



Mutualism

The clownfish and sea anemone

Neither clownfish nor anemones need each other to survive but, through mutualism, they thrive better together.

sappi

Group Sustainability Report

2019

3

- 3 Reader’s guide
- 4 About this report
 - 4 Defining report content
 - 5 External reviews of our sustainability performance
 - 6 Independent Assurance Practitioner’s Report on Selected Key Performance Indicators
 - 8 Leadership messages
- 10 Sustainability governance
 - 11 Our performance against our 2020 global sustainability goals
 - 12 Our performance against our 2020 regional targets
- 13 Our accolades in 2019

- 14 Key material issues
 - 15 The links between our operating context, risk, key relationships and key material issues
 - 16 How we create value
 - 17 Understanding our business model
 - 19 Our operating context
- 35 Key relationships
 - 37 Employees
 - 38 Unions
 - 39 Customers
 - 41 Communities
 - 43 Industry bodies and business
 - 45 Investors
 - 46 Suppliers and contractors
 - 47 Civil society (and media)
 - 48 Government and regulatory bodies

49

- 49 Prosperity
 - 50 Prosperity 2019 – at a glance
 - 51 Delivering on our strategy and 2020Vision
 - 53 Our diversified product portfolio
 - 54 Investing in R&D
- 55 Assessing our investment case
- 56 Adding value to daily life
- 56 Value added in 2019
- 56 Adding value in each region where we operate

57

- 57 People
 - 58 People in 2019 – at a glance
 - 60 Profiling our people
 - 62 Monitoring turnover and new hires
 - 64 Monitoring turnover, new hires and absenteeism
 - 66 Developing our people to reach their full potential
 - 67 Training our people
 - 68 Appraising our people
 - 69 Leading and managing our people
 - 70 Assessing employee engagement
 - 71 Promoting health and wellbeing
 - 72 Reviewing our safety performance in 2019
 - 76 Sharing value

80

- 80 Planet
 - 81 Planet in 2019 – at a glance
 - 82 Knowing our woodfibre sources
 - 84 Sourcing certified woodfibre
 - 85 Mitigating the impact of climate change in our plantations
 - 86 Assessing climate change
 - 87 Producing and using renewable energy
 - 90 Focusing on greenhouse gas emissions
 - 92 Decreasing emissions
 - 93 Managing water responsibly
 - 99 Minimising waste
 - 100 Deriving value from waste
- 103 UNGC and SDGs
 - 104 Letter to the United Nations Secretary-General
 - 105 Forests and the United Nations Sustainable Development Goals
 - 107 Aligning with the United Nations Sustainable Development Goals
- 116 Global Reporting Initiative (GRI)
- 127 Glossary

Contents

Reader’s guide

About our theme

Mutualism

Neither clownfish nor anemones need each other to survive but, through mutualism, they survive more easily: The clownfish, who are protected by a mucus covering from the stinging tentacles of the anemone, live in the anemone and attract larger fish. However, the larger fish are paralysed by the tentacles of the anemone and devoured. The remains of are later eaten by the clownfish and at the same time the anemone is cleaned, leaving it in perfect condition for the next prey.

Mutualism is most commonly defined in a way that reflects the positive signs characterising the outcome of interactions between individuals of different species that benefit both of them. We have chosen this theme because it reflects the interconnected relationship we have with our stakeholders and the fact that this connection enables all parties to thrive.





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. 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 continue to focus on being a leader in our industry and a valued member of our local communities beyond 2020.

Getting around

This sustainability report uses in-document navigation tools, allowing you to navigate to the subjects that interest you most. The navigation bar at the top of the page shows you where you are in the report.

Click on the icons to:




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

Icons

- | | |
|---|--|
|  Achieve cost advantages |  Rationalise declining businesses |
|  Maintain a healthy balance sheet |  Risk |
|  Accelerate growth in higher margin products |  Targets |

More information

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


-  Related and explanatory information in this report is cross referenced.
-  See more detailed information in other published documents on www.sappi.com or other interactive reports.
-  See more detailed information on third-party websites.

Best viewed

This sustainability report is best viewed using Adobe Acrobat’s PDF-viewer which can be downloaded free from Adobe’s website (acrobat.adobe.com/za/en/acrobat/pdf-reader.html). Viewing the report online using your browser’s native built-in PDF-viewer may render some of the navigational and interactive functionality unusable.

Certification systems

Certification systems, eg the Forest Stewardship Council™ (FSC™) (FSC; ref FSC-N003159), the Programme for the Endorsement of Forest Certification™ (PEFC™) and the Sustainable Forestry Initiative® (SFI®) 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 is available on  www.sappi.com/certifications

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 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 (adt) of product.

Tons

We standardise all our reported measurements using the metric ton equivalent to 1,000 kg.

Exchange rates

We have used the following exchange rates:

US\$/ZAR: 14.3
US\$/EUR: 1.12

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 2018 to the end of September 2019. 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, environmental and quality (SHEQ) data is compiled according to international best practice. Commentary is provided on graphs to enhance understanding and specific measurement criteria—as well as instances where these have changed—are clearly spelled out.

Reporting framework

As Sappi Limited is headquartered in South Africa and we have our primary listing on the JSE, 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 create stakeholder value in a sustainable manner.

Joint ventures

LignoTech South Africa, our 50:50 joint venture with Borregaard at Saiccor Mill, is excluded from the **Prosperity**, **People** (with the exception of safety) and **Planet** data as we do not manage the operation.

New acquisitions

The report does not cover information for the newly acquired Matane Mill in Canada.

GRI

We have reported in terms of the GRI, *Global Reporting Initiative* Standards (see [GRI](#)). We have included a GRI index and a separate section communicating our progress in terms of the *United Nations Global Compact (UNGC)*, as well as the *United Nations Sustainable Development Goals (SDGs)* (see [UNGC](#) and [SDG](#)).

Business units

Throughout this report, Sappi's regional business units are referred to as:

SEU – Sappi Europe
SNA – Sappi North America, and
SSA – Sappi Southern Africa.

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 as graphs illustrating performance over five years from 2015 – 2019. (Safety graphs include 2014 performance as this is referred to in the text.)

Regional sustainability reports for SEU and SNA, as well as our SSA corporate citizenship report can be  found on www.sappi.com.

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.

Prioritising content

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

While we do cover economic (Prosperity) issues to some extent, these are dealt with in greater detail in our annual integrated report.



Defining report content *continued*

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 the [Key relationships](#) section. 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

In 2019, we obtained external limited assurance on selected sustainability key performance indicators in this report (see [Independent Assurance Practitioner’s Limited Assurance Report on Selected Key Performance Indicators](#)).

Assured data (Sappi group)

Direct emissions (Scope 1) (tCO ₂ e)	4,395,555.97 ^{LA}
Indirect emissions (Scope 2) (tCO ₂ e)	1,608,661.38 ^{LA}
Employee (own) LTIFR (rate)	0.71 ^{LA}
Contractor LTIFR (rate)	0.41 ^{LA}

Our sustainability information also continues to be verified 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 addition, most of our key operations undergo external verification including the *Eco-Management Audit System (EMAS)* in Europe, *ISO 50001 energy certification* (Europe and South Africa), *ISO 14001* environmental certification, *ISO 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 2019, Sappi Limited was a constituent of the FTSE/JSE Responsible Investment Index and the FTSE/JSE Responsible Investment Top 30 Index. Being included in these indexes 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 is satisfied that the sustainability information in this report has been presented with a reasonable degree of accuracy.

External reviews of our sustainability performance

Our focus on continuous improvement and commitment to integrate the principles of sustainability into our everyday business activities is highlighted by the fact that in 2019:



- We were included in the FTSE/JSE Responsible Investment Top 30 Index and confirmed as a constituent of the FTSE4Good Index Series.



- Sappi has been classified as Prime by Oekom, one of the world’s leading environmental, social and governance (ESG) research and rating agencies for sustainable investments.



- In all three regions, we were awarded a Gold Recognition Level in sustainability performance by independent rating agency EcoVadis.



- We reported to the CDP (www.cdp.net/en) under its climate change and forest programmes, making our responses publicly available.



- Recognised as a leader in the 2019 Corporate Sector and Children’s Rights Benchmark

Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong **environmental, social and governance (ESG) practices**. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

LA: Limited assurance provided by KPMG.

Independent Assurance Practitioner’s Limited Assurance Report on Selected Key Performance Indicators

To the Directors of Sappi Limited

Report on Selected Key Performance Indicators

We have undertaken a limited assurance engagement on selected key performance indicators (KPIs), as described below, and presented in the Sappi Group Sustainability Report 2019 of Sappi Limited (Sappi) for the year ended September 2019 (the Report). This engagement was conducted by a multidisciplinary team including environmental, safety and assurance specialists with relevant experience in sustainability reporting.

Subject Matter

We have been engaged to provide a limited assurance conclusion in our report on the following selected KPIs, marked with a ‘LA’ on page 5 of the Report. The selected KPIs described below have been prepared in accordance with Global Reporting Initiative Standards (‘GRI Standards’) that accompanies the sustainability information on the relevant pages of the Report (the accompanying Sappi reporting criteria).

Scope of the KPIs prepared for the 2019 reporting period

Category	Selected KPIs	Coverage/ Reporting Boundary
Environment	Direct emissions (Scope 1) tCO ₂ e	Sappi Global (Total Group)
	Indirect emissions (Scope 2) tCO ₂ e	
Safety	Employee (Own) LTIFR (rate)	Sappi Global (Total Group)
	Contractor LTIFR (rate)	

Directors’ Responsibilities

The Directors are responsible for the selection, preparation and presentation of the selected KPIs in accordance with the accompanying Sappi reporting criteria. This responsibility includes the identification of stakeholders and stakeholder requirements, material issues, commitments with respect to sustainability performance and design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error. The Directors are also responsible for determining the appropriateness of the measurement and reporting criteria in view of the intended users of the selected KPIs and for ensuring that those criteria are publicly available to the Report users.

Inherent Limitations

Greenhouse gas emissions quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Sections 290 and 291 of the Independent Regulatory Board for Auditors’ *Code of Professional Conduct for Registered Auditors (Revised January 2018)* and parts 1 and 3 of the Independent Regulatory Board for Auditors’ *Code of Professional Conduct for Registered Auditors (Revised November 2018)* (together the IRBA Codes), which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Codes are consistent with the corresponding sections of the International Ethics Standards Board for Accountants’ *Code of Ethics for Professional Accountants* and the International Ethics Standards Board for Accountants’ *International Code of Ethics for Professional Accountants (including International Independence Standards)* respectively.

KPMG applies the International Standard on Quality Control 1, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Independent Assurance Practitioner’s Limited Assurance Report on
Selected Key Performance Indicators *continued*

Practitioner’s Responsibility

Our responsibility is to express a limited assurance conclusion on the selected KPIs based on the procedures we have performed and the evidence we have obtained. We conducted our assurance engagement in accordance with the *International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised))*, and the carbon emission assurance portion of our engagement in accordance with the International Standard on Assurance Engagements 3410, *Assurance Engagements on Greenhouse Gas Statements (ISAE 3410)* issued by the International Auditing and Assurance Standards Board. These Standards requires that we plan and perform our engagement to obtain limited assurance about whether the selected KPIs are free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised) and ISAE 3410 involves assessing the suitability in the circumstances of Sappi’s use of its reporting criteria as the basis of preparation for the selected KPIs, assessing the risks of material misstatement of the selected KPIs whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected KPIs. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, and the

procedures performed in response to the assessed risks. The procedures we performed were based on our professional judgement and included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Interviewed management to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process;
- Inspected documentation to corroborate the statements of management in our interviews;
- Inspected supporting documentation on a sample basis and performed analytical procedures to evaluate the data generation and reporting processes against the reporting criteria;
- Evaluated the reasonableness and appropriateness of significant estimates and judgements made by the directors in the preparation of the selected KPIs; and
- Evaluated whether the selected KPIs presented in the Report are consistent with our overall knowledge and experience of sustainability management and performance at Sappi.

The procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent than for a reasonable assurance engagement. As a result the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether Sappi’s selected KPIs have been prepared, in all material respects, in accordance with the accompanying Sappi’s reporting criteria.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained and subject to the inherent limitations outlined elsewhere in this report, nothing has come to our attention that causes us to believe that the selected KPIs as set out in the Subject Matter paragraph above for the year ended September 2019 are not prepared, in all material respects, in accordance with Sappi’s reporting criteria.

Other Matters

The maintenance and integrity of the Sappi website is the responsibility of Sappi’s management. Our procedures did not involve consideration of these matters and, accordingly, we accept no responsibility for any changes to either the information in the Report or our independent limited assurance report that may have occurred since the initial date of its presentation on the Sappi website.

Restriction of Liability

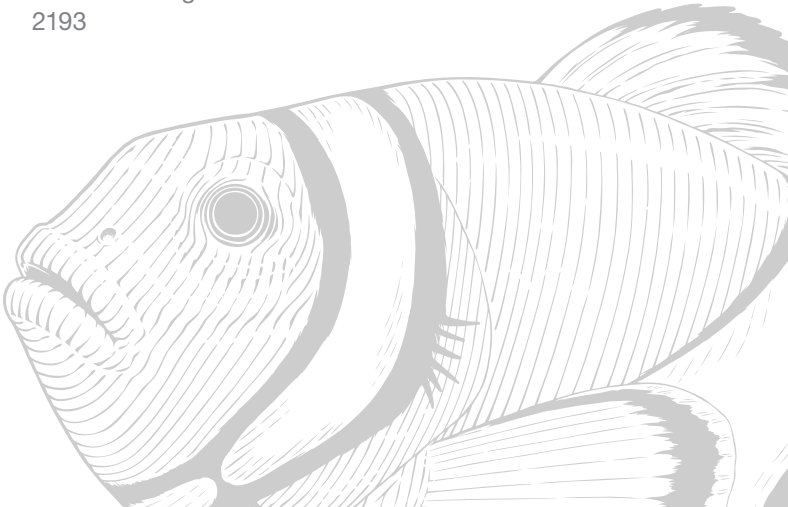
Our work has been undertaken to enable us to express a limited assurance conclusion on the selected KPIs to the Directors of Sappi in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than Sappi, for our work, for this report, or for the conclusion we have reached.

KPMG Services Proprietary Limited

Per PAH Lalla
Chartered Accountant (SA)
Registered Auditor
Director

20 December 2019

KPMG Crescent
85 Empire Road
Parktown
Johannesburg
2193



Leadership messages



Dear Stakeholders

The past year was extremely challenging in light of slowing global growth and market volatility, driven by issues like escalating trade wars and Brexit.

Against this uncertain macro-economic backdrop, in terms of Prosperity, we failed to match our 2018 performance. On the positive side, when measured against our 2014 baseline, return on capital employed (ROCE) showed a slight improvement.

There were also some notable achievements: We completed the upgrade to PM8 at Lanaken Mill and made progress with our expansion project at Saiccor Mill which was 40% complete at year-end. The former will allow us to more closely match our coated woodfree and coated mechanical supply with demand, while the latter will enable us to supply additional volumes to our dissolving wood pulp customers. Our acquisition of the Matane high-yield pulp mill in Canada is an important step in ensuring the security and lower cost of woodfibre supply to our growing packaging and speciality papers business.

Our Biotech division continues to make strides, with phase 2 of our sugar demonstration plant under construction and work ongoing to develop markets for our biocomposites, biomaterials and *Valida* (nanocellulose) products.

However, the area in which the board and I are most concerned is safety. Tragically, there were four fatalities in Sappi Southern Africa (SSA) and while Sappi North America achieved their best ever injury rate, lost-time trends deteriorated in Sappi Europe and SSA.

We do not accept that injuries and accidents are inevitable. We remain committed to Project Zero based on all people at all times making safe choices underpinned by risk assessments, group sharing of all incidents and root cause investigations, enforcement of compliance and leadership engagement.

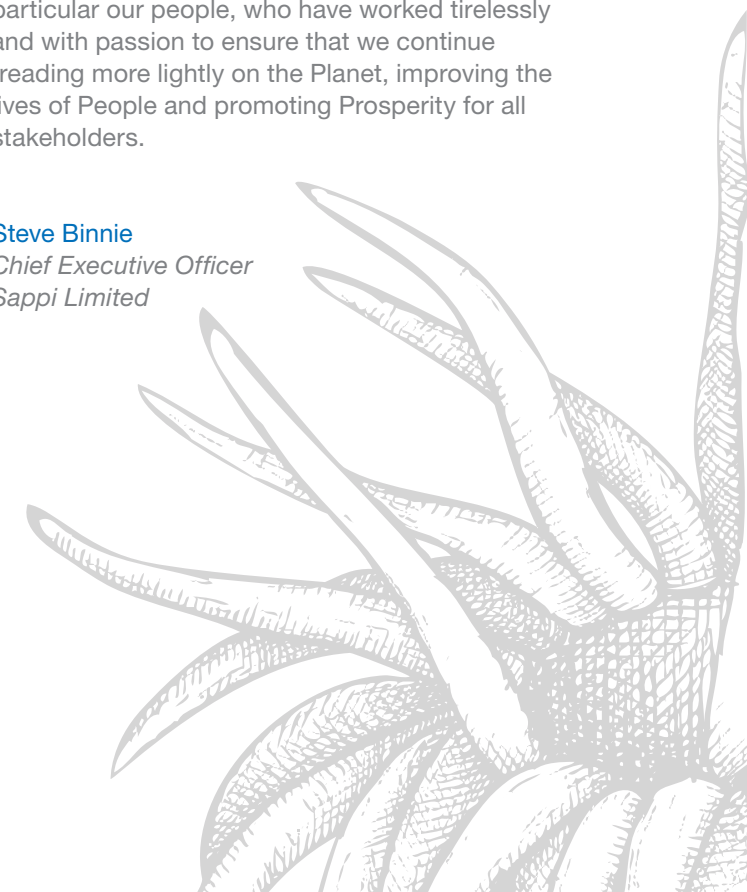
Our safety programmes in each region are aimed at creating an environment where no one will suffer permanent disability or loss of life. Every disability and each life lost are unacceptable. Our drive for zero harm remains unwavering and we will do everything in our power to ensure all our employees return home safely every day.

We spent approximately US\$525 per employee on training and skills development to ensure that our people are well equipped to meet the needs of a rapidly changing world. I was extremely encouraged by the fact that 90% of our people participated in the 2019 employee engagement survey, an increase of 17 percentage points from our 2014 baseline. Our people spoke and we listened: We have compiled plans to address their issues and concerns the group as a whole and for each region specifically.

In the interests of promoting more transparent supply chains, we rolled out our Supplier Code of Conduct across the group and initiated a supplier assessment process. We also established a working group focused on identifying priority Sustainable Development Goals (SDGs) for Sappi and establishing specific actions to embed these more closely into our business. In addition, work on adopting the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) is ongoing.

I thank all our stakeholders for their trust in our ability to deliver on our 2020Vision and strategy, in particular our people, who have worked tirelessly and with passion to ensure that we continue treading more lightly on the Planet, improving the lives of People and promoting Prosperity for all stakeholders.

Steve Binnie
Chief Executive Officer
Sappi Limited



Leadership messages *continued*



Dear Stakeholder

Our theme for this year's report is mutualism, present in every aquatic and terrestrial habitat. Mutualisms are crucial to the reproduction and survival of many plants and animals and to nutrient cycles in ecosystems. In fact, ecologists now believe that almost every species on Earth is involved directly or indirectly in one or more of these interactions.

This theme reflects our belief that, to succeed in the long term, Sappi needs to be inclusive. This means taking the issues and needs of our employees and customers, as well as the communities in which we operate, into account even as we focus on generating returns for our shareholders. It means understanding that we all inhabit the same Earth and that we have a responsibility to mitigate our impact on the natural world.

It means recognising that we need to participate in helping to solve the pressing challenges facing the world today, including supply chain transparency, biodiversity loss, climate change and social inequality.

Exciting new developments during the past year include our work in Europe on the use of blockchain technology for timber supply chain transparency and the US-based Forests in Focus partnership, an innovative new platform to identify risk in forest product supply chains. In South Africa, we made significant progress towards a relevant certification scheme for our small growers, with official endorsement by the Programme for Endorsement of Forest Certification™ (PEFC™) of the new South African Forestry Assurance Scheme (SAFAS).

We continue to invest significantly in our communities, spending US\$4.1 million in 2019 on support activities, as well as establishing training facilities and helping drive local economies by favouring local businesses. Internally we continued to invest in developing our people and promoting innovation across the business.

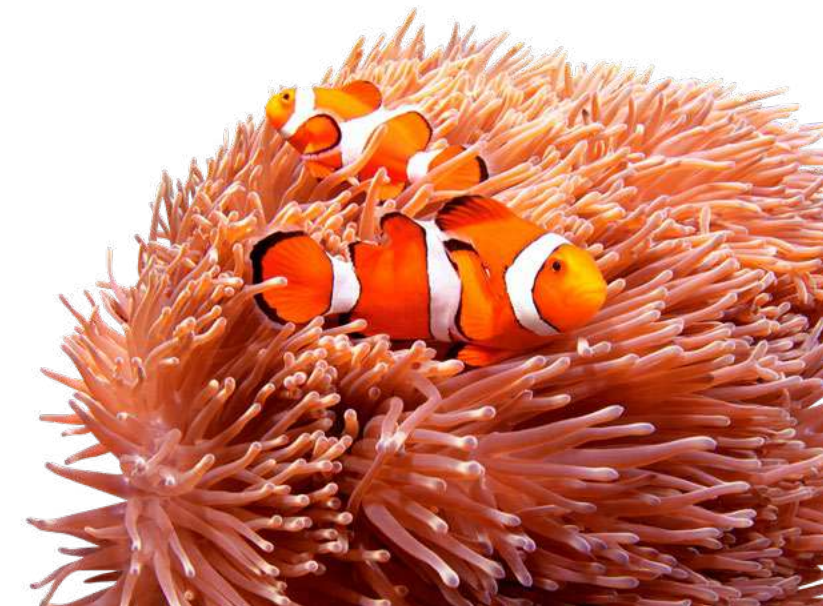
Our aim is to make an effective, relevant contribution and real, demonstrable difference through practical actions while driving business value.

Our 2019 Group Sustainability Report sets out our work to achieve this goal.

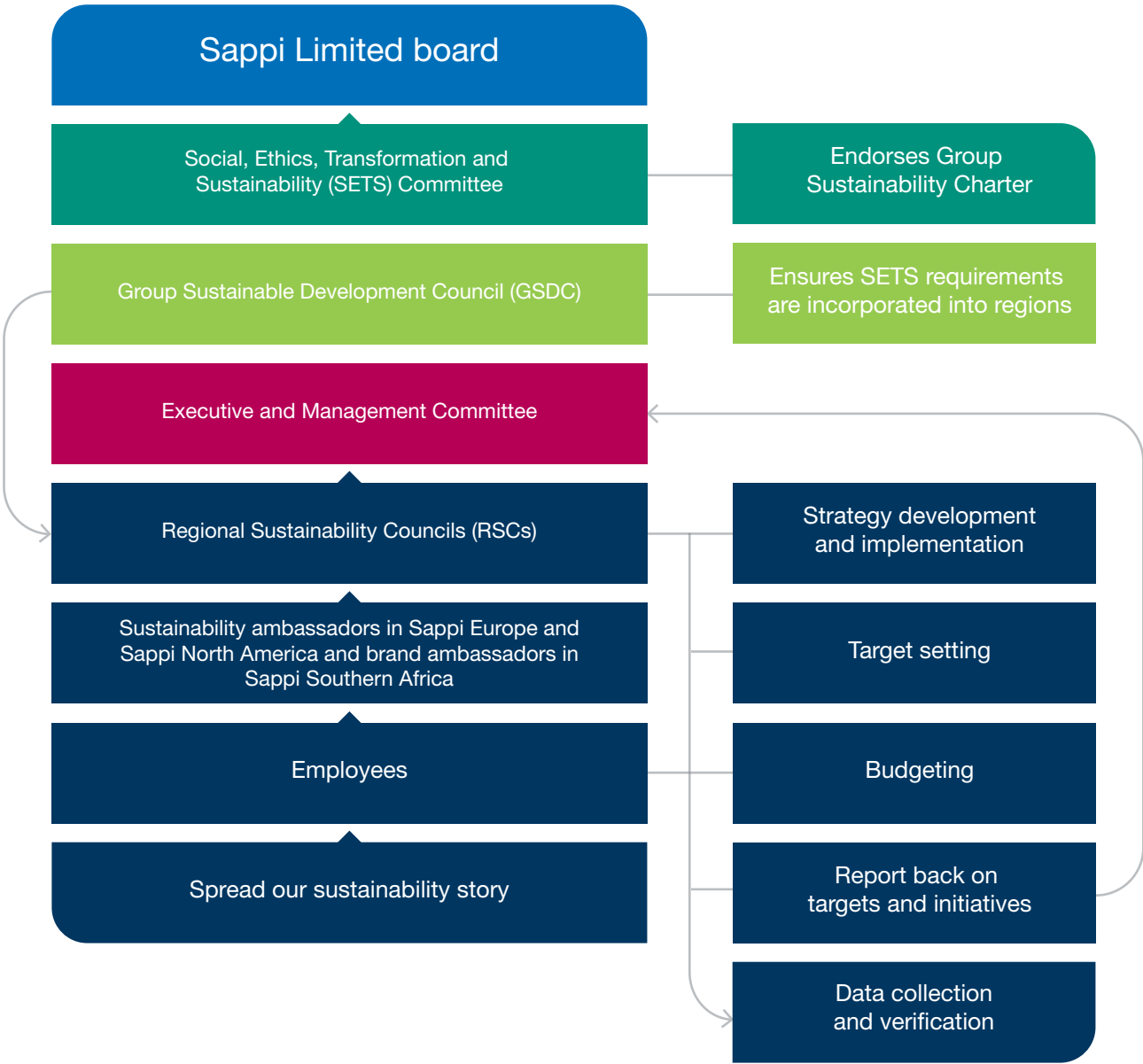
Valli Moosa

Chairman

Social, Ethics, Transformation and Sustainability (SETS) Committee



Sustainability governance



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 (www.sappi.com/sustainability).

