Our North American operations pay well above the US mandatory minimum hourly wage for entry level wages.

Southern Africa: The minimum wage in Southern Africa for the forestry sector is determined at government level. For the pulp and paper, as well as the sawmilling sectors, it is determined on a collective bargaining basis.

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

Great culture

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

• The Technical Innovation Awards, and
• The Group Chief Executive’s Award which recognises outstanding leadership behaviour and contributions to our business.

Regionally, we present the following awards:

• Europe: The annual Coryphaena Award which recognises truly exceptional achievements
• North America: The quarterly Risk Taking and Ingenuity Awards and periodic President’s Awards
• Southern Africa: The Excellence in Achievement Awards, and
• Sappi Trading: The SMART Awards.
Great company

In order to determine whether we truly are a great company to work for, we measure levels of employee engagement every second year. Clear evidence continues to link employee engagement to an organisation’s bottom line. Accordingly, ascertaining levels of employee engagement is important in achieving our goal of building a workforce that is engaged, enabled and energised to deliver on our 2020Vision. In September 2017, we conducted an employee engagement survey, the objectives of which were as follows:

- Measure changes in employee opinions and perceptions of Sappi as a place to work since the baseline survey in 2015
- Measure the evolution of sustainable engagement at Sappi
- Understand what drives sustainable engagement among our employees, and
- Help us to maintain a better work environment.

Engaged – Feeling of attachment to the company and willingness to give discretionary effort.

Enabled – Being able to operate in a work environment that supports productivity and high performance.

Energyed – Being able to maintain an adequate level of energy and sense of wellbeing.

The results of our 2015 and 2017 employee engagement surveys

<table>
<thead>
<tr>
<th>Description</th>
<th>Global</th>
<th>Europe</th>
<th>North America</th>
<th>Southern Africa</th>
<th>Trading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation rate 2015</td>
<td>73%</td>
<td>71%</td>
<td>65%</td>
<td>79%</td>
<td>98%</td>
</tr>
<tr>
<td>Participation rate 2017</td>
<td>85% (75%)</td>
<td>87% (75%)</td>
<td>71% (67%)</td>
<td>89% (80%)</td>
<td>96% (100%)</td>
</tr>
<tr>
<td>Sustainable engagement 2017</td>
<td>77% (74%)</td>
<td>78% (75%)</td>
<td>77% (74%)</td>
<td>76% (76%)</td>
<td>85% (81%)</td>
</tr>
</tbody>
</table>

Follow up actions to our 2015 survey

In Europe, the results in this region indicated that we needed to improve our approach to development. We achieved this by the offering of our learning platform to ensure a wider choice of easy access courses to our employees.

In North America, the survey results suggested an opportunity for improved communication. Accordingly, members of SNA’s lead team have enhanced opportunities to communicate the state of the business, including town hall meetings by site and regional leadership.

In terms of personal development, we have extended our offering of our learning platform to ensure a wider choice of easy access courses to our employees.

Encouraged by external insights from best-practice continuous improvement companies as well as the potential in each of our employees, we are piloting the Sappi Performance Engine & i (SPE&i) initiative in three areas in Europe. This encompasses the participation of all employees every day, working as teams to see how to best reach safety, quality, delivery and efficiency standards on the shop floor.

To this end, a project team has been assembled to address how SNA could best utilise recognition and rewards to enhance performance. The team is focusing on three primary areas for SNA to undertake:

- Improving the initial experience a new employee has when first joining Sappi (making a good first impression) which will result in all new employees receiving welcome packets with products representing all of the region’s businesses.
- Standardising the way SNA celebrates employee milestones achievements like years-of-service awards, which is resulting in uniform service awards and the introduction of service awards at sites that did not have such programmes, and
- Creating a simple way for employees throughout SNA to offer each other recognition and appreciation (peer recognition program), which is resulting in a new online recognition program which allows employees to demonstrate appreciation for peers, in the following categories (using the acronym TOUITS). On a quarterly basis, four TOUITS are selected for a drawing where the employee being TOUIted will receive points to spend in a newly created Sappi store.

Team player – works well across departments/sites/levels with collaboration and integrity.

Outstanding performance on work assignment, project, or event done in a timely, well-planned manner.

Unique involvement in the community/sustainability/volunteerism.

Taking risk, and practising ingenuity and innovation through courage and smart decision making.

Safety and sustainability – exemplifies excellence in safety practices, behaviour or safety mentoring, and/or significant contribution to sustainability through interactions with People and Planet helping Sappi to achieve prosperity.
Being a great place to work continued

The specific focus areas for Southern Africa were identified as follows:

- **Supervision (including leadership):** A global leadership framework was launched in 2016 to all employees. There was also a focus on the identification of future leaders through the talent management process and alignment with the young talent pipeline to ensure that we have a pool of employees with identified future leadership potential. We also launched an online learning portal with five online learning programmes aimed specifically at leadership. The Manager in Training programme for emerging leaders was launched and the Sappi Academy was revitalised within the region.

- **Safety and wellbeing:** The ‘Twice as Safe’ safety programme is aimed not only at raising awareness of safety within the region, but also at changing the mindset of employees so that they are more aware of safety within their span of control.

- **Reward and recognition:** Numerous policies were revised in order to ensure that employees were remunerated fairly and in line with best practice. We introduced the CEO’s award for outstanding performance in the region.

- **Diversity and inclusion:** A transformation strategy was developed in 2015 with multiple elements including diversity and inclusion as a measure for success. Diversity workshops were rolled out in the region in an effort to engage all employees on diversity concerns as well as to create a platform for employees to engage and dialogue on areas of concern.

In Sappi Trading, the following areas were identified for follow-up action:

- **Talent and recognition:** The SMART Awards, a non-monetary recognition programme, was launched in response to the employee engagement feedback. The awards now take place twice a year in order to attract more nominations, following employees’ feedback. The awards recognise those employees who add business value and uphold the Sappi values.

- **Continuous improvement:**
  - The entire process of sales order administration has been reviewed and dramatically simplified in all areas.
  - Multi-skilling and job rotation is underway so that when manpower is temporarily decreased due to sickness or colleagues taking vacation, the workload can be evenly distributed amongst the department. Job rotation also provides employees with the opportunity to learn new skills, face new challenges, as well as provide job enrichment.
  - Job specific KPI’s and measurements were agreed with the regional sales offices and are now being implemented in order to improve operational efficiencies and employee performance.

Employee engagement is one of our 2020 global goals. Click here to view this and our other goals.
A key aspect of great jobs is creating opportunities and make resources available to enable our people to grow intellectually and bring new ideas to fruition. Training and development programmes are reviewed on an ongoing basis to ensure they remain relevant to the changing needs of our people, the business environment and Sappi.

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

In our ongoing drive to build a learning culture, we are reducing our focus on mandatory training in favour of skills building. On average for the group, the split between mandatory or compliance training and skills training is as follows (in terms of time spent) is 62% on skills development and 38% on compliance training. There was a renewed focus on compliance training across the regions with the launch of global programmes on competition law and anti-bribery and corruption for all senior, sales and procurement employees. Code of Ethics training is mandatory for all employees.

While we invest in formal training and development programmes, we realise that potential is not only developed through training courses which develop competencies and skills. We provide our employees with opportunities to gain new experiences and through personal development plans which are based on creating the right conditions and circumstances which allow people to develop their careers.

We track spend per category to ensure that training is directed where most appropriate and where skills gaps have been identified. We also monitor training in terms of gender performance appraisals to ensure that female employees are being provided with the same development opportunities as their male colleagues.

**Training initiatives in each region in 2017**

**Europe**
- The SEU Leadership Academy, which provides opportunities for employees identified as future lead team successors to build their internal networks, develop their business and leadership skills, continued to attract top internal talent as participants. A new group of 16 employees started in September 2016 and will complete in October 2017.
- SEU is training and developing approximately 200+ young apprentices mainly at their four German-speaking mills on a three to four-year vocational training programme. In this way, the region is building a technical talent pool that will replace staff going on retirement over the next three to four years.

**North America**
- The LEADS (Leadership Excellence and Development at Sappi) programme continued in 2017 with a focus on resourcefulness. The training module was offered to all salaried employees.
- The Udemy online learning tool which proved to be successful in Southern Africa was introduced.
- Situational leadership training was introduced at Cloquet and Somerset Mills to help supervisors use a common language when discussing developmental needs and coaching behaviours.
- Somerset Mill rolled out the Convergence learning management system in connection with training for the new PM1 rebuild. In time, the training system will be used across the mill.
Great jobs and great leaders continued

Southern Africa

• We embedded the utilisation of online video based training though the deployment of five core programmes to all employees occupying skilled technical and higher-level roles. A total of 2,055 employees used this channel to learn.

• Compliance training improved substantially with the successful deployment of anti-bribery, competition law and Code of Ethics courses, all in online format.

• We launched a 21 module, 10-month Sappi Manager in Training programme. The programme covers all the competencies a first-time manager at Sappi would need and is structured as an action learning programme with limited classroom, some online and a number of practical workplace assignments.

• The new learning management system, branded as Sappi Learning, was fully deployed. All units are using it for individual development plans. 134 employees have been through individual skills gap assessments.

• We renewed focus on the Young Talent programmes as a mechanism to address our technical skills shortages. 82 trainees were placed into permanent positions during the year. The programmes include engineers in training (24 people), apprenticeships (107), mill and forestry technical trainees (120), corporate functions learners (54), learnership for people with disabilities (14). In addition, Sappi had 52 university bursars in the year.

• We established two technical training facilities. (See box alongside).

Skills centres at Saiccor and Ngodwana Mills

Shortly after year end, in October 2017, our new skills centres at Saiccor and Ngodwana Mills opened their doors to the first group of 20 basic handyman trainees. The centres nine-week programme aimed at providing unemployed youth with basic vocational skills in order to start maintenance micro-enterprises or gain employment. In addition, Sappi’s intake of apprentices will be doubled and the centres will provide high quality specialised technical training to mill employees.

Sappi Trading

• Employees completed a refresher course on the Code of Ethics.

• The legal compliance online programme was completed by designated sales employees and senior management team.

• In terms of the Udemy online learning platform, 421 courses were completed.
Great jobs and great leaders continued

Female training hours by job category

<table>
<thead>
<tr>
<th>Region</th>
<th>No grade</th>
<th>Unskilled</th>
<th>Semi-skilled</th>
<th>Skilled technical and junior management</th>
<th>Professional managerial</th>
<th>Senior management</th>
<th>Top management</th>
<th>Female total average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEU</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>24.15</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>24.15</td>
</tr>
<tr>
<td>SNA</td>
<td>99.19</td>
<td>–</td>
<td>27.82</td>
<td>42.76</td>
<td>44.55</td>
<td>25.45</td>
<td>4.67</td>
<td>62.13</td>
</tr>
<tr>
<td>SSA</td>
<td>47.72</td>
<td>18.74</td>
<td>29.11</td>
<td>39.64</td>
<td>30.79</td>
<td>12.15</td>
<td>4.87</td>
<td>33.55</td>
</tr>
<tr>
<td>Total</td>
<td>66.28</td>
<td>18.74</td>
<td>28.95</td>
<td>40.26</td>
<td>34.91</td>
<td>19.12</td>
<td>4.72</td>
<td>39.60</td>
</tr>
</tbody>
</table>

Male training hours by job category

<table>
<thead>
<tr>
<th>Region</th>
<th>No grade</th>
<th>Unskilled</th>
<th>Semi-skilled</th>
<th>Skilled technical and junior management</th>
<th>Professional managerial</th>
<th>Senior management</th>
<th>Top management</th>
<th>Male total</th>
<th>Male and female grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEU</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>6.00</td>
<td>15.08</td>
</tr>
<tr>
<td>SNA</td>
<td>98.92</td>
<td>–</td>
<td>18.29</td>
<td>46.83</td>
<td>41.48</td>
<td>25.32</td>
<td>10.08</td>
<td>80.64</td>
<td>77.51</td>
</tr>
<tr>
<td>SSA</td>
<td>62.07</td>
<td>49.06</td>
<td>73.81</td>
<td>63.97</td>
<td>29.56</td>
<td>10.74</td>
<td>10.12</td>
<td>60.55</td>
<td>53.55</td>
</tr>
<tr>
<td>Total</td>
<td>87.06</td>
<td>49.06</td>
<td>71.76</td>
<td>61.46</td>
<td>33.41</td>
<td>16.34</td>
<td>10.10</td>
<td>66.90</td>
<td>60.54</td>
</tr>
</tbody>
</table>

Percentage of eligible employees with performance appraisals

Female

<table>
<thead>
<tr>
<th>Region</th>
<th>No grade</th>
<th>Unskilled</th>
<th>Semi-skilled</th>
<th>Skilled technical and junior management</th>
<th>Professional managerial</th>
<th>Senior management</th>
<th>Top management</th>
<th>Female total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEU</td>
<td>71.62%</td>
<td>–</td>
<td>60.00%</td>
<td>76.86%</td>
<td>78.76%</td>
<td>100.00%</td>
<td>–</td>
<td>74.89%</td>
</tr>
<tr>
<td>SNA</td>
<td>–</td>
<td>–</td>
<td>76.67%</td>
<td>76.52%</td>
<td>80.60%</td>
<td>63.64%</td>
<td>–</td>
<td>76.11%</td>
</tr>
<tr>
<td>SSA</td>
<td>–</td>
<td>–</td>
<td>14.53%</td>
<td>74.79%</td>
<td>87.82%</td>
<td>100.00%</td>
<td>–</td>
<td>56.50%</td>
</tr>
<tr>
<td>Total</td>
<td>71.62%</td>
<td>–</td>
<td>28.29%</td>
<td>75.75%</td>
<td>83.33%</td>
<td>85.71%</td>
<td>–</td>
<td>66.55%</td>
</tr>
</tbody>
</table>

Male

<table>
<thead>
<tr>
<th>Region</th>
<th>No grade</th>
<th>Unskilled</th>
<th>Semi-skilled</th>
<th>Skilled technical and junior management</th>
<th>Professional managerial</th>
<th>Senior management</th>
<th>Top management</th>
<th>Male total</th>
<th>Male and female grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEU</td>
<td>69.29%</td>
<td>–</td>
<td>–</td>
<td>86.89%</td>
<td>77.00%</td>
<td>78.95%</td>
<td>–</td>
<td>71.43%</td>
<td>71.14%</td>
</tr>
<tr>
<td>SNA</td>
<td>–</td>
<td>–</td>
<td>93.75%</td>
<td>89.36%</td>
<td>84.15%</td>
<td>70.59%</td>
<td>–</td>
<td>33.33%</td>
<td>85.29%</td>
</tr>
<tr>
<td>SSA</td>
<td>–</td>
<td>–</td>
<td>0.93%</td>
<td>62.20%</td>
<td>92.33%</td>
<td>90.38%</td>
<td>–</td>
<td>63.64%</td>
<td>47.56%</td>
</tr>
<tr>
<td>Total</td>
<td>69.29%</td>
<td>–</td>
<td>3.17%</td>
<td>68.50%</td>
<td>84.57%</td>
<td>81.12%</td>
<td>–</td>
<td>58.33%</td>
<td>62.99%</td>
</tr>
</tbody>
</table>

1 SEU does not monitor training at these levels. Only Sappi Trading figures are included in the SEU numbers.
A certain turnover rate is needed to bring new people with new skills into the business to drive innovation and a fresh approach while maintaining a certain level of continuity. In 2016 the global turnover rate for the manufacturing and distribution industry stood at 10.1% for voluntary turnover and 16% in terms of total turnover.¹

Our turnover figures compare favourably against this benchmark: voluntary turnover across Sappi for 2017 was 3.52%, with total turnover standing at 5.85%.

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

Training on anti-corruption

During 2017 all senior and top management employees, all sales teams and all procurement teams had to complete an anti-fraud and corruption online course:

- Europe – 194 employees in scope, 191 completed the course
- North America – 172 employees in scope, 171 completed the course, and
- Southern Africa – 347 employees in scope, 347 completed the course.


² Figures exclude Sappi Trading.
Maintaining sound labour relations

Ensuring disciplined behaviour

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

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

Communicating operational changes

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

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

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

In Europe, information about significant operational changes needs to be provided at a time when planned changes are concrete enough to enable proper consultation. Finland is the only country in which we operate where the process is followed-through according to a set timeline.

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

In North America, the notice period in terms of Federal Law is 60 days. Details regarding operational changes are not specified in collective bargaining agreements.