This in turn is underpinned by our *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. Our values are underpinned by an unrelenting focus on and commitment to safety.

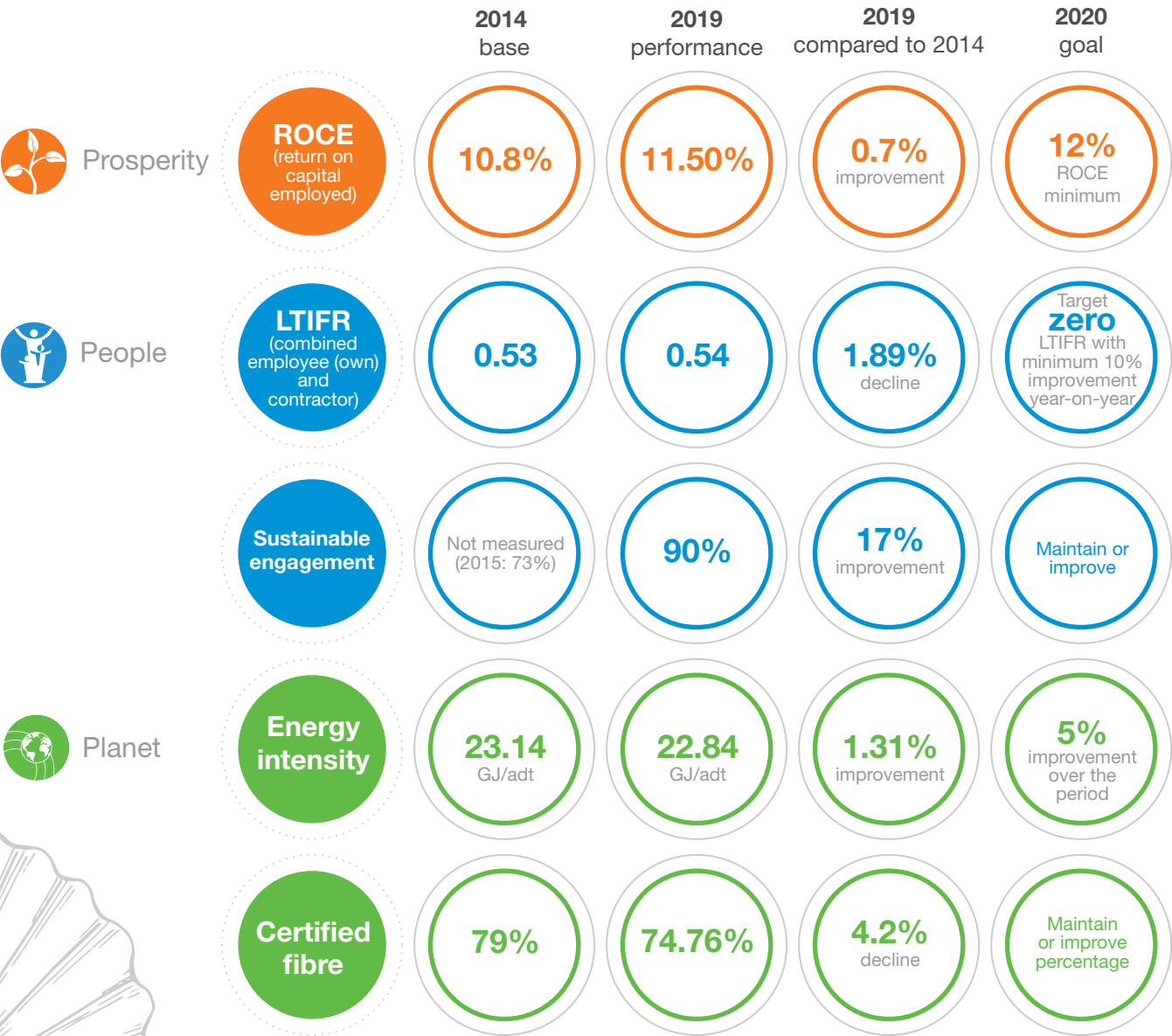
Regional Sustainability Councils (RSCs) operate in Sappi Europe ([SEU](#)), Sappi North America ([SNA](#)) and Sappi Southern Africa ([SSA](#)). Each RSC focuses on key material issues relevant to their specific region and on incorporating sustainability into everyday business processes.

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

Sustainability ambassadors in [SEU](#) and [SNA](#) and brand ambassadors in [SSA](#) help to entrench a holistic approach to the 3Ps of *Prosperity*, *People* and *Planet* throughout the group.



Our performance against our 2020 global sustainability goals



Prosperity

The slight improvement from the 2014 base year in the face of extremely challenging conditions reflects the ongoing successful implementation of our *One Sappi* strategy and *2020Vision*.

People

Safety

Safety performance was highly disappointing, with four fatalities in *SSA*.

Sustainable engagement

The high rate of participation in our employee engagement survey was very satisfactory.

Planet

Energy intensity

Our ongoing efficiency improvement projects continue to reduce energy intensity.

Certified fibre

The amount of certified fibre procured (2018: 75.2%) year-on-year remained relatively stable.

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 global performance in 2019, together with commentary, is set out on this page.

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 regularly to management, the *Regional Sustainability Councils (RSCs)*, the *Global Sustainable Development Council (GSDC)* and ultimately, to the *Social, Ethics, Transformation and Sustainability (SETS) Committee*, a fully constituted board committee.

We will be establishing new 2025 targets in 2020, aligned with the *United Nations' Sustainable Development Goals*.

Our performance against our 2020 regional targets

<div> Prosperity</div> <div>Regional performance contributes to the global Prosperity target.</div>																																
<div> People</div> <table><tr><th>Target</th><th>Performance in 2019 compared to 2014 base year</th><th>Self-assessment of 2019 performance</th></tr><tr><td colspan="3">SEU</td></tr><tr><td>Engaged employees in terms of participation and sustainable engagement.</td><td>Participation by employees: 95% Level of engagement: 82%</td><td>Satisfactory</td></tr><tr><td>Target of 0.52 for employee (own) LTIFR from a baseline of 0.99 in 2014.</td><td>3% reduction</td><td>Unsatisfactory</td></tr><tr><td colspan="3">SNA</td></tr><tr><td>Offer training at average of 60 hours per employee per year with baseline of 74 hours per employee in 2014.</td><td>41.9% increase</td><td>Satisfactory</td></tr><tr><td>Achieve zero workplace injuries from a baseline of 0.56 employee (own) LTIFR in 2014.</td><td>55% reduction</td><td>Satisfactory</td></tr><tr><td colspan="3">SSA</td></tr><tr><td>Achieve level 3 compliance in BBBEE (against new forestry codes) from a baseline of level 4 in 2014.</td><td>Level 2</td><td>Satisfactory</td></tr><tr><td>Combined employee (own) and contractor lost-time injury frequency rate (LTIFR) to be better than best achieved on a continuous 12-month basis and lost-time injury severity rate to be below 0.25 from a baseline of 0.38 in 2014.</td><td>Did not achieve</td><td>Unsatisfactory</td></tr></table>			Target	Performance in 2019 compared to 2014 base year	Self-assessment of 2019 performance	SEU			Engaged employees in terms of participation and sustainable engagement.	Participation by employees: 95% Level of engagement: 82%	Satisfactory	Target of 0.52 for employee (own) LTIFR from a baseline of 0.99 in 2014.	3% reduction	Unsatisfactory	SNA			Offer training at average of 60 hours per employee per year with baseline of 74 hours per employee in 2014.	41.9% increase	Satisfactory	Achieve zero workplace injuries from a baseline of 0.56 employee (own) LTIFR in 2014.	55% reduction	Satisfactory	SSA			Achieve level 3 compliance in BBBEE (against new forestry codes) from a baseline of level 4 in 2014.	Level 2	Satisfactory	Combined employee (own) and contractor lost-time injury frequency rate (LTIFR) to be better than best achieved on a continuous 12-month basis and lost-time injury severity rate to be below 0.25 from a baseline of 0.38 in 2014.	Did not achieve	Unsatisfactory
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SSA																																
Achieve level 3 compliance in BBBEE (against new forestry codes) from a baseline of level 4 in 2014.	Level 2	Satisfactory																														
Combined employee (own) and contractor lost-time injury frequency rate (LTIFR) to be better than best achieved on a continuous 12-month basis and lost-time injury severity rate to be below 0.25 from a baseline of 0.38 in 2014.	Did not achieve	Unsatisfactory																														

Self assessment of 2019 performance

■ Satisfactory performance■ Progress to be made/Ongoing■ Unsatisfactory performance

Planet		
Target	Performance in 2019 compared to 2014 base year	Self-assessment of 2019 performance
SEU		
5% reduction of specific fossil CO ₂ emissions including purchased power emissions (calculated at 400 gCO ₂ /kWh) from 2014 base year.	5.90% increase	Unsatisfactory
Reduce energy intensity (GJ/adt) by 5% from 2014 base year.	2.47% reduction	Progress to be made/Ongoing
Ensure minimum 70% certified fibre delivered to our mills	3.5% increase	Satisfactory
SNA		
Procure 60% certified fibre to meet customer demands for certified products.	12% ¹ decrease	Progress to be made/Ongoing
Reduce energy intensity (GJ/adt) by 5% from 2014 base year.	1.39% increase	Unsatisfactory
Reduce paper mill raw material waste by 5% (lb/adt) from baseline of 42 lb/adt in 2017.	13% increase	Unsatisfactory
Reduce pulp mill raw material waste by 10% (lb/adt) from baseline of 20.7 lb/adt in 2014.	24.6% decrease	Satisfactory
SSA		
10% reduction in GHG emissions (GHGe) CO ₂ e/adt	11.37% reduction	Satisfactory
Achieve 10% reduction in total specific process water use (m ³ /adt) from 2014 base year.	23.08% reduction	Satisfactory
Achieve 10% reduction in specific fossil energy intensity (GJ/adt) from 2014 base year.	9.81% reduction	Satisfactory
Achieve 10% reduction in specific solid waste landfilled (t/adt) from 2014 base year.	14.82% decrease	Satisfactory
100% certification of own timber. 70% certification of Chain of Custody for our manufacturing plants	Own timber percentage maintained, 15.9% increase (manufacturing plants)	Satisfactory

¹ This year the SNA certified fibre value does not include 'Point of Harvest' (PoH) as it has previously. The PoH) certified fibre refers to wood fibre that is harvested from lands not otherwise certified by one of the forest management standards, but that is harvested by logging professionals who are trained and certified in practices designed to conserve forestland.

Our accolades in 2019



Sappi group

In 2019, Sappi was selected for an Avery Dennison Supplier Distinction Award for the second consecutive year.

- In the International Content Marketing Awards 2019, **SEU** and John Brown Media were honoured with gold for the **Best Use of Print with Reach Out and Touch publication**.*
- Sappi won second place at the **#druckerdesjahres** (Printer of the Year) event in the category Hersteller (= producer/manufacturer) for the digital solution Octoboot.*



SEU



SNA

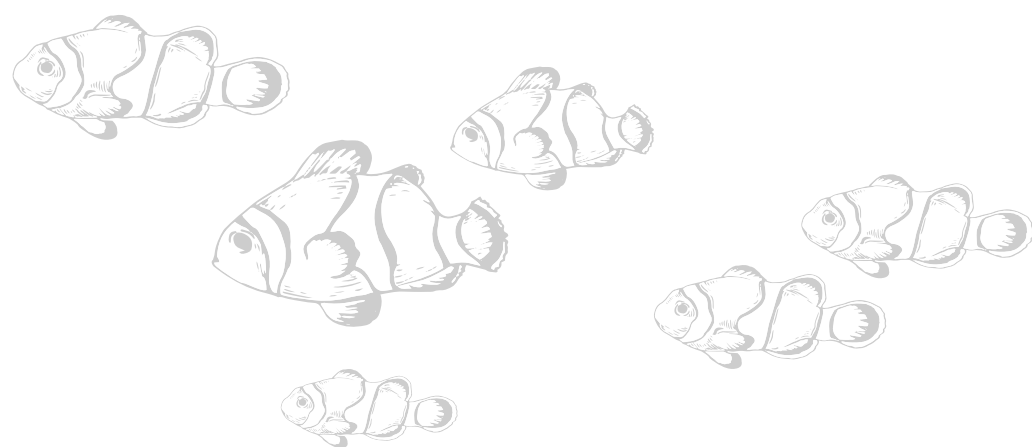
- Sappi North America received the **Minnesota dual training grant from the Office of Higher Education and Department of Labor and Industry** for the amount of US\$100,000. The grant allows Sappi to strengthen the local workforce by providing advanced technical trainings to employees while improving functions and safety at its Cloquet Mill.
- **SNA's** private forestry programme participated in a collaborative, multi-stakeholder project with Warren Tester, **Carlton County's 2019 Outstanding Conservationist**, to develop, manage and harvest 50+ acres of strategic forestland in Minnesota. Tester is also a finalist for the state-wide MASWCD Outstanding Conservationist Award.
- Sappi ETC's Print & Creative Manager was named **Person of the Year by the Graphic Arts Association (GAA)** where he was recognised for his contributions and being a key evangelist for the power of paper and print.



SSA

- Awarded **Shoprite Supplier of the Year** title in the general merchandise division which includes sustainability.
- Finalist in the **2019 Makro Most Sustainable Supplier of the Year award** and received a special recommendation for being nominated every year since inception.
- We were recognised for our contribution in promoting export competitiveness, by winning the **2019 KZN Exporter of the Year awards** convened by the Durban Chamber of Commerce. We were also announced as a finalist in the Africa and the Manufacturers categories.
- The Sappi Trails Programme earned an **IABC Golden Quill Award of Excellence** for communication in community relations.
- Our Sappi Refibre division was runner-up in three categories in the **Absa Business Day Supplier Development Awards – Nation Builder, Impact and Overall Winner**.*
- The African Honey Bee project was honoured with **Community Chest Impumelelo Social Innovation Award** in the community development category, winning the innovation income generation section.*

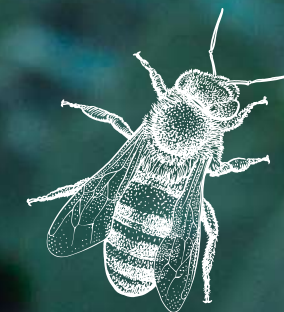
* Shortly after year-end



Support

Honeybees and flowers

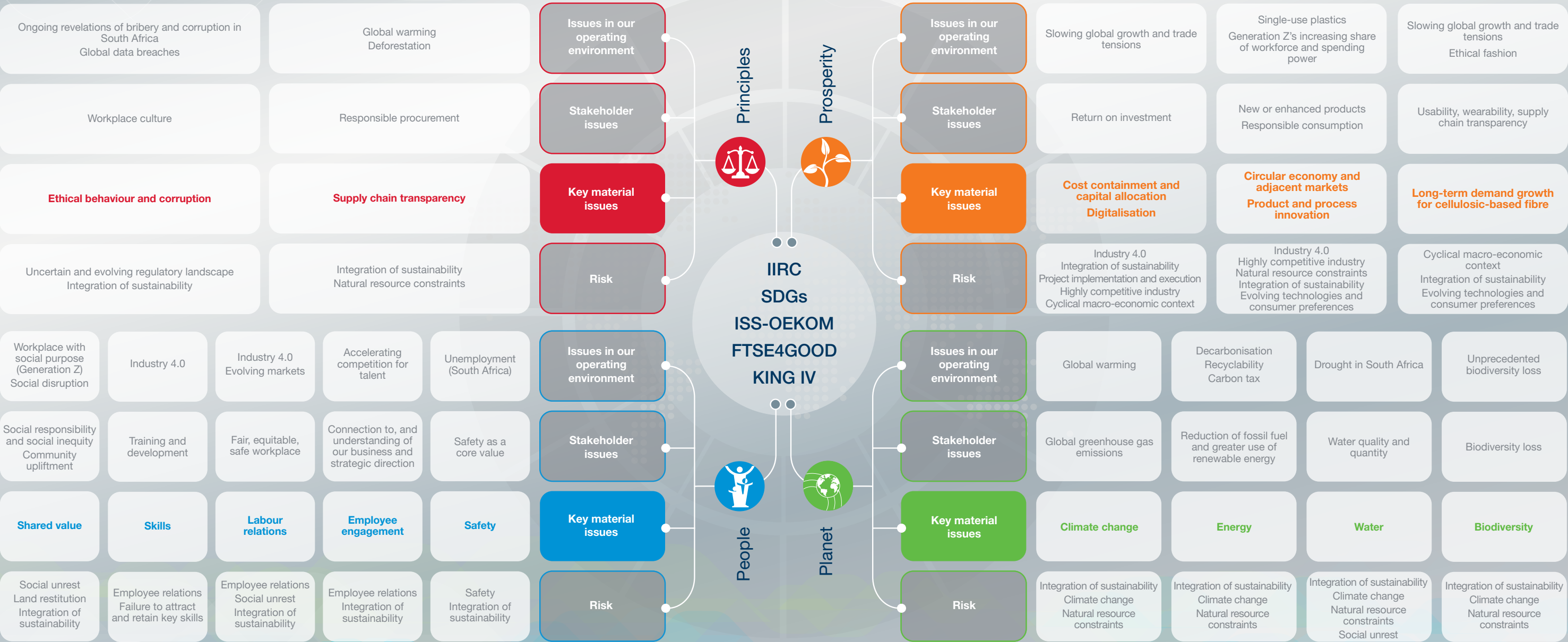
Bees and most flowering plants have developed a complex interdependence over millions of years. Bees have to find their food, which can be nectar or pollen, in flowers. Nectar is produced to attract bees. Pollen also attracts bees, but it has another function too: It is produced to ensure the next generation of plants. Each bee hair has a branched structure that makes it highly effective at catching pollen when they brush against the anthers of the flower. By moving from flower to flower, they assist in pollination.



2019



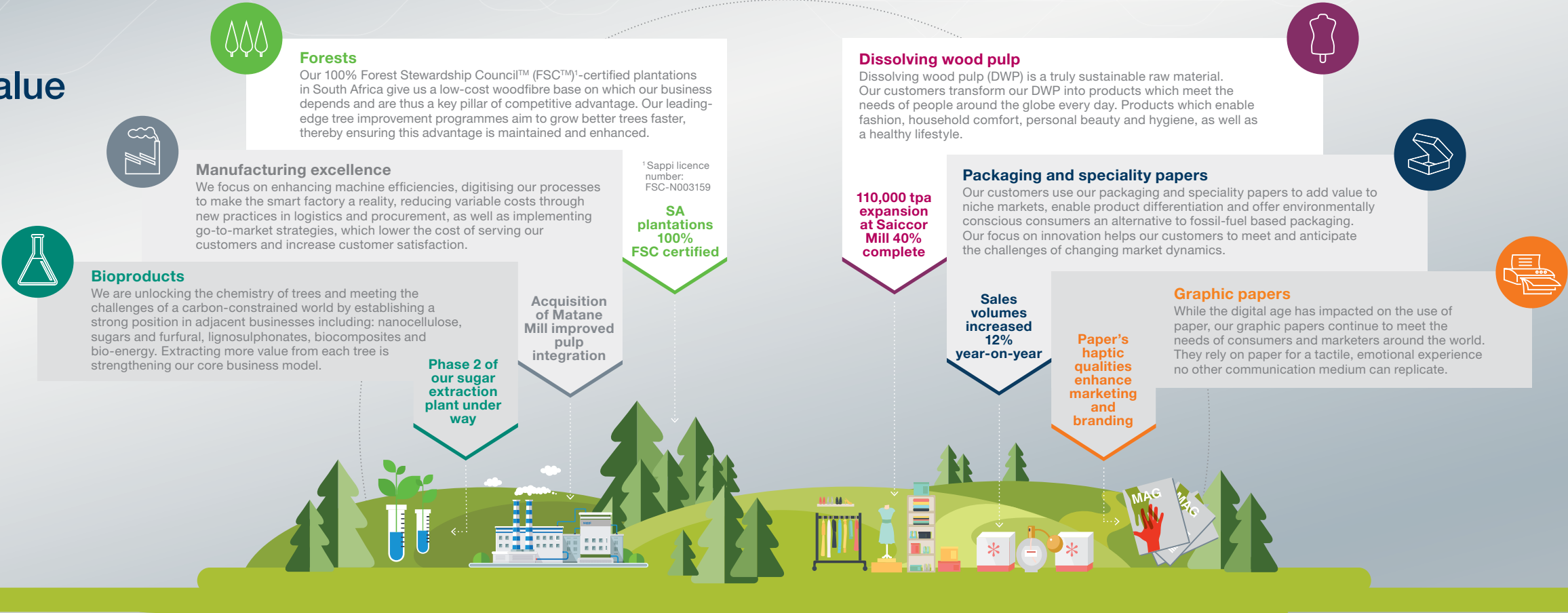
The links between our operating context, risk, key relationships and key material issues





How we create value

We take an integrated approach to value creation. Guided by our values, our **six value streams** enable the delivery of our mission.



Our mission

All our activities aim to realise our mission:

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

1

Our values

- Act with integrity**
We strive to consistently deliver goods and services of the highest standards; doing the right thing the right way.
- Be courageous**
We take full responsibility for all our decisions and actions; operating with conviction and without hesitation.
- Make smart decisions**
We strive to be easy to do business with and have a ‘can-do’ attitude, always looking for the better, faster route to create value for all.
- Execute with speed**
If something is worth doing it is worth doing quickly, right the first time and never cutting corners.

2

Our inputs

Our integrated approach to sustainable development acknowledges that we depend on Prosperity, People and the Planet to thrive. We rely on certain inputs to create value.

3

Our value streams

The value streams set out above indicate the manner in which we create value and serve our customers, meeting their needs today, tomorrow and well into the future.

4

Our strategy

Our ability to deliver sustained value depends on the successful execution of our strategy.

5

Our outcomes

While we acknowledge that our business activities have both positive and negative outcomes, we strive to maximise the positive consequences of our value streams in terms of Prosperity, People and Planet.

6

Our key relationships

Ongoing engagement with our stakeholders conducted in a spirit of trust and mutual respect enables more tangible business value creation.

7

Our global sustainability goals

Monitoring and reporting transparently on our ambitious Prosperity, People and Planet targets aligns with our 2020Vision and One Sappi strategic approach.



Understanding our business model

In an increasingly interdependent society, the way we operate must reflect the connected nature of Prosperity, People and Planet.

There is a growing recognition of the necessity for a more circular global economy, as we move away from a ‘take, make, dispose’ model of production to a more regenerative economic system aimed at minimising waste and making the most of scarce resources.

At its heart, our business model is circular and interconnected. And we continue to find ways to maximise the circular nature of our activities.

Value for Sappi is not only about delivering returns to our shareholders, it is about maximising the value of every resource along our value chain to ensure those returns are sustainable.

We are also committed to positively impacting the communities we rely on and support the principles of the UNGC and the UN SDGs, which are focused on reshaping the world around us to create a more sustainable one.



While we have laid out our value creation process in two dimensions, we understand that the overarching reality is circular.



1

Inputs

The resources and relationships we rely on

PROSPERITY



Financial, intellectual and manufactured capitals

PEOPLE



Human and social and relationship capitals

PLANET



Natural capital

- 18 production facilities:
 - Eight paper mills
 - Four speciality paper mills and one other operation
 - One paper and speciality paper mill
 - Two dissolving wood pulp and paper mills
 - One dissolving wood pulp mill, and
 - One sawmill

- Biomass plant under construction
- Fuel rod demonstration plant
- Nanocellulose demonstration plant
- Sugar demonstration plant – now in its second phase
- Acquisition of Matane Mill in Canada

- Total assets: US\$5.6 billion
- EBITDA: US\$687 million, a decline of 10% year-on-year
- Cash and cash equivalents: US\$393 million
- R&D spend: US\$42 million

- 12,821 employees
- US\$525 average training spend per employee
- Ongoing stakeholder engagement
- US\$4.1 million invested in corporate social responsibility

- Access to 529,000 ha plantations, of which approximately:
 - 255,000 ha are owned or leased, and
 - 139,000 ha are contracted supply
 - 135,000 ha is set aside and maintained by Sappi Forests to conserve the natural habitat and biodiversity found there.

- 2,621 MW energy purchased
- 2,011 MW energy generated on site
- Energy intensity: 22.84 GJ/adt
- 289 million litres of water extracted for all purposes
- 34.17 m³/adt specific process water extracted

2

Outputs

What we produce

- 7.6 million tons of saleable production
- Profit down by 15%
- Net debt down by 4%
- New products to meet changing customer expectations and market trends

- Productivity: 4.00 hours worked/adt saleable production (2018: 3.63 hours)
- Internal global awards (Technical Innovation Awards and CEO Award for Excellence), together with regional awards, drive excellence and innovation

- Waste: 1.5 million tons of waste, of which 377,422 tons sent to landfill
- Emissions: 4.4 million tCO₂e absolute direct (Scope 1) GHG

PEOPLE



US\$525 average training spend per employee



High levels of wood certification = competitive advantage

PROSPERITY



Matane Mill acquisition = high yield pulp at lower costs

- ✓ Our investors received US\$92 million in dividends
- ✓ Our high levels of innovation give our customers a competitive edge in global markets – we collaborated closely with specialist packaging converter and a global FMCG company to support the launch of a new confectionery snack bar wrapped in recycled paper

- ✗ Four fatalities
- ✓ We play an active role in South Africa's transformation agenda and are classified as a Level 2 BBBEE contributor
- ✓ In South Africa our operations provide employment for approximately 9,250 contractor employees

4

Actions to enhance outcomes

The impacts of our operations



- Tight management of working capital and postponement of discretionary capital expenditure to mitigate the impact of uncertain market conditions
- Investment in R&D to ensure cutting-edge solutions for customers
- Ongoing diversification of our product portfolio into higher margin segments



- Continued investment in embedding a safety culture across the group
- Focus on entrenching transformation in our South African operations to support inclusive growth
- Investment in training and development of our employees
- Strong governance; Code of Ethics training
- Group Supplier Code of Conduct rolled out to suppliers and review process initiated



- Increased energy self-sufficiency by 5.4% over five years due to focus on reducing purchased energy
- Participated in initiatives to enable certification for small growers
- Adjusted our tree breeding strategy to mitigate the impacts of climate change
- Participated in industry consortium to test blockchain technology
- Together with other forestry companies, initiated a detailed climate change mapping project with the Global Change Institute (GCI) at the University of the Witwatersrand

- ✓ Globally, we contributed US\$131 million to government taxation
- ✓ We paid US\$989 million to employees as salaries, wages and other benefits
- ✓ Lenders of capital received US\$95 million as interest
- ✓ We invested US\$438 million to grow the business
- ✗ Downtime at certain mills

- ✓ Our specialised sustainable packaging solutions: preserve and protect, convey information and offer convenience
- ✓ Acquisition of Matane Mill – opens up opportunities as part of a global organisation

- ✓ One-third of owned and leased plantations set aside for biodiversity conservation
- ✗ Negative impact on plantation biodiversity at stand level (not plantation level)
- ✓ DWP used for clothing and household textiles, baby wipes and wet wipes – reducing environmental impact
- ✓ Lighter-weight packaging products – reduction of carbon footprint
- ✓ Expanded packaging portfolio offers customers and consumers more sustainable alternatives to fossil-fuel based packaging (plastics)
- ✓ Ecosystem services benefit various stakeholders

3

Outcomes

The impacts of our operations

- Positive ✓
- Negative ✗
- Neutral –
- Earth kind ♻️

- 52.9% renewable energy, of which 66.4% own black liquor
- ✓ Training of smallholders to educate them on more sustainable forestry practices
- 95% of water drawn returned to the environment
- Impact on GHG emissions offset by carbon sequestration
- ✓ 74.8% of fibre used certified
- ✓ World-leading tree improvement programmes have led to shorter growth times and enhanced fibre gain





Our operating context

Our external operating environment presents risks and opportunities, impacts our ability to generate value and informs our response to stakeholders and approach to material matters. Below we set out key developments in our operating context in 2019 and our response.



Slowing global growth and trade tensions

Developments

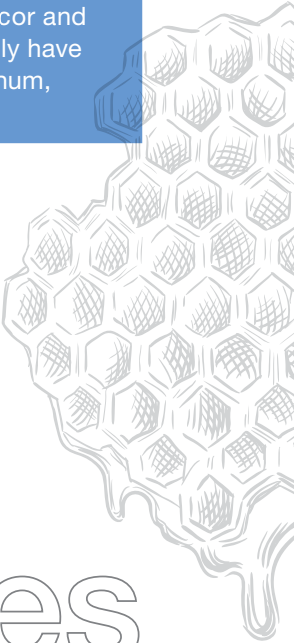
The global economy in 2019 is on course for its **weakest year of growth** since the financial crisis. The International Monetary Fund is expecting global growth to slow to 3% this year, from 3.2% in July 2019.

Slow global growth has been exacerbated by ongoing **trade wars** between the USA on the one side and Europe and China on the other, which have impacted the global economy.

Our response

- In South Africa, shortly after year-end, we announced our intention to make investments totalling up to ZAR14 billion over the next six years in our South African operations.
- We took commercial downtime at certain mills in 2019 and began a review of our assets in Europe and North America.
- We have dissolving wood pulp (DWP) sites in the USA and South Africa. Asia is the biggest market for our DWP and one of our major customers has a production site in China. However, we can supply this customer and others in the same country from our Saiccor and Ngodwana Mills in South Africa which currently have capacity of 800,000 and 250,000 tons per annum, respective capacity.

Key material issues





Our operating context *continued*

Regulatory and environmental issues

Developments	Our response
In Belgium, Germany, Latvia, Poland and the United Kingdom, to promote recyclability , there are fees for manufacturers that place packaging in the market. More countries are looking at introducing similar fees.	<ul style="list-style-type: none">SEU has formed an internal recyclability task force with representatives across R&D, new business development, sustainability, and innovation and marketing.SNA initiated similar work focused on increasing packaging recyclability.
The European Union’s climate and energy framework promotes decarbonisation by setting 2030 targets for greenhouse gas emissions to decline by at least 40% below 1990 levels, renewables to deliver 32% of our energy and energy efficiency to improve by 32.5%.	<ul style="list-style-type: none">SEU is leading the process of developing decarbonisation plans for each mill in Europe, while SNA and SSA are focusing on mills in their regions.
In South Africa, carbon tax was introduced on 01 June 2019. Our liability from implementation to the end of September is estimated at ZAR20 million (or ZAR60 million/annum).	<ul style="list-style-type: none">Together with other industry members, we are working with consultants appointed by the Department of Environmental Affairs on rules for recognition of carbon in harvested wood products.
Parts of South Africa are still suffering from the effects of a devastating drought .	<ul style="list-style-type: none">We achieved our specific water use target in South Africa and have funded the rehabilitation of water infrastructure in villages close to our areas of operation.

The rise of populism, social disruption and Generation Z

Developments	Our response
<p>Globally, we have witnessed mass protests about climate change in the form of the Extinction Rebellion and #FridaysForFuture. In South Africa, there have been marches to protest gender-based violence which has now come under the national spotlight.</p> <p>Close to many of our operations in South Africa, there have been protests and incidents of violence, the result of a disaffected population protesting about lack of service delivery and job opportunities – the official unemployment rate is 29%, with the unofficial rate significantly higher and youth being most affected.</p>	<ul style="list-style-type: none">The Sustainability Council is reviewing how to integrate the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) into our climate change response. A target for gender equity will form part of our 2025 sustainability goals. We continue to raise awareness about gender-based violence across the organisation through our employee wellbeing programme.The recently announced ZAR14 billion investment programme (described earlier) will help to create direct and indirect jobs. In addition, we continue to promote participation in the forestry value chain through our Sappi Khulisa enterprise development programme which encompasses community tree farming. The total area managed is currently 34,139 hectares. In 2019, under this programme, 425,001 tons of timber (2018: 483,359 tons) worth approximately ZAR382 million (2018: ZAR387 million) was delivered to our operations. Since 1995, a total volume of 4,221,941 tons to the value of ZAR4.2 billion has been purchased from small growers in terms of this programme.We have intensified our enterprise and supplier development (ESD) drive by establishing a separate ESD department which identifies procurement opportunities and oversees mentoring programmes and capability training. A total of 129 small, medium and micro enterprises (SMMEs) have been assessed and trained by our partners and 28 SMMEs integrated into the value chain across the business.We have established skills centres at Ngodwana and Saiccor Mills which provide training for our own employees and target unemployed youth with the overarching aim of stimulating SMME growth.





Our operating context *continued*

The rise of populism, social disruption and Generation Z *continued*

Developments

According to Bloomberg, **Generation Z** accounts for 32% of the global population in 2019. This generation wants companies to have a positive purpose that improves the world in some way. They're also more digitally connected than any previous generation.

Our response

- The fact that our business is based on woodfibre, a renewable resource from sustainably managed forests and plantations which help mitigate the impacts of global warming, is widely communicated across social media. So too is our shared-value approach to doing business. Increasingly, we are offering our employee learning in digital format.

Increasing consumer and brand owner concerns about sustainability-related issues

Developments

According to the United Nations Environment Programme (UNEP), every year an estimated **8 million tons of plastic** land up in oceans and 60-90% of the litter that accumulates on shorelines, the surface and the seafloor is made up of plastic. The most common items are cigarette butts, bags, and food and beverage containers.

Concerns about the impact of fast fashion on natural resources, and on deforestation in particular, are driving a move to **ethical fashion**.

Our response

- We are taking advantage of anti-plastic sentiment by increasing capacity in packaging papers, particularly of recyclable packaging. (See page 24 for details of our collaborative work to support the launch of a new confectionery snack bar wrapped in recyclable paper.)
- SNA solicits direct brand owner feedback through the Sustainability Customer Council, strengthening positioning against plastic end use.
- Forest certification systems with third-party verified forest management and chain-of-custody processes ensure that responsible forest management practices are implemented in the forest and woodfibre from certified forests can be identified throughout the supply chain. Globally, in 2019, 74.8% of fibre supplied to our mills was certified.

Increasing consumer and brand owner concerns about sustainability-related issues *continued*

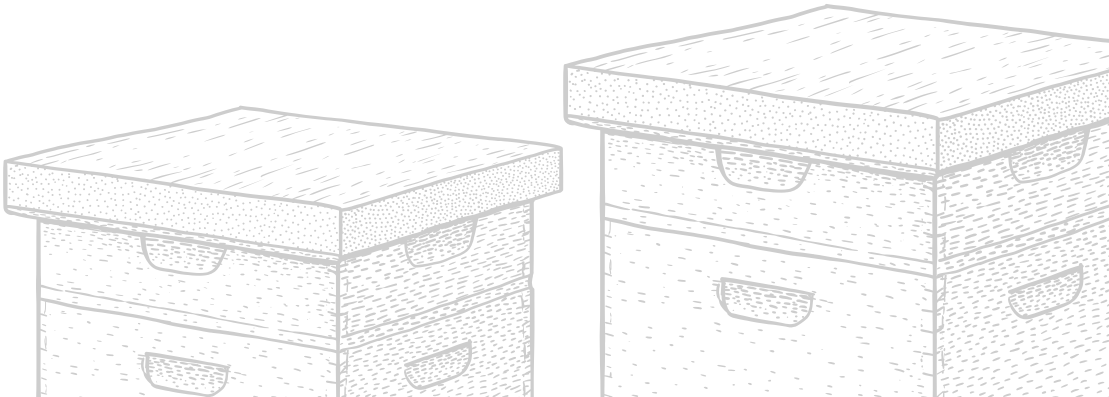
Developments

In terms of global warming, scientists officially pronounced July 2019 the warmest month the world has experienced since record-keeping began more than a century ago. Alaska's sea ice melted for the first time in recorded history. **Climate change** activism around the world accelerated, with teenager Greta Thunberg generating global attention.

Biodiversity loss is unprecedented: The Intergovernmental Science- Policy Platform on Biodiversity and Ecosystem Services (IPBES), the first intergovernmental report of its kind, finds that around one million animal and plant species are now threatened with extinction, many within decades, more than ever before in human history.

Our response

- Trees and forests play an integral role in the global carbon cycle. By sequestering carbon dioxide from the atmosphere and storing it in forest biomass and soils, forests store vast amounts of carbon and release oxygen back into the atmosphere. Harvesting managed semi-natural forests in a sustainable manner, in accordance with internationally recognised forest certification systems as Sappi does, promotes growth and carbon uptake. So too does balancing harvesting with continual replanting and regrowth, as in our plantations in South Africa.
- SNA highlights its superior carbon footprint compared to other key players in graphics and packaging segments through the EQ tool on our e-commerce platform.
- It is in our own interests to promote biodiversity in the forests and plantations from which we source woodfibre, discussed in Key material issues on page 33. SNA has invested in Forests in Focus, a platform using United States Department of Agriculture (USDA) forest inventory data to assess and promote forest health, including biodiversity.





Our key material issues

The issues on the following pages are those we believe underpin our strategic risks and opportunities and have the highest potential impact – positive and negative – on stakeholder value.

How we determine materiality

STEP 1:
Identifying regulatory and reporting issues

We take various stakeholder guidelines into account, including those set out in the Sustainable Development Goals, GRI, the International Integrated Reporting Council and King IV; as well as ratings agencies such as ISS-oekom and the FTSE4Good Index Series

STEP 2:
Mapping stakeholder issues and local and global trends

Regulatory and reporting guidelines are mapped against stakeholder issues, as well as trends and developments in the external operating environment







STEP 3:
Prioritising issues through the lens of materiality

How relevant is each issue to our business?
How does each issue impact our ability to create value in the short-, medium- and long-term?

STEP 4:
Reviewing issues

We regularly review our key material issues and their alignment with our strategy of intentional evolution

Principles

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Supply chain transparency	Visibility into the supply chain helps identify risks and issues early and addresses consumer concerns about issues like deforestation	<ul style="list-style-type: none">• Rolled out our Supplier Code of Conduct across the group and began the review process by assessing raw material suppliers in countries that have a score of 50 or lower in the global Corruption Perceptions Index.• Participated in Trado, a consortium including the Cambridge Institute for Sustainability Leadership that is testing blockchain technologies. The project is trialling the concept by using a shared data system for tea farmers in Malawi that supply Unilever and UK-based supermarket Sainsbury's.	<div> Risk</div> <div>#5 Natural resource constraints</div> <div>Integration of sustainability</div>	Operating context – Increasing consumer and brand owner concerns about sustainability-related issues 
Ethical behaviour and corruption	Creating clear boundaries and a consistent framework across geographies for ethical behaviour provide a foundation for unlocking growth opportunities as One Sappi	Global training on ethics targeted relevant new employees across the group, while regional training covered topics relevant to each region including general data protection regulations (GDPR) in Europe, insider trading in North America and the Protection of Personal Information (POPI) Act in South Africa.	<div> Risk</div> <div>#7 Uncertain and evolving regulatory landscape</div> <div>Integration of sustainability</div>	Operating context – Increasing consumer and brand owner concerns about sustainability-related issues   





(Emerging risks are highlighted in green)

¹ Key risks from 1-10 and emerging risks are detailed on [pages 35-41](#) of the 2019 annual integrated report



Our key material issues – Prosperity





Prosperity

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Cost containment and capital allocation	Ongoing investment and cost containment are strategic pillars of competitive advantage	<ul style="list-style-type: none">Acquired Matane Mill in Quebec, Canada, with capacity of 270,000 tpa of aspen and maple high-yield pulp to deliver the following benefits:<ul style="list-style-type: none">Increased levels of pulp integration by supplying pulp to our US and European packaging operationsSecure supply of a raw material critical to product qualityReduced input pricing and volatility in profitabilityAvoid higher capital cost of internal high-yield pulp capacity.Completed a rebuild of PM8 at Lanaken Mill in Belgium. The PM can now produce coated woodfree paper in addition to lightweight coated paper, enhancing our ability to meet market demand.Took downtime at certain mills and began an asset review in Europe and North America, in line with reduced demand in key markets.	<div> Risk</div> <div>#2 Cyclical macro-economic context</div> <div>#4 Highly competitive industry</div> <div>#6 Project implementation</div>	<div> Achieve cost advantages</div> <div> Maintain a healthy balance sheet</div> <div></div>





Our key material issues – Prosperity *continued*

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Product and process innovation	We view innovation not as an end in itself, but as an integral aspect of our business that provides sustainable, competitive advantages which make a significant difference	<ul style="list-style-type: none">• Piloted a new generation manufacturing execution system to leverage data analytics; make our processes more efficient and productive; and enable tracking of information on quality, raw materials and environmental aspects.• Continued to promote internal innovation through the Technical Innovation Awards. In 2019, Sappi Europe was named the 2018 winner for designing a completely new ‘three layers in one headbox’ for paperboard packaging that combines good printability with high bulk and good creasability. This step-change technology was successfully applied to the rebuild of PM6, making Maastricht Mill the only producer world-wide to use this novel concept for its packaging product range.• Collaborated closely with a specialist packaging converter and a global fast-moving consumer goods (FMCG) company to develop breakthrough proprietary barrier technology and support the launch of a new confectionery snack bar wrapped in recyclable paper (see box opposite).• Invested US\$42 million in R&D initiatives.	<div> Risk</div> <div>#3 Evolving technologies and consumer preferences</div> <div>Industry 4.0</div> <div>Integration of sustainability</div>	<div>Achieve cost advantages</div> <div>Operating context</div> <div>Increasing consumer and brand owner concerns about sustainability-related issues</div> <div></div>

CASE STUDY

An innovative solution for the circular economy






Packaging for the food industry that meets stringent health and safety standards and is also recyclable is a long-standing challenge. Sappi has been working with leading consumer brand owners to develop and supply renewable paper-based packaging solutions by understanding and supporting the goals of making their packaging recyclable without compromising on food protection and shelf life.

One example of this is the new Sappi Guard range of products. These innovative papers for flexible packaging come with integrated barriers against oxygen, water vapour, grease, aroma and mineral oil. Thanks to the integrated barriers, there is no need to apply special coatings or laminations. The work was enabled by Sappi’s 2017 acquisition of barrier film technology company Rockwell Solutions.

Sappi used this technology when it worked with a global FMCG company and a specialist flexible packaging converter to develop the wrapper for a new confectionery snack bar. The launch of the new snack bar highlights the benefits of collaboration across the value chain in a focused effort to increase the use of recyclable packaging made from renewable woodfibre.






Our key material issues – Prosperity *continued*





Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Circular economy and adjacent markets	Producing more with less has become a global focus in light of a burgeoning global population and subsequent pressure on resources. In keeping with the approach outlined above, our aim is to extract more value from each tree and, in doing so, move into adjacent markets to strengthen our core business model.	<ul style="list-style-type: none">In August 2019, we commissioned the pre-hydrolysis liquor (PHL) evaporator at Ngodwana Mill, moving into the second phase of our sugar extraction project. This is to demonstrate industrial-scale operability of the technology to concentrate hemicellulose sugar streams, extracted from the wood, to levels required for downstream technologies. The work enables derisking full-scale implementation of the sugar concentration technology which opens up new revenue generation opportunities in the xylitol and furan chemistry value chains.We progressed the design of a furfural pilot plant to be established at Saiccor Mill. The plant will illustrate the technology, produce commercial samples and provide greater clarity on process economics. We anticipate beneficial operation in 2021.Construction of the 25 MW Ngodwana Energy biomass power plant at Ngodwana Mill, in which we have a 30% stake, began in July. The plant will use biomass from surrounding plantations to generate power that will feed into the national grid.	<div> Risk</div> <div>#3 Evolving technologies and consumer preferences</div> <div>#4 Highly competitive industry</div> <div>#5 Natural resource constraints</div>	<div> Accelerate growth in higher margin products</div> <div>Operating context – Increasing consumer and brand owner concerns about sustainability-related issues</div> <div></div>

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Circular economy and adjacent markets <i>continued</i>		<ul style="list-style-type: none">We are building on our well-established position in lignin markets to expand into high-value markets, including substitution for phenol which is widely used in household products and as intermediates for industrial synthesis; as well as replacement for petrochemicals in foams. We are also diversifying into lignin as a replacement for starch in the manufacture of recycled paper, as a fuel pellet binder and in animal health and nutrition.We began testing fuel rods in one of the boilers at Tugela Mill. The rods, manufactured at Ngodwana Mill, comprise a mixture of waste coal slurry (from discarded thermal-grade coal fines), biomass and lignosulphonates. If positive results are achieved, the demonstration facility at the latter mill will be upgraded.We are advancing our <i>Valida</i> fibrillated cellulose technology and continue to conduct third-party development work with prominent global brand owners and technology institutions to develop a variety of applications where <i>Valida</i>'s functionality can enhance everyday products responsibly and sustainably. The product is also being used to develop new advanced paper grades with greater strength and unique barriers.		



Our key material issues – Prosperity *continued*

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Circular economy and adjacent markets <i>continued</i>		<ul style="list-style-type: none"> In terms of biocomposites, we continue to develop markets for Sappi Symbio which brings the haptics of nature and reduced environmental footprint to plastic composite materials. Sappi Symbio is a specially prepared and easy-to-use cellulose fibre ready to be easily dispersed into plastic compounds. Symbio compounds can be injection moulded and blow moulded into components for various sectors, including automotive, furniture, utensils, appliances and consumer electronics. Weight reduction, warm touch and high stiffness are just some of the product's many benefits. 		
Digitalisation	Digital solutions offer a new platform for innovation and efficiency as well as enhanced connection with customers and employees	<ul style="list-style-type: none"> Launched digital group-wide learning initiatives In Sappi Europe: <ul style="list-style-type: none"> Appointed a head of digital transformation Launched Octoboost, an internal technology start-up whose core mission is to develop innovative digital solutions for the print industry Signed a global strategic alliance with PerfectPattern to roll out AI-driven dynamic print planning and ganging technology to print businesses world-wide. 	 Risk Industry 4.0 Integration of sustainability	 Achieve cost advantages Operating context – Generation Z 

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Long-term demand growth for cellulosic-based fibres	Increasing our capacity in the dissolving wood pulp (DWP) market aligns with our strategy of refocusing operations away from graphics paper to the higher-margin DWP sector, together with specialised packaging products and the biotech sectors	<ul style="list-style-type: none"> Completed a US\$25 million capital investment at Cloquet Mill to debottleneck areas of the pulp manufacturing process and add 30,000 tpa of DWP production capacity. The expansion of Saiccor Mill to add 110,000 tpa tons of DWP capacity was approximately 40% complete at year-end and is on track for completion in the last quarter of 2020. The uncertainty in textile markets as a result of US/China trade tensions – China is the world's largest exporter of apparel to the US – and an oversupplied viscose staple fibre market are challenges for value creation in the short term, but we believe the fundamentals of the DWP market are sound. Accordingly, we expect sales volumes to stay healthy and anticipate that our expanded DWP production will be fully used to meet customer demand. We continue to engage with customers to develop products and solutions for the market. 	 Risk #3 Evolving technologies and consumer preferences Integration of sustainability Cyclical macro-economics	 Accelerate growth in higher margin products Operating context – Increasing consumer and brand owner concerns about sustainability-related issues  



Our key material issues – People





People



Issues discussed here are covered in greater detail in the [People section](#) of our from page 57

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Safety	<p>Unsafe practices and conditions can have devastating consequences – the impact of human loss and suffering on individuals and those around them is immeasurable.</p> <p>Globally, the pulp and paper industry, and forestry in particular, is viewed as potentially hazardous.</p>	<p>Our safety performance was deeply unsatisfactory:</p> <ul style="list-style-type: none">Tragically, there were four contractor fatalities in SSA.As shown in the graph opposite, the LTIFR for own employees and contractors deteriorated against the previous five years. The global own Injury Index (II) was an improvement on 2018, but above what was achieved in 2014, with the contractor II impacted by the four tragic fatalities.SNA's own employee LTIFR was the best ever. Year-on-year, own employee LTIFR deteriorated in SEU while contractor LTIFR improved, but both own employee and contractor LTIFR deteriorated in SSA. Performance in SEU was largely impacted by the integration of mills acquired in 2018. The region has conducted safety gap audits to redress the situation. With the assistance of a team from DuPont, SSA is driving initiatives to improve safety systems and awareness. The focus on life-saving rules will continue through 2020 as the region's primary safety initiative.	<p> Risk</p> <p>#1 Safety</p> <p> Integration of sustainability</p>	<p> Achieve cost advantages</p> <p> Accelerate growth in higher margin products</p> <p> Rationalise declining businesses</p> <p> Maintain a healthy balance sheet</p> <p></p>

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business																																			
Safety <i>continued</i>		<p>Lost-time injury frequency rate (group)</p> <table border="1"><thead><tr><th>Year</th><th>Employee (own) LTIFR</th><th>Contractor LTIFR</th><th>Employee (own) II</th><th>Contractor II</th></tr></thead><tbody><tr><td>2014</td><td>0.71</td><td>0.38</td><td>~15</td><td>~10</td></tr><tr><td>2015</td><td>0.56</td><td>0.47</td><td>~25</td><td>~15</td></tr><tr><td>2016</td><td>0.59</td><td>0.36</td><td>~35</td><td>~10</td></tr><tr><td>2017</td><td>0.58</td><td>0.34</td><td>~75</td><td>~10</td></tr><tr><td>2018</td><td>0.55</td><td>0.34</td><td>~15</td><td>~10</td></tr><tr><td>2019</td><td>0.71</td><td>0.41</td><td>~45</td><td>~15</td></tr></tbody></table>	Year	Employee (own) LTIFR	Contractor LTIFR	Employee (own) II	Contractor II	2014	0.71	0.38	~15	~10	2015	0.56	0.47	~25	~15	2016	0.59	0.36	~35	~10	2017	0.58	0.34	~75	~10	2018	0.55	0.34	~15	~10	2019	0.71	0.41	~45	~15		
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Employee engagement	<p>When employees are engaged at work, they feel a connection with the company. They believe that the work they're doing is important and therefore work harder. This has obvious implications for productivity, career development and job satisfaction.</p>	<ul style="list-style-type: none">90% of the total organisation participated in our 2019 survey – a 6% increase from participation levels of 84% in 2017.Overall employee engagement remains high, with 42% of employees fully engaged, 39% unsupported or detached and 19% fully disengaged.	<p> Risk</p> <p>#9 Employee relations</p> <p> Integration of sustainability</p>	<p> Achieve cost advantages</p> <p> Accelerate growth in higher margin products</p> <p> Rationalise declining businesses</p> <p> Maintain a healthy balance sheet</p> <p></p>																																			

Our key material issues – People *continued*

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Skills	People are no longer looking for a 'job for life' but have moved toward 'learn for life'. At the same time, rapid changes in the operating environment are constantly reshaping the skills requirements of our business.	<ul style="list-style-type: none"> In 2019, we continued to implement programmes to enhance skills levels, particularly across priority categories of employees. We also continued to offer all employees access to detailed development plans and the opportunity to select online or classroom training from over 4,000 approved courses. 	 Risk #9 Employee relations #10 Failure to attract and retain key skills	Operating context – Generation Z 
Labour relations	Sound labour relations result in increased levels of engagement, enhanced productivity and a more harmonious working environment.	<p>Sappi endorses the principles of fair labour practice as entrenched in the United Nations Global Compact and the Universal Declaration of Human Rights. At a minimum, we conform to and often exceed labour legislation requirements in countries in which we operate. We promote freedom of association and engage extensively with representative trade unions. Globally, approximately 62% of Sappi's workforce is unionised, with 69% belonging to a bargaining unit.</p> <p>Sappi enjoyed relatively positive industrial relations with trade unions at all manufacturing sites across the group and Sappi Forests' plantations in SSA – attributable mainly to our proactive engagement strategy and initiatives.</p>	 Risk #9 Employee relations Social unrest Integration of sustainability	Operating context – Social disruption 

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Shared value	Shared value involves developing profitable business strategies that deliver tangible social benefits. In other words, identifying societal challenges within our sphere of operation and finding ways of addressing these for the mutual benefit of communities and the company, thereby enhancing our social licence to operate, building our reputation as a responsible corporate citizen, establishing customer loyalty and attracting talent.	<p>We continued to take a very active approach to corporate shared value (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. Given South Africa's development needs, in line with our long-standing approach, the bulk of spend was allocated to this region as follows:</p> <ul style="list-style-type: none"> SEU: EUR100,000 SNA: US\$460,000 SSA: ZAR50 million 	 Risk Integration of sustainability Social unrest Land restitution	Operating context – Social disruption 





Our key material issues – People *continued*

CASE STUDY

Investing in early childhood development

International research states that 90% of brain growth and development takes place before the age of five. Research also indicates that children whose development is nurtured early in life are more likely to be:

- Successful in school, have fewer learning disabilities and be more likely to finish high school and seek further education or training
- More productive in the workforce, hold better jobs, own their own homes, and
- Healthier throughout their lives, physically and mentally.