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

Sappi Southern Africa is party to the Bargaining Council for the Wood and Paper Sector as well as forestry within South Africa. In the case of sawmilling and pulp and paper, collective bargaining is conducted at industry level under the auspices of the bargaining council. The Constitution specifies when parties should submit issues of bargaining for the particular year and when the negotiations must commence. Forestry conditions of employment are implemented on 01 April every year and are regulated by ministerial sectoral determination. The normal notice period applies.

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEU</td>
<td>4,814</td>
</tr>
<tr>
<td>SNA</td>
<td>3,067</td>
</tr>
<tr>
<td>SSA</td>
<td>1,399</td>
</tr>
</tbody>
</table>

Globally, approximately 60% of our workforce is unionised, with 72.6% belonging to a bargaining unit.

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

Overall, FY2017 was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies. For details on our engagement with trade unions in 2016, please click here.
Wellbeing and health

Our management approach

Proactively seeking to keep our employees healthy enhances productivity, reduces stress and enables creativity and innovation. Promoting wellbeing also has a direct impact on the bottom line.

Internally, we have established health and wellness departments as well as risk departments at regional level to manage safety, health and wellness in the workplace. These include safety initiatives geared to the needs of each range, HIV/AIDS programmes, access to company clinics in most operations and general wellness programmes. It is a condition of employment in Sappi for all employees to belong to a retirement fund. Medical aid is also a condition of employment for all employees categorised as ‘salaried’ and other employees have the option to join a medical aid fund.

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

- In Europe, formal health and safety committees are in place at different levels of the business in line with statutory requirements. 100% of all Sappi Europe employees are represented by the safety committees.
- In North America, all unions have the opportunity to participate in joint management-worker safety committees.
- In Southern Africa, (including Sappi Limited) health and safety representatives are elected from non-supervisory staff. In line with legislation, there is one representative for every 50 workers.
- Sappi Trading does not have formal joint management-worker health and safety committees due to the small size of the offices, but there are appointed safety officers.

Sappi Europe

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

Sappi North America

We encourage all salaried and hourly employees (and their spouses) who participate in one of Sappi’s medical plans to complete a health risk assessment (HRA) questionnaire. We continue to have wellness events, such as healthy cooking demonstrations and wellness webinars, at our sites.

Sappi Southern Africa

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

- Occupational health – our practice is governed through standards and best operating practices aimed at preventing harm to employees at work. The major risks we are challenged with due to our work environment are noise, vapours, fumes and ergonomic risks. To mitigate the noise risk, we conduct repeated hearing loss measurements and have focused on reducing or eliminating noise levels in the work environment.
- Primary health care – we continue to focus on HIV/AIDS and tuberculosis as primary health care issues. At some of our mills we have partnered with the provincial health services to provide chronic medication and HIV/AIDS retroviral drugs to the clinics at our mills. As indicated by the graph below, the mortality rate from HIV/AIDS within SSA has been reducing steadily over time.
- Employee wellbeing – these programmes focus on educating, empowering and providing employees with the skills to take ownership of their wellbeing. The programmes include support against obesity, substance abuse (alcohol and drugs), basic counselling for referrals to external providers, financial wellness, trauma counselling, work stress issues and other health issues and relationship issues.

HIV/AIDS mortality within Sappi

(National mortality rate: 2%)
Safety

Our management approach

All our pulp and paper mills are certified to the internationally recognised OHSAS 18001 safety management system. A core element of this approach is the hazard identification and risk assessment process in terms of which task-specific hazards and risks are identified, evaluated in terms of current controls and managed by establishing additional controls and risk reduction activities. Roles, responsibilities and accountability are documented, with management in all regions actively involved in our safety programmes. Like preventive action, corrective action involves root-cause analysis with the emphasis on improvement rather than blame. In addition to actual incidents, near-misses are documented and also undergo root-cause investigation.

Our Allentown sheeting facility in North America has re-certified in OHSAS’s Voluntary Protection Programme (VPP).

Annual external safety audits are conducted at all operations. Internal safety tools and techniques which have proven to be effective are shared within the group with particular emphasis on the empowerment of our workforce to identify where and how improvements can be made. We also share regular feedback with our employees on performance measured against our standards to instil a sense of ownership and awareness.

We take the safety of contractor employees as seriously as we do that of our own employees by emphasising safety awareness and competence through ongoing training programmes which take into account differing levels of ability, literacy and responsibility. Training related to health and safety hazards and safe work practices is reinforced by educational pamphlets, posters, videos as well as a Global Safety Awareness Day around which each facility arranges a week of focused activities to reinforce and reinvigorate our year-round work programme on safety.

Safety terminology: Key to graphs and terms used

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTI</td>
<td>Lost-Time Injury. Lost days are calculated as days that an employee cannot report for the next work day or shift due to an illness, injury, disability or death arising from an incident occurring at work. If the employee is unable to complete the work he/she is hired to do, but is well enough to attend work (restricted work), this is also deemed to be a lost day. Lost days are recorded from the day after the accident/incident until the employee returns. The day of the accident and the day returning to work are not included. A fatality or permanent disability is counted as 6,000 days.</td>
</tr>
<tr>
<td>NLTI</td>
<td>Non-Lost-Time Injury.</td>
</tr>
<tr>
<td>LTIFR</td>
<td>Lost-Time Injury Frequency Rate based on a Sappi groupwide standard for manhours</td>
</tr>
<tr>
<td>LTISR</td>
<td>Lost-Time Injury Severity Rating based on a Sappi groupwide standard for manhours</td>
</tr>
<tr>
<td>II Index</td>
<td>Injury Index provides an overall sense of safety within the measured unit</td>
</tr>
<tr>
<td>AIFR</td>
<td>The All Injury Frequency Rate represents the number of all injuries</td>
</tr>
<tr>
<td>OIR</td>
<td>The OSHA Incidence Rate is applicable only to SNA recordable incidents</td>
</tr>
</tbody>
</table>

Firefighting at Alfeld Mill.

LTIFR = (LTI × 200,000) / hours of exposure

LTISR = days lost to injury × 200,000 / hours of exposure

II = LTIFR × LTISR

AIFR = LTI + NLTI x 200,000 / hours of exposure

OIR = Recordable incidents x 200,000 / hours of exposure
Our management approach to safety

Project Zero
We want all our people to adopt a 24/7 safety mindset.

1. Report action plans
2. Enhance injury investigation
3. Leading performance indicators
4. Embrace our contractors
5. Further develop common systems and approach
6. Enhance safety organisation and structure
7. Effective communications
8. Health and safety best practice sharing
9. Setting to work project
10. Develop belief set
11. Behavioural auditing
12. Safety leadership

"I follow the rules because I have to."
"I follow the rules because I know it is the right thing to do."
Safety performance in 2017

Safety performance in 2017 was highly unsatisfactory. Tragically there were three own employee fatalities – two in Southern Africa and one in Europe – and one contractor fatality. The severity of these accidents is reflected in the increased Injury Index (II) for own employees and contractors. Lost time injuries incidence remained within a narrow band with only SNA achieving a major improvement.

Identified or inadequately mitigated risks were a key factor in most of the severe incidents that occurred in 2017. Accordingly, in 2018, risk and hazard reviews will be our main focus. We will also aim to drive down the severity of accidents and near misses by involving all personnel, sharing information and managing risk in accordance with accepted best practice.

All regions have set specific safety targets to be achieved by 2020 and each region has compiled specific action plans to achieve these targets.

### Global safety performance

**Sappi Limited**

**Lost-Time Injury Frequency Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Own LTIFR</th>
<th>Contractor LTIFR</th>
<th>Own II</th>
<th>Contractor II</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.65</td>
<td>0.58</td>
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</tr>
<tr>
<td>2014</td>
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<td>0.36</td>
<td>0.33</td>
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<td>0.32</td>
</tr>
<tr>
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<td>0.36</td>
<td>0.34</td>
<td>0.37</td>
<td>0.32</td>
</tr>
<tr>
<td>2017</td>
<td>0.36</td>
<td>0.34</td>
<td>0.37</td>
<td>0.32</td>
</tr>
</tbody>
</table>

### Safety performance in Europe

**Sappi Europe**

**Lost-Time Injury Frequency Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Own LTIFR</th>
<th>Contractor LTIFR</th>
<th>Own II</th>
<th>Contractor II</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.76</td>
<td>0.50</td>
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<td>2014</td>
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<td>0.71</td>
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<tr>
<td>2015</td>
<td>0.68</td>
<td>0.53</td>
<td>0.68</td>
<td>0.53</td>
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<tr>
<td>2016</td>
<td>0.68</td>
<td>0.53</td>
<td>0.68</td>
<td>0.53</td>
</tr>
<tr>
<td>2017</td>
<td>0.68</td>
<td>0.53</td>
<td>0.68</td>
<td>0.53</td>
</tr>
</tbody>
</table>

The own employee fatality significantly affected the severity rate, with the LTIFR for own employees declining from 0.65 in FY2016 to 0.77.

For further details on how this is being dealt with, please click here.

Significant accomplishments included:
- Maastricht Mill achieved one million-man hours without incident, and
- Stockstadt Mill achieved 1.8 million man hours without incident.

SEU’s vision is to be the safest pulp and paper company in Europe by 2020. Our strategic objectives in support of this goal are:
- Improving LTIFR with an ultimate goal of achieving 0.52 in 2020
- Achieving an LTIFR target of less than 0.66 for own employees
- Making the safety of personnel the first priority in all operations, and
- Ensuring that no employee will suffer permanent loss of the use of a body part or a fatal injury.

The cornerstone of this strategy is for every individual to:
- Drive a cultural change to better understand his/her responsibility towards safety
- Continuously improve his/her work safety (behaviour and environment)
- Simplify rules for better understanding
- Generate ideas to improve safety
- Lead safety with courage, fair-minded and inspiring spirit, and
- Make contractor safety as important as that of own employees.
The region completed FY2017 with an LTIFR for own employees of 0.43 (FY2016: 0.69), below the FY2017 target of 0.6. There were 10 lost time and one restricted incident in FY2017 (FY2016: 17 incidents). SNA continues to benchmark in the upper 25% compared to the North American paper industry.

SNA completed FY2017 with an OIR of 0.98 which is significantly lower than the FY2016 rate of 1.42 and improved upon our historically best achievement of 1.01 in FY2015. There were 25 recordable incidents during FY2017 compared to 35 in FY2016 – a 30% decrease.

SNA’s severity rate has significantly declined from a costly high of 1,673 lost work days in FY2011 and stabilised over the past six years. SNA experienced 482 lost work days in FY2017, up slightly from 414 lost work days in 2016 producing a severity rate of 21 in FY2017.

SNA contractors experienced several lost-time incidents and completed the year with an LTIFR of 1.4.

Significant accomplishments included:

- Cloquet Mill set an all-time mill and companywide record in May 2017, working approximately 2.5 million man-hours without a lost time incident
- Shortly after year-end, SNA will receive the AF&PA 2017 Leadership in Sustainability Award for Safety to be presented at the 03 November 2017 AF&PA Presidents Forum
- Allentown Sheeting Facility experienced zero recordable LTIs in F2017, and
- Somerset Mill completed FY2017 with three lost-time incidents for an LTIFR of 0.33, an all-time mill record.

We continue to engage with our labour unions and work together on the goal of going home to our families. We continue to refine our ergonomic risk reduction efforts with both internal and external resources. Front line leaders have continued performing daily safety contacts, five-minute safety talks and craftsmen perform pre-task job safety analysis.

Going forward, our goal is to have zero fatalities or life changing incidents and an LTIFR of less than 0.55. This will be achieved by:

- Driving participation and prevention activity through gain sharing
- Managing hazards
- Coaching and mentoring of front line leaders through the safety contact programme
- Refining our efforts to eliminate muscular skeletal disorders and reduce ergonomics hazards, and
- Managing the major changes related to capital projects.

Westbrook Mill has met with the local union leadership and an external United Steel Workers (USW) safety facilitator/consultant who helped them formulate a safety improvement plan that will be implemented in 2018. Their focus will be utilising a hazard mapping technique.
Safety performance in 2017 continued

The final LTIFR for own employees for FY2017 was 0.50 (0.50 for FY2016) and for contractors 0.25 (FY2016: 0.26), both against a target of 0.45. The three fatalities resulted in high severity rates for both own employees and contractors. For further details on how this is being dealt with, please click here.

A total of 11 out of 16 operating units achieved zero own employee LTIs for 12 months or more, and nine units achieved zero contractor LTIs for 12 months or more.

Significant accomplishments included:
- Saiccor Mill achieved one million manhours without an LTI
- Ngodwana Mill achieved one million man-hours’ without an LTI, and
- Lignotech achieved one million manhours without an LTI.

Sappi Forests has initiated a very successful safety programme called ‘Stop and Think before you Act’ which is similar in intent to Maastricht Mill’s ‘Erst Denken Dan Doen’ programme. (See box below.)

Going forward, SSA’s objectives are:
- Zero fatal accidents
- Achieve an LTIFR of better than 0.40 for own employees, and
- Achieve an LTISR of less than 25 for all categories of employees.

To achieve these objectives, the following factors are receiving focus:
- Lead indicator measurement rather than the traditional lag indicators (LTIFR/LTISR) will take precedence. Correctly implemented, risk is removed prior to a potential event and the lag indicators follow consequently.
- Leadership which requires that leaders at all levels demonstrate, and live, the safety value. Leadership training and development is underpinned by safety and risk management principles and entrenches safety values in leaders and potential leaders throughout the organisation.
- Competency: All levels in the organisation must understand exactly what safety in the organisation means and what is expected from them and everyone must have some element of relevant safety management training.
- Communication: A common system that is simple enough that it can transcend multiple nationalities and cultures is essential to improved safety performance making use of a simplified safety vocabulary and culture neutral cartoons.
- Information sharing: Detailed sharing of incidents throughout the organisation to create awareness of potential hazards and to share best practices in the treatment of said hazards is implemented.
- Near-miss reporting: Very few incidents result in accidents. By capturing all incidents and ‘at risk behaviours’ and communicating the analysed information to employees, accidents are prevented.

Review of risk assessments: To reduce exposure to this risk all baseline risk assessments that were previously rated low will be reviewed to ensure that they are correctly rated with the knowledge that is available now.

To help achieve our goal of being ‘Twice as safe’ by 2020, DuPont Sustainable Solutions will be performing an assessment of the SSA safety systems. The assessment, which will be underpinned by the appointment of a safety specialist practitioner, will have the following three outcomes:
- An assessment of the current state and design of the SSA safety system
- Assistance with the creation of an envisioned future state, and
- Assistance with the planned transition.

www.sappi.com

Safety performance in Southern Africa
Sappi Forests is responsible for the management of these 387,000ha plantations, spread across Mpumalanga and KwaZulu-Natal. Sappi Forests' operations are almost 100% outsourced to 76 private contractors who employ 10,334 people, including subcontractors. Forestry work is demanding with long hours in harsh outdoor conditions that can change by the minute. Safety hazards are ever-present and include extreme temperatures, wildlife, eg venomous snakes and labour-intensive manual operations with potentially hazardous equipment such as chainsaws.

We expect our contractors to uphold the same high standards for their employees as we do for our own. However, to date, safety incidents occurred mostly in contractor operations and this resulted in a strained relationship between Sappi Forests and our contractors. Contractors felt that they were constantly in the firing line. They felt that Sappi forced decisions on them without consultation – and decisions often having negative cost implications. Sappi employees in turn felt responsible and pressurised by senior management to change the situation. They felt that management made decisions without understanding the practical consequences.

In February 2017, Sappi Forests announced a new safety target for the business: to be ‘Twice as safe by 2020’.

We developed one set of key messages across all target audiences based on the approach of Stop and Think before you Act (STA). Low literacy rates required a new approach to communication. Research showed that the audience loved stories and we adopted a storytelling approach to safety communication using graphics and symbols. Various types of graphics were presented to the target audience (cartoons, computer generated images, photographs etc). Research show that the target audience preferred computer generated images and we adopted that in the development of all picture stories. Material was laminated to withstand extreme weather and bound with a key ring so that material could be added later.

We introduced an aspirational hero and all the safe behaviours of the STA process were attributed to him. He is male as most of the stakeholders are males. Female audiences did not have a problem with this. The audiences named the hero figure Clever Mina (Clever Me).

The programme has proved to be highly successful – the AIFR decreased from 4.90 to <4.72; the LTIFR went down from 0.25 to <0.23, while the LTISR decreased from 135.77 to <47.94 and II Index declined from 33.47 <10.88.
Our approach

We have matured our approach to corporate citizenship to include both corporate social responsibility (CSR) as well as corporate shared value (CSV). The importance of this step lies in the fact that it recognises that our support for society is integral to the way we do business, and not something which stands separate. Shared value 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. 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.

Our Group Corporate Social Responsibility Policy provides a global framework used by each operating region to guide local activities. 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 and which include education, local community support, the environment and health and welfare. We encourage employees to participate in outreach and community projects.

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

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

Click here to see spend per per region. Details of initiatives are covered in our regional sustainability reports, available on www.sappi.com. We present a snapshot of initiatives on the following pages.

Sappi Europe

Save Food

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

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

Mondberge magazine

Sappi has been supporting the Mondberge species conservation project since 2011, through financial support, paper donations (Magno and Algro Design) for their calendars, books and magazines as well as ads in the magazine.

Symbio

We are sharing value with our customers through Symbio (short for symbiosis with nature), a product which uses cellulose fibres found in trees to reinforce plastics. These fibres can significantly increase the rigidity of plastic despite keeping weight low, whilst at the same time giving the material renewable properties. The more cellulose you put into any composite, the lower the carbon footprint of the resulting material.

The lower carbon footprint is enhanced by the lightweight nature of the product – very important for our customers in today’s carbon-constrained world. Another significant benefit of interest to our customers is touch and feel, so much so that some of them have organised touching tests with focus groups.

Organised Symbio touching tests can be used for a variety of applications including appliances, consumer electronics, car parts and furniture.

The Mondberge project aims to produce high-quality media products that are sold to raise money for species conservation.
Ideas that Matter

As an integral part of Sappi North America’s corporate social responsibility platform since 1999, the Ideas that Matter grant programme has funded over 500 non-profit projects and contributed more than US$13 million to a wide range of causes that use design as a positive force in society. The programme is open to North American designers who have partnered with a non-profit organisation and developed a communication campaign that is ready for implementation.

Sappi North America made 10 grants in the 18th annual Ideas that Matter programme, where financial support is given to designers who create print integrated projects to maximise social impact. The 10 projects selected this year highlight how design and creativity can help solve prominent social issues. Through communication projects and campaigns using paper and print, the winning projects focus on climate change, encourage high school students to consider urban planning, educate girls about their reproductive rights, support quality journalism, address prison reform, and explore solutions for delivering humanitarian aid – inspiring change across the country, and around the world.

Award recipient: Prosperity Gardens expansion project (US$17,468)

Through signage, new packaging, merchandise and experiential items, this campaign will help Prosperity Gardens expand services that provide job training and employment opportunities in agricultural sciences and food production for teens seeking a new direction in life.

Prosperity Gardens, a non-profit organisation, was created in 2010 to address the growing problems of youth obesity and limited nutrition knowledge, while providing job training and employment opportunities in agricultural sciences and food production. Its urban gardening programming, provides hands-on garden-based education and green business employment opportunities and offers affordable, locally grown produce for low-income residents. Prosperity Gardens’ services target urban neighbourhoods that are considered “food deserts” by the USDA, where access to healthy foods is limited by a lack of resources and full service grocery options.
Sappi Southern Africa

As South Africa is a developing country characterised by high levels of inequality, shared value is particularly important in advancing socio-economic development. We have a number of initiatives in place to drive shared value including:

- The Sappi Khulisa supplier and enterprise development programme (‘Khulisa’ means ‘to grow’ in isiZulu), established in 1983, our enterprise development initiative, previously known as Project Grow, is aimed at community tree-farming. 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. Sappi Khulisa represents a win-win situation – it drives prosperity and skills development and also helps to ensure continuity of fibre supply to our mills.

- The African Honey Bee project which has over 900 participants. This project is empowering people and helping to reduce fires from honey hunting on our plantations.

- The Abashintshi (the ‘changers’ in isiZulu) programme: Established in 2015, in conjunction with development agency, DevCom, this programme has resulted in 234 businesses, ranging from brickmaking projects to poultry and pig farms, and from crèches to home industries, either being started up or being rejuvenated. The programme is not only contributing to socio-economic development, it is also helping to boost morale and reduce fires on our plantations. (See case study on the following page.).

- An alien invasive clearing programme at three of our mills in KwaZulu-Natal in collaboration with the non-governmental organisation WESAA (Wildlife and Environmental Society of South Africa). The aim is two-fold: to clear alien invasive vegetation on our mill sites and to develop small-, medium- and micro-enterprises (SMMEs) within the surrounding communities. With wages and training indirectly benefiting up to 337 beneficiaries in 50 households the socio-economic impact has been promising, providing an effective building block for SMME development in Sappi’s neighbouring communities.
Case study

About our Abashintshi programme

In 2015, Sappi Forests was faced with two key challenges: fires on our plantations which were sometimes deliberately started and disenchanted, unmotivated communities living near our plantations. Accordingly, together with DevCom, a development communications specialist company, we launched the Abashintshi (‘Changers’ in isiZulu) programme. The aim was threefold:

- Decrease intentional fires
- Establish closer engagement with communities, and
- Achieve social change.

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

- The Asset Based Community Development (ABCD) model which aims to empower community members to use what they have, instead of focusing on what they need or don’t have
- Youth life skills training (various modules dealing with decision making and choices, amongst others)
- Ifa Lethu which documents the legacy of the elderly in the community in order to continue with successful practices and learn from mistakes, and
- Holiday programmes with learners.

The programme which began in KwaZulu-Natal, has now been expanded to Mpumalanga and has grown from 18 young volunteer men and women (the Abashintshi) in nine communities to 87 Abashintshi in 44 communities.

The results have been extremely positive:

- Fires have declined by 89% since 2015
- 234 small businesses have either started up or have been rejuvenated. These range from brickmaking projects to poultry and pig farms, and from crèches to home industries.
- Perceptions of Sappi have shifted: More than 50% of the community participants in the follow-up audit indicated that they were very satisfied with their relationship with Sappi, and
- Communities have a better self-help attitude: only 9% expect donations from Sappi compared to 51% in 2014.

Fakazi Mbele has started his own chicken business through the asset-based community development (ABCD) initiative.

Mthobisi Shezi in his tuck shop, started under the auspices of the Abashintshi programme.
The world is undergoing multiple complex transitions: towards a lower-carbon future; towards technological change of unprecedented depth and speed; towards new global economic and geopolitical balances. At the same time, environmental resources are under increasing pressure as the world population grows and as people live longer.

However, the momentum is building to reduce pressure on natural systems including halting deforestation, shifting to renewable energy and fishing sustainably.

At Sappi, we have long been sowing the seeds for greater levels of environmental responsibility. The main aspects we consider are woodfibre procurement, raw material and land use, energy generation and the associated greenhouse gas (GHG) emissions, manufacturing processes and the end of life of our products.
We are inspired by the art of nature and we depend on nature, so we aim to tread more lightly.

Globally, over five years we have reduced Specific Scope 2 emissions by 7.4%.

5.4% reduction of absolute emissions intensity (Specific Scope 1 and 2) globally over five years.

Improving effluent quality

We discharge 35.5% fewer total suspended solids in effluent than we did five years ago and our effluent has 12.9% less chemical oxygen demand.

Recyclable

Some of our packaging papers are compostable.

Biodegradable

Our products come from nature and return to nature.

Increasing energy self-sufficiency by 8.7% over five years.

Generating 45.2% renewable energy, of which 73.6% own black liquor.

Using less water (m³/adt)

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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</table>

Ensuring responsible management of our woodfibre sources

The forests and plantations from which we source woodfibre are actively managed to enhance biodiversity.

Our plantations in Southern Africa are 100% FSC®-certified.

73.5% of woodfibre supplied to our mills is certified.

Approximately a third of our land is set aside for conservation purposes.

The forests and plantations from which we source woodfibre help mitigate global warming by acting as carbon sinks.

Carbon is lost back to the atmosphere through respiration and decomposition of organic matter.

Atmospheric carbon is fixed by trees and other vegetation through photosynthesis.

Some carbon is internally transferred from aboveground carbon soils.

Some carbon is transferred from belowground carbon (for example root mortality) to the soils.

Belowground carbon: roots, litter.

Soil carbon: organic, inorganic.

Some carbon is transferred from belowground carbon to the soils.

Fallen leaves and branches add carbon to soils.

Carbon is lost to the atmosphere through soil respiration.

The forests and plantations from which we source woodfibre are actively managed to enhance biodiversity.

Aboveground carbon: stem, branches, biomass.

Recyclable

Biodegradable

Some of our packaging papers are compostable.

Some of our packaging papers are compostable.
At Sappi we recognise that as a species, we cannot continue to produce, consume and power our lives the way we currently do. Our challenge is to balance ecologically sustainable development with economic growth and this becomes more difficult as pressure on natural resources increases.

Given that Sappi depends on natural resources such as water and woodfibre, ensuring their renewability as we promote economic and social development makes sound business sense. Producing more efficiently and consuming more wisely is key to establishing resilient markets that stay within our planet’s safe operating space, safeguard our natural wealth and contribute to overall economic and social well-being. We acknowledge that we do have an environmental footprint, however we aim to tread lightly by carefully managing and mitigating the environmental, climate and biodiversity impacts of our operations. We achieve this by working towards the Planet commitments embodied in our Group Sustainability Charter, which is available on our website, www.sappi.com.

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

• Minimising the environmental impact of our operations in terms of raw materials and energy use.
• Developing new production methods and products and finding innovative new ways of beneficiating waste.
• Saving water and energy at every step in production processes. This begins in our Southern African plantations, where we apply best practice management techniques to produce woodfibre with properties that allow it to be pulped using less energy and water.
• Ongoing investment in research and development.
• Monitoring environmental performance and legal compliance at each mill, by constantly assessing our performance in terms of energy dashboards, integrated water and waste management plans, air emissions, and effluent.
• Taking appropriate, pre-emptive action to avoid or mitigate identified environmental risks.
• Ensuring that we keep up with environmental best practice through an internal environmental ‘cluster’ comprised of experts in various fields.
• Having environmental targets in place in each region. Progress to achieving targets is reported to the management teams in each region on a regular basis, quarterly to the Global Sustainable Development Council and to the Social, Ethics, Transformation and Sustainability Committee biannually.
• Using internationally recognised, independently verified certification systems including the Forest Stewardship Council, the Programme for the Endorsement of Forest Certification and the Sustainable Forestry Initiative (woodfibre); as well as ISO 9001, ISO 14001, OHSAS 18001 and, in Europe: EMAS (Eco Management and Audit System) and ISO 50001 in Europe and Southern Africa.
Sourcing fibre responsibly

Responsible manufacturing begins with responsible procurement. Healthy, abundant forests and plantations are critical to the long-term viability of each of our core businesses because wood fibre comprises the primary ingredient in our paper and pulp products and supplies the bulk of the renewable energy that drives our mills. A wide variety of issues, including the management and harvesting of plantation forests drive our procurement policies.

We have achieved certification by three internationally recognised forest products certification programmes, those of the Forest Stewardship Council (FSC®), the Sustainable Forestry Initiative (SFI®) and the Programme for the Endorsement of Forest Certification (PEFC™). This is important, because it assures end users that our wood fibre is sourced from sustainably managed forests and plantations and not from the deforestation of forests — according to the Rainforest Alliance, deforestation causes about 10% of worldwide GHG emissions.

Both natural and plantation forests are essential to a healthy environment, sustaining vital plants and wildlife, filtering water and air, and reducing greenhouse gases by removing carbon dioxide from the atmosphere.

Forest certification gives the consumer the assurance that the products they are buying have been legally produced, and meet stringent environmental, social and economic criteria.

There are different types of certification applicable to forest products:

- **Forest management (FM) certification** which assures that forests and plantations producing wood products meet a set of criteria aimed at responsible management
- **Chain of Custody (CoC) certification**, and
- **The FSC® and PEFC™ Controlled Wood and SFI® fibre sourcing procurement standards** which cover supply chain risks and the avoidance of controversial sources.

### Levels of certification

Globally, 73.5% of fibre supplied to our mills is certified. In Europe, North America and Southern Africa, the percentage of certified fibre in FY2017 was respectively 74.1%, 54% and 83.1%.

In **North America**, Sappi includes fibre sourced from Certified Logging Professional and the Maine Master Logger programmes. Cloquet, Westbrook and Somerset Mills are FSC®, SFI®, and PEFC™-certified. 100% of wood and pulp is purchased in accordance with both the FSC® Controlled Wood standard and the SFI® Certified Sourcing standard. These standards are a critical element of Sappi’s due diligence for Lacey Act compliance.

In **Europe**, all mills are FSC®- and PEFC™-certified. In **Southern Africa**, 100% of Sappi’s owned and managed plantations are FSC®-FM-certified, while Ngodwana, Saiccor, Stanger and Tugela Mills and Lomati Sawmill are FSC® CoC-certified.

### About CoC

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

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

[Image of softwood plantations in Southern Africa]
Enhancing traceability

Sappi North America (SNA) records the town and state or province of origin of each load of wood received at the mills. Representative samples of the deliveries to the mills are subsequently traced backward to confirm the accuracy of the information provided. Through a separate effort, the State of Maine requires that all timber harvests must be registered with the Maine Forest Service, which periodically inspects the operation for environmental compliance. The State of Maine also requires the use of a ‘trip ticket’ to accompany any wood transported to market. The trip ticket identifies the owner, the place of origin and the destination of the wood. A trip ticket system is also utilised in Minnesota, supported by a random sampling process which is incorporated into SNA’s certified sourcing procedures.

Sappi Southern Africa (SSA) and Sappi Europe (SEU) use a system called the Timber Control System which identifies aspects such as location of origin, age and species etc and operates according to FSC®, SFI®, PEFCTM chain of custody requirements which stipulate reporting on species and countries forest origin.

Promoting certification outside our own operations

In addition to our internal woodfibre certification efforts, we promote certification amongst our suppliers and outside our own operations.

The Confederation of European Paper Industries (CEPI), of which SEU 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 is a member of both FSC® US and the SFI® which support certification.

In Southern Africa, we have established a group certification scheme for small- and medium growers. There are currently 42 members in the scheme with plantations ranging from less than a hundred hectares to 4,391ha in size. FSC®-certification is not yet practical for micro growers, largely because of financial and technical constraints. Sappi, with some industry partners, is currently researching ways of overcoming these barriers. Currently timber from micro growers is recognised as ‘controlled wood’ and can thus be used to produce FSC® products labelled as ‘mixed sources’.

Softwood plantations in Southern Africa.
Sustainable land management and biodiversity

To find out more about our tree improvement programmes, please click here. Sustainable land management and biodiversity

Woodfibre is the most important input into our production processes, together with energy and water. Accordingly, ensuring sustainable fibre supply is a key priority for our business.

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

Biodiversity – the complex web of life made up by millions of species of animals, plants, bacteria and fungi – underpins many of Earth's systems that we take for granted, systems that provide us with the air we breathe and the food and water we consume.

Given that all our products are based on woodfibre, biodiversity has a particular relevance for Sappi. Neither our own plantations in Southern Africa or those from which we source woodfibre in South America, nor the managed natural forests in Europe and North America, or plantations would be productive without biotic processes taking place. These processes play a vital role in ensuring the health and vitality of trees and include decomposition, soil rejuvenation, pollination and pest control.

Both the plantations and forests which provide us with woodfibre are actively managed to enhance these beneficial processes and restrict harmful impacts like pests and disease.

Biodiversity contributes to the provision of a number of products and services in the following ways:

- **Ecosystem services:**
  - Protection of water resources
  - Soils formation and protection
  - Nutrient storage and recycling
  - Pollution breakdown and absorption
  - Contribution to climate stability
  - Maintenance of ecosystems
  - Recovery from unpredictable events.

- **Biological resources:**
  - Food
  - Medicinal resources and pharmaceutical drugs
  - Wood products
  - Ornamental plants
  - Breeding stocks, population reservoirs
  - Future resources
  - Diversity in genes, species and ecosystems.

- **Social benefits:**
  - Opportunities for research and education
  - Recreation and tourism
  - Cultural values.

We measure our biodiversity management standards against the internationally accredited forest certification systems we use. Click here for further detail. These systems incorporate detailed criteria for biodiversity management.

Trees used to make paper and wood products are grown in managed forestlands for the purpose of manufacturing. Without regular harvesting of trees to manufacture products, those managed forestlands would likely be sold or used for other purposes such as development or agriculture – purposes that would not include the consistent replanting of trees.