Against this backdrop, the South African government prioritised early childhood development (ECD) as highlighted in the National Development Plan (NDP) Vision for 2030.

We began investing in ECD in 2014, partnering with key role players to achieve the following results:

- In Mpumalanga, we have developed an ECD centre of excellence at the Sappi Elandshoek community through Penreach, the largest teacher development programme in Africa. Sappi has sponsored the training of the principal and five primary school teachers from a local primary school in ECD-related topics. Between 2016 and 2018, these teachers reached 415 children.
- In 2016, we extended the ECD programme to Gauteng, by sponsoring the Jabulani Training and Development Centre. Our sponsorship of the centre has contributed to training over 1,250 ECD practitioners in recent years.
- In 2018, 22 ECD practitioners graduated from the ECD programme in KZN with an NQF4 qualification (a national standard), implemented under the auspices of Training and Resources in Early Education (TREE), and a further 36 will complete their training at the end of 2019. Of these, 18 will have a NQF4 certification which they will administer in their crèches, while the other 18 have been trained to run playgroups in their areas, where previously no ECD facilities existed. Practitioners in this region have impacted 2,097 children between 2016 and 2018.








Our key material issues – Planet

Planet

Issues discussed here are covered in greater detail in the [Planet section](#) on page 80

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Climate change ¹	Woodfibre is one of the main inputs in our business. Climate change could pose a risk to our plantations in South Africa.	<p>Sappi together with other forestry companies in South Africa, and with financial support from the Department of Science and Technology Forest Sector Innovation Fund, has initiated a detailed climate change mapping project with the Global Change Institute (GCI) at the University of the Witwatersrand. See box on following page. This project will enable us to spatially map the risk across our entire land base, and understand how it changes on decadal intervals.</p> <p>In addition, we continued to:</p> <ul style="list-style-type: none">Adjust and direct our tree breeding strategy by using modelled future climate data. This will help us to produce and select the most optimally suited hybrid varieties for each climatic zone.Replace pure species with hybrids which are more suited to future climatic conditions to enhance security of supply.Together with rapid understanding of the relative tolerance/susceptibility of our growing stock to new pests or disease, these techniques are critical in successfully managing the viability of our woodfibre base.	<p> Risk</p> <p>#5 Natural resource constraints</p> <p>Integration of sustainability</p> <p>Climate change</p>	<p>Operating context – Increasing consumer and brand owner concerns about sustainability-related issues</p> <p></p> 

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Climate change ¹ <i>continued</i>		<ul style="list-style-type: none">Use satellite imagery and drones to rapidly detect and respond to change.Monitor soil – under hotter and drier climatic conditions, the importance of soil organic matter will increase because of its ability to reduce soil temperature, and to increase the soil water infiltration rate and soil water holding capacity.Implement an extensive fire protection strategy, as climate change exacerbates potential for fires.		



¹ We have established a working group to integrate the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) into our risk assessment of climate change.



Our key material issues – Planet *continued*

CASE STUDY

Understanding climate risks

A preliminary climate change investigation conducted by Sappi Forests’ scientists indicated that climate change is likely to be greater in Southern Africa compared to the world average. The study indicated that maximum temperatures are more likely to increase than minimum temperatures, especially in the spring and summer months. It is also likely that spring rainfall will decrease, with more high-intensity rainfall during summer. The combined effect of higher temperatures and lower rainfall in spring is likely to increase tree stress. This in-house study highlighted that simply understanding changes to annual averages is not enough if we are to mitigate potential losses. Currently, available climate projections do not meet Sappi’s needs for the following reasons:

- The time resolution is too infrequent – projections are typically for mid-century and end of century, whereas we need something closer to decadal intervals.
- The spatial resolution is too coarse – often regional, rather than plantation-block specific.

- The variables provided are too general – annual rainfall rather than its monthly distribution, mean temperatures rather than the extremes, wind, humidity and other variables absent.

Accordingly, Sappi and other forestry companies in South Africa, with financial support from the Department of Science and Technology Forest Sector Innovation Fund, has initiated a detailed climate change mapping project with the Global Change Institute (GCI) at the University of the Witwatersrand. The GCI team is made up of South Africa’s leading climate change experts. The project entails two phases:

- **Phase 1:** 2020: Generate of raster climate surfaces for the entire forestry domain of South Africa, at 8 km resolution, with monthly time resolution, for the years 2020, 2030, 2040 to 2100. The variables would include up to about 20 important bioclimatic indicators and both averages and information about their statistical distribution, such as variances, confidence ranges and probabilities of exceedance.

- **Phase 2:** 2021 onward: A second iteration of variables generated for the one-year product, refining the indicators or making them more specific for species or issues; and/or inclusion of more ensemble members or scenarios to broaden the robustness of the evaluation; and/or 1 km data for selected parts of the country.



The regional climate modelling capacity established at Wits GCI can resolve all the needs of the industry, listed above. Wits GCI runs the CCAM Global Climate Model, a state-of-the-art Global Circulation Model (GCM), fully coupled with land and ocean. It can seamlessly use the same framework to ingest the output of ensembles of other GCMs, and downscale them for Southern Africa in a very robust way. Outputs can be generated at any time interval. The Southern African downscalings already under way produce coverage at a fundamental resolution of 8 x 8 km over the entire South African forestry domain, fine enough to represent important local phenomena (like the escarpment) that are invisible to GCMs. All primary climate variables are generated, so producing them as output tailored to the needs of forest bioclimatology is relatively straightforward.

The Variable Resolution Earth System Model used for the regional downscalings can then be used a second time, to generate projections with a resolution of as fine as 1 x 1 km, over an area of 200 x 200 km. This is a ‘cloud-resolving’ scale, so it can capture the specificity of rainfall in relation to terrain and aspect. The process is computationally intensive, so cannot immediately be applied to all the forest extent in South Africa but, over time, key areas will be prioritised.

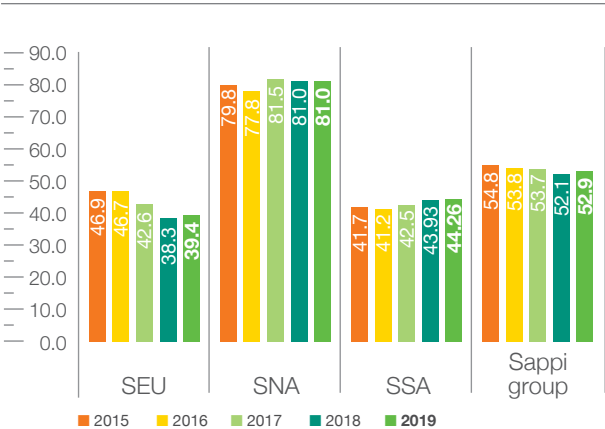




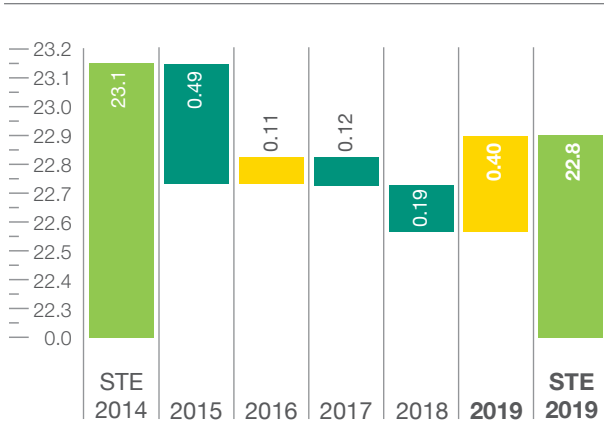
Our key material issues – Planet *continued*

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Energy	Given the high energy intensity of our industry, the cost and availability of energy is a key consideration that must be weighed in the context of a carbon-constrained world.	<p>Energy is a key input for our industry. Aggressively managing energy use leads to a reduction in carbon emissions and enhanced cost efficiencies. Globally, purchased energy costs as a percentage of cost of sales have not fluctuated significantly over the last five years, and were 8.74% in FY19 (2018: 8.98%).</p> <p>Environmental impact is reduced by the amount of energy, and also by the type of energy consumed. We have made significant efforts to reduce our reliance on fossil fuels, thereby reducing fossil-related greenhouse gas (GHG) emissions and separating our operations from the volatility of energy prices. In 2019, globally, our use of renewable energy as a percentage of total energy used was 52.9%. However, while globally our direct (Scope 1) GHG emissions were stable in the review period, indirect (Scope 2) emissions increased by 5.7% year-on-year. The main reason for the increase was the deteriorating emissions factor of energy derived from Eskom, the South African state power utility.</p>	<p> Risk</p> <p>#5 Natural resource constraints</p> <p>Climate change</p> <p>Integration of sustainability</p>	<p>Achieve cost advantages</p> <p>Operating context – Increasing consumer and brand owner concerns about sustainability-related issues</p> <p></p>

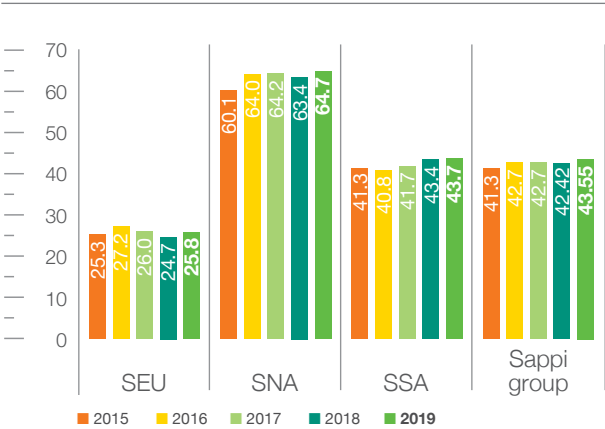
Renewable energy (%)



Reduction of energy consumption (GJ/adt)



Energy self-sufficiency (%)



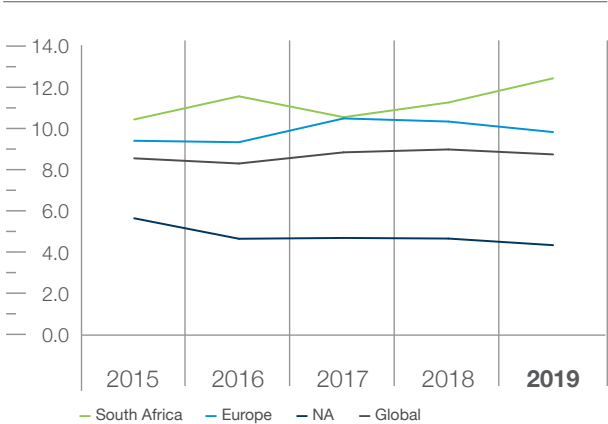
Absolute direct (Scope 1) and indirect emissions (Scope 2) (m tCO₂e)







Our key material issues – Planet *continued*

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



Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Biodiversity	The plantations and forests from which we source woodfibre depend on healthy ecosystems and beneficial biotic processes taking place.	<p>Globally, 74.8% of fibre supplied to our mills is certified. The internationally accepted, independently verified forest certification systems we use – PEFC™, SFI® and FSC™ – all make provision for biodiversity management. Within PEFC™-certified forests, for example, managers must make make provisions for Criterion 4: “Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems¹”, while SFI® guidelines stipulate the protection of biodiversity. Principles 6.5 of the FSC’s Principles and Criteria states: “The Organization* shall effectively maintain the continued existence of naturally occurring native species and genotypes, and prevent losses of biological diversity*, especially through habitat management in the Management Unit²”.</p> <p>We set aside approximately 30% of permanently unplanted land on our owned and leased landholdings in South Africa to conserve natural habitats and the biodiversity they contain</p> <p>In SSA, we have used systematic conservation planning to identify 166 Important Conservation Areas (ICAs) on our land using a systematic conservation planning approach based on the presence of both plant and animal red data species, the size, connectedness, condition and aesthetic and recreational value of the area.</p>	<p> Risk</p> <p>#5 Natural resource constraints</p> <p>Climate change</p> <p>Integration of sustainability</p>	<p>Operating context – Increasing consumer and brand owner concerns about sustainability-related issues</p> <p></p>



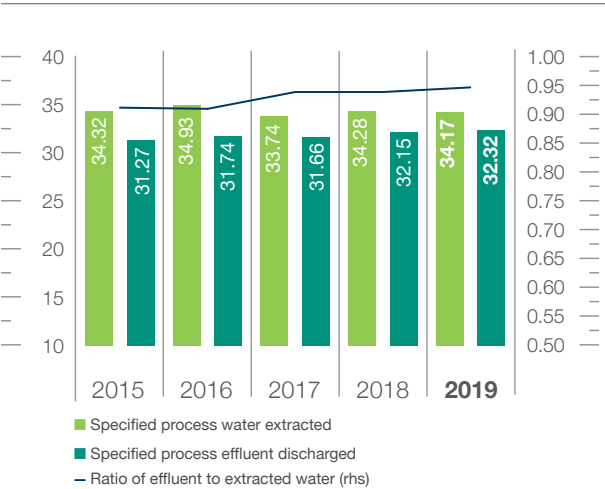
¹ <https://www.pefc.org/>
² <https://fsc.org/en>



Our key material issues – Planet *continued*

Material issue	Why it's important	What we did about it in 2019	How it links to risk	How it links to other aspects of our business
Water	Our operations are highly dependent on the use and responsible management of water resources. Water is used in all major process stages, including raw materials preparation (woodchip washing), pulp washing, screening, and paper machines (pulp slurry dilution and fabric showers). Water is also used for process cooling, materials transport, equipment cleaning and general facilities operations.	In FY19, globally we returned around 95% of water extracted to the environment.	<div> Risk</div> <div>#5 Natural resource constraints</div> <div>Climate change</div> <div>Integration of sustainability</div> <div>Social unrest</div>	Operating context – Increasing consumer and brand owner concerns about sustainability-related issues <div></div>

Specific water returned to extracted (m³/adt)



Unity

The yucca flower and yucca moth

The female yucca moth is the sole pollinator of the yucca flower, and the yucca flower is the only caterpillar host plant of the yucca moth. A female yucca moth collects pollen from one flower and lays a few eggs in the ovary of the yucca plant. She then leaves the plant and finds another yucca to lay more eggs in. After that, she delivers some pollen to the stigma in a flower to ensure that seeds will develop for her offspring after they hatch. She is conservative in the number of eggs she lays, which allows the yucca plant to still have seeds left over for its own reproduction once the larval moths are finished feeding on them. This display of unity ensures the survival of both species.



2019

Key relationships

We believe that building relationships with our stakeholders in a spirit of trust and mutual respect enables more tangible business value creation.



Strengthen the means of implementation and revitalise the global partnership for sustainable development.

We view stakeholder engagement not as a once-off annual intervention but as an ongoing dynamic process. This enables us to respond to the changing nature of shared priorities of parties who are interested in, and affected by, our business. To enhance our understanding of, and communication with, our stakeholder groups we consider: expectations, existing relationships, cultural context and capacity to engage (language barriers, IT literacy, access to digital resources).

Our approach to engaging with all stakeholder groupings is based on inclusivity and the principles of:

- **Materiality:** Identifying the legitimate interests and material concerns of stakeholder groupings
- **Relevance:** Focusing on those issues of legitimate interest and 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 legitimate and 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 stakeholder work is aligned to the governance outcomes of the King IV Code, namely ethical culture, performance and value creation, adequate and effective control and trust, good reputation and legitimacy.

In terms of feedback loops, we assess the quality of our relationships both formally (employee engagement and customer surveys as well as Poverty Stoplight in South Africa which assesses the impacts of our social investment programmes) and informally (suppliers, investors, industry bodies and business, civil society and media).

Key relationships



Key relationships – Employees

We invest in future talent while challenging our people so that they are able to leverage the opportunities presented by our strategic direction and a changing world.

Shared priorities	Our response
Resources that enable our people to grow intellectually, fulfil their potential and drive innovation in Sappi	Invested an average of US\$525 per employee in training and development.
Connection with Sappi's strategic goals and high levels of engagement	We conduct engagement surveys every second year (see Key material issues for more detail). At group level, leadership and direction together with image and customer focus were identified as areas needing attention. Accordingly, we have introduced new leadership development programmes at senior and executive levels and are working to further entrench our One Sappi culture. We provide regular updates on progress towards our 2020Vision strategy to the business.
Effective safety, health, wellness and recognition programmes	<ul style="list-style-type: none">• The theme for Global Safety Awareness week was <i>We value safety</i>. The message was reinforced by toolbox talks, safety games, competitions, addresses by media personalities and self-defence classes.• Wellbeing and wellness programmes are tailored to the needs of each region• Our recognition programmes include:<ul style="list-style-type: none">- Sappi Limited:<ul style="list-style-type: none">> Technical Innovation Awards> CEO Award for Excellence- SEU: Annual <i>Coryphaena</i> Award- SNA: TOUTS Recognition Awards and periodic regional President's Awards- SSA: Excellence in Achievement Awards- Sappi Trading: SMART Awards.
Encourage employee volunteerism through initiatives like:	<p>SEU: Support of various local education, cultural and environmental projects based on annual requests and identified needs</p> <p>SNA: The Employee Ideas that Matter initiative through which we provide grants to employees to fund their individual projects to support good in local communities</p> <p>SSA: Employee wellbeing committees at each mill support local community projects and support Mandela Day.</p>

Opportunities for value creation
<ul style="list-style-type: none">• Employees who understand and buy into our 2020Vision 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 establish a base of the technical skills needed by the industry• An increased commitment to safety delivers benefits at personal, team and operational levels• By establishing an ethical culture where corporate citizenship is promoted, we ensure the ongoing viability of our business, enhance reputation and become an employer of choice.
Challenges for value creation
<ul style="list-style-type: none">• Recruitment and retention of key skills• Loss of institutional memory.

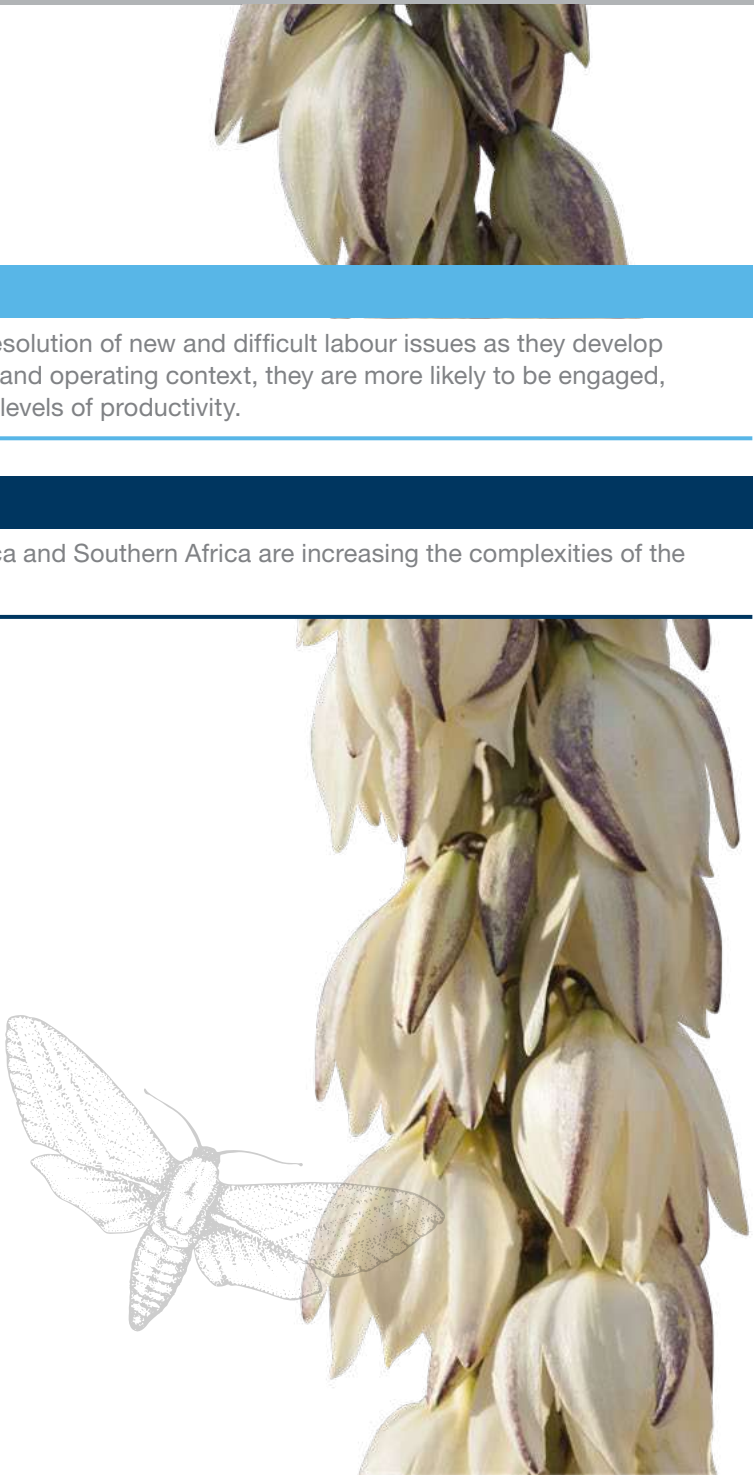


Key relationships – Unions

Given challenging global economic conditions and current socio-economic dynamics across the world, particularly in the South African labour market, we prioritise our relationship with our employees and their representatives.

Shared priorities	Our response
Freedom of association and collective bargaining	Sappi endorses the principles of fair labour practice as entrenched in the United Nations Global Compact and the Universal Declaration of Human Rights. At a minimum, we conform to and often exceed the labour legislation requirements in countries in which we operate. We promote freedom of association and engage extensively with representative trade unions.
Safety and wellness initiatives	Unions are involved in health and safety committees at each mill.
Remuneration, working hours and other conditions of service	<p>SEU: Collective labour agreements</p> <p>In 2019: The overall industrial relations climate in SEU remained good, without any major issues.</p> <p>SNA: Collective bargaining with hourly paid employees and labour agreements with various unions</p> <p>In 2019: We settled labour agreements with all four unions at Somerset Mill, the trade unions at Westbrook Mill and two small unions representing railroad workers at the Cloquet railroad.</p> <p>SSA: Employees (collective bargaining); forestry workers (sectoral determination/consultation)</p> <p>In 2019: The region successfully concluded a separate collective bargaining framework agreement with the majority trade union, Chemical Energy Paper Printing Wood Allied Workers Union (CEPPWAWU) for forestry operations. This will effectively replace the ministerial or government determination and allows for engagement on wages and conditions of employment for forestry workers annually, similar to pulp and paper as well as sawmilling segments of SSA operations.</p>
<ul style="list-style-type: none">Resolution of grievancesEngagement on strategy	<ul style="list-style-type: none">Well-established grievance channels and disciplinary proceduresWe engage with unions continually on economic conditions, market dynamics and growth plans.

Opportunities for value creation
<ul style="list-style-type: none">Good employee/management relations enable resolution of new and difficult labour issues as they developWhen employees understand strategic direction and operating context, they are more likely to be engaged, leading to a more stable labour force and higher levels of productivity.
Challenges for value creation
Multi-union landscapes, particularly in North America and Southern Africa are increasing the complexities of the labour landscape.



Key relationships – Customers

We adopt a partnership approach, where we develop long-term relationships with global, regional and local customers. We also accommodate more transactional customers. Where relevant, we will conduct R&D and develop products to suit customers’ specific needs.