Source: American Forests and Paper Association (AF&PA)
Biodiversity in Europe and North America

According to the Confederation of European Paper Industries (CEPI), today forests cover approximately one-third of the land area of the European Economic Area (EEA), with about one-quarter of that excluded from logging, mainly because of their value for biodiversity. Currently, there is no major deforestation in Europe. In fact, the forest area has been increasing annually since the 1990s.

In the United States of America, more trees are grown than harvested. The country continues to benefit from a large and diverse forest cover distributed across about one-third of total land area. Over the last six decades, the total net US forest cover has increased by over 3%.

Sappi Europe sources pulp from mills in Latin America, where the suppliers own and manage large eucalyptus and pine plantations. The land is divided into sections of intensively managed plantation areas and indigenous forest that is forested to recover and achieve a higher level of biodiversity. The natural ecosystem that is maintained in turn protects the forest stands.

Of the 387,291 ha of land that we own and lease in Southern Africa (contracted supply covers a further 92,000 ha), approximately 30% is permanently unplanted and is managed for the conservation of the natural habitats (including indigenous forests) and the biodiversity they contain.

In South Africa, some people view tree plantations as ‘green deserts’. We accept that at the stand level our plantations are monocultures in the same way that vineyards, apple orchards or any other type of crop are. However, Sappi’s plantations are generally highly productive sites and are managed to use that productive capacity in tree growth. In addition, the genetic diversity within trees is of fundamental importance to our tree improvement programmes.

Our strategies for managing biodiversity include:

- Managing natural vegetation according to best practice in terms of burning, grazing and weed control to ensure healthy habitats.
- Ongoing assessment and monitoring of veld condition.
- Protection of sites from poaching, illegal medicinal plant collection and overgrazing.
- Participation in the national stewardship programme through which we have six declared nature reserves and are in the process of having a seventh proclaimed.

Flagship species

- Flagship species are a selection of charismatic easily recognisable red data listed animal species.
- Flagship species on Sappi land include the Blue Swallow, Oribi, the Cape Parrot, Southern Ground Hornbill and all South African cranes.
- The Endangered Wildlife Trust requests information on the numbers and location of these species from landowners.
Nature in Southern Africa continued

Biodiversity in Southern Africa continued

Nature reserves on Sappi land in Mpumalanga Province

The Oosterbeek Nature Reserve and Angle Ridge Nature Reserve (2,997ha) are both located on the Highlands Management unit of Sappi’s Twello plantation. These reserves lie within the headwaters of the Lomati and Mtsoli Rivers within the Komati Water Management Area, which is of strategic importance in supplying water to the region, including Mozambique. The value of these areas lies in the fact that they are areas of outstanding natural beauty and part of the Barberton Centre of Endemism and Barberton Mountainlands, vulnerable ecosystem.

The Mount Morgan Nature Reserve is a grassland portion (998ha) of the Sappi Glenthorpe and Twello plantations is an area of outstanding natural beauty containing vulnerable and threatened ecosystems and endemic floral species.

The Ngodwana River Valley Nature Reserve is a grassland and woodland area (985ha) of the Sappi Nootgedacht plantation in Mpumalanga. The area conserves the following important species: Hottentot Golden Mole (Amblysomus hottentotus meesteri), Natal Long Fngered Bat (Miniopterus natalensis), Lebombo Flat Lizard (Platysaurus wilhelmi), the critically endangered Inkomati Suckermouth fish (Chiloglanis bifurcus) and the Blue Squill (Merwilla plumbea), an important medicinal plant.

Mount Morgan Nature Reserve
Establishment of the Sappi Tree Health Laboratory at the Shaw Research Centre

The increasing threat of pests and pathogens to commercial plantation forestry industries led to Sappi appointing two dedicated pest and pathogen researchers at the Shaw Research Centre, near Howick in KwaZulu-Natal. The centre focuses on tree breeding and optimal efficiencies in Sappi’s forestry sector.

The centre has now accelerated efforts as regards pests and diseases by appointing a principal researcher officer and allocating dedicated funding towards the construction of a Tree Health Laboratory at the Research Centre.

The aims of the tree health facilities at SRC are to augment services already received from the Tree Pathology Cooperative Programme (TPCP), of the Forestry and Agricultural Biotechnology Institute (FABI) at the University of Pretoria. The TPCP plant diagnostic clinic has, over the years provided valuable diagnostic, and in some cases research, services to Sappi and other members of the South African forestry industry.

However, with the increasing demand on the clinic: they cannot assist with larger batches of samples over extended periods of time. The Sappi Tree Health Laboratory will allow extra material to be analysed for Sappi plantations, and in a shorter time frame. This is especially important in the nursery situation where rapid responses are critical.

It is envisaged that the laboratory will allow Sappi to conduct additional research into pest and disease management, and potentially initiate pilot studies in the selection and use of bacterial and fungal biological control agents of insects and pathogens.

Plans are also already underway for the development and implementation of in-house rapid screening techniques for the most important pathogens affecting Sappi plantations, thus assisting tree breeding efforts.

Biodiversity in Southern Africa continued
Biodiversity in Southern Africa continued

Case study

Using innovative methods to trap pests

The wood-boring Cossid Moth, Coryphodema (C.) tristis, first reported on Eucalyptus nitens in Mpumalanga in 2004. As E. nitens is planted on our plantations, it was important to become involved in efforts to reduce infestation.

The Forestry and Agricultural Biotechnology Institute (FABI) initiated work on the development of a female sex pheromone to lure adult male C. tristis in 2012. Field experiments, testing an optimised pheromone mix and trap types during 2015, paved the way for the first possible commercial application of pheromone trapping techniques with the aim of reducing the reproductive capacity of the C. tristis population. A pilot mass-trapping project was implemented during 2016 in all five and six-year-old E. nitens compartments at Sappi’s Lothair plantation, using approximately 6,500 bucket type funnel traps with pheromone lures.

This study has shown that males are attracted to the lures even after a three-month maturation period in the field.

At the end of May 2017 destructive sampling was conducted to evaluate the success of the mass trapping exercise. It was found that trapping significantly decreased the population growth. The theoretical increase in the number of colonies with and without trapping was modelled. This indicated that if no trapping is conducted, the 1.9 colonies per tree at five years could increase to 96 colonies at eight years. However, trapping male moths for one year at the age of five could reduce the number of colonies at eight years to 53 and trapping at both five and six years could reduce the number of colonies at the age of eight years to 28.

Drilling drainage holes in the bucket traps in order to extend the servicing interval of the traps from two to four weeks.
Ensuring sustainable land management

In North America our Forestry Programme assists woodlot owners in the states of Maine, Minnesota, Wisconsin, and Michigan’s Upper Peninsula develop, manage and harvest their woodlands.

In Southern Africa, qualified extension officers work with growers in our enterprise development scheme Sappi Khulisa, to promote response planting and harvesting practices.

It is our duty as a responsible global corporate citizen to secure the future of our business and the welfare of our stakeholders, in particular the communities where we operate. As such we are exploring the potential solutions that genetically modified (GM) trees, which have been developed and deployed elsewhere in the world, could offer in Southern Africa as regards combating climate change and the threat of pests and diseases. We are a consortium member of the Forest Molecular Genetics Programme at the University of Pretoria, which is busy with evaluations in a highly controlled research environment. Through this process we aim to obtain a better understanding of this technology, its impact, benefits and associated costs. However, our commercial forestry operations are free from GM trees.
Managing and mitigating climate change

We share the view that collectively, greenhouse gases (GHGs), most notably carbon dioxide (CO₂), nitrous oxide (N₂O) and methane (CH₄), are responsible for climate change. These are generated primarily by human activities such as the burning of fossil fuels, poorly managed landfill and deforestation. The United Nations has estimated that 2017 would be the hottest year on record without a natural El Nino event that releases heat from the Pacific Ocean about once every five years.

Forests and plantations play an important role

Through photosynthesis, trees and other plants use water and sunlight to convert CO₂ into carbohydrates to provide energy and the building blocks for plant growth. The process releases oxygen as a by-product. The CO₂ removed from the atmosphere is converted and stored in plant material and wood. In other words, trees and the use of forest products can act as carbon sinks. The process of photosynthesis is accelerated by the elevated levels of CO₂ in the atmosphere.

In all regions, our industry has played a significant role in expanding forests and plantations. Harvesting is not equal to deforestation; it is an important part of the cycle of growth, materials manufacture and re-growth.

In North America and Europe, the forests from which we source wood fibre regenerate naturally. In Southern Africa, our harvested plantations are replanted generally within a few months, and consequently the process of absorbing CO₂ continues as the new trees grow. Harvesting our trees is balanced with re-growth – in Southern Africa, we currently plant 1.2 trees for every tree harvested.

Managing and mitigating climate change

The individual within Sappi with the highest responsibility for climate change programmes and plans to combat and adapt to climate change is the Group Head Technology who reports directly to the Group CEO.

For a discussion on how we mitigate climate change risk in our plantations, please click here.
Reducing our carbon footprint

Our efforts to reduce our own carbon footprint are evident in the fact that over 45% of our global energy use is derived from renewable, rather than fossil fuel sources. This is important, as the burning of fossil fuels releases ‘new’ CO2 previously locked up in the earth’s crust in the form of oil, gas or coal. When renewable energy like biomass is burned, the CO2 released is equivalent to that which was bound from the atmosphere during the process of photosynthesis – so, no ‘new’ carbon is being introduced. Our aim is to enhance energy self-sufficiency, improve energy efficiency and decrease our reliance on fossil fuels. We are achieving this by making process changes, installing best available technology (BAT) which is more energy efficient, reducing purchased energy (electricity and fossil fuel) by increasing our use of renewable energy – an approach that ultimately results in a reduction in CO2 emissions. Since 2000, when we instituted a system for measuring greenhouse gases (GHGs), based on the premise of measure, monitor, manage and mitigate. One of our key strategic goals has been to reduce our carbon footprint by improving energy-use efficiency and decreasing our reliance on fossil fuels.

There are significant opportunities, inherent in our business and processes, that can help us to meet this key strategic goal and sustainability driver:
- The sequestration of carbon by our plantations and forests
- Using a high proportion of renewable energy, most of it self-generated in the form of black liquor, together with bark and woody biomass, and
- Identifying further co-generation opportunities.

Over time, we have reduced purchased energy (electricity and fossil fuel) and increased our use of renewable energy – an approach which ultimately results in a reduction in GHG emissions and has positive economic implications. As pulp and paper production is highly energy intensive, the cost and availability of energy is a key consideration for us. Reducing our dependence on fossil fuels not only lowers GHG emissions but helps to isolate our operations from fluctuations in energy prices, making us a more sustainable and profitable business.

Globally, over five years, we have increased energy self-sufficiency by 8.7%. For further information, click here.

Most conventional power generation is based on burning a fuel to produce steam pressure which turns the turbines and generates power. Co-generation, or combined heat and power (CHP) makes use of more than one form of energy provided from a combustion source – most commonly excess heat, usually in the form of relatively low-temperature steam exhausted from the power generation turbines. Such steam is suitable for a wide range of heating applications and effectively displaces the combustion of carbon-based fuels. We have co-generation power plants at 12 of our mills. Our combined heat power plants that generate electricity and steam for our production are at efficiency ratios of 80% and higher.

Our generation of renewable energy in FY2017 stood at 45.2%, mostly from black liquor – which contributed over 73% of the renewable fuel sources as indicated by the pie chart alongside. The regional renewable energy profile is as follows: Europe: 23%, North America: 78.7% and Southern Africa: 41.3%.

The reason for the much higher percentages of renewable energy in our mills in North America and Southern Africa than in Europe is that in the first two regions, a much greater proportion of our product originates from integrated pulp and paper mills. These mills typically have a higher degree of energy self-sufficiency than mills with different processes or those that only produce paper, as the black liquor (dissolved organic compounds from wood) created during the manufacture of pulp is a biofuel and a primary source of renewable fuel for steam and power production.
Globally, there was a slight increase in renewable energy. There was a slight decrease in Europe because there was lower pulp integration, resulting in decreased available black liquor. The percentage of renewable energy increased in North America due to a shift to bark burning from natural gas. This was driven by the return to normal operation of the #7 boiler in Cloquet and a reduction in the cost of purchased biomass at Somerset Mill due to nearby mill closures. There was slight increase in Southern Africa because Ngodwana Mill recovered more black liquor and burned more bark, while Saiccor Mill increased recovery of black liquor.

Globally, energy intensity was stable. It was also stable in Europe. Here, higher specific energy demand at Kirkniemi Mill due to lower production was mitigated by Stockstadt Mill where energy intensity decreased due to increased efficiencies in the pulp liquor evaporation. In North America, energy intensity increased due to the increase in energy intensity at Somerset Mill because the rewasher shower water steam usage increased in the pulp mill in an effort to improve brownstock washing and the #2 heavy fuel boiler efficiency was reduced due to an increase in bark burning and a reduction in natural gas burning. However, energy intensity at Cloquet Mill has improved over the last three years due to increased pulp production and successful capital projects. While energy intensity in Southern Africa was stable overall, it increased at Stanger Mill due to longer runs on the Copeland recovery boiler and temperature-related problems that required more heavy fuel oil for stabilisation. Energy intensity at the mill also increased year-on-year because more coal was consumed due to higher pulp production – the mill was not impacted as severely by drought and a prolonged off-crop shut as in 2016. Energy intensity decrease at Tugela Mill as the commissioning of a new turbine resulted in decreased purchased power.

Globally, energy self-sufficiency was stable. In Europe, it decreased slightly at most mills due to lower pulp integration, resulting in a reduction in the amount of available black liquor. Only Stockstadt Mill increased due to increased efficiencies in the pulp liquor evaporation. The situation in North America was stable and increased slightly in Southern Africa, due to Ngodwana and Saiccor Mills increasing renewable energy generation and therefore improving energy self-sufficiency. Saiccor Mill also increased own power generation due to the installation of a new turbine.

To view our performance against our global specific total goal, please click here.

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**Percentage renewable energy (%)**

- Europe: 22.6% (2013-2017)

**Energy intensity (GJ/adt)**


**Energy consumption (GJ/adt)**

- Europe: 23.0% (2013-2017)
- Global: 40.5% (2013-2017)

**Energy self-sufficiency (%)**

- Europe: 78.7% (2013-2017)
- North America: 74.5% (2013-2017)
- Southern Africa: 76.5% (2013-2017)
Reduction of our carbon footprint continued

Planting more trees in Europe

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

In March this year employees from our Brussels office once again braved the weather to plant a further 1,250 saplings – a mixture of hornbeams and oaks – in the Forêt des Soignes. Since the initiative began seven years ago, Sappi employees have planted just over 16,250 trees.
Reducing our carbon footprint continued

Our greenhouse gas emissions – cradle to gate

CO₂ capture

Scope 1 direct emissions

Coal, production of process material, oil, renewable fuels and gas.

Scope 2 indirect emissions

Purchased steam and electricity for own use.

Scope 3 purchased goods and service emissions

Employee business travel, contractor owned vehicles and outsourced activities.

CO₂ is absorbed by the trees, capturing carbon in the photosynthesis process. Most of the carbon remains sequestered in our products.
Reducing our carbon footprint

Direct GHG emissions (Scope 1) (t CO₂/adt)

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Indirect GHG emissions (Scope 2) (t CO₂/adt)

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Globally, there was a slight decrease in specific Scope 1 emissions. In Europe, specific Scope 1 emissions decreased at Stockstadt and Kirkniemi Mills. In the case of the former this was due to increased efficiencies in pulp liquor evaporation, with the latter this was due to the better efficiency of the new multifuel boiler and the decreased steam demand of PM3 after starting up the new shoe-press. All other mills in the region increased their emissions slightly or kept them stable because of production together with a decrease in the use of renewable energy. At Maastricht Mill, emissions increased because the steam turbine operated for longer. Overall in North America, Scope 1 emissions improved, driven by a move from natural gas to bark combustion. In Southern Africa, emissions remained stable.

Globally, specific Scope 2 emissions decreased. In Europe, increased paper production at Alfeld Mill resulted in lower specific purchased power. In addition, a lower purchased power emission factor for Alfeld, Ehingen and Stockstadt Mills contributed in a decrease in Scope 2 emissions. Overall, Scope 2 emissions in North America decreased due a reduction in purchased power and higher mill power generation. This was driven by the increased uptime of the turbine generators at Cloquet Mill. Scope 2 emissions declined in Southern Africa due to Tugela Mill becoming more power self-sufficient due to the commissioning of a new turbine. The new turbine is around 70% efficient in the conversion of fuels into energy and is displacing Eskom power which is 31% efficient in converting fuel into energy. Saiccor Mill increased in power self-sufficiency due to enhanced black liquor recovery, while an increase in black liquor production and bark burned at Ngodwana Mill led to higher power self-sufficiency and thereby, lower Scope 2 emissions.