In addition to the usual avenues of engagement, we engage through initiatives like the Sappi Football Cup (SEU); Printer of the Year (SNA); and by sponsoring the Citrus Research Symposium (SSA).

Shared priorities	Our response
High levels of service	We moved to a single customer relationship management (CRM) system across all regions. This has enabled us to manage customer relationships more effectively and provide better service by leveraging customer data and sales processes across the globe.
New or enhanced products that meet rapidly changing market demand	<div>In 2019 we launched:</div> <ul style="list-style-type: none">• Atelier GC1 paperboard with the brand promise ‘brilliance meets function’• Transjet Drive, a sublimation paper optimised for industrial printers with a glue-belt system• We relaunched Sappi OHG, the first paper wrapper for confectionery bars• We launched Sappi Seal, a paper-based packaging solution to replace heat-sealing laminates by material with a high share of renewable sources• Heaven 42 under the auspices of IGEPA which owns the brand• A range of new release paper textures including Selva, Optima and Fiesta.
Support for paper, packaging, DWP and sustainability goals	<div>In terms of DWP, technical centres of excellence are located at Saiccor and Cloquet Mills.</div> <div>Customers can use the competence centre for speciality papers and paper laboratory at Alfeld Mill.</div> <div>In North America, the Sustainability Customer Council provides candid feedback, identifies emerging issues and helps to establish goals.</div> <div>In South Africa, we co-fund with Cellmark (through its Paperseed Foundation) projects in our Tugela Mill community. Funding is in the form of US\$0.50 per ton of sales per partner.</div>
Information and campaigns to promote print as a communication medium and encouraging the use of packaging	<div>We showcased our brands at Fachpak, Nuremberg; FESPA, Munich; Interzum, Cologne; LabelExpo, Brussels; Luxe Pack Shanghai; Northwest Materials Show, Portland; Packaging Premiere, Milan and the PRINTING United tradeshow in Dallas.</div> <div>Globally, we continue to participate in industry initiatives like TwoSides.</div>

Shared priorities	Our response
Information about fibre sourcing and production processes behind our brands	<div>At the request of our customers, we participate in EcoVadis and Sedex in all regions.</div> <div>SEU and SSA: We make paper profiles, wood origin declarations and information sheets available for our papers.</div> <div>SNA: Has an updated EQ GHG calculator on the SNA e-commerce portal. This online tool enables our salesforce and customers to calculate the carbon savings achieved by buying SNA graphic and packaging products compared to the industry average.</div> <div>See page 79 for details of SNA’s investment in Forests in Focus, a joint undertaking of the American Forest Foundation and GreenBlue/Sustainable Packaging Coalition.</div>
Provision of technical information	<div>Globally, a series of technical brochures is available on our website www.sappi.com</div> <div>SEU:</div> <ul style="list-style-type: none">• The Sappi Houston online knowledge platform• The POP site to provide targeted information on packaging and speciality papers (www.sappipops.com) <div>SNA:</div> <ul style="list-style-type: none">• Sappi etc is an educational platform for designers and printers (www.sappi.com/sappietc) <div>SSA: Our paper and paper pulp product offerings are supported by strong technical teams at each mill and the technology centre in Pretoria.</div>

Opportunities for value creation
<ul style="list-style-type: none">• Meet customer needs for products with an enhanced environmental profile• Innovate to align with evolving market trends• Increase awareness of the importance of sustainability• Promote our customers’ own sustainability journeys• Keep abreast of market developments• Showcase our products and promote the Sappi brand.

Challenges for value creation
Confusing harvesting with deforestation and lack of understanding of the manner in which the forests and plantations from which we source woodfibre help mitigate global warming.

Key relationships – Customers *continued*

CASE STUDY

Our Customer Council in SNA

At SNA, we have reinvigorated our Sustainability Customer Council, a forum for feedback from some of our strongest customer voices on emerging trends in sustainability. The Customer Council is structured to bring diverse representation from our various customers' segments (distribution, print manufacturers, publishers, packaging entities and corporate end users of graphics papers, paperboard and DWP for textiles). The purpose is to learn from a cross-section of our customer base what is driving strategies and decisions around sustainable business practices and to learn more about opportunities and trends in the space. We have established a core group of eight that includes a mix of former and new members, representing all areas of our business.

CASE STUDY

SNA expands food safety management position

The implementation of a food safety management system (FSMS) at Somerset Mill was completed in 2019 with the implementation of ISO 22000, Food safety management systems - Requirements for any organisation in the food chain. This well-recognised global certification strengthens our positioning in the food packaging sector by providing additional third-party assurances to our customers beyond Food and Drug Administration (FDA) compliance.

CASE STUDY

Bringing charitable ideas to life

Through the structured Employee Ideas that Matter programme, SNA employees bring their charitable ideas to life. For four years, employees have been applying for direct funding to benefit the non-profit organisations that they are most passionate about, and the winners share US\$25,000 in corporate giving to support their selected causes. Funding can be used in many ways – from financing a project, sponsoring a trail clean-up, or providing new equipment or supplies.

In 2019, Sappi received applications for nearly 40 worthy causes around the country. The competition was tough, but in the end 10 were selected. Grants were given for:

- Outdoor reading space near the Oakland Public Library created a team of 37 Sappi employees for the ShineOnCass Foundation
- Skowhegan AmeriCorps Outdoor Recreation Programme

- Replenishment of library lost to fire at Meadowbrook Waldorf School
- Sponsorship of summer reading and STREAM Club programme for Children Across America
- Construction of a quiet space at Windham Primary School
- Construction of 4 kilometres of trail along the Pine Valley mountain bike trail
- Full-day construction of homes in Scarborough under Habitat for Humanity
- Repair of homes as part of the Age in Place programme under Habitat for Humanity
- Improvement of lighting around the 4 Seasons Event Centre, Carlton Amateur Hockey Association
- Bikes for Books programme.

The next round of Employee Ideas that Matter applications will begin in January 2020.

Key relationships – Communities

We work to incorporate communities close to our operations into our journey of intentional evolution, which recognises the importance of sharing value with all our stakeholders; conserving natural resources; and uplifting people so that they are well-positioned to thrive in our increasingly interconnected world.

Various formats of community engagement meetings are held by our mills in 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 licencing conditions of mills. In South Africa, there are local farmer and community forums related to our forestry communities.

Our initiatives are described in more detail on [pages 76-79](#).

Shared priorities	Our response
Community support including employment, job creation, business opportunities, economic and social impacts/ contributions and community support	<p>SEU</p> <ul style="list-style-type: none">• Mills offer support and financial sponsorships to local schools, sport and hobby clubs, forest products industry students, local safety/environmental organisations and support local charities. Supporting youth in our communities was a key priority in 2019. SOS Children’s Villages International, Save the Children and Global Exploration were some of the charities that we contributed to. We also engaged with and contributed to local schools. <p>SNA</p> <ul style="list-style-type: none">• Each business unit has a lead sustainability ambassador who is responsible for supporting sustainability communication, conducting training and fostering community engagement through local projects.• Education programmes are supported at targeted colleges and universities as are programmes to encourage study in fields relevant to our operations.• Our employees supported initiatives like Living Lands & Waters and the Charles River Watershed Association, focused on environmental stewardship and education.• The Ideas that Matter programme, now in its 20th year, recognised and rewarded designers who support good causes.• The Employee Ideas that Matter programme allows employees to apply for grants made by Sappi to the employee’s favourite non-profit or charity.

Shared priorities	Our response
Community support including employment, job creation, business opportunities, economic and social impacts/ contributions and community support. <i>continued</i>	<p>SSA</p> <p>Given South Africa’s significant development needs, the bulk of community support is allocated to this region. Support covers education, environment and socio-economic development, based on helping communities help themselves. Initiatives include:</p> <ul style="list-style-type: none">• Sappi Khulisa, our enterprise development scheme• The Abashintshi programme• Early childhood development• Education, including Khulisa Ulwazi, our training centre for small growers and two training centres for local unemployed youth, at Saiccor Mill and Ngodwana Mill• Support for local tourism through our mountain biking sponsorships and promotion of recreational riding on Sappi land. <p>In SSA, we have appointed a specialist team to drive local procurement forward.</p>

Opportunities for value creation
<ul style="list-style-type: none">• Enhanced licence to operate and thrive• Promotion of socio-economic development which could, in the long term, lead to increased demand for our products• Initiation of real social mobilisation and change for the better.

Challenges for value creation
Community expectations related to jobs and service delivery.

Key relationships – Communities *continued*

Supporting Living Lands & Waters

SNA supports Living Lands & Waters, an Illinois-based environmental organisation established in 1998 to clean up America's rivers. It has grown to be the only 'industrial strength' river clean-up operation of its kind in the world.

Spending up to nine months a year living and travelling on a barge, the Living Lands & Waters cleanup crew hosts river clean-ups, watershed conservation initiatives, workshops, tree plantings and other key conservation efforts. Through SNA's corporate sponsorship, employees participate as volunteers in river clean-ups.

To date, the organisation has removed approximately 4 million kilograms of rubbish and debris from 24 rivers in 21 states.



Key relationships – Industry bodies and business

We partner with industry and business bodies to provide input into issues and regulations that affect and are relevant to our businesses and industries. We also support and partner with industry initiatives aimed at promoting the use of our products.

One of our longest-standing relationships is with the United Nations Global Compact, to which we have been a signatory since 2008.

Shared priorities	Our response
<ul style="list-style-type: none">Issues that affect the sustainability of our industry including woodfibre base, carbon taxes, energy and emissionsEthical issues impacting businessEnergy issues in general, particularly government proposals on carbon taxationThe impact of increased regulations on businessThe benefits of our industry and our economic contribution to societySocial and environmental credentials of our products	<p>Globally in 2019, we:</p> <ul style="list-style-type: none">Became a member of the Sustainable Apparel Coalition and will use its sustainability measurement suite of tools, the Higg Index, to drive environmental and social responsibility throughout our supply chain. With this membership, we join over 240 global brands, retailers, and manufacturers, as well as government, non-profit environmental organisations, and academic institutions, that are collectively committed to improving supply chain sustainability in the apparel, footwear and textile industry.We continued our work with the Cambridge Institute of Sustainability and other partners on blockchain technology for timber certification (see page 22 for details of the Trado project) and the development of new low-carbon pulp technology (deep eutectic solvents).

Shared priorities	Our response
<ul style="list-style-type: none">Issues that affect the sustainability of our industry including woodfibre base, carbon taxes, energy and emissionsEthical issues impacting businessEnergy issues in general and in particular government proposals on carbon taxationThe impact of increased regulations on businessThe benefits of our industry and our economic contribution to societySocial and environmental credentials of our products <p><i>continued</i></p>	<ul style="list-style-type: none">We are an investor in the Forests in Focus tool in the USA, which strives to assess and evaluate forest-based risks within wood baskets for customers, investors and stakeholders, using credible scientific public data collected by state and federal government agencies. https://greenblue.org/work/forests-in-focus-landscape-assessment/We celebrated 20 years of partnership with Borregaard of Norway LignoTech South Africa which extracts lignin from Saiccor Mill's effluent stream. Output is sold in South Africa and exported to countries in Africa, Asia Pacific, the Middle East and South America for a range of applications including dust suppression, concrete additives, pelleting agents in animal feeds and mineral granulation aids.

Opportunities for value creation
<ul style="list-style-type: none">Develop sustainable, transparent supply chainsMaintain and expand markets for our productsDispel myths and enhance understanding of our environmental and social credentialsPromote dialogue.

Challenges for value creation
High cost of membership and resource allocation involved in certain memberships.

Key relationships – Industry bodies and business *continued*

Participating in dialogue about forests

In 2019, Sappi joined the steering committee of The Forests Dialogue (TFD). This organisation is focused on promoting constructive stakeholder dialogues to spur collaborative action on the highest priority issues facing the world’s forests. In 2019, TFD was particularly active in a land-use dialogue initiative. This is a multi-country engagement platform coordinated by TFD, together with a variety of local and global partners, that seeks to enable responsible business, improve governance and create inclusive development in landscapes at risk of deforestation. These dialogues were convened in Ghana, Democratic Republic of the Congo and Tanzania.



Our membership of industry associations

Sappi Limited

Business Leadership South Africa | Cambridge Institute for Sustainability Leadership | Paris Pledge for Action | Programme for the Endorsement of Forest Certification™ (PEFC™) | Sustainable Apparel Coalition | Technical Association of the Pulp and Paper Industry (TAPPI) | The CEO Initiative | United Nations Global Compact | The Ethics Institute

SEU

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

SNA

American Forests and Paper Association (AF&PA) | Paper and Paper Packaging Board | Agenda 2020 Technology Alliance | Forest Products Working Group | Forest Stewardship Council™ (FSC™) | Sustainable Packaging Coalition (SPC) | Sustainable Forestry Initiative® SFI® | The Recycling Partnership | TwoSides

SSA

Business Unity 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) | Recycle Paper ZA | Printing Industries Federation SA (PIFSA) | Manufacturing Circle | South African Chamber of Commerce and Industry (SACCI) and local chambers of commerce and industry | TwoSides | National Business Initiative (NBI)

Sappi Forests

Institute for Commercial Forestry Research (ICFR) | Founding member of the Tree Protection Co-operative Programme (TPCP) | Biological Control of Eucalypt Pests (BiCEP) (www.bicep.net.au) | Eucalyptus Genome Network (EUCAGEN) | CAMCORE

Key relationships – Investors

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

Shared priorities	Our response
<ul style="list-style-type: none">Information on Sappi’s strategy, debt levels and key developments such as the acquisition of Matane Mill in CanadaReturn on investmentTransparent information about risks, opportunities and environmental, social and governance (ESG) performance	<ul style="list-style-type: none">Our investor relations department engages with shareholders and analysts continually.Our Chairman and CEO engage with shareholders on relevant issues.We engage with various ratings agencies, particularly in terms of ESG performance. We conduct ad-hoc mill visits and road shows, and issue announcements through the JSE – Stock Exchange News Services (SENS), in the press and on our website (see www.sappi.com/SENS).We publish our annual integrated report (see www.sappi.com/annual-reports) and sustainability reports (see www.sappi.com/sustainability) on the group website. <p>Shareholders can attend and participate in the Annual General Meeting (AGM) as well as the four quarterly financial results briefings.</p> <ul style="list-style-type: none">Our Chief Financial Officer and Head of Treasury engage with bondholders, banks and rating agencies regularly on the performance of the company.We participate in carbon disclosure and forest footprint disclosure projects every year, making our submissions publicly available.

Opportunities for value creation

- Understanding our strategic direction
- Enhanced reputation
- Greater investment confidence
- Broader licence to invest.

Challenges for value creation

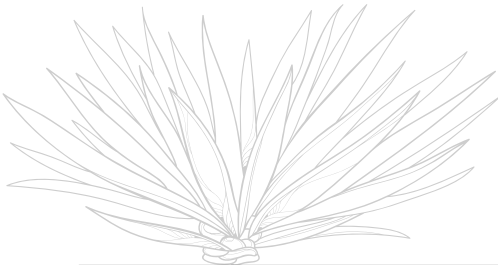
Global economic uncertainty, trade wars, reduced demand, lower pricing.



Key relationships – Suppliers and contractors

We are committed to establishing mutually respectful relationships with our suppliers and encouraging them to join our commitment to economic, social and environmental responsibility. We encourage them to share our commitment to doing business with integrity and courage; making smart decisions which we execute with speed, underpinned by a commitment to safety. We aim to build long-term value partnerships, based on the importance of suppliers to a sustainable supply chain.

Shared priorities	Our response
<ul style="list-style-type: none">SafetyTransparency	<ul style="list-style-type: none">Given our focus on zero harm in the workplace, we work with our contractors to ensure they follow Sappi’s safety systems. In South Africa, Sappi Forests works closely with contractors and their workers in implementing its innovative Stop and Think Before You Act safety initiative.Rolled out our Group Supplier Code of Conduct (further details on page 22).
<ul style="list-style-type: none">Increased valueDecreased costsSecurity of fibre supply, certification, income generation and job creation	<p>SEU</p> <p>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 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.</p> <p>SNA</p> <ul style="list-style-type: none">The Sappi Maine Forestry Programme and the Sappi Lake States Private Forestry Programme assist forest landowners to meet their objectives for managing their woodland. Sappi’s trained foresters are able to develop a forest management plan geared to the interests of the landowner including wildlife management and aesthetics, marketing of timber to generate maximum return and providing an extensive network of environmental and marketing resources.Procurement practices extend far beyond avoiding of controversial sources by requiring the promotion of biodiversity, logger training, forest research, landowner and community outreach, and implementation of best management practices for soil and water conservation, as evidenced by our conformance to the SFI® fiber sourcing standard.



Shared priorities	Our response
<ul style="list-style-type: none">Increased valueDecreased costsSecurity of fibre supply, certification, income generation and job creation <p><i>continued</i></p>	<p>SSA</p> <ul style="list-style-type: none">Qualified extension officers provide growers in our Sappi Khulisa enterprise development scheme with ongoing growing advice and practical assistance.We have established a training centre, Khulisa Ulwazi, for Khulisa growers. The objective is to develop growers’ and contractors’ skills so that they can conduct silviculture operations economically and to a good standard. Training material has been developed in conjunction with the Institute of Natural Resources and covers area like entrepreneurship, fire management, harvesting planning, leadership and management development, as well safety.As at the end of September 2019, Sappi was involved in 60 land reform projects, helping beneficiaries to manage approximately 18,320 ha of land. Many of these properties previously belonged to commercial farmers who had supply agreements with Sappi. For many of the land claims in which we have been involved, and where there has been a change in ownership, we continue to buy the timber and help to manage those plantations.Sappi Forests pays small growers a premium for certified timber.

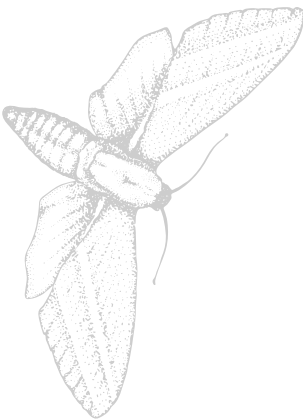
Opportunities for value creation
<ul style="list-style-type: none">Security of woodfibre supplyImproved supplier relationsBetter understanding of the requirements of the Sappi groupExpanded basket of certified fibreSupport for local economic developmentSupport for emerging supplier/contractor development.

Challenges for value creation
Balancing the need to support SMMEs with the need to source from suppliers with strong social and environmental credentials.

Key relationships – Civil society and media

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 on our strategic shifts to extract value from woodfibre in line with future trends. We engage with civil society organisations on issues of mutual interest and belong to key organisations relevant to our operations. We engage with various civil society groups on our societal and development impact.

Shared priorities	Our response
<ul style="list-style-type: none">Business developmentsThe future of our industryOur impacts on our communitiesProtecting the environment	<p>We:</p> <ul style="list-style-type: none">Join key credible organisations as membersDevelop personal relationships and engage regularlyProvide support to and sponsorship for key organisations on issues of mutual interest. <p>We have joined The Forest Dialogue which uses a constructive dialogue process among key stakeholders to build relationships and spur collaborative action on the highest priority issues facing the world’s forests.</p> <p>In terms of civil society, in SSA, our forestry operations belong to a number of fire associations, given that fire is a key risk on our plantations. We also provide funding for BirdLife SA and Honorary Rangers of the Kruger Park and have established a project which coordinated efforts to re-establish the <i>Warburgia Salutaris</i> (pepper-bark tree) in communities and the wild.</p> <p>In SNA, we support the Ruffed Grouse Society; the Dovetail Partners which works to promote bat habitat conservation efforts in the state, and the University of Minnesota Sustainable Forests Education Cooperative.</p> <p>In SEU, we participate in the Save Food initiative, signalling a firm commitment to better protection of all foodstuffs the world over. Save Food is a joint initiative of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), Messe Düsseldorf and Interpack, the world’s leading trade fair for processes and packaging</p>



Opportunities for value creation

- Opportunity to inform and educate media
- Transparent, two-way communication and opportunity for dialogue with civil society and media.

Challenges for value creation

Misunderstanding of our environmental impacts.

Collaborating with diverse stakeholders

Globally we interact and engage with a wide range of non-governmental organisations, especially through our participation with the forest certification systems (FSC™, PEFC™ and SFI®). We actively contribute to the growth of forest certification worldwide and collaborate with diverse stakeholders. In South Africa, Sappi is a member of the local WWF organisation as well as FSC and has worked closely with the PEFC to develop a forestry assurance standard which is now known as the South African Forestry Assurance Standard (SAFAS).



Key relationships – Government and regulatory bodies

We engage with government departments and regulatory bodies to provide input on 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.

Shared priorities	Our response
<ul style="list-style-type: none">• Social and economic benefits of our industry nationally and at a local level• Increased investment• Energy issues in general and in particular government moves on carbon taxation, decarbonisation and recyclability• The impact of increased regulations on business	<ul style="list-style-type: none">• In 2018, our group CEO made commitments at the first investment conference hosted by the South African President, announcing R2.7 billion to expand Sappi Saiccor Mill’s DWP capacity by 110,000 tpa (for global textile markets); and R5 billion for upgrade projects at the mill to decrease production costs, introduce new technology, optimise processes, reduce environmental footprint and future-proof manufacturing systems.• Ongoing consultations take place with government departments and regulatory bodies in each region. In Europe we also regularly engage with the European Commission. (See Our operating context: Regulatory and environmental issues on page 20.)• We brief legislators.• We support specific government initiatives. In South Africa, this includes the renewable energy drive. The biomass project at Ngodwana Mill in which we had a 30% stake is under construction.

Opportunities for value creation
<ul style="list-style-type: none">• Promote understanding of issues and challenges, as well as the strategic value of our industry• Help create a more receptive regulatory and policy environment.

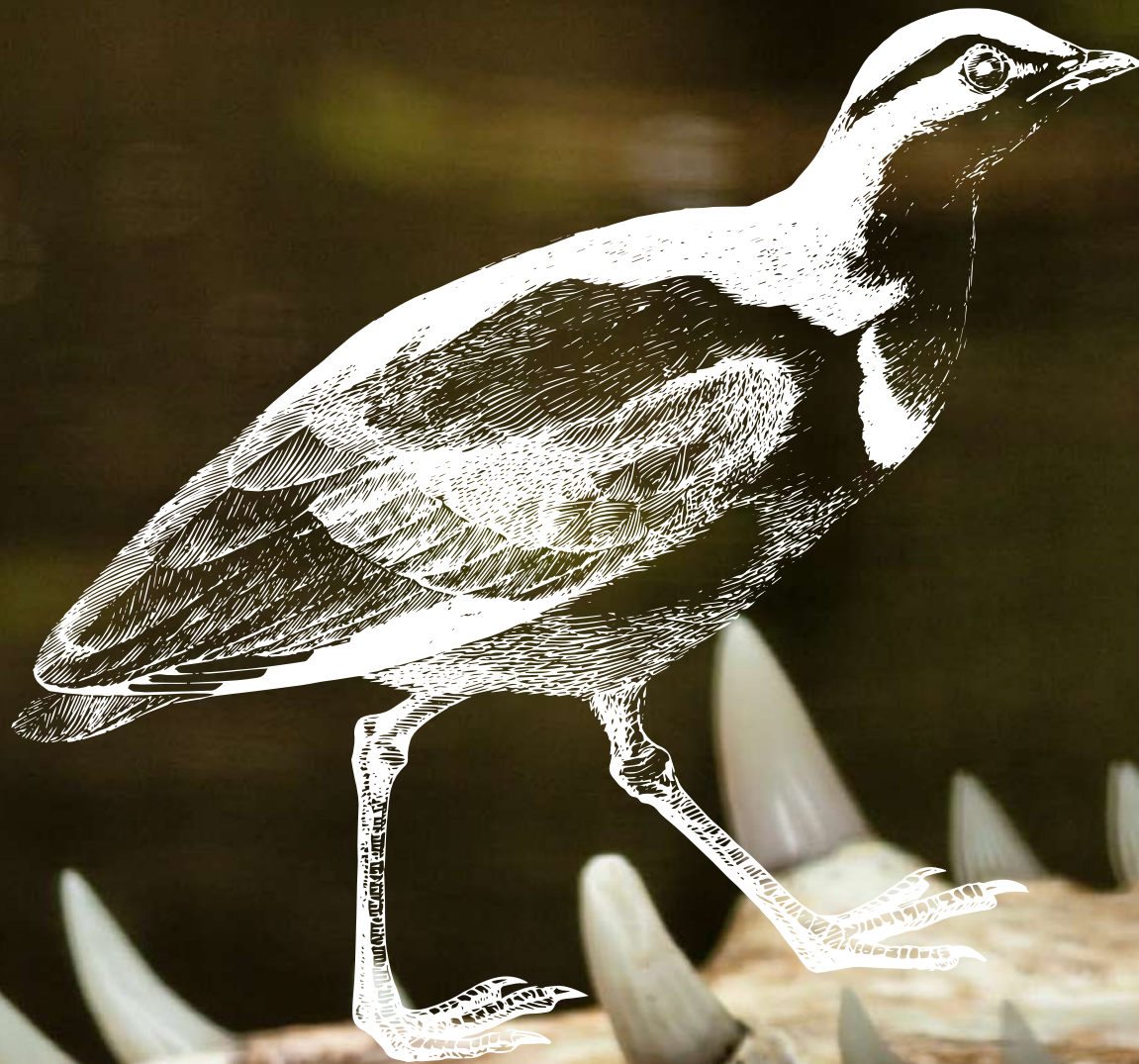
Challenges for value creation
<ul style="list-style-type: none">• Policies which do not take our high use of bio-based energy into account• Administrative delays.



Harmony

The crocodile and Egyptian plover

Crocodiles can open and close their jaws, but they cannot move them from side to side, nor can they use their tongues to propel food around their mouths. This means that a lot of food gets caught in the crocodile's teeth, attracting parasites and bacteria. Crocodiles 'invite' the plover over for a meal by opening their mouths wide and remaining very still. The plover will approach and enter the crocodile's mouth where it eats food scraps and parasites, cleaning the reptile's teeth in the process. An unlikely, but harmonious, win all round.



2019



Prosperity in 2019 – at a glance

Our management approach

We can only create value for stakeholders from a strong foundation of Prosperity. Our ability to meet our People and Planet commitments depends on continued profitability. Accordingly, our 2020Vision is for Sappi to 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 shareholders.



SEU

Produces **50%** of group sales

10 production facilities
14 sales offices



SNA

Produces **25%** of group sales

3 production facilities
6 sales offices



SSA

Produces **25%** of group sales

5 production facilities
6 sales offices
516,000 ha plantations

Key financial developments

EBITDA

(excl special items)

US\$687 million

(FY18 US\$762 million)

Profit

US\$211 million

(FY18 US\$323 million)

EPS

(excl special items)

US44 cents

(FY18 US60cents)

Net debt

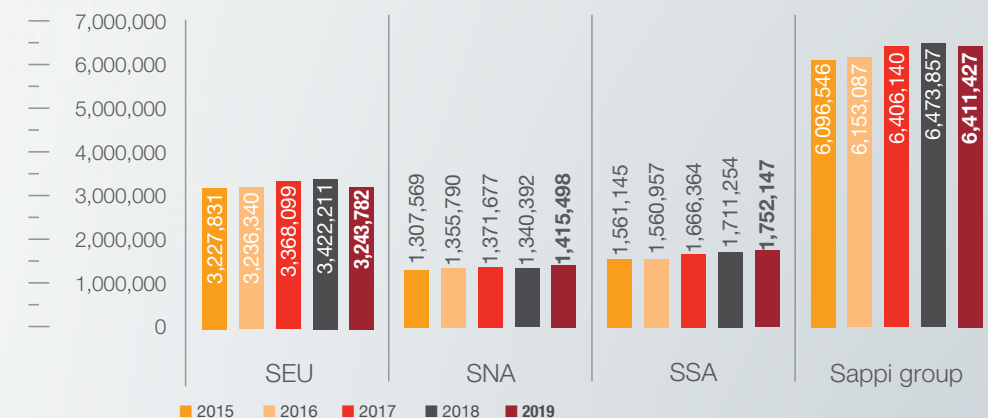
US\$1,501 million

(FY18 US\$1,568 million)

Key operational and market developments

- Weak graphic paper markets and DWP prices, driven by ongoing trade wars and slower economic growth in various geographies
- Continuing trend towards paper-based packaging in consumer segments
- Recent projects to increase capacity at each of the DWP mills and convert capacity at Somerset and Maastricht Mills to packaging boosted sales volumes in these segments during the year
- Impact of uncertain market conditions and low DWP demand being mitigated by tighter working capital management as well as postponing and reducing discretionary capital
- Temporary halt to dividends until market conditions improve
- Downtime at certain mills (SEU and SNA)
- Acquisition of Matane Mill in Canada (shortly after year-end).

Saleable production (adt/a)



Saleable production increased slightly in SNA and SSA, but decreased in Europe, partly due to downtime at some mills.

NOTE: The information on the following pages aims to give a snapshot of our financial performance in 2019. A detailed review appears in our 2019 Annual Integrated Report.

Delivering on our strategy and 2020Vision

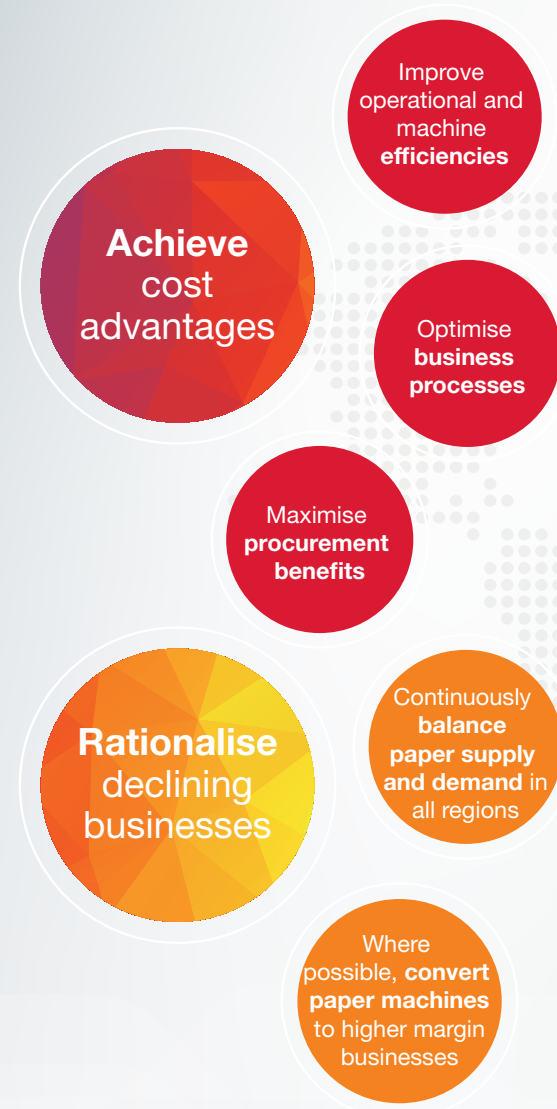
Actions in 2019

- **US\$87m** realised through group efficiency and procurement initiatives
- **Ongoing continuous improvement** across all mills
- Acquisition of Matane Mill has enabled **pulp integration opportunities**
- Saiccor Mill expansion **40% complete**, will lead to lower variable costs

Actions in 2019

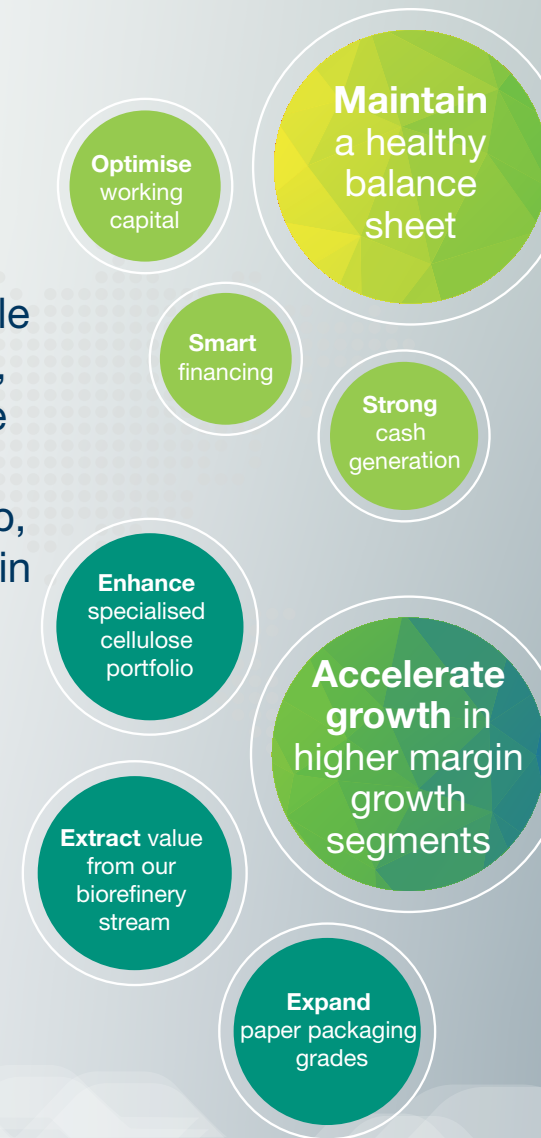
- **Downtime** taken at mills (SEU and SNA) to lower inventories
- Progressive **transition** of Lanaken Mill out of lightweight coated paper to produce coated woodfree paper
- Evaluating **graphic paper capacity**

Ongoing strategic actions



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

Ongoing strategic actions



Actions in 2019

- **No new major capex commitments**
- **Reduced capex** by US\$150m over two years
- Leverage covenant **adjusted** for next two years
- **Tight working capital management**
- 8-year term loan raised to **fund Matane acquisition**

Actions in 2019

- **Debottlenecking** of Saiccor, Ngodwana and Cloquet DWP projects complete
- **Expansion of Saiccor Mill** by 110,000 tpa 40% complete
- **Acquired Matane Mill**, a high-yield hardwood pulp mill in Quebec, Canada. This acquisition will provide Sappi with cost reductions and decreased volatility at a very competitive price per ton of pulp
- Acquired a **2,004-hectare plantation** in South Africa
- Progressing work in **biomaterials, biochemicals and bio-energy**
- Ramp-up of **board grades** at Maastricht and Somerset Mills
- Further developing **barrier coating** opportunities

Delivering on our strategy and 2020Vision *continued*

CASE STUDY

Lowering the costs of pulp: Matane Mill

We completed the acquisition of Matane Mill shortly after year-end. Located in Matane, Quebec, the mill currently has 129 employees and capacity of 270,000 tpa of aspen and maple high-yield pulp. A key advantage is that it is situated 5 km away from a port.

- The acquisition supports our strategy and 2020Vision cost advantages and growth in higher margin packaging and speciality paper. It will also increase pulp integration by supplying high-yield pulp to our US and European packaging operations, enabling us to secure supply of a raw material critical to product quality
- Reduce input pricing and volatility in profitability
- Avoid higher capital cost of internal high-yield pulp capacity.

High-yield pulp is used in a variety of applications: providing higher bulk, opacity and stiffness in the final product, with demand primarily driven by the packaging board and printing paper markets. Globally, the high-yield pulp market is some 5 million tons, 40% of which is produced in Canada due to lower fibre and energy costs.

Payment of the adjusted net acquisition price of approximately US\$158 million will be made in the first quarter of FY20, funded via a new term loan.



CASE STUDY

Generating savings and environmental benefits at Saiccor Mill

Project Vulindlela, which was around 40% complete at year-end, will boost Saiccor Mill's production of DWP to 890 000 tpa, taking it to about 10% of the global market. Cost savings attributable to Vulindlela are expected to be at least ZAR300 million a year.

The project will also deliver significant environmental benefits which include:

- Coal consumption reducing by over 130 000 tpa, which means fossil carbon emissions will be halved
- Gaseous emissions decreasing by approximately 40%
- Water consumption being reduced by 5%
- Water use efficiency increasing by 17%
- Energy efficiency being improved by 10% and renewable-energy use increasing by 20%



Our diversified
product portfolio

Dissolving wood pulp
Viscose/rayon and lyocell staple fibres
Cellophane
Ethers
Microcrystalline cellulose (MCC)



Forestry
Sawn timber
Pulpwood



Pulp
Paper pulp



Packaging and specialties papers
Flexible packaging
Label papers
Functional papers
Containerboard
Silicone base papers
Dye sublimation papers
Digital imaging papers
Tissue paper



Biomaterials
Hemicellulose sugars¹
Nanocellulose¹
Lignosulphonate
Biocomposites¹
Bio-energy

¹ Future potential sales.



Graphic papers
Coated woodfree paper
Coated mechanical paper
Uncoated woodfree paper
Newsprint



For a more detailed review of our products, please refer to [pages 72-79](#) of our 2019 annual integrated report

Investing in R&D

R&D spend in 2019: **US\$42 million** = 0.73% of revenue in range of similar industries

- Coating and binder development – alternative products
- Biocomposites - Symbio concentration optimisation
- Breakthrough papermaking and packaging processes
- Cellulosic based films
- DWP and Verve enhancements
- Lignin, furfural and sugar development
- Packaging development – specialised mono and multi-layer packaging as substitute for plastic packaging
- New commercial revenue streams
- Release papers – new functionality and application developments
- Use of cellulose microfibril (CMF) in papermaking processes
- Valida development in non-core business

Consolidating and growing our position in targeted market segments

Driving cost competitiveness and cost reduction

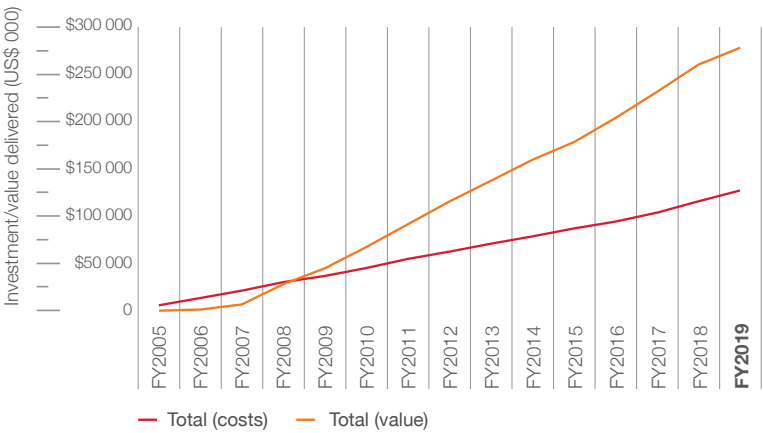
- Improved fibre utilisation

Optimising our equipment and forestry assets

- DNA markers and genes for wood properties, pest and diseases
- Pulping and bleaching adjacencies and alternatives
- Stock preparation and refining optimisation

R&D focus

Cumulative global value generated versus expenditure



Assessing our investment case

- **Focus is on investments in existing and adjacent areas with strong potential growth:**

- DWP: Underlying demand is growing at rates consistent with our long-terms forecasts
- Packaging: Consumers continue to shift from plastics to paper in many packaging categories

A leading:

- European coated paper producer
- North American coated woodfree paper producer
- South African graphic paper and packaging paper producer
- Global producer of coated woodfree paper
- Global producer of DWP (some 16% of global market)

- Customers in 150 countries
- Our global presence allows us to take advantage of opportunities where markets are strong

Growth strategy

Market leader

Geographic diversification

Our investment case

Extensive fibre base in South Africa

Low-cost, fast-growing woodfibre base from sustainably managed plantations, underpinned by world-class tree improvement programmes

1st

Innovation

- History of industry firsts
- Technology centres around the world
- Coatings expertise gives us a competitive advantage in packaging and speciality segments, and means we can easily fulfil requirements for complicated prints, finishes and colours as well as barrier coatings

Demonstrable track record of debt reduction

Net debt has nearly halved from US\$2.6 billion in 2009 to US\$1.5 billion, in line with our target of 2 times net debt to EBITDA.

Strong liquidity position

- Liquidity comprises cash on hand of US\$393 million and US\$640 million from unused committed revolving credit facilities in South Africa and Europe
- We continue to strengthen our position in cash-generative graphic paper markets generation

Adding value to daily life

With a growing global population and increased per-capita wealth, consumers are becoming more conscious of resource scarcity and the need for efficiency. In the context of greater consumer awareness, societal demands for sustainable products will only grow.

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

- Our Verve DWP is used world-wide 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 packaging and speciality and papers are used in the manufacture of products such as soup sachets, luxury carry bags, cosmetic and confectionery packaging, boxes for agricultural products for export, tissue wadding for household tissue products, and casting 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 to produce 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 from local communities, and the services of small and medium enterprises in areas around plantations and production facilities. We also have a best-practice training programme and, through our corporate social

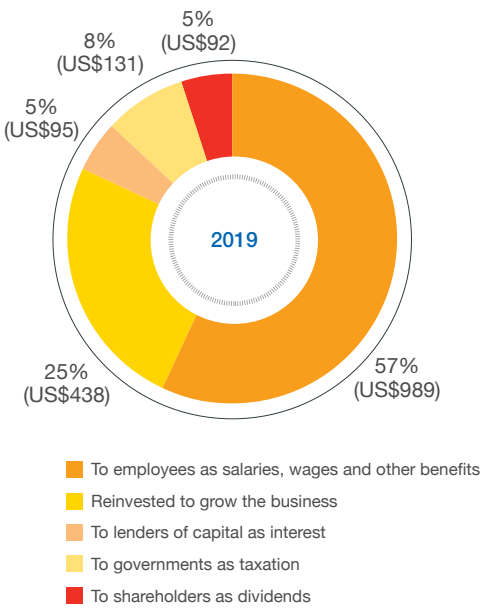
investment programme, together with our enterprise development programme in Southern Africa, invest in the socio-economic development of the communities in which our workers live.

- The indirect economic benefits of our operations impact on sectors including technical, construction and engineering services which are outsourced to a variety of contractors. The chemicals industry, in particular, is one of our major suppliers. In addition, the provision of services including collection of waste paper for the industry and outsourcing non-core activities such as maintenance, medical services, transportation, cleaning and security creates opportunities for small, medium and micro enterprises.

In 2019, we added value to the Prosperity of the regions where we operate:

- By employing 13,187 people. In addition, just over 10,300 people are employed by contractors working for Sappi Forests (SSA).
- By creating millions of dollars’ worth of goods each year. In 2019 sales per region were:
 - SEU: US\$2,918 million (2018: US\$2,970 million)
 - SNA: US\$1,466 million (2018: US\$1,432 million)
 - SSA: US\$1,342 million (2018: US\$1,328 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 2019



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, 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 2018, the pulp and paper industry provided more than 180,000 direct jobs, and a further 1.5 million in the value chain. It has a turnover of EUR90 billion and adds EUR20 billion to Europe’s GDP annually. It is strong in export markets, with an export rate of 22% of its paper and board production. The industry yields 2x higher return on investment than average manufacturing.

United States of America

The forest products industry accounts for some 4% of the total manufacturing GDP of the USA, manufactures nearly US\$300 billion in products annually and employs around 950,000 people. The industry meets a payroll of a sum US\$55 billion annually and is among the top 10 manufacturing sector employers in 45 states.

South Africa

According to Forestry South Africa, in 2017 the forest products sector in South Africa employed approximately 157,500 people (59,800 directly and 97,700 in indirect jobs). Overall, forestry provides livelihood support to 688,000 people. The forest sector (forestry and forest products) contributes about 1% to national GDP and makes a significant contribution to the balance of payments.

Partnership

The sea turtle and remora

Remoras are a group of fish informally known as suckerfish. Lacking a swim bladder, they use a sucking disc on the top of their heads to attach themselves to larger marine animals like turtles.

In this underwater partnership, the remora removes parasites found on the host turtle and cleans epidermal tissue that the turtle sloughs off. In return, the remora benefits by using the host as transport and protection, and feeds on materials dropped by the host.



2019



People in 2019 – at a glance

Improving the lives of People

Our management approach

Our workforce of more than 13,000 dedicated employees around the world underpins our business success. Our focus is on equipping our people and the communities in which we operate with the life and career skills, knowledge and confidence that allow them to build on their own capabilities and further their development. And when it comes to people outside our business, our products play a vital role in promoting development and helping people across the world to communicate.

People have a critical role in our overall performance and the manner in which we **develop, engage and lead and manage** our people contributes significantly to our success.



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

We continue to unlock the potential of our people with world-class training programmes. Globally, we spent an average per employee of **US\$525** on training and development

90% of our people participated in our 2019 engagement survey – a **6% increase** from 2017

We promote **shared value**, spending **US\$4.1 million** on corporate citizenship programmes

Our forestry operations provide employment for approximately **9,250 people**

Our products add value to people's daily lives all over the world

Customer surveys monitor **customer satisfaction**

Improving the lives of our people *continued*

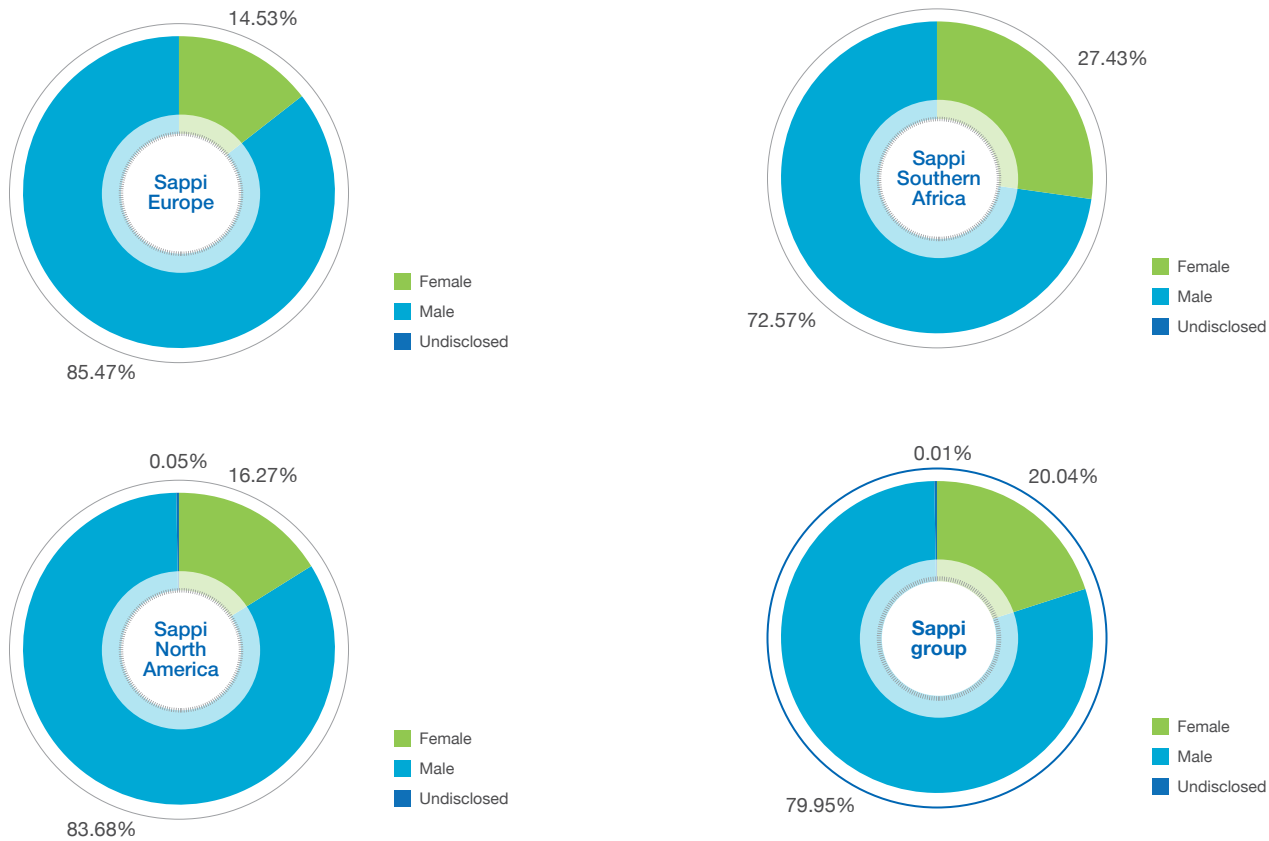
Total workforce by level and gender (numbers)

Total workforce								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	4,544	–	21	410	621	84	10	5,690
SNA	1,385	–	47	333	339	44	9	2,157
SSA	587	824	1,474	1,833	540	70	12	5,340
Sappi group	6,516	824	1,542	2,576	1,500	198	31	13,187

Male only								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	4,173	–	11	126	470	73	10	4,863
SNA	1,262	–	16	231	257	34	5	1,805
SSA	337	468	1,198	1,409	397	55	11	3,875
Sappi group	5,772	468	1,225	1,766	1,124	162	26	10,543

Female only								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	371	–	10	284	151	11	–	827
SNA	123	–	31	102	81	10	4	351
SSA	250	356	276	424	143	15	1	1,465
Sappi group	744	356	317	810	375	36	5	2,643

Gender split per region



People

Profiling our people

A diverse workplace generates different skill sets and backgrounds, as well as unique ways of doing things and divergent ways of thinking innovatively. These in turn enhance our ability to service diverse, rapidly evolving global markets. We celebrate our differences in human capital and strive to create a workplace free from discrimination and harassment; acknowledging and accepting differences among our people in 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. In 2020, we will be establishing a 2025 target.