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1 The basis for calculation of Scope 2 emissions is the market based method as defined by the GHG Protocol. Eight of our mills use market based emission factors, the other mills use location-based (country-specific) emission factors.
Globally, emissions were stable. They decreased in Europe, with emissions at Stockstadt Mill reducing following the upgrade of the coal-fired boiler. Emissions in North America increased due to the more bark being burned at Somerset Mill and a moderate increase in bark and coal combustion at Westbrook Mill. Emissions in Southern Africa increased: at Stanger Mill this was due to boiler bucket elevator failure as well as roof collapse which necessitated manual coal feeding into the boilers and affected the steam to coal ratio, negatively impacting on emissions. The increase was also due to greater use of coal and heavy fuel oil at the same mill and higher levels of black liquor being fired in magnesium boilers at Saiccor Mill.

Globally, there was a slight increase in emissions. However, these remained stable in Europe. They increased in North America, driven by the use of non-condensable gas burning for carbon monoxide control in a power boiler at Cloquet Mill, increased oil and non-condensable gas burning in the #1 heavy fuel boiler at Somerset Mill and an increase in coal combustion at Westbrook Mill. In Southern Africa, emissions were stable.

Globally particulate emissions were stable. In Europe, they maintained their low levels, while in North America there was a slight decrease due to a favourable stack test at Somerset Mill. They increased in Southern Africa because of increased coal and heavy fuel oil usage at Stanger Mill.
Water – a scarce resource

Water use in our mills

Water availability has been identified as one of the most serious sustainability challenges facing the planet. Increasing population, urbanisation, per capita demand, and pollution damage to supplies will put even greater pressure on this limited resource going forward.

We are mindful of mounting water insecurity in many of the world’s regions, particularly Southern Africa, which has, in recent years, been significantly affected by drought. While our manufacturing processes are water intensive, we return a significant amount of water extracted back into the environment. Globally over five years, we have reduced specific process water drawn down by 7.2%.

Pulp production has a higher specific water need than the production of paper. Our water use is lower in Europe where the share of pulp production compared to total production is smaller than in North America and Southern Africa.

Most of our mills are situated in the vicinity of rivers from which they draw water. Withdrawal from surface sources (mostly rivers) accounts for the largest percentage of water use. This withdrawal is subject to licence conditions in each area where we operate.

In addition to reducing specific water usage, we have been steadily improving the quality of effluent we discharge. We use temperature controls, oxygen level controls and other metrics to ensure that we comply with all relevant environmental regulations.

Mills implemented water recovery and re-use reduction projects. Increased saleable production at Alfeld, Gratkorn, Lanaken and Stockstadt Mills resulted in more efficient water usage, decreasing specific process water consumption. There was a slight increase in North America, attributed to efficiencies in final TSS separation. In North America, TSS levels increased. This trend was driven by an increase in pulp production coupled with a reduction in wastewater treatment efficiency at Somerset Mill. We also experienced process upsets at Westbrook Mill in the first half of the year. In Southern Africa, TSS concentrations decreased as Tugela Mill reduced solid losses by implementing washing improvements in the pulp plant which improved pulp consistency onto the pulp slab.

Globally, there was a decrease. In Europe, the decrease was the result of many continuous improvement projects. Increased saleable production at Alfeld, Gratkorn, Lanaken and Stockstadt Mills resulted in more efficient water usage, decreasing specific process consumption. There was a slight increase in North America. In Southern Africa, the figure decreased as all mills increased saleable production and Saiccor, Tugela and Stanger Mills implemented water recovery and re-use reduction projects.

Globally, TSS was stable. In Europe there was an overall decrease. While TSS in effluent at Alfeld Mill increased due to lower efficiencies of the filtration units, the situation at Gratkorn Mill improved owing to efficiencies in final TSS separation. In North America, TSS levels increased. This trend was driven by an increase in pulp production coupled with a reduction in wastewater treatment efficiency at Somerset Mill. We also experienced process upsets at Westbrook Mill in the first half of the year. In Southern Africa, TSS concentrations decreased as Tugela Mill reduced solid losses by implementing washing improvements in the pulp plant which improved pulp consistency onto the pulp slab.

* Saiccor Mill has been excluded from the TSS and COD graphs as it is the only mill in the group to use the sulphite bleaching process in the production of CMP. Both Sigbuhope and Sigquar Mill use the pulp bleaching process to produce dissolving wood pulp. However, over the past five years, Saiccor Mill has reduced TSS and COD effluent concentrations by 30% and 45%. Additionally, and as a result of improvements in mill processes to reduce air emissions, significant reductions in the overall levels of TSS and COD have been made.


diagram

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Water – a scarce resource continued

Globally, COD was stable. The slight decrease in Europe was due to improvements caused by increased paper production at Gratkorn Mill and reduced pulp production at Stockstadt Mill. In North America, COD increased overall, driven by an increase in pulp production and a reduction in wastewater treatment efficiency at Somerset Mill. COD was stable in Southern Africa.

Saiccor Mill and wastewater

The Saiccor Mill outfall monitoring programme, which is conducted by South Africa’s national scientific body, the CSIR, began in 1956 and has produced 73 scientific reports over this period. The primary objective of the programme is to ensure that the wastewater discharge is not harming the local marine ecosystem and that biodiversity is maintained. In addition, the CSIR provides independent verification of the mill’s compliance against the limits of the legal discharge permit, which is designed to ensure that local water quality guidelines are met.

The effluent from the mill is pressure discharged through 58 diffusers that are designed to enhance dilution and dispersion. This dispersion process is further facilitated by the fact that the wastewater is comprised largely of freshwater which accounts for about 98% of its volume. Regulatory authorities require that water quality at the margin of the mixing zone ie 75m from the point of discharge, meet the water quality guidelines for ecosystem and human health protection.

As recommended by the CSIR, various chemical, physical and biological measurements are made at six sites situated approximately 75m from the point of wastewater discharge (bio-dispersion value). Measurements are also made at a further six sites between 500-2,000m both to the north-northeast and to the south-southwest, which takes into account current direction. In total, five in-situ surveys are conducted annually during summer and autumn, when the initial dilution of the wastewater is expected to be weakest due to lower currents and hence would represent the worse-case impact scenario.

The findings from the CSIR monitoring program are shared annually with the public as well as the licensing advisory panel, and are used to reach a conclusion on the impact of the discharge. In summary, the results from the long-term continuous monitoring programme have shown that the wastewater discharge does not harm the marine environment. The focus will continue to remain on the actual impact analysis, and further amendments to the monitoring programme will continue to be made, to ensure it remains aligned to international best practice and technological advances.

1 Saiccor Mill has been excluded from the TSS and COD graphs as it is the only mill in the group to use the sulphite pulping process in the production of DWP. Both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process to produce dissolving wood pulp. However, over five years, Saiccor Mill has reduced TSS and COD effluent concentrations by 32.8% and 3.9% respectively and will continuously improve its water quality footprint. Over many years, scientific studies carried out on the marine environment have concluded that the magnitude and spatial extent of the impact is negligible with no immediate or significant ecological concern – CSIR (2008 – 2015).
Reducing solid waste and adding value

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

The least desirable method of solid waste disposal from an environmental perspective is landfill. Organic waste emits methane, a greenhouse gas with approximately 25 times the global warming potential of CO₂. Waste can leach, resulting in surface and/or groundwater pollution. However, it should be noted that well managed landfill sites can capture the majority of methane as well as the leachate.

As can be seen from the bar graph opposite, globally most of Sappi’s solid waste generated is in the form of wood waste. In all regions, this is used as a fuel for onsite energy generation.

Uses for Sappi’s waste

Non-solid waste
- Used oil is de-watered, chemically treated, refined and filtered for re-use in various grades of base oils.
- At Alfeld and Ehingen Mills in Europe, coarse pigments from re-pulping internal broke are recovered from paper machine effluent and reprocessed to substitute virgin material. In another process, coating colour is also recovered from effluent and reprocessed. These partly Sappi-patented processes help to increase material efficiency.

Solid waste
- Sludges, bark and wood are combusted for energy production in each region, while in Europe, dried sludge is also used for animal bedding by farmers and as fertiliser.
- At some mills, tall oil (a by-product of the kraft pulping process) is sold to convertors as a renewable chemical raw material and used to make detergents, lubricants and paint additives.
- In North America lime and boiler ash is provided to farmers as a soil enhancer through a partnership with the University of Minnesota Extension Service, Carlton County By-Products Programme, while in Southern Africa, lime mud is also sold.
- In North America, inorganic ‘grit’ removed from the chemical recovery process is used for roadbed underlayement.
- Bagasse supplied to Stanger Mill in South Africa is de-pithed, and the pith is given to farmers as a soil enhancer.

We generate very little hazardous waste, 0.6% of the total generated. This is closely controlled and carefully managed, both at our operations and the receiving facilities.

Disposal methods of solid waste (tpa)

There were no significant changes in Europe. On-site combustion reduced slightly while off-site combustion increased slightly, because of capacity limitations of the on-site waste boilers. In North America, boiler ashes increased at Somerset Mill due to increased combustion of biomass. In Southern Africa, there was an increase in waste sent to landfill due mainly to reduced demand for ash by third parties.

Water treatment plant at Gratkorn Mill.
Reducing solid waste and adding value

Breakdown of solid waste types in Sappi (%) (2017)

- Bark (from own operations)
- Sludge (from pulp and paper mill and biological treatment)
- Boiler ashes
- Other

Global breakdown of ‘other’ solid waste types in Sappi (%) (2017)

- Wood waste (knots, sawdust, slivers, fines oversize, pallets, other wood)
- Paper- and packaging waste
- Other combustible waste
- Green liquor dregs/Sodium sulphate rejects
- Process rejects including Slaker rejects
- Lime mud
- Wires and felts
- Domestic waste
- Plastics, polyolefins, plastic packaging
- Hazardous waste
- Used oil
- Other/scrap metals, iron, empty cans
- Oil contaminated waste
- Other waste (rolls, small chemicals, grinding roll waste etc)
- Other waste

About Sappi and conflict minerals

Against the backdrop of civil wars and undemocratic governance being funded by trade of natural resources, in May 2017, the European Commission introduced a regulation making the monitoring of supply chains mandatory. The regulation covers the trade of metals and ore, including tin, tungsten, tantalum and gold are covered by the regulation. This builds on an amendment to the US Dodd–Frank Wall Street Reform and Consumer Protection (Dodd–Frank Act) requiring electronics companies to verify and disclose their sources of cassiterite, wolframite, and tantalum.

We have seen increased queries regarding conflict minerals and can confirm that we do not use any of the high-risk metals in our products.
United Nations Global Compact (UNGC)

The UNGC principles provide the foundation for the seeds of a more inclusive future. We believe businesses like ours have an important role to play in ensuring that these seeds mature and flourish.
Dear Mr Secretary-General

I would like to re-affirm Sappi’s commitment to the UNGC’s Ten Principles and to the Communication on Progress process.

Sappi has been a signatory to the UNCG since 2008 and we have been making steady progress in achieving the goals embedded in the Ten Principles.

In line with recommendations and at the request of the UNGC Secretariat, we integrate our communication on the UNGC principles into our sustainability reporting and corporate citizenship communication.

This Communication on Progress Report sets out the manner in which we are doing so and also gives an overview of our alignment with the global Sustainable Development Goals (SDGs) which came into effect at the beginning of 2016. In keeping with the overarching spirit of the SDGs, our aim is to strengthen the enabling environment for doing business and building markets around the world, thereby addressing the universal need for sustainable development.

Yours sincerely

Steve Binnie
Chief Executive Officer
Sappi Limited

His Excellency António Guterres
Secretary-General
United Nations
New York, NY 10017
United States of America

30 September 2017

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Overview

The UNGC points out that respecting the Ten Principles across all business operations and supply chains is a baseline for any company engaging on the SDGs. As a long-standing signatory to the UNGC and responsible corporate citizen, we have an advantage in that we have been working to achieve the SDGs well before they were formalised. We focus on promoting Prosperity for all, empowering People to reach their full potential and treading more lightly on the Planet.

To achieve these aims, we work closely with a broad group of stakeholders, including technology partners and industry bodies to develop more sustainable approaches to the task of balancing socio-economic growth with the use of natural capital.

Our commitment to specific SDGs is detailed below.

In Southern Africa, we adopt an holistic approach to wellness and to focus on prevention, rather than cure. Pilates classes are offered at all the operating units and we also offer programmes like support against obesity, substance abuse (alcohol and drugs), basic counselling for referrals to external providers, trauma counselling, work stress issues and other health issues and relationship issues. We also focus on financial wellness by offering our people opportunities for financial advice and financial skills training.

In Southern Africa, where an estimated 7.1 million people were living with HIV in 2016, we established our HIV/AIDS programme in 1992 to measure, monitor and manage the disease in order to mitigate the risks posed to our employees, our organisation and the communities in which we operate. We involve contractors in our HIV/AIDS programme by training contractor peer educators who are then fully incorporated into our peer educator programme. We offer counselling and testing to contractors and refer them to the appropriate treatment centre if necessary. We also assist contractors with TB testing and treatment referral to the Department of Health.

In North America, employees and their spouses who are enrolled in our medical plans have the ability to create a Wellness Profile with our insurance provider to earn a US$50 gift card. Extra gift cards can be earned by scheduling annual physicals and recommended screenings. Additionally, every site holds different events based on the needs and preferences of the employee population ranging from healthy cooking and equipment safety demonstrations to free flu shots and mindfulness activities.

In Southern Africa, we adopt an holistic approach to health and wellbeing, with health and wellness departments at regional level to manage safety, health and wellness in the workplace and safety and wellbeing committees at each operation. In terms of safety, we see contractor safety as equally important as that of our own employees. Performance in this regard is monitored by a global target.

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As an example of our approach to health and safety, in Europe, employees at our Stockstadt Mill participated in a Germany-wide campaign to cycle to work from 01 May to 31 August 2017. To encourage this, the mill has entered into a partnership with a bicycle leasing company. Every mill employee has the opportunity to lease a bike or eBike at a reasonable price, as well as a second bike for a member of their family. The contract is for three years, after which bikes can be returned or purchased for a tenth of their original price.

The American Forest & Paper Association (AF&PA) recognised Sappi North America with the 2017 AF&PA Leadership in Sustainability Award for Safety for their over two million hours worked without lost-time injury project. This is the second year in a row AF&PA has honoured Sappi for its sustainability advancements.

Our commitment to education and training extends beyond our employees and customers to the communities where our mills are located.

In Europe, we support Career Expos and host visits by schools and colleges to our mills.

In FY2017, we sponsored a competition which pitted students from 10 French printing schools against each other in the task of creating communication material for a leukaemia charity based in France.

In North America, we support Science, Technology, Engineering and Math (STEM) education through scholarship programmes at the University of Maine, the University of Southern Maine and the Fond du Lac Tribal Community College in Minnesota. We also support the Codman Academy, a charter school in Boston.

In Southern Africa, our support includes sponsorship of five Programme for Technological Careers (PROTEC) branches in Sappi communities. PROTEC works to advance Science, Technology, Engineering and Math (STEM) education amongst high school learners. We have also established an Early Childhood Development programmes in many of our communities. In addition, we run a training centre for timber growers in our supplier and enterprise development scheme, Sappi Khulisa, and in 2017 opened Skills Centres at our Saiccor and Ngodwana Mills to train both Sappi employees and unemployed youth.
As part of its annual programme, the Social, Ethics, Transformation and Sustainability (SETS) Committee reviews Sappi’s standing in terms of the International Labour Organisation (ILO) protocol on decent work and working conditions.

We are proud of the fact that, in general terms, in all regions where we operate, our activities promote economic growth in rural areas, where there are often limited forms of economic activity and opportunity.

In more specific terms, in Europe we work to ensure our activity and opportunity.

We provide extensive support for our customers in the form of online and print education platforms and run two flagship projects, the Ideas that Matter and Printer of the Year initiatives. (https://www.sappi.com/ideas-that-matter and https://www.sappi.com/printer-of-the-year)

In Southern Africa we have established a number of projects which promote economic growth, including:

• Sappi Khulisa, (Khulisa means ‘to grow’ in isiZulu), established in 1983, our supplier and enterprise development scheme, previously known as Project Grow is aimed at community tree-farming. Since 1995, a total volume of 3,313,581 tons, to the value of ZAR1.6 billion, has been purchased from small growers through this programme

• The African Honey Bee Project which has over 900 participants

• The Abashintshi (the ‘changers’ in isiZulu) programme, established in 2015, in conjunction with development agency, Devcom, this programme has resulted in 234 businesses either being started up or being rejuvenated. These range from brickmaking projects to poultry and pig farms, and from creches to home industries, and

• Active participation in 60 land reform projects.

Further details of the first three projects detailed above can be found in our 2017 Sappi Southern Africa Sustainability Report.

We foster industry-wide innovation and environmental responsibility by participating in a number of local and global programmes, a few examples of which are set out below:

• Sappi Europe is an active member of the Bio-Based Industries Consortium, which is focused on creating value from waste and side streams. In addition, Sappi Europe is promoting hemicellulose sugar extraction and cleaning, lignins, nanocellulose and biocomposites.

• Sappi North America supports the Agenda2020 Technology Alliance, a non-profit organisation that promotes pre-competitive research on key technical challenges that face our industry. Working collaboratively with industry partners, universities and government agencies, the alliance has developed technology road maps in five areas:

  – Reducing energy in the chemical recovery process (more efficient black liquor concentration), and

  – Advancing the commercialisation of cellulose nanomaterials.

Each of these initiatives has clear ties to economic and environmental benefits through resource conservation (reducing water, materials and energy) or access to new markets. While some of these initiatives may take a decade or more to address, we believe that success in these areas has the potential to transform our industry.

• Sappi Forests is a member of the South African 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 BICEP (Biological Control of Eucalyptus Pests) 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.

We have technology and innovation centres of excellence in all regions (see page 57 for what each centre focuses on). We have also invested in biomaterials innovation through research and pilot and demonstration plant investments regarding hemicellulose sugar extraction and cleaning, lignins, nanocellulose and biocomposites.

Sappi and the sustainable development goals continued
Sappi and the sustainable development goals continued

Given that our business depends on natural resources, consuming and producing responsibly, is not only the right thing to do, it makes sound business sense. We promote the recycling of all our products in support of responsible consumption; we ensure that we re-use and return as much water as possible in our manufacturing processes (over 90%) and our R&D work strives to address the demands for lightweighting and making other products deliver more through the addition of our renewable fibre-based products (bio-composites, lignosulphonate, dissolving wood pulp). As regards production, globally, over five years we have:

- Increased energy self-sufficiency by 8.7%
- Reduced:
  - Specific Scope 1 specific emissions by 4.6%
  - Specific Scope 2 specific emissions by 7.42%, and
  - Total Scope 1 and 2 specific greenhouse gas emissions intensity by 5.4%.
- Decreased specific process water drawn by 7.2%, and
- In terms of water quality, we have decreased chemical oxygen demand (COD) by 12.9% and total suspended solids (TSS) by 35.5%.

Deforestation of the world’s endangered tropical forests drives a significant proportion of global warming. We do not source wood fibre from endangered forests anywhere in the world and participate in climate action because the sustainably managed forests and plantations from which we source wood fibre help to mitigate global warming. Our support for responsible forestry management and commercial plantations means that we not only contribute to the expansion of the amount of natural and planted timber, but also that we promote the protection of natural areas and their biodiversity. We also work to promote the role of renewable products from wood fibre in a low carbon economy.

We are also playing our part in climate action by using high levels of renewable energy. In FY2017, renewable energy in our mills stood at 45.2% mostly from black liquor – which contributed over 73% of the renewable fuel sources.

High levels of forest certification – 73.5% certified fibre supplied to our mills with the rest procured from known and controlled sources – highlight our responsible approach to life on land.

The sustainably managed forests and plantations from which we source wood fibre make positive contributions to improving and safeguarding life on land. Europe’s net forest area is currently increasing at a rate of approximately 1.6 million hectares per annum. In the United States of America, over the last six decades, the total net US forest area has increased by over 3%.

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

In Southern Africa, we set aside approximately one third of the 387,291ha of land that we own and lease, managing these areas for the conservation of the natural habitats and the biodiversity they contain. Accordingly, our lands are home to all forms of natural life. Approximately 455 bird species have been recorded on our plantations, more than half of all South Africa’s bird species. A total of 15 faunal red data species have been recorded on our land, with endangered mammal species including Oribi and the Samango Monkey. Near threatened species include Serval and Honey Badger. We provide feedback on numbers and location of specific priority species on our lands to the Endangered Wildlife Trust every year.
Sappi reports to its board on an annual basis regarding the application of the OECD Guidelines on Bribery and Corruption, which partly work to prevent companies undermining institutions. Sappi’s group value statement and Code of Ethics also drive the company to support peace, justice and strong institutions. Sappi Limited is listed on the FTSE/JSE Responsible Investment Index, a reflection of our commitment to strong institutions.

In addition, Sappi Limited is a member of Business Leadership South Africa (BLSA), a voluntary organisation of the approximately 70 largest listed companies on the Johannesburg Stock Exchange (JSE) which is actively working to end corruption, underpin the democratic state and institutions and drive economic growth. Sappi is a signatory to BLSA’s pledge which 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.
Sappi and the United Nations Global Compact

Human rights

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

As stipulated in our Group Human Rights Policy and Group Human Resources Policy, we endorse the principles entrenched in the Universal Declaration of Human Rights and the International Labour Organisation (ILO).

We also conform to, and in many cases, exceed, prescriptions set out in the labour legislation in the countries in which we operate.

Our Group Human Resources Policy recognises the right of all people to be treated with dignity, and prohibits harassment in the workplace.

Hotlines in all regions allow employees and suppliers to report human rights abuses in full confidentiality.

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

Our commitment to ensuring that we are not complicit in human rights abuses is encapsulated in our Group Human Rights Policy. This extends to suppliers and states that we:

- Require our suppliers to respect human rights and act in full accordance with our policies and guidelines concerning social responsibility, labour standards and human rights, and
- Commit to openly and transparently reporting on human rights violations within our value chain, should these occur.

This policy further commits us to working with communities in order to address indigenous people’s interests and to resolving land claims in South Africa with wide participation and in the best interests of individuals and communities.

In terms of our Group Supplier Policy, we also encourage our suppliers to uphold the principles of human rights as set out in the United Nations Universal Declaration on Human Rights. The International Trade Union Confederation (ITUC) human rights index rates countries, according to the following:

- 1 – The best score, irregular violation of rights
- 2 – Repeated violation of rights
- 3 – Regular violation of rights
- 4 – Systematic violation of rights
- 5 – No guarantee of rights, and
- 5* – No guarantee of rights due to the breakdown of the rule of law.

The countries in which we have manufacturing operations are classified as follows:

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

We have identified no operations or significant suppliers where the right to exercise freedom of association and collective bargaining has been violated or is at significant risk. In addition, we have identified no operations and significant suppliers as having significant risk for incidents of child labour. Similarly, we have identified no operations and significant suppliers as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour.

Principle 3: Businesses should uphold freedom of association and the effective recognition of the right to collective bargaining.

We promote freedom of association and sound labour practices by engaging extensively with representative trade unions.

Protecting the right to freedom of association and collective bargaining is fundamental to the manner in which we do business. In 2017, globally 60% of our workforce was unionised, with 72.6% belonging to a bargaining unit.

We focus on maintaining constructive relationships with trade unions, believing that this is essential to long-term sustainable development. Discussions range from remuneration issues, to training and development, health and safety and organisational changes.

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

Disciplined behaviour is essential not only for individual wellbeing, but also to achieve our group goals and objectives. In each region, disciplinary codes ensure disciplinary procedures are applied consistently, while grievance policies entrench the rights of employees, including the right to raise a grievance without fear of victimisation, the right to seek guidance and assistance from a member of the Human Resources Department or their representative at any time and the right to appeal to a higher authority, without prejudice.
Sappi and the United Nations Global Compact continued

**Principle 4:**
The elimination of all forms of forced and compulsory labour.

Our Group Human Rights Policy explicitly forbids the use of compulsory and forced labour. Our Group Supplier Policy states that we encourage our suppliers to adhere to national labour law and to internationally proclaimed human rights, including those relating to forced labour (including prison and slave labour).

Our labour standards ensure that our remuneration practices are fair, with compensation levels set to reflect competitive market practices and internal equity as well as company and individual performance.

In all three regions, labour is sourced on the open market. In rural areas, forest products companies like Sappi are often the only, or major, employers in the region which makes the local population very dependent on the company and which in turn lead to exploitative behaviour and an indirect form of forced labour.

This is a particular issue in South Africa, which is one of the most consistently unequal countries in the world and continues to be characterised by high levels of poverty and unemployment. Disparity in income differentials across population groups and across genders remains a challenge. While there has been some progress in reducing poverty in urban areas, many South Africans in rural areas still endure high levels of poverty underpinned by social deprivation and under-development. Recognising that decent work and productive employment are key elements to achieving fairness, reducing poverty and achieving equitable, inclusive and sustainable development, we work hard to dispel the imbalance.

In Southern Africa, as in the other regions where we operate, Sappi pays market-related wages in accordance with or above local legislation. As an example: The new Forestry minimum wage, gazetted by the Minister of Labour, was successfully implemented on 01 March 2017. SSA adjusted the minimum wage in the forestry division by 8% – higher than the stipulated increase. In the absence of a formal collective bargaining structure in this division, workers’ committees are engaged during the implementation process.

In 2013, we made it a contractual obligation for our forestry contractors to pay their workers in accordance with the minimum wage stipulated by government for the agricultural sector.

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

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

**Principle 5:**
The effective abolition of child labour.

Our Group Human Rights Policy explicitly forbids the use of child labour. Our Group Supplier Policy states that we encourage our suppliers to adhere to national labour law and to internationally proclaimed human rights, particularly those relating to child labour.

Women tend to be under-represented in our workforce due to the nature of our operations – a manufacturing environment which involves shift work. Line management are mandated to facilitate the employment of women by ensuring that women working on shifts are safe and the appropriate facilities are available.

In terms of disability, we focus on creating physically and socially ‘disability ready’ work environments. In terms of our new corporate headquarters in Johannesburg, for example, we consulted disability experts to ensure that our new offices are disability-friendly.

**Principle 6:**
The elimination of discrimination in respect of employment and occupation.

We recognise that the creation of an equitable working environment, in which the dignity of all individuals is respected and the diversity of all employees is valued, represents an essential foundation for sustainable growth and competitive advantage.

We are committed to promoting diversity and inclusion so that all employees can develop their full potential, irrespective of their gender, ethnicity, disability, age, religion, belief or sexual orientation. We administer our People policies, programmes and practices in a non-discriminatory manner in all aspects of our relationship with our employees, including recruitment, hiring, assessments, work assignments, promotions, transfers, terminations, wage and salary administration and selection for training and development.

The Group Human Resources Policy and the Group Human Rights Policy state that Sappi prohibits “discrimination based on race, gender, colour, ethnicity, age, religion, political and sexual orientation, union membership, physical disability or HIV/AIDS status.”

Where an unfair or discriminatory practice has occurred, employees are able to make use of the grievance procedure to lodge their grievance. Employees also have access to a hotline telephone number where they can report incidents of this nature.

In Southern Africa, we have employment equity targets to promote economic and social transformation of the previously disadvantaged.
Sappi and the United Nations Global Compact continued

Environment

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

As stated in our Group Sustainability Charter and Group Environmental Policy, we acknowledge that we do have an environmental footprint, but are committed to managing and mitigating the environmental, climate and biodiversity impacts of our operations. The precautionary approach places the onus on Sappi to prevent any harm from occurring. We achieve this by:

- Ensuring that we keep up with environmental best practice through an internal environmental ‘cluster’ comprised of experts in various fields
- Having environmental targets in place in each region. Progress to achieving targets is reported to the management teams in each region on a regular basis, quarterly to the Global Sustainable Development Council and to the Social, Ethics, Transformation and Sustainability Committee biannually, and
- Using internationally recognised, independently verified certification systems including the Forest Stewardship Council (FSC®), the Programme for the Endorsement of Forest Certification (PEFC™) and the Sustainable Forestry Initiative (SFI) (woodfibre), as well as ISO 9001, ISO 14001, OHSAS 18001 and, in Europe, Eco Management and Audit System (EMAS) and ISO 50001 in Europe and Southern Africa.

We view conducting our business in an environmentally sustainable manner as an obligation – one which is integral to our licence to operate on an individual, community, country and global level. It also makes sound business sense, given that we depend on natural resources such as water and woodfibre for our ongoing viability as a business and it is in our interest to use these resources as responsibly as possible.

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

At the heart of our business is a renewable, recyclable natural resource – woodfibre. We use this to create pulp, paper and dissolving wood pulp solutions which enhance the lives of consumers around the world.

We take a holistic approach to protecting the environment, beginning with the responsible procurement of wood that is grown and harvested sustainably and sourced only from well-managed forests and plantations. We are committed to reducing our use of traditional fossil fuels, lowering both our environmental footprint and energy costs. We focus on the efficient use and recovery of materials used in the manufacturing process in order to minimise waste.

Our energy efficiency is enhanced through our ongoing drive to make process improvements and install more efficient equipment, as well as through our extensive use of cogeneration.

We track key metrics for fibre, emissions, energy usage and the impact of our operations on air, water and solid waste. We use this data when setting improvement goals related either to our operations or our interactions with our key stakeholder groups – employees, customers and our local communities. In 2015, we established overarching 2020 global goals in addition to the regional goals established in each region to deal with specific issues. Progress against these goals are reported on in our Annual Integrated Report, our Group Sustainability Report and regional sustainability reports.

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

In Europe, we:

- Continue with our eco-effectiveness campaign whereby Sappi people share their stories about achieving greater levels of environmental responsibility. (https://www.sappi.com/eco-effective-stories)
- Communicate information internally about sustainability-related topics through our Green Ambassadors, who keep colleagues informed about industry developments that could be of interest to customers.
- Are closely engaged in the Confederation of European Paper Industries (CEPI) Roadmap 2050 which works to implement the transition to an effective low-carbon economy.
- Belong to the Save Food initiative which signals a firm commitment to better protection of all foodstuffs the world over. Save Food is a joint initiative of the Food and Agriculture Organisation of the United Nations (FAO), the United Nations Environment Programme (UNEP), Messe Düsseldorf and Interpack, the world’s leading trade fair for processes and packaging.
- Have installed a fish ladder – a series of 39 pools at increasing heights – at our Glatbrook Mill. This was in response to the building of a weir across the Muir River to generate green electricity in the form of hydraulic power to provide 2,500 households with green electricity. Without the fish ladder, the weir would block the migrating routes of several species of fish. However, the fish ladder has overcome the problem.
In North America, we:

- Play an active role in Living Lands and Waters, a non-profit, environmental organisation focused on cleaning up America's great rivers and forest restoration. (http://livinglandsandwaters.org/about-us/sponsors-supporters)
- Have established a fishway project near Westbrook Mill, enabling natural fish passage through a portion of the Presumpscot River for the first time in more than 150 years.
- Are a supporter, together with publishers, cataloguers and other paper companies, of Recycling Works in Publishing (RWIP). RWIP is a member of The Recycling Partnership, whose goal is to increase curbside recycling in 200 communities throughout the US in the next 10 years. In 2016, the partnership worked directly with over 200 communities, placed nearly 300,000 recycling carts (replacing bins), and reached over eight million households through a combination of open source downloads, technical assistance with municipalities, quality-focused research and grant partnerships. (www.recyclingpartnership.org)
- Assist forest landowners to meet their objectives for managing their woodland through the Sappi Forestry Programme. Sappi's trained foresters are able to develop a forest management plan geared to the interests of the landowner including wildlife management and aesthetics.
- Have a long-standing relationship with the University of Minnesota Extension Service at our Cloquet Mill. In terms of this partnership, boiler ash and lime mud are diverted from landfill and put to beneficial use as a soil amendment. The alkaline pH of these materials helps adjust the pH of crop soil and allows for better absorption of nutrients – ultimately resulting in better yield of alfalfa used in dairy farming.