Workforce profile by gender and nature of employment

All employees					
Region	Fixed-term contract >12 months	Fixed-term contract <12 months or temp or hourly	Full-time permanent	Part-time permanent	Total
SEU	314	91	5,285	–	5,690
SNA	–	–	2,149	8	2,157
SSA	157	430	4,753	–	5,340
Sappi group	471	521	12,187	8	13,187

Male				
Region	Fixed-term contract >12 months	Fixed-term contract <12 months or tempor hourly	Full-time permanent	Total
SEU	279	70	4,514	4,863
SNA	–	–	1,805	1,805
SSA	111	226	3,538	3,875
Sappi group	390	296	9,857	10,543

Female					
Region	Fixed-term contract >12 months	Fixed-term contract <12 months	Full-time permanent	Part-time permanent	Total
SEU	35	21	771	–	827
SNA	–	–	343	8	351
SSA	46	204	1,215	–	1,465
Sappi group	81	225	2,329	8	2,643

Profiling our people *continued*

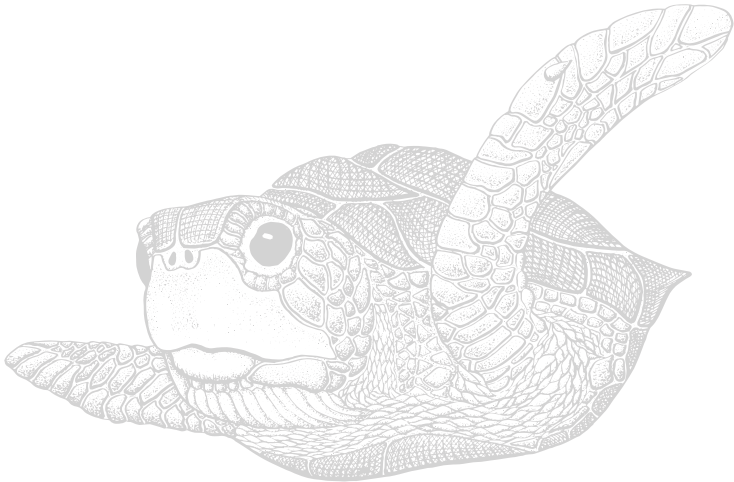
Workforce by minority group (numbers)

All employees				
Region	Non-minority group	Minority group	Undisclosed	Total
SEU	60	–	5,630	5,690
SNA	2,114	43	–	2,157
SSA	966	4,374	–	5,340
Sappi group	3,140	4,417	5,630	13,187

Male				
Region	Non-minority group	Minority group	Undisclosed	Total
SEU	16	–	4,847	4,863
SNA	1,772	33	–	1,805
SSA	722	3,153	–	3,875
Sappi group	2,510	3,186	4,847	10,543

Female				
Region	Non-minority group	Minority group	Undisclosed	Total
SEU	44	–	783	827
SNA	341	10	–	351
SSA	244	1,221	–	1,465
Sappi group	629	1,231	783	2,643

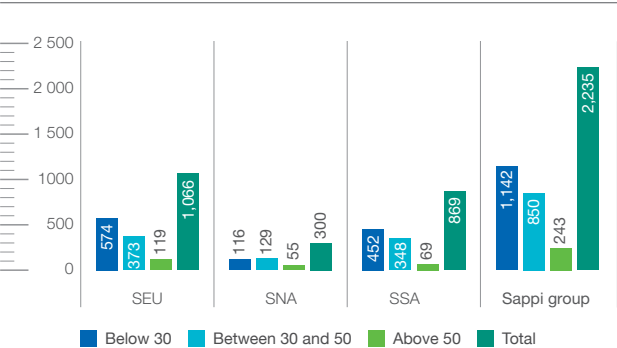
Gender and split at executive level



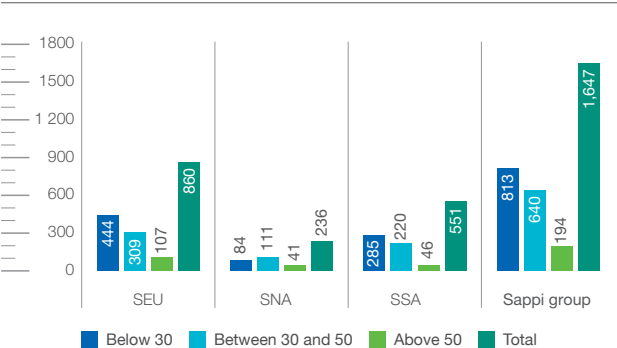
Monitoring turnover and new hires

A certain turnover rate is needed to bring new people with new skills into the business to drive innovation and a fresh approach while maintaining a certain level of continuity. Our global voluntary and involuntary (total) turnover rate for 2019 was 7.64% (2018: 6.81%).

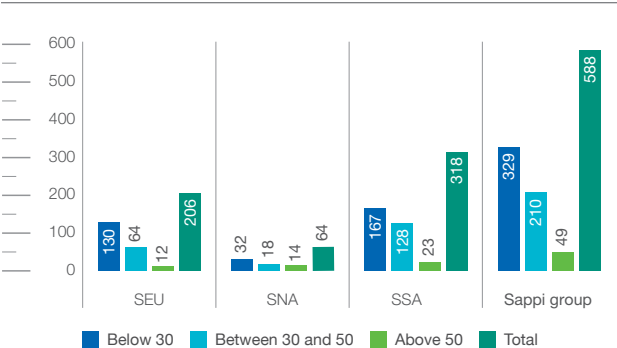
New hires (internal and external) by age group
All new hires



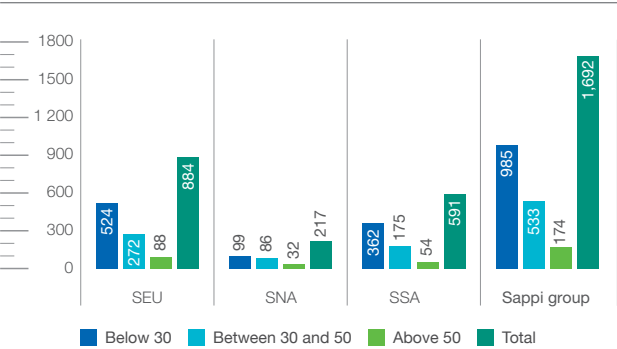
New hires (internal and external) by age group
New hires (male)



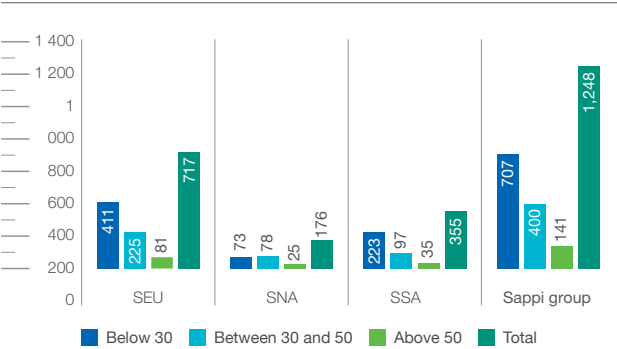
New hires (internal and external) by age group
New hires (female)



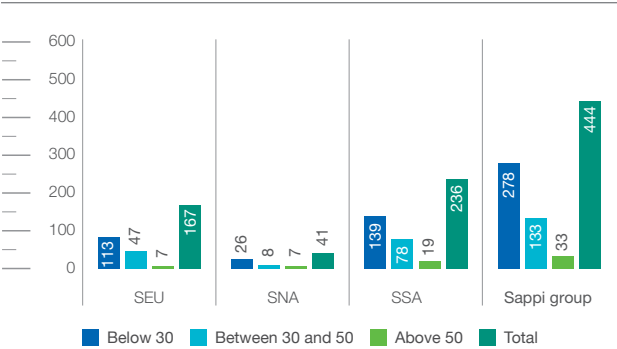
New external hires



New external hires (male)



New external hires (female)

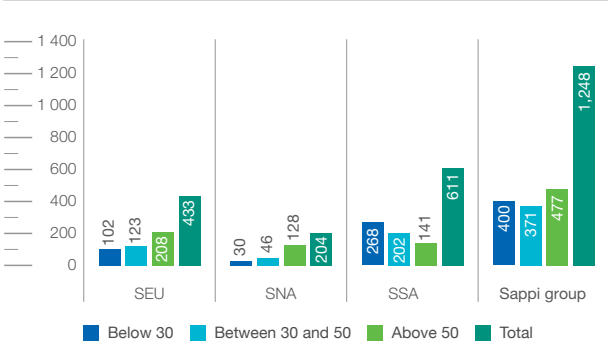


Monitoring turnover and new hires *continued*

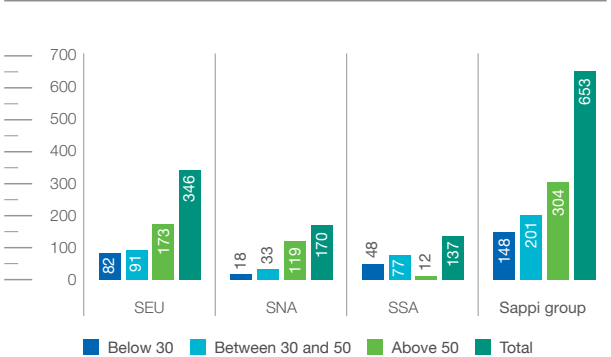
New external hires: gender percentages

Region	Male turnover	Female turnover
SEU	81.11%	18.89%
SNA	81.11%	18.89%
SSA	60.07%	39.93%
Grand total	73.76%	26.24%

All exits: voluntary and involuntary



Voluntary exits only (resignations)



Voluntary exits as a percentage of permanent employees (voluntary turnover)

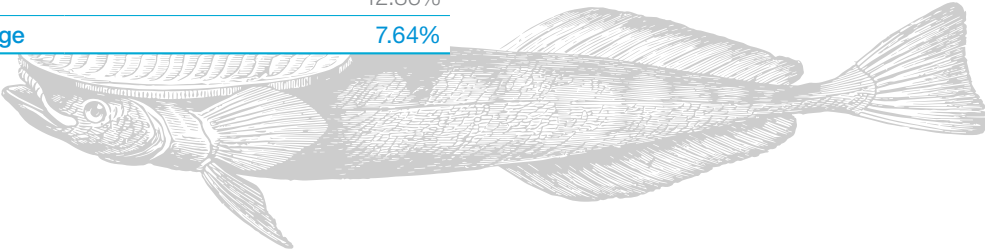
2019	Total voluntary exits	Full-time permanent employees	Part-time permanent	Total permanent	Total voluntary exits
SEU	346	5,285	–	5,285	6.55%
SNA	170	2,149	8	2,157	7.88%
SSA	137	4,753	–	4,753	2.88%
Total	394	12,187	8	12,195	5.35%

Absenteeism rate by gender and overall

2019	Male percentage absence	Female percentage absence	Percentage absence
SEU	4.51%	2.70%	4.29%
SNA	2.45%	3.18%	2.57%
SSA	2.48%	4.65%	3.08%
Total	3.21%	4.04%	3.38%

Total turnover rate (voluntary and involuntary)

Region	Total turnover (voluntary and involuntary)
SEU	8.19%
SNA	9.46%
SSA	12.86%
Overall average	7.64%

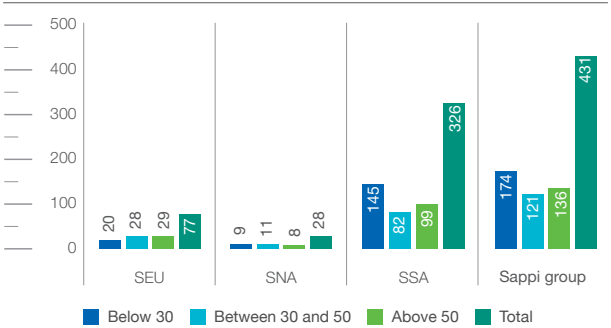


Monitoring turnover, new hires and absenteeism

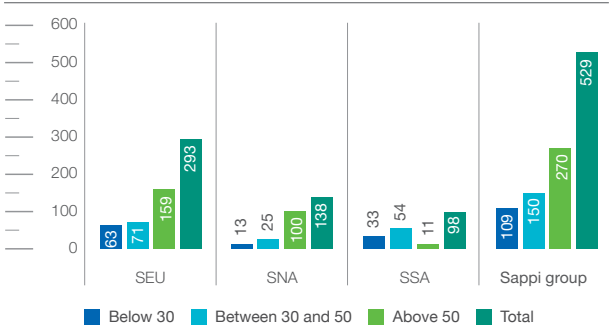
Voluntary turnover by gender – voluntary exits as a percentage of the number of employees per gender

Region	Male turnover	Female turnover
SEU	6.49%	6.87%
SNA	7.65%	9.12%
SSA	2.77%	3.21%
Sappi Group	5.37%	5.31%

Involuntary exits by gender and age category (male)



Voluntary exits by gender and age category (male)



Absenteeism rate – overall rate

Region	Percentage absence
SEU	4.48%
SNA	2.57%
SSA	3.08%
Sappi Group	3.49%

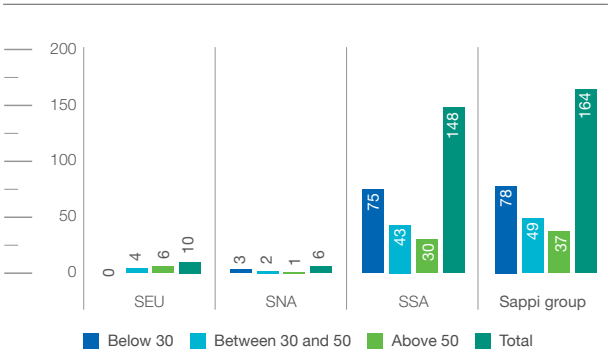
Absenteeism rate – male

Region	Percentage absence
SEU	4.69%
SNA	2.45%
SSA	2.48%
Sappi Group	3.34%

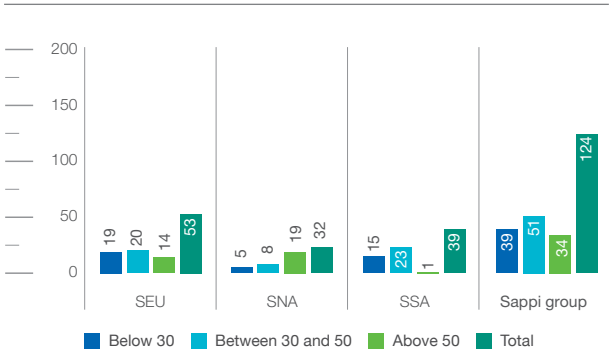
Absenteeism rate – female

Region	Percentage absence
SEU	3.00%
SNA	3.18%
SSA	4.65%
Sappi Group	4.07%

Involuntary exits by gender and age category (female)



Voluntary exits by gender and age category (female)

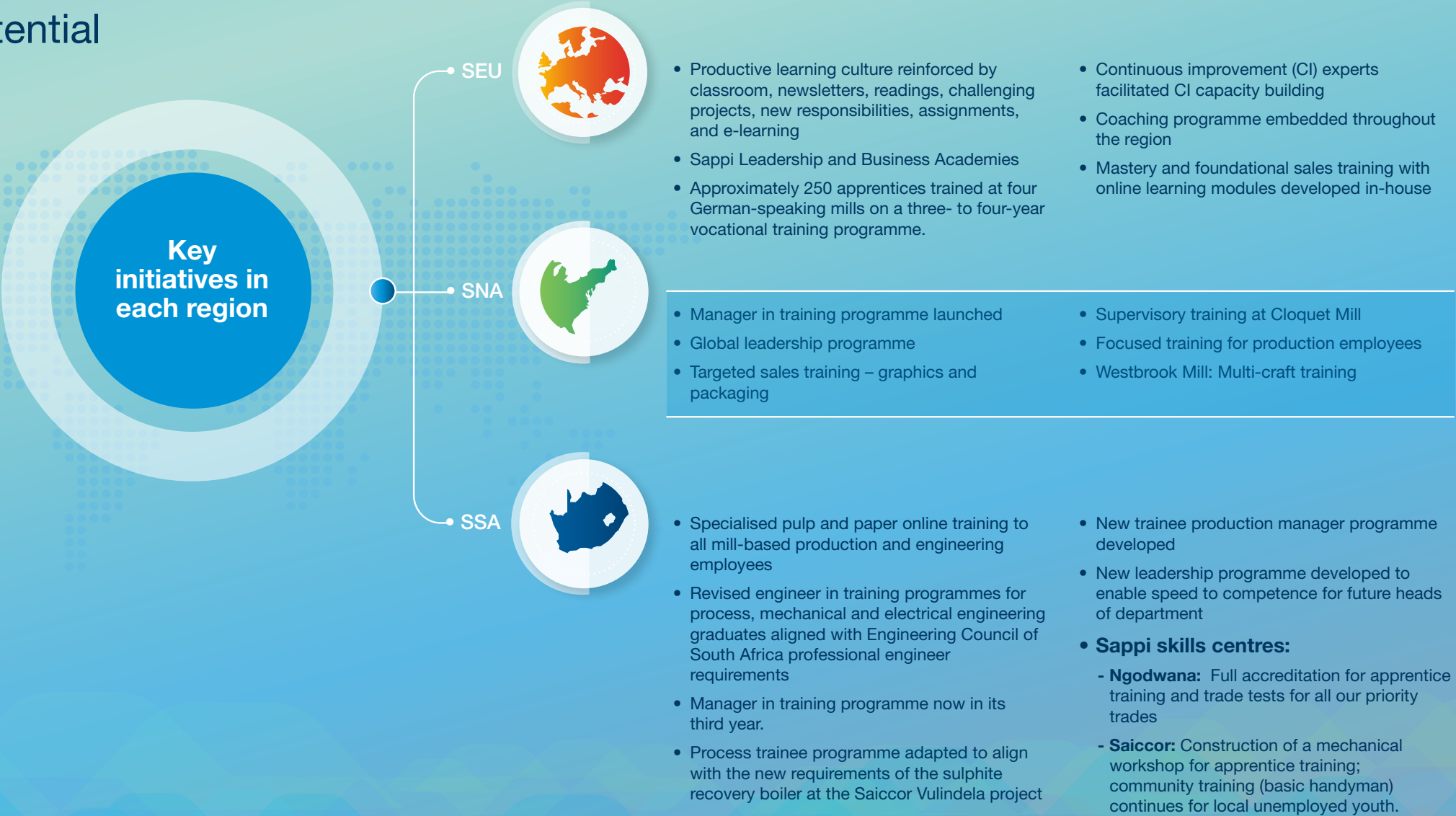


Developing our people to reach their full potential

The focus of training and development at Sappi is to invest in current and future talent and to grow the skills of people in three key areas: **technical, behavioural and leadership competencies**. Our consistent approach to learning is linked to talent management, succession, improving skill and productivity across our business and individual personal and career growth.



86% skills improvement training, 14% compliance training (2018: 69% skills development, 31% compliance)



Developing our people to reach their full potential



Ongoing technical upskilling with a focus on priority roles:

- Biotechnology
- Engineering
- Forestry (SA only)
- Global sales
- IT
- Production
- Project management

Ongoing safety and ethics training continued across all regions

Training our people

We make resources available to enable our people to grow intellectually and bring new ideas to fruition. Training and development programmes are reviewed continuously 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.

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 individual development plans, based on creating the right conditions and circumstances that allow people to develop their careers.



Average training hours for all employees by job category and gender

All employees								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	26.00	–	9.45	18.49	23.64	18.01	19.68	25.02
SNA	132.04	–	32.51	39.23	30.55	16.55	3.33	96.70
SSA	315.03	30.89	64.48	65.90	21.81	12.43	3.70	82.19
Sappi group	74.58	30.89	62.76	54.91	24.54	15.71	8.75	59.89

Training hours – male averages

Male								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	26.13	–	15.35	13.06	24.11	18.72	19.68	25.45
SNA	131.66	–	39.63	41.77	30.57	16.36	5.20	102.42
SSA	476.89	37.21	69.33	72.89	22.80	7.84	3.32	96.36
Sappi group	75.52	37.21	68.45	64.55	25.12	14.53	9.97	64.69

Training hours – female averages

Female								
Region	No grade	Unskilled	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Total
SEU	24.61	–	2.95	20.90	22.19	13.35	–	22.48
SNA	135.99	–	28.83	33.45	30.48	17.20	1.00	67.46
SSA	96.84	22.58	43.46	42.68	19.05	29.24	7.90	44.72
Sappi group	67.29	22.58	40.75	33.88	22.79	21.04	2.38	40.78

Appraising our people



Percentage employees with individual development plans

	2017	2018	2019
SEU	42%	46%	46%
SNA	51%	70%	65%
	(of salaried employees)	(of salaried employees)	(of salaried employees)
SSA	36%	51%	67%
Sappi Trading	53%	41%	40%

Performance appraisals (all eligible employees)

All employees							
Region	No grade	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Grand total
SEU	3,840	21	410	621	84	9	4,985
SNA		47	333	339	44	9	772
SSA			1,146	540	70	12	1,768
Sappi group	3,840	68	1,889	1,500	198	30	7,525

Percentage of eligible male employees with performance appraisals

Male							
Region	No grade	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Grand total
SEU	29%	–	53%	81%	84%	89%	37%
SNA	–	69%	81%	90%	59%	60%	83%
SSA	–	–	77%	82%	56%	55%	78%
Sappi group	29%	41%	75%	83%	69%	68%	50%

Percentage of eligible female employees with performance appraisals

Female							
Region	No grade	Semi-skilled	Skilled technical and junior management	Professional and middle management	Senior management	Top management	Grand total
SEU	55%	40%	63%	80%	91%	–	63%
SNA	–	81%	81%	86%	90%	50%	83%
SSA	–	–	78%	80%	53%	100%	78%
Sappi group	55%	71%	72%	81%	75%	60%	70%

Leading and managing our people

Strong leadership has a direct, positive correlation to positive business results. We focus on building leadership capability at all levels and using the leadership pipeline framework as a means of guiding development.

Employee retention is 20x greater in companies that focus on leadership development¹

Our leadership philosophy: *Our current and future leaders at all levels are adaptive and agile in our mindsets and behaviours so that we can meet and embrace changing market demands and deploy our talent a way that will unleash the full potential of our employees.*

¹ <https://www.ccl.org/wp-content/uploads/2016/05/driving-performance-white-paper-center-for-creative-leadership.pdf>

Leadership development

70%

On the job through structured assignments

20%

Mentoring and coaching

10%

Online, classroom and reading

sappi | lead^x

- A new leadership development programme targeting future heads of department developed with input from current business seniors.
- Two-year programme covers eight leadership and four priority technical competencies.
- Formal training, online learning, selected reading and practical workplace assignments that need to be completed with support from a mentor.

Assessing employee engagement

A connection between work and organisational strategy = *a fulfilled and engaged workforce that delivers on our key business drivers.*

Held every 2nd year, our employee engagement survey measures sustainable engagement based on three key factors:



Traditionally engaged – measures the belief in company goals and objectives, the emotional connectedness to the organisation and willingness to give discretionary effort

79%

Sustainable engagement in 2019 was **79%** (2017: 77%; 2015: 74%)



Enabled – measures the availability of resources to achieve excellent performance and the lack of obstacles to getting the work done

90%

90% of our people participated in our 2019 engagement survey (2017: 85%; 2015: 73%)



Energised – measures the social networks in place in the work environment and feelings of enthusiasm or accomplishment at work

42%

42% of employees are fully engaged, 39% unsupported or detached and 19% fully disengaged

Research has indicated that companies with higher scores on sustainable engagement outperform those with lower sustainable engagement scores.

Identified global focus areas?

The detailed results for both **leadership and direction and image and customer focus were positive**. However, there has been a decline compared to the 2017 results. Accordingly, we:

- Have introduced new leadership development programmes at senior and executive levels.
- Are reviewing and including the One Sappi culture in the 2025 strategy launch.

Action plans dealing with issues specific to each region have been put in place.

Promoting health and wellbeing

Healthier employees are more **productive, innovative and creative** and have a direct, positive impact on the bottom line.



SEU



- Each mill, together with the mill lead teams, decides on their priorities for the year
- Programmes include **preventative medical healthcare check-ups, flu vaccinations and immunisations**
- Support for employee **sports and social activities**, among others



SNA



- All salaried and hourly employees (and their spouses) who participate in one of Sappi's medical plans are encouraged to complete a **health risk assessment questionnaire**
- Wellness events, including **healthy cooking demonstrations and wellness webinars, at all sites**



SSA



- Occupational health risks like hearing loss are mitigated by **repeated hearing loss measurements and reducing or eliminating noise levels**
- Primary healthcare: Ongoing focus on **HIV/AIDS and tuberculosis**. 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. For more information, please go to our HIV/AIDS FAQ, available on www.sappi.com
- Employee wellbeing: **Educating, empowering and upskilling our people** to take ownership of their wellbeing. Programmes include support for obesity; substance abuse (alcohol and drugs); basic counselling for referrals to external providers; **financial wellness**; trauma counselling; work stress issues and other health and relationship issues

Health and safety committees are in place at each mill.

Reviewing our safety performance in 2019

What are we doing about our safety performance?



SEU

- Adapting to the Sappi safety culture, has proven more challenging than expected for previously acquired entities. Accordingly, the region is focusing on driving a cultural change founded on individual responsibility and simplifying rules for better understanding
- Audits to identify the main gaps have been conducted. The resulting actions are well on track and are starting to show improvements by an increasing time span between LTI's



SNA

- Incorporate the newly acquired Matane Mill into safety programmes
- Continue to drive total injury reduction through hazard identification and controls
- Engage the hearts and minds of employees on the journey to zero injuries 24/7 at work and at home

Our management approach

All three regions have **safety programmes** with the objective of creating an environment where no person will suffer permanent disability or loss of life. We do not accept that injuries and accidents are inevitable and **remain committed to Project Zero**. Our safety focus is based on **improved personal behaviour** and making safe choices underpinned by risk assessments, group sharing of all incidents and root cause investigations, enforcement of compliance and leadership engagement.

Our values are underpinned by an unrelenting focus on and commitment to safety

We want all our people to understand how to prioritise safety, how to achieve production and other targets without compromising safety, how to be active in calling out unsafe behaviour and help their colleagues to understand safety and the implications of non-conformance.



Despite tremendous focus on safety, safety performance globally in 2019 was poor, with four deeply regrettable fatalities in South Africa. Lost-time trends in SSA and SEU deteriorated, but on a positive note SNA continued to improve its performance with the best achieved injury rate.