In Southern Africa, we:

- Set approximately 30% of our land aside for the management and conservation of natural habitats, including indigenous forests, and the biodiversity they contain.
- Have established a group forest certification scheme for small- and medium growers. There are currently 42 members in the scheme with plantations ranging from less than a hundred hectares to 4,391ha in size. FSC-certification is not yet practical for micro growers, largely because of financial and technical constraints. Sappi, with some industry partners, is currently researching ways of overcoming these barriers. Currently timber from micro growers it recognised as 'controlled wood' and can thus be used to produce FSC® products labelled as 'mixed sources'.
- Qualified extension officers work with growers in our supplier and enterprise development scheme, Sappi Khulisa, providing them with growing advice and practical assistance.
- Participate in the national stewardship programme through which six areas on our land have been declared nature reserves. We are in the process of having a seventh proclaimed.
- Promote multiple use of our landholdings. Our land provides a resource for planned recreational activities. We support non-motorised activities such as mountain biking and bird watching on our land, aligning with our commitment to promoting a healthy lifestyle and nurturing an appreciation for nature and the sustainable use of renewable resources. We have partnered with mountain biking clubs and event organisers, allowing access to our plantations and natural areas in Mpumalanga and KwaZulu-Natal. (https://cdn-s3.sappi.com/s3fs-public/Sappi-Fact-Sheet-Mountain-biking.pdf)

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

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

Westbrook Mill
Sappi and the United Nations Global Compact continued

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

Technology is a cornerstone of our business and is supported by friendly technologies.

- The Maastricht Centre of Excellence in Europe which focuses on papermaking processes along with the newly acquired barrier coating centre at Rockwell Technology.
- The Westbrook Centre of Excellence in North America (coated fine paper and specialty casting and release paper development), and
- In Southern Africa, the Forestry Research Centre (tree breeding, propagation techniques, silviculture); the Sappi Technology Centre (fibre processing, paper science, chemical sciences, environment) and the Specialised Cellulose Centre of Excellence (applications testing and fundamental cellulose properties).

The development and usage of environmentally friendly technologies underpins research at all these centres.

In line with our strategy of intentional evolution which includes seeking growth opportunities by producing innovative performance materials from renewable resources, we have identified nanocellulose as a key growth area. A pilot-scale plant for low-cost cellulose nanofibrils (nanocellulose) production at Napier University to find a low-cost energy-saving process that would allow Sappi to produce the nanocellulose on a commercially viable basis – and importantly without producing large volumes of chemical waste water associated with existing techniques. Significant about our process is the use of unique chemistry, which has allowed us to very easily break down the wood pulp fibres into nanocellulose. There is no expensive chemistry required and, most significantly, the chemicals used can be easily recycled and reused without generating large quantities of waste water.

The plant has successfully produced a high quality wet micro-fibrillated and nano-fibrillated cellulose and further commissioning will take place in the Q4 2018 in order to produce dry 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 and specialties and packaging papers.

In North America, our trade association, the American Forest and Paper Association (AF&PA), is collaborating with the Massachusetts Institute of Technology (MIT) to develop a new approach for a more comprehensive understanding of the tradeoffs of changes in recovered fibre utilisation. The MIT methodology applies a “systems dynamics” approach to consequential life cycle assessment for US paper production to model the system-wide effects. The project will deliver a comprehensive model to better educate policy makers and customers to make informed decisions about shifts in recovery rate and recycled content. Sappi personnel have worked alongside other stakeholders as members of a Technical Advisory Group and participants in several workshops to help define systems variables and interactions.

Anti-corruption

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

We recognise that building an accountable organisation underpins our ongoing viability as a business. Accordingly, the Social, Ethics, Transformation and Sustainability Committee, amongst other things, monitors our activities with regard to matters such as social and economic development, including the UN Global Compact and the OECD Guidelines on Bribery and Corruption, with particular emphasis on Section VII of the OECD Guidelines for Multinational Enterprises dealing with Combating Bribery, Bribe Solicitation and Extortion.

No issues have been raised regarding Sappi with regards to compliance with the convention either externally or internally. We regularly review the Code of Ethics to ensure that it remains aligned to current governance and business trends. Accordingly, in September 2016, we launched a revised Code of Ethics which incorporates the new Sappi values (At Sappi we do business with integrity and courage; making smart decisions which we execute with speed); includes specific policies that guide employee conduct on everyone’s mind.

In 2017, the regions continued to send out newsletter articles and posters on various Code topics and to use different programmes to further emphasise the importance of the Code.

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 written and distributed to the mills to assist those unable to read the policies. Ethics messages are displayed on the media screens, in the lift lobbies and on Sappi desk calendars to keep ethical conduct on everyone’s mind.

In addition, competition law, anti-bribery and corruption online training was completed in all regions, while Code of Ethics online training was completed in Southern Africa.
Global Reporting Initiative (GRI)

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

### General standard disclosures

#### G4-1
Provide a statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation’s strategy for addressing sustainability.

**Where reported**: GSR, Messages from our leadership, pages 5-6

### Organisational profile

#### G4-3
Report the name of the organisation.

**Where reported**: AIR, Cover

#### G4-4
Report the primary brands, products and services.

**Where reported**: AIR, Where we operate, pages 20-21

#### G4-5
Report the location of the organisation’s headquarters.

**Where reported**: GSR, About this report, page 4

#### G4-6
Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.

**Where reported**: AIR, Where we operate, pages 20-21

#### G4-7
Report the nature of ownership and legal form.

**Where reported**: AIR, Where we operate, pages 20-21

#### G4-8
Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).

**Where reported**: AIR, Where we operate, pages 20-21

#### G4-9
Report the scale of the organisation, including:

- a. Total number of employees
- b. Total number of operations
- c. Net sales (for private sector organisations) or net revenues (for public sector organisations)
- d. Total capitalisation broken down in terms of debt and equity (for private sector organisations)
- e. Quantity of products or services provided.

**Where reported**: AIR, Our business model, pages 2-3

#### G4-10
Report the composition of the workforce, including:

- a. Report the total number of employees by employment contract and gender
- b. Report the total number of permanent employees by employment type and gender
- c. Report the total workforce by employees and supervised workers and by gender
- d. Report the total workforce by region and gender
- e. Report whether a substantial portion of the organisation’s work is performed by workers who are legally recognised as self-employed, or by individuals other than employees or supervised employees of contractors
- f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).

**Where reported**: GSR, Profiling our people, pages 62-63

#### G4-11
Report the percentage of total employees covered by collective bargaining agreements.

**Where reported**: GSR, Maintaining sound labour relations, page 72

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**Key:** • AIR 2017 Sappi Annual Integrated Report • GSR 2017 Sappi Group Sustainability Report (This report) • Blue page numbers are links
<table>
<thead>
<tr>
<th>G4 indicator</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4–12</td>
<td>Describe the organisation’s supply chain.</td>
</tr>
<tr>
<td>G4–13</td>
<td>Report any significant changes during the reporting period regarding the organisation’s size, structure, ownership, or its supply chain, including:</td>
</tr>
<tr>
<td></td>
<td>a Changes in the location of, or changes in, operations, including facility openings, closings and expansions</td>
</tr>
<tr>
<td></td>
<td>b Changes in the share capital structure and other capital formation, maintenance and alteration operations (for private sector organisations)</td>
</tr>
<tr>
<td></td>
<td>c Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination.</td>
</tr>
<tr>
<td>G4–14</td>
<td>Report whether and how the precautionary approach or principle is addressed by the organisation.</td>
</tr>
<tr>
<td>G4–15</td>
<td>List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses.</td>
</tr>
<tr>
<td>G4–16</td>
<td>List memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation:</td>
</tr>
<tr>
<td></td>
<td>• Holds a position on the governance body</td>
</tr>
<tr>
<td></td>
<td>• Participates in projects or committees</td>
</tr>
<tr>
<td></td>
<td>• Provides substantive funding beyond routine membership dues</td>
</tr>
<tr>
<td></td>
<td>• Views membership as strategic.</td>
</tr>
<tr>
<td>G4–17</td>
<td>List all entities included in the organisation’s consolidated financial statements or equivalent documents. Report whether any entity included in the organisation’s consolidated financial statements or equivalent documents is not covered by the report.</td>
</tr>
<tr>
<td>G4–18</td>
<td>Explain the process for defining the report content and the aspect boundaries. Explain how the organisation has implemented the reporting principles for defining report content.</td>
</tr>
<tr>
<td>G4–19</td>
<td>List all the material aspects identified in the process for defining report content.</td>
</tr>
<tr>
<td>G4–20</td>
<td>For each material aspect, report the aspect boundary within the organisation, as follows: Report whether the aspect is material within the organisation If the aspect is not material for all entities within the organisation (as described in G4–17), select one of the following two approaches and report either: The list of entities or groups of entities included in G4–17 for which the aspect is not material or The list of entities or groups of entities included in G4–17 for which the aspect is material Report any specific limitation regarding the aspect boundary within the organisation.</td>
</tr>
</tbody>
</table>
### Identified material aspects and boundaries (continued)

<table>
<thead>
<tr>
<th>G4 indicator</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4–21 For each material aspect, report the aspect boundary outside the organisation, as follows:</td>
<td>GSR, Our key material issues, pages 17–33</td>
</tr>
<tr>
<td>• Reporting whether the aspect is material outside of the organisation</td>
<td></td>
</tr>
<tr>
<td>• If the aspect is material outside of the organisation, identify the entities, groups of entities or elements for which the aspect is material. In addition, describe the geographical location where the aspect is material for the entities identified</td>
<td></td>
</tr>
<tr>
<td>• Report any specific limitation regarding the aspect boundary outside the organisation.</td>
<td></td>
</tr>
<tr>
<td>G4–22 Report the effect of any restatements of information provided in previous reports and the reasons for such restatements.</td>
<td>GSR, Global sustainability goals, page 9</td>
</tr>
<tr>
<td>G4–23 Report significant changes from previous reporting periods in the scope and aspect boundaries.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Stakeholder engagement

<table>
<thead>
<tr>
<th>G4 indicator</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4–24 Provide a list of stakeholder groups engaged by the organisation.</td>
<td>GSR, Our key relationships, pages 35–47</td>
</tr>
<tr>
<td>G4–25 Report the basis for identification and selection of stakeholders with whom to engage.</td>
<td>As above</td>
</tr>
<tr>
<td>G4–26 Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.</td>
<td>As above</td>
</tr>
<tr>
<td>G4–27 Report key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.</td>
<td>As above</td>
</tr>
</tbody>
</table>

### Report profile

<table>
<thead>
<tr>
<th>G4 indicator</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4–28 Reporting period (such as fiscal or calendar year) for information provided.</td>
<td>GSR, About this report, page 4</td>
</tr>
<tr>
<td>G4–29 Date of most recent previous report (if any).</td>
<td>GSR, About this report, page 4</td>
</tr>
<tr>
<td>G4–30 Reporting cycle (such as annual, biennial).</td>
<td>GSR, About this report, page 4</td>
</tr>
<tr>
<td>G4–31 Provide the contact point for questions regarding the report or its contents.</td>
<td>Graeme Wild, Group Head Investor Relations and Sustainability</td>
</tr>
</tbody>
</table>
G4–32 “In accordance” option:

- Report the “in accordance” option the organisation has chosen.
- Report the GRI Content Index for the chosen option.
- Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be “in accordance” with the guidelines.

Where reported:
- Core: GSR, GRI, pages 118–130
- GSR, About this report, page 4

G4–33 Assurance:

- Report the organisation’s policy and current practice with regard to seeking external assurance for the report.
- If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.
- Report the relationship between the organisation and the assurance providers.
- Report whether the highest governance body or senior executives are involved in seeking assurance for the organisation’s sustainability report.

Where reported:
- GSR, About this report, page 4

Governance

G4–34 Report the governance structure of the organisation, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.

Where reported:
- GSR, Our sustainability governance structure, page 8

Ethics and integrity

G4–56 Describe the organisation’s values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics.

Where reported:
- Sappi Code of Ethics available on www.sappi.com
**Economic performance**

<table>
<thead>
<tr>
<th>EC1</th>
<th>Direct economic value generated and distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Report the direct economic value generated and distributed (EVG&amp;D) on an accruals basis including the basic components for the organisation’s global operations as listed below. If data is presented on a cash basis, report the justification for this decision and report the basic components as listed below:</td>
</tr>
<tr>
<td></td>
<td>• Direct economic value generated: Revenues</td>
</tr>
<tr>
<td></td>
<td>• Economic value distributed: Operating costs</td>
</tr>
<tr>
<td></td>
<td>• Employee wages and benefits</td>
</tr>
<tr>
<td></td>
<td>• Payments to providers of capital</td>
</tr>
<tr>
<td></td>
<td>• Payments to government (by country)</td>
</tr>
<tr>
<td></td>
<td>• Community investments</td>
</tr>
<tr>
<td></td>
<td>• Economic value retained (calculated as “Direct economic value generated” less “Economic value distributed”), To better assess local economic impacts, report EVG&amp;D separately at country, regional, or market levels, where significant.</td>
</tr>
<tr>
<td></td>
<td>• Report the criteria used for defining significance.</td>
</tr>
</tbody>
</table>

**Where reported**

GSR, Our value add to daily life, pages 58–59

**Indirect economic impacts**

<table>
<thead>
<tr>
<th>EC7</th>
<th>Development and impact of infrastructure investments and services supported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Report the extent of development of significant infrastructure investments and services supported. Report the current or expected impacts on communities and local economies. Report positive and negative impacts where relevant. Report whether these investments and services are commercial, in-kind, or pro bono engagements.</td>
</tr>
</tbody>
</table>

**Where reported**

GSR, Sharing value, pages 80–83
**Indirect economic impacts (continued)**

**EC8**

Significant indirect economic impacts, including the extent of impacts

- **a** Report examples of the significant identified positive and negative indirect economic impacts the organisation has. These may include:
  - Changing the productivity of organisations, sectors, or the whole economy
  - Economic development in areas of high poverty
  - Economic impact of improving or deteriorating social or environmental conditions
  - Availability of products and services for those on low incomes
  - Enhancing skills and knowledge among a professional community or in a geographical region
  - Jobs supported in the supply chain or distribution chain
  - Stimulating, enabling, or limiting foreign direct investment
  - Economic impact of change in location of operations or activities
  - Economic impact of the use of products and services.

- **b** Report the significance of the impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols and policy agendas.

**Environmental – Energy**

**EN3**

Energy consumption within the organisation

- **a** Report total fuel consumption from non-renewable sources in joules or multiples, including fuel types used.

- **b** Report total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used.

- **c** Report in joules, watt-hours or multiples, the total:
  - Electricity consumption
  - Heating consumption
  - Cooling consumption
  - Steam consumption.

- **d** Report in joules, watt-hours or multiples, the total:
  - Electricity sold
  - Heating sold
  - Cooling sold
  - Steam sold.

- **e** Report total energy consumption in joules or multiples.

- **f** Report standards, methodologies, and assumptions used.

- **g** Report the source of the conversion factors used.
<table>
<thead>
<tr>
<th>G4 indicator</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EN5</strong> Energy intensity</td>
<td>GSR, Reducing our carbon footprint, page 98</td>
</tr>
<tr>
<td>a Report the energy intensity ratio.</td>
<td></td>
</tr>
<tr>
<td>b Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio.</td>
<td></td>
</tr>
<tr>
<td>c Report the types of energy included in the intensity ratio: fuel, electricity, heating, cooling, steam or all.</td>
<td></td>
</tr>
<tr>
<td>d Report whether the ratio uses energy consumed within the organisation, outside of it or both.</td>
<td></td>
</tr>
<tr>
<td><strong>EN6</strong> Reduction of energy consumption</td>
<td>GSR, Our key material issues, energy, page 32</td>
</tr>
<tr>
<td>a Report the amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.</td>
<td></td>
</tr>
<tr>
<td>b Report the types of energy included in the reductions: fuel, electricity, heating, cooling, and steam.</td>
<td></td>
</tr>
<tr>
<td>c Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</td>
<td></td>
</tr>
<tr>
<td>d Report standards, methodologies, and assumptions used.</td>
<td></td>
</tr>
<tr>
<td><strong>EN7</strong> Reductions in energy requirements of products and services</td>
<td>GSR, Reducing our carbon footprint, page 98</td>
</tr>
<tr>
<td>a Report the reductions in the energy requirements of sold products and services achieved during the reporting period, in joules or multiples.</td>
<td></td>
</tr>
<tr>
<td>b Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</td>
<td></td>
</tr>
<tr>
<td>c Report standards, methodologies and assumptions used.</td>
<td></td>
</tr>
<tr>
<td><strong>EN8</strong> Total water withdrawal by source</td>
<td>GSR, Water – a scarce resource, pages 103–104</td>
</tr>
<tr>
<td>a Report the total volume of water withdrawn from the following sources:</td>
<td></td>
</tr>
<tr>
<td>• Surface water, including water from wetlands, rivers, lakes, and oceans</td>
<td></td>
</tr>
<tr>
<td>• Ground water</td>
<td></td>
</tr>
<tr>
<td>• Rainwater collected directly and stored by the organisation</td>
<td></td>
</tr>
<tr>
<td>• Waste water from another organisation</td>
<td></td>
</tr>
<tr>
<td>• Municipal water supplies or other water utilities.</td>
<td></td>
</tr>
<tr>
<td>b Report standards, methodologies and assumptions used.</td>
<td></td>
</tr>
<tr>
<td><strong>EN10</strong> Percentage and total volume of water recycled and reused</td>
<td>GSR, Our key material issues, water, page 33</td>
</tr>
<tr>
<td>a Report the total volume of water recycled and reused by the organisation.</td>
<td></td>
</tr>
<tr>
<td>b Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4–EN8.</td>
<td></td>
</tr>
<tr>
<td>c Report standards, methodologies and assumptions used.</td>
<td></td>
</tr>
</tbody>
</table>
### EN15 Direct greenhouse gas (GHG) emissions (Scope 1)
- a. Report gross direct (Scope 1) GHG emissions in metric tons of CO₂ equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.
- b. Report gases included in the calculation (whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all).
- c. Report biogenic CO₂ emissions in metric tons of CO₂ equivalent separately from the gross direct (Scope 1) GHG emissions.
- d. Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.
- e. Report standards, methodologies and assumptions used.
- f. Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source.
- g. Report the chosen consolidation approach for emissions (equity share, financial control, operational control).

### EN16 Energy indirect greenhouse gas (GHG) emissions (Scope 2)
- a. Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO₂ equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.
- b. Report gases included in the calculation, if available.
- c. Report the chosen base year, the rationale for choosing the base year, emissions in the base year and the context for any significant changes in emissions that triggered recalculations of base year emissions.
- d. Report standards, methodologies and assumptions used.
- e. Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source, if available.
- f. Report the chosen consolidation approach for emissions (equity share, financial control, operational control).

### EN18 Greenhouse gas (GHG) emissions intensity
- b. Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio.
- c. Report the types of GHG emissions included in the intensity ratio: direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3).
- d. Report gases included in the calculation.

### EN19 Reduction of greenhouse gas (GHG) emissions
- a. Report the amount of GHG emissions reductions achieved as a direct result of initiatives to reduce emissions, in metric tons of CO₂ equivalent.
- b. Report gases included in the calculation (whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all).
- c. Report the chosen base year or baseline and the rationale for choosing it.
- d. Report standards, methodologies and assumptions used.
- e. Report whether the reductions in GHG emissions occurred in direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3) emissions.
### G4 indicator

#### Environmental – Water (continued)

<table>
<thead>
<tr>
<th>EN21</th>
<th>NOx, SOx, and other significant air emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the amount of significant air emissions, in kilograms or multiples for each of the following:</td>
</tr>
<tr>
<td></td>
<td>• NOx</td>
</tr>
<tr>
<td></td>
<td>• SOx</td>
</tr>
<tr>
<td></td>
<td>• Persistent organic pollutants (POPs)</td>
</tr>
<tr>
<td></td>
<td>• Volatile organic compounds (VOCs)</td>
</tr>
<tr>
<td></td>
<td>• Hazardous air pollutants (HAPs)</td>
</tr>
<tr>
<td></td>
<td>• Particulate matter (PM)</td>
</tr>
<tr>
<td></td>
<td>• Other standard categories of air emissions identified in relevant regulations.</td>
</tr>
<tr>
<td>b</td>
<td>Report standards, methodologies and assumptions used.</td>
</tr>
<tr>
<td>c</td>
<td>Report the source of the emission factors used.</td>
</tr>
</tbody>
</table>

| GSR, Reducing our carbon footprint, page 102 |

#### Effluents and waste

<table>
<thead>
<tr>
<th>EN22</th>
<th>Total water discharge by quality and destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the total volume of planned and unplanned water discharges by:</td>
</tr>
<tr>
<td></td>
<td>• Destination</td>
</tr>
<tr>
<td></td>
<td>• Quality of the water including treatment method</td>
</tr>
<tr>
<td></td>
<td>• Whether it was reused by another organisation.</td>
</tr>
<tr>
<td>b</td>
<td>Report standards, methodologies and assumptions used.</td>
</tr>
</tbody>
</table>

| GSR, Water – a scarce resource, pages 103–104 |
### G4 indicator

#### Effluents and waste (continued)

**EN23**

**Total weight of waste by type and disposal method**

- Report the total weight of hazardous and non-hazardous waste by the following disposal methods:
  - Reuse
  - Recycling
  - Composting
  - Recovery, including energy recovery
  - Incineration (mass burn)
  - Deep well injection
  - Landfill
  - On-site storage
  - Other (to be specified by the organisation).

- Report how the waste disposal method has been determined:
  - Disposed of directly by the organisation or otherwise directly confirmed
  - Information provided by the waste disposal contractor
  - Organisational defaults of the waste disposal contractor.

**Where reported**

GSR, Reducing solid waste and adding value, pages 105–106

### Social: Labour practices and decent work

#### Social – Employment

**LA1**

**Total number and rates of new employee hires and employee turnover by age group, gender and region**

- Report the total number and rate of new employee hires during the reporting period, by age group, gender and region.

- Report the total number and rate of employee turnover during the reporting period, by age group, gender and region.

**Where reported**

GSR, Monitoring turnover, new hires and absenteeism, page 71

### Social – Labour/management relations

#### LA4

**Minimum notice periods regarding operational changes, including whether these are specified in collective agreements**

- Report the minimum number of weeks’ notice typically provided to employees and their elected representatives prior to the implementation of significant operational changes that could substantially affect them.

- For organisations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.

**Where reported**

GSR, Communicating operational changes, page 72
### G4 indicator

#### Social – Occupational health and safety

**LA6**

**Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities, by region and by gender**

- **a** Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AIR) and work-related fatalities for the total workforce (that is, total employees plus supervised workers) by:
  - Region
  - Gender.

- **b** Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities for independent contractors working on-site to whom the organisation is liable for the general safety of the working environment, by:
  - Region
  - Gender.

- **c** Report the system of rules applied in recording and reporting accident statistics.

**Where reported**

- GSR, Monitoring turnover, new hires and absenteeism, page 71
- GSR, Safety, pages 74–79

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#### Social – Training and education

**LA9**

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

- **a** Report the average hours of training that the organisation’s employees have undertaken during the reporting period, by:
  - Gender
  - Employee category.

**LA11**

**Percentage of employees receiving regular performance and career development reviews, by gender and by employee category**

- **a** Report the percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.

**Where reported**

- GSR, Great jobs and great leaders, page 70
### G4 indicator

#### Social – Diversity and equal opportunity

<table>
<thead>
<tr>
<th>LA12</th>
<th>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the percentage of individuals within the organisation's governance bodies in each of the following diversity categories:</td>
</tr>
<tr>
<td></td>
<td>• Gender</td>
</tr>
<tr>
<td></td>
<td>• Age group: under 30 years old, 30–50 years old, over 50 years old</td>
</tr>
<tr>
<td></td>
<td>• Minority groups</td>
</tr>
<tr>
<td></td>
<td>• Other indicators of diversity where relevant.</td>
</tr>
<tr>
<td>b</td>
<td>Report the percentage of employees per employee category in each of the following diversity categories:</td>
</tr>
<tr>
<td></td>
<td>• Gender</td>
</tr>
<tr>
<td></td>
<td>• Age group: under 30 years old, 30–50 years old, over 50 years old</td>
</tr>
<tr>
<td></td>
<td>• Minority groups</td>
</tr>
<tr>
<td></td>
<td>• Other indicators of diversity where relevant.</td>
</tr>
</tbody>
</table>

#### Social – Compliance

<table>
<thead>
<tr>
<th>SO8</th>
<th>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report significant fines and non-monetary sanctions in terms of:</td>
</tr>
<tr>
<td></td>
<td>• Total monetary value of significant fines</td>
</tr>
<tr>
<td></td>
<td>• Total number of non-monetary sanctions</td>
</tr>
<tr>
<td></td>
<td>• Cases brought through dispute resolution mechanisms.</td>
</tr>
<tr>
<td>b</td>
<td>If the organisation has not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient.</td>
</tr>
<tr>
<td>c</td>
<td>Report the context against which significant fines and non-monetary sanctions were incurred.</td>
</tr>
</tbody>
</table>
AF&PA – American Forest and Paper Association.

air dry tons (ADT) – Meaning dry solids content of 90% and moisture content of 10%.

biochemicals – Enzymes, hormones, pheromones etc, which either occur naturally or are manufactured to be identical to naturally occurring substances. Biochemicals have many environment-friendly applications, such as natural pesticides that work in non-lethal ways as repellents or by disrupting the mating patterns of the pests.

biofuels – Organic material such as wood, waste and alcohol fuels, as well as gaseous and liquid fuels produced from these feedstocks when they are burned to produce energy.

biomaterials – New developments in wood processing supports the move to a bioeconomy that utilises materials that are renewable and biodegradable and that do not compete with food sources.

black liquor – The spent cooking liquor from the pulping process which arises when pulpwood is cooked in a digester thereby removing lignin, hemicellulose and other extractives from the wood to free the cellulose fibres. The resulting black liquor is an aqueous solution of lignin residues, hemicellulose, and the inorganic chemicals used in the pulping process. Black liquor contains slightly more than half of the energy content of the wood fed into the digester.

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

casting and release paper – Embossed paper used to impart design in polyurethane or polyvinyl chloride plastic films for the production of synthetic leather and other textured surfaces.

CEPI – Confederation of European Paper Industries.

chemical oxygen demand (COD) – The amount of oxygen required to break down the organic compounds in effluent.

chemical pulp – A generic term for pulp made from wood fibre that has been produced in a chemical process.

CHP – Combined heat and power.

corroding medium – Paperboard made from chemical and semi-chemical pulp, or waste paper, that is to be converted to a corrugated board by passing it through corrugating cylinders. Corroding medium between layers of linerboard form the board facing of corrugated board. Linerboard is combined with corrugating medium by converters to produce corrugated board.

corrugating medium – Paperboard made from chemical pulp, which is made from wood fibre that has been produced in a chemical process, primarily used for high-end publications and advertising material.

coated paper – Paper that contains a layer of coating material on one or both sides. The coating materials, consisting of pigments and binders, act as a filter to improve the printing surface of the paper.

coated woodfree – Coated paper made from chemical pulp which is made from wood fibre that has been produced in a chemical process, primarily used for magazines, catalogues and advertising material.

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

CSI and CSR – Corporate social investment and corporate social responsibility.

cSV – Creating shared value involves developing profitable business strategies that deliver tangible social benefits.

dissolving pulp – Highly purified chemical pulp derived primarily from wood, but also from cotton linters intended primarily for conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament.

dissolving wood pulp – Highly purified chemical pulp derived from wood intended primarily for conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament.

dissolution – Conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament.

ebITDA excluding special items – Earnings before interest and tax, depreciation, amortisation and special items.

energy – Is present in many forms such as solar, mechanical, thermal, electrical and chemical. Any source of energy can be tapped to perform work. In power plants, coal is burned and its chemical energy is converted into electrical energy. To generate steam, coal and other fossil fuels are burned, thus converting stored chemical energy into thermal energy.

fibre – Fibre is generally referred to as pulp in the paper industry. Wood is treated chemically or mechanically to separate the fibres during the pulping process.

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

fmg – Fast-moving consumer goods. Examples include non-durable goods such as packaged foods, beverages, toiletries, over-the-counter medicines and many other consumables.

Forestry SA – Largest forestry organisation representing growers of timber in South Africa.

FSC®, Forest Stewardship Council® – Is an independent, non-governmental, not for profit organisation established to promote the responsible management of the world’s forests. Over 190 million hectares of forest are FSC®-certified, in over 80 countries worldwide. (https://www.fsc.org/en)

full-time equivalent employee – The number of total hours worked divided by the maximum number of compensable hours in a full-time schedule as defined by law.

greenhouse gases (GHG) – The GHGs included in the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

ISO – Developed by the International Standardisation Organisation (ISO), ISO 9000 is a series of standards focused on quality management systems, while the ISO 14001 series is focused on environmental performance and management and the ISO 500001 covers energy management.

Johannesburg Stock Exchange (JSE) Limited – The main securities exchange in South Africa.

kraft paper – Packaging paper (bleached or unbleached) made from kraft pulp.

kraft pulp – Chemical wood pulp produced by digesting wood by means of the sulphate pulping process.

Kyoto Protocol – A document signed by over 160 countries at Kyoto, Japan in December 1997 which commits signatories to reducing their emission of greenhouse gases relative to levels emitted in 1990.

 lignosulphonate – Lignosulphonate is a highly soluble lignin derivative and a product of the sulphite pulping process.

linerboard – The grade of paperboard used for the exterior facings of corrugated board. Linerboard is combined with corrugating medium by converters to produce corrugated board used in boxes.

liquor – White liquor is the aqueous solution of sodium hydroxide used in boxes.

lst – Long-stemmed twig

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Glossary continued

**Lost-Time Injury Frequency Rate (LTIFR)** – Number of lost time injuries x 200,000 divided by man hours.

**managed forest** – Naturally-occurring forests that are harvested commercially.

**market pulp** – Pulp produced for sale on the open market, as opposed to that produced for own consumption in an integrated mill.

**mechanical pulp** – Pulp produced by means of the mechanical grinding or refining of wood or woodchips.

**nanocellulose** – Cellulose is the main component of plant stems, leaves and roots. Traditionally, its main commercial use was in producing paper and textiles. Nanocellulose opens up opportunities for advanced, planet-friendly solutions in place of environmentally harmful products.

**natural/indigenous forest** – A forest of naturally regenerating native trees.

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

**newspaper** – Paper produced for the printing of newspapers mainly from mechanical pulp and/or recycled waste paper.

**NGO** – Non-government organisation.

**NPO** – Non-profit organisation.

**OHSAS** – Is an international health and safety standard aimed at minimising occupational health and safety risks firstly, by conducting a variety of analyses and secondly, by setting standards.

**packaging paper** – Paper used for packaging purposes.

**PAMSA** – Paper Manufacturers’ Association of South Africa.

**PEFC™** – The Programme for the Endorsement of Forest Certification (PEFC) is an international non-profit, nongovernmental organisation dedicated to promoting Sustainable Forest Management (SFM) through independent third-party certification. PEFC™ is the world’s largest forest certification system with over 300 million hectares of forest area under PEFC™ standards. PEFC™ is represented in 49 countries through national organisations such as SFI in North America.

**plantation** – Large scale planted forests, intensively managed, highly productive and grown primarily for wood and fibre production.

**PM** – Paper machine.

**power** – The rate at which energy is used or produced.

**pulpwood** – Wood suitable for producing pulp – usually not of sufficient standard for saw milling.

**release paper** – Based paper used in the production of making release liners, the backing paper for self-adhesive labels.

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

**sackkraft** – Kraft paper used to produce multi-wall paper sacks.

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

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity, and
- Indirect GHG emissions are emissions from purchased electricity, steam, heat or cooling.

**SFP® (Sustainable Forestry Initiative)** – Is a solutions oriented sustainability organisation that collaborates on forest-based conservation and community initiatives. The SFP® forest management standard is the largest forestry certification standard within the PEFC programme with over a hundred million hectares under management. (http://www.sfiprogram.org)

**silviculture costs** – Growing and tending costs of trees in forestry operations.

**solid waste** – Dry organic and inorganic waste materials.

**specialised cellulose** – The business within Sappi which oversees the production and marketing of dissolving wood pulp (DWP).

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

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

**specific purchased energy** – The term ‘specific’ indicates that the actual quantity during the year indicated, is expressed in terms of a production parameter. For Sappi, as with other pulp and paper companies, the parameter is air dry tons of product.

**STE** – Specific total energy.

**Sustainable Forestry Initiative (SFI®)** – The SFI® programme is a comprehensive system of objectives and performance measures which integrate the sustained growing and harvesting of trees and the protection of plants and animals.

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

**ton** – Term used in this report to denote a metric ton of 1,000kg.

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

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

**viscose staple fibre (VSF)** – A natural fibre made from purified cellulose, primarily from dissolving wood pulp (DWP) that can be twisted to form yarn.

**woodfree paper** – Paper made from chemical pulp.

**World Wildlife Fund (WWF)** – The world’s largest conservation organisation, focused on supporting biodiversity.