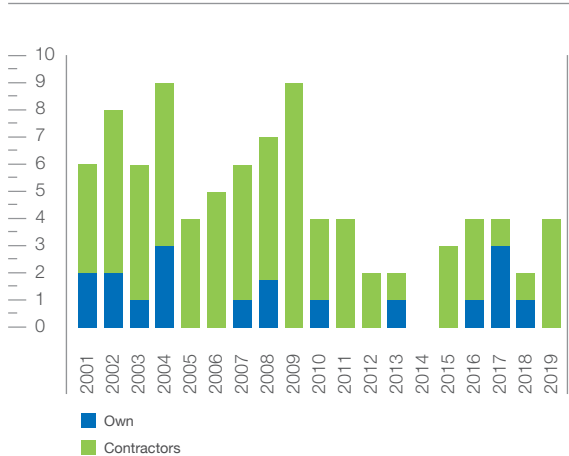


SSA

- Following the fatality at Ngodwana Mill, DuPont Sustainable Solutions are assisting in further integrating safety management with the operational/manufacturing system – an approach that will be rolled out to other mills.
- All manufacturing risk assessments were reviewed and an action plan formulated for each of the identified weaknesses.
- Continued focus on the eight lifesaving rules – non-compliance can result in dismissal.
- Replacing of the existing deviation management system with a single system supplied by Isometrix will allow direct access for employees and contractors to register their deviations. The system will contribute towards a safer working environment by allowing better management and collection of data. It will be a web-based system with a mobile application.
- Encourage and grow the social media activities on Facebook in Sappi Forests as part of the Stop, Think and Act messaging and continue with the Train the Trainer safety awareness rollouts.

Reviewing our safety performance in 2019: Our safety statistics

Own and contractor fatalities



Comment
Tragically, there were four fatalities in SSA: A general contractor died at Ngodwana Mill when he was caught in a nip point of a conveyor belt. A forestry contractor employee died in a vehicle accident while another died in a chainsaw accident. A third forestry contractor employee died when a dead tree fell on him during harvesting.

All our pulp and paper mills are certified to the internationally recognised OHSAS 18001 health and safety management system.

Sappi group – employee (own) and contractor LTIFR



Comment
The LTIFR for own employees and contractors deteriorated from the previous year and against the prior five years. Own Injury indexes (II) were an improvement on last year, but did not match our 2014 achievement. Contractor injury index was impacted by the four fatalities.

LTIFR – Lost-time injury frequency rate based on a Sappi groupwide standard for man hours.
LTIFR = (LTI × 200,000) / Hours of exposure or hours worked
II Injury Index – Provides an overall sense of safety within the measured unit.
II = LTIFR × LTISR (lost-time injury severity rate which is the number of days lost due to injury multiplied by 200,000 divided by the actual hours worked.



SSA's eight lifesaving rules

Life saving rules

sappi|safety

1. Comply with lock-out and work permit requirements
2. Comply with working at height protection requirements
3. Comply with machine guarding and safety device requirements
4. Operate vehicles and mobile equipment in accordance with safety requirements
5. Comply with lifting and suspended load safety requirements
6. Comply with safety critical personal protection requirements
7. Prevent uncontrolled exposure of HCS and biological agents
8. Assess the impacts of immediate surrounds on all tasks

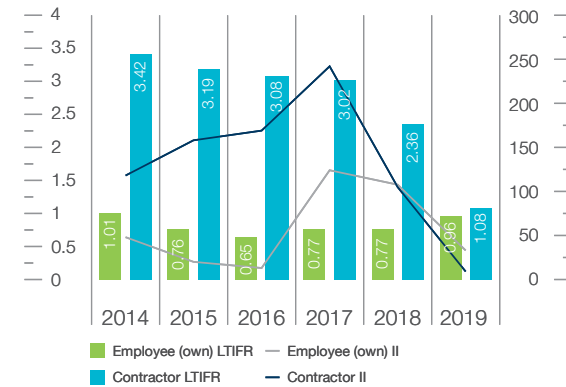
We value safety

Global Safety Awareness Week 2019



Reviewing our safety performance in 2019: Our safety statistics

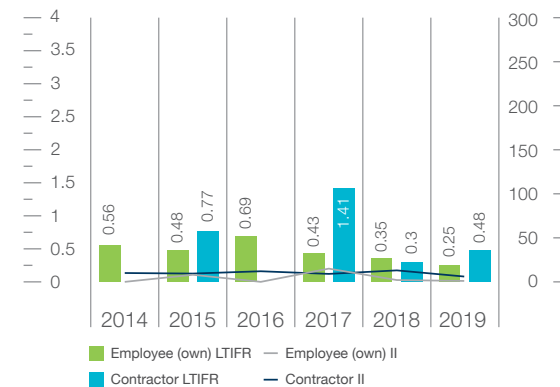
Sappi Europe - Employee (own) contractor LTIFR



Comment

While contractor LTIFR improved, own employee contractor LTIFR deteriorated. However, there were no significant incidents in 2019, reflected in a significant improvement in the II figure.

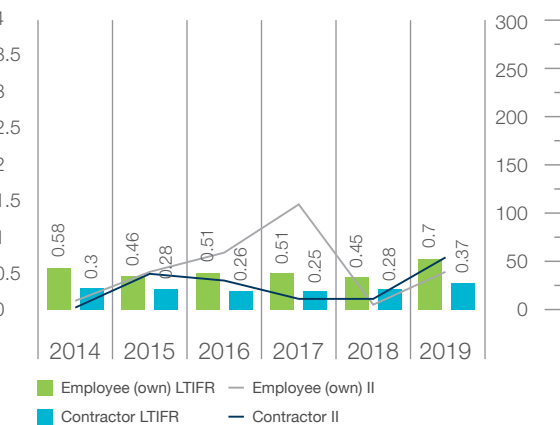
Sappi North America - Employee (own) contractor LTIFR



Comment

For the second consecutive year SNA's own employee LTIFR was the best ever. A total of six lost-time injuries occurred in FY19 compared to nine in FY18 and 11 in FY17. Year-on-year, there was a 25% reduction in total injuries and a reduction of 35% in lost work days.

Sappi Southern Africa - Employee (own) contractor LTIFR



Comment

Safety performance was disappointing, with all figures deteriorating.

Significant regional accomplishments in 2019



SEU

- **Region:** SEU reached 2 million man hours without LTI
- **Stockstadt Mill:** Achieved 1.0 million man hours without LTI
- **R&D Gratkorn:** Achieved 1.0 million man hours without LTI



SNA

- **Allentown:** Experienced zero recordable lost-time incidents in FY2019 and completed an external OSHA¹ voluntary protection programme audit, maintaining its Star status.
- **Cloquet and Somerset Mills:** Total injuries (first aid and OSHA cases) were down 35% and 29% respectively from FY18.
- **Westbrook Mill:** Essentially matching its LTIFR record of 2016 (2019: 0.61, 2016: 0.59)



SSA

- **Saiccor Mill:** Contractors achieved 1 million manhours without an LTI in September 2019
- **Sappi Forests Zululand:** Achieved 1.8 million manhours without an LTI
- **Lignotech SA:** Achieved seven years without a lost-time injury on 31 August 2019
- **Tugela Mill:** Achieved a new record for LTI free days of 699 days (9 January 2019) – at the time 1.6 million LTI-free hours.

¹ The OSHA incidence rate is applicable only to SNA and is arrived at by taking the number of recordable incidents * 200,000 / man hours. A recordable incident is any report to a medical practitioner.

Reviewing our safety performance in 2019 *continued*

CASE STUDY

Putting safety first at Gratkorn Mill

The rebuild of PM9 at Gratkorn Mill was executed with zero lost-time injuries (LTI), on time, below budget and with a running overall equipment efficiency (OEE) of 84%.

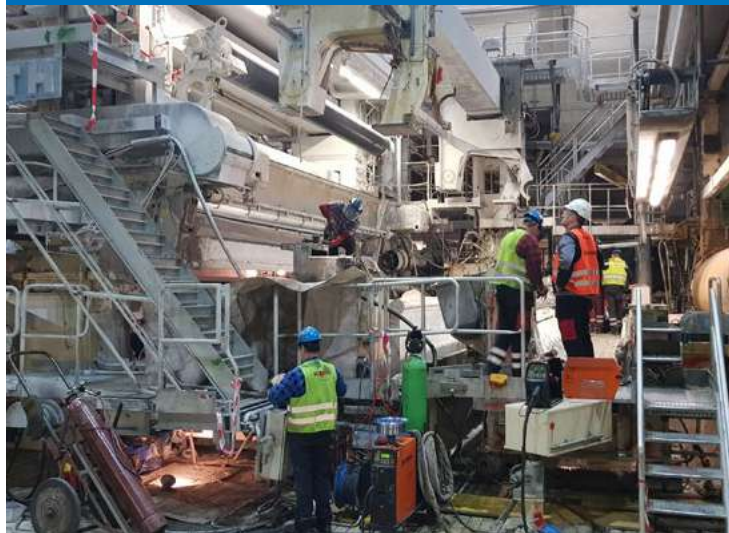
Apart from Sappi's own employees, almost 500 additional contractors were on site daily, resulting in a total of 100,000 man hours worked (62,000 hours for contractors and 36,000 hours for Sappi staff). Despite the unusual working conditions, long working hours, considerable pressure and workload, the target of zero LTIs was achieved.

The starting point for safe implementation of the project was introducing a safety concept comprising:

- Safety first – even if it was time consuming
- A joint site safety evaluation between Sappi and the suppliers
- Strict safety project rules
- A motivated, highly engaged, qualified and experienced team with detailed knowledge
- Contractor instructions at the gate, followed by a safety test

- Contractors were required to wear helmets indicating their name and company name and showing that they had the passed safety test
- A daily safety meeting with content escalated to the operational project meeting.

A further crucial factor that contributed to the success of the project was the high number of daily behaviour-based safety (BBS) observations conducted. The fact that the Gratkorn management team also participated in the BBS observations showed their commitment to the importance of safety.



Sharing value

Our management approach

Our support for society is integral to the way we do business, and not something that stands separate. Accordingly, we identify societal challenges in our sphere of operation and find ways of addressing these for the mutual benefit of our three primary stakeholder groups – employees, customers and the local communities in which we operate.

We prioritise projects that will make the most difference to communities and have meaningful, measurable impact in enterprise development and upliftment; education and the environment.

Social investment in 2019	
SEU	EUR100,000
SNA (Ideas That Matter US\$250,000)	US\$460,000
SSA	ZAR50 million

Further details in the 2019 Sappi North America Sustainability Report and the 2019 Sappi Southern Africa Corporate Citizenship Report, both available on www.sappi.com



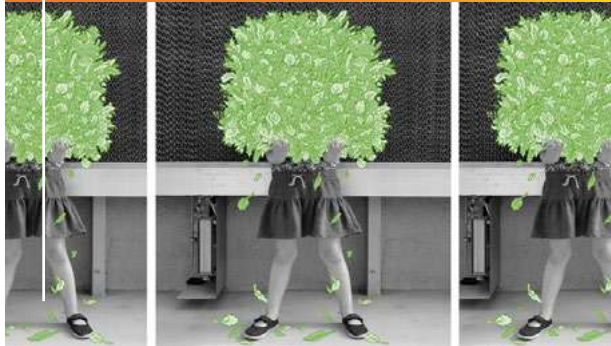
Sharing value – Making ideas matter in North America

Award recipients of Ideas that Matter 2019 – some samples

CASE STUDY

NY Sun Works

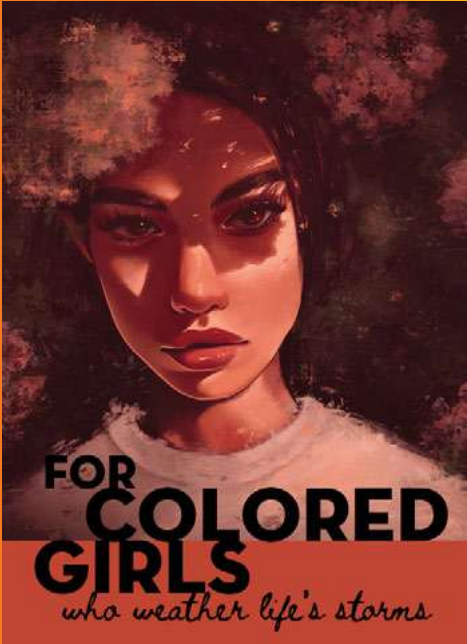
NY Sun Works builds innovative science labs in urban schools. Their greenhouse project initiative uses hydroponic farming technology to educate students and teachers about the science of sustainability. During the 2019-2020 school year, students will harvest 45,000 kilograms of leafy greens. Studio Usher is working with NY Sun Works to design a workbook and develop new curriculum to guide students and teachers to make the best use of this produce.



CASE STUDY

Trauma & Resilience Initiative, Inc.


This unique project is a graphic novel with autobiographical stories from diverse women of colour. The stories explore not only their personal relationships with trauma, but also the strengths, resources and supports that continue to foster resilience and post-traumatic growth. To help promote and build awareness of the book, postcards and bookmarks will be distributed in advance to organisations, events and libraries.



CASE STUDY

StreetCred at Boston Medical Centre


This campaign uses print and digital materials in the paediatrician's office to reach low-income families that are eligible for the earned income tax credit (EITC). These materials address key obstacles to claiming the EITC and include postcard flyers, engaging graphic posters, short pamphlets, and mobile-friendly digital resources.



CASE STUDY

The Edmund Niles Huyck Preserve

The Huyck Preserve is celebrating eight decades of scientific accomplishment and the strong research culture of its field station. To mark this milestone and ensure ongoing support of the field station's activities, the campaign includes a field guide, commemorative poster, exhibition, digital field guide and a tote bag, each of which is tailored to a specific target audience of the preserve.



Sharing value – Supporting youth in Europe

Supporting youth in our communities was a key priority for Sappi Europe in 2019. Our youth represent the future and investments made today to help them reach their full potential will return dividends for society over the long-term. Specific mill initiatives in 2019:

CASE STUDY

Maastricht Mill

Maastricht Mill (The Netherlands) supported Global Exploration in its mission to foster global citizenship. The organisation offers young people the opportunity to travel and volunteer in a developing country, have contact with and learn from others.

CASE STUDY

Ehingen Mill

Ehingen Mill (Germany) donated nearly 3.6 tons of paper, with much of this going to support local schools in various forms, from drawing paper for kindergarten students, through to the paper needed to produce student newspapers. Going beyond donations, the mill has also established formal cooperation contracts with select partner schools to provide learning opportunities and career orientation to the students. From offering internships, mill tours for classes, traditional paper-making in the classes, support for projects, and participations in the school festivals, Ehingen brings to life its commitment to the community's next generation.

CASE STUDY

Gratkorn Mill

Gratkorn Mill (Austria) held a charity run that brought together around 120 employees and their families. For every kilometre completed, the mill donated money to SOS Children's Villages, a non-governmental organisation which provides children with loving and supportive alternative care.

CASE STUDY

Kirkniemi Mill

Kirkniemi Mill (Finland) has been supporting two youth-centric charities over the years:

- The mill's support of Save the Children has enabled two students to be financially supported through high school, to take the financial pressures off their families.
- Support to HOPE organisation has helped to provide birthday parties for children who come from families of limited means, helping them to feel special, equal and integrated in their communities.



Sharing value – Uplifting lives in South Africa

CASE STUDY

Growing a brighter future

“When I left Tugela Mill in the late 80s I saw a gap in the forestry sector, as I would often see growers collecting good money at the mill after harvesting. It was a good shift for me as joining Khulisa changed my life completely. I am now a proud owner of two beautiful homes.

“I am encouraging my children to learn more about the forestry field and they are showing interest, because they see the benefits. It is great to see more investors and retail owners coming to Manguzi town. This is happening because they know that growers like myself are spending a lot of money earned from trees in our own town and growing our economy. Sappi has consistently provided us with highly qualified forestry professionals who look after us and share information with us on how we can best improve our forestry businesses.”

Samson Mthethwa, who was employed as a general worker at Tugela Mill for 10 years before he became involved in Sappi’s enterprise development scheme for small growers, Sappi Khulisa (previously Project Crow), which began in 1983.

Samson Mthethwa alongside Sappi Management Forester, Mxolisi Silinda in one of the plots he manages in Manguzi, KwaZulu-Natal.



CASE STUDY

Encouraging holiday fun

The Abashintshi hold holiday programmes in several KwaZulu-Natal and Mpumalanga communities with activities including sports days, talent shows, dancing competitions, reading sessions, organised games and many other creative activities.

Sappi donates pencils, crayons, bags, t-shirts, balls and all sorts of Sappi-branded apparel to encourage children to participate.



CASE STUDY

Using existing assets to generate income

The ABCD (asset-based community development) approach encourages people to make use of their existing assets. This approach teaches individuals and communities to use what they already have, and to grow those assets to the benefit of the community at large, rather than focusing on what they don’t have and letting it stifle their progress in life. It also shows people that although they may be ‘poor’ in material assets, they have skills that they can put to good use to help others.

Zandile Mguni from the Mngqobokazi community in Hluhluwe exemplifies this approach. The mother of three saw a business opportunity in making mats that are traditionally known as Izincansi, a skill she learned from her mother that she has been using to make a living for her family. Zandile has applied the ABCD concept by fetching weaving grass from a nearby river and recycling used materials and old planks to make the machine she uses to weave her mats. The Abashintshi have helped her expand her business by using her profits to buy stock such as chips, airtime and prepaid electricity so that she can run a small tuckshop business that gives her extra cash.

Balance

Humans and trees

Life is breath: When humans take a breath, we pull air into our lungs that contains mostly nitrogen and oxygen. When we exhale, we breathe out mostly carbon dioxide. During the process of photosynthesis, the trees around us absorb carbon dioxide and give off oxygen, which we need, to breathe and survive.

2019

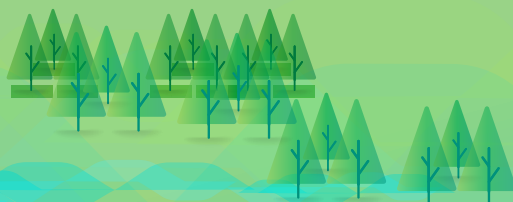


Planet in 2019 – at a glance

Treading more lightly

Our management approach

By treading more lightly on the Planet we can produce more with less — an approach that has obvious economic benefits and which involves reducing our use of fossil energy and the associated greenhouse gas emissions across the full life cycle of our products. It also necessitates using less water and improving effluent quality, mitigating our impact on biodiversity and promoting sustainable forestry through internationally accredited, independent forest certification ([see page 84](#)) and environmental management systems. These include ISO 14001, ISO 9001, ISO 50001 (SEU and SSA) and EMAS (SEU).



Our products are:

Recyclable



Biodegradable



Some of our products are:

Compostable



Globally, **95%** of our **process water** extracted is returned to the environment



Globally, over five years, specific landfilled solid waste decreased by **23.6%**



Globally, **75%** of **solid waste** generated is benefited



Globally, specific **NOx emissions** have decreased **10.32%** and specific **SOx emissions** have decreased by **6.35%**



Globally, **66.35%** of renewable energy is derived from **own black liquor**



Globally, **52.93%** of total energy consumed is from renewable sources

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

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

Some carbon is **internally transferred** from above ground to below ground carbon soils.

Fallen leaves and branches add carbon to soils.

Below ground carbon: roots, litter.

Oxygen is released through respiration.

Above ground carbon is stored in stems, branches and foliage.

Carbon is transferred to the atmosphere through **soil respiration**.

Some carbon is **transferred** from below ground carbon (for example root mortality) to the soils.

Soil carbon: organic, inorganic.

“We need healthy ecosystems to achieve the Sustainable Development Goals and to address climate change: they can provide 37% of the mitigation needed to limit global temperature rise.”

António Guterres, United Nations Secretary-General, International Day of Biodiversity 2019



Knowing the origin of woodfibre is a fundamental prerequisite for responsible sourcing.

Knowing our woodfibre sources



Europe

Our wood sourcing partners (Sapin S.A. in Belgium, proNARO GmbH in Germany, Papierholz Austria GmbH in Austria and Metsä Forest in Finland) buy wood mainly from non-industrial private forests, municipalities and state-owned forests. Given that the use of local raw material makes both ecological and economic sense, most of the wood originates from local, managed semi-natural forests. Wood chips, a by-product from sawmilling, are purchased from sawmills. Pulp is also sourced from external suppliers based in Europe and the Americas.

Primary tree species: Spruce and pine (softwoods) and beech, poplar, aspen and eucalyptus (hardwoods).



South Africa

In South Africa, timber is sourced from about 255,000 ha of plantations managed by Sappi, 138,800 ha managed by private farmers and smallholders contracted to supply Sappi and a small amount from independent growers. Sappi has a comprehensive plantation management system to ensure that its plantations are sustainable.

The **primary tree species** are eucalyptus (hardwood) and pine (softwood). Some paper pulp is purchased from external suppliers, mainly from New Zealand, Spain and the Americas.



United States and Canada

Woodfibre is sourced from landowners and commercial loggers who procure from temperate forests in Maine, New Hampshire, Michigan, Minnesota and Wisconsin, and from the Canadian provinces of New Brunswick, Quebec and Ontario. Sappi also purchases paper pulp from external suppliers in the Americas.

The **primary tree species** used are maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods). Cloquet Mill uses mixed northern hardwoods to produce dissolving wood pulp: aspen and maple sourced from Minnesota, Wisconsin and Michigan.

Our newly acquired **Matane Mill in Canada** procures from Quebec and New Brunswick provinces in Canada and from New England states in the north-eastern part of the United States, including Maine, New Hampshire and Vermont.



Zero deforestation

We neither harvest nor buy woodfibre that originates from tropical natural forests and our wood sourcing causes **zero deforestation**. Our commitment to zero deforestation means:

- Knowing the origin of woodfibre
- Ensuring suppliers implement practices to promptly regenerate forests post-harvest, which is required under the global forest certification standards that Sappi is committed to upholding
- Implementing our Supplier Code of Conduct to continually assess supply-chain, ethical and legal risk; and not sourcing from suppliers associated with deforestation.

We work to build transparent supply chains and maintain close relationships with our suppliers.

Sappi's woodfibre procurement commitments and ambitions are stated in the [Sappi group woodfibre procurement policy](#).

Tree species identified as endangered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are neither used nor imported. We comply with the US Lacey Act, EU Timber Regulation, Australian Illegal Logging Prohibition Regulation, and other regional legal requirements.



Knowing our woodfibre sources *continued*

CASE STUDY

Working together for sustainable forestry

In **SEU**, we work closely with our wood and chip sourcing partners in Austria, Belgium, Finland and Germany, as well as a number of external pulp suppliers, mainly from Europe and the Americas. In addition to providing specific certification claims on each shipment invoice, they also provide us with regular reports on where the wood is coming from. This gives us the necessary insights on our sourcing. We also produce wood origin declarations for each mill to summarise and inform our customers on the wood origin.

Our sourcing partners give us direct access and insight to forestry issues as they emerge. One such issue is the outbreak of the spruce bark beetle (*Ips typographus*) in Europe, which is having profound impacts on forest ecosystems. Following a few years with exposure to drought and high seasonal temperatures, the spruce trees' defence mechanisms to the pest have been depleted.

The thriving beetle population which is now attacking not only stressed and dying trees, but also healthy ones, is exacerbating the situation.

There is currently an aggressive response throughout the region to remove infected trees from the forest and work to control the outbreak. While these impacts of climate change also extend far beyond Sappi, our woodfibre sourcing plays an important role in regional forest economies and our sourcing partners help us prepare and consider ways to build resilience into our future sourcing strategies.

CASE STUDY

Focusing on forests

Shortly after year-end, **SNA** announced a partnership with the nonprofit organisations American Forest Foundation (AFF) and GreenBlue to support the Forests in Focus sustainability risk assessment. The Forests in Focus platform will optimise multiple public data sources to provide customers, brand owners and investors with user-friendly analyses of the sustainability strengths and risk profile of forested lands across specified landscapes.

The platform is designed to complement existing forest certification programmes and provide an account of sustainability for USA woodbaskets in the context of global supply systems. As an early adopter and investor in the programme, Sappi will leverage the new technology to support and validate its sustainability claims and to monitor risks and further strengthen its supply chain.

The Forests in Focus platform provides global customers and brand owners with scientific analyses on the condition of the forested landscape. This is especially important for family-owned woodlands, where there is otherwise a significant gap in information.

Collectively, individual and family-owned land account for more than one-third of all forests across the USA – more forest land than the federal government manages on behalf of the public. These lands are owned by more than 21 million individuals, in small tracts that average 67 acres. According to the Forest Service, these lands collectively supply over 50% of the wood harvested and flowing into supply chains in the USA.

The Forests in Focus platform will be publicly launched in 2020.

Sourcing certified woodfibre



Forest certification provides assurance to our customers that our products originate from responsibly managed forests.

We use the following global certification systems: The Forest Stewardship Council™ (FSC™); the Programme for the Endorsement of Forest Certification™ (PEFC™); and the Sustainable Forestry Initiative® (SFI®) program, and other PEFC-endorsed systems.

All our woodfibre suppliers must provide evidence that all woodfibre is sourced from controlled, non-controversial sources in accordance with the FSC Controlled Wood Standard, as well as PEFC (and SFI in the United States) risk-based due diligence systems.

Across the group in 2019, almost 75% of fibre supplied to our mills was certified. Our global target is to achieve 79% by 2020.

We promote the increased use of certified woodfibre throughout our supply and value chains, and work with credible, internationally recognised, robust systems described above, which give equal assurance of the origin of woodfibre and responsible forest management practices. Our goal is to offer our customers a wide basket of products that are certified by an independent third-party acredible system.



Forest certification



Overcoming barriers to entry

In South Africa, Sappi has worked hard to expand forest certification and has helped introduce PEFC into the country, based on the need for additional certification on customers’ requests for PEFC labelled products. PEFC endorses national certification schemes, which meant South Africa had to develop a new certification scheme including a forest management standard. This is now known as the **South African Forest Assurance Scheme (SAFAS)** which has been assessed and endorsed by the PEFC.

In South Africa, we run a group certification scheme to help mitigate cost pressure on small growers. In FY19, this scheme had 44 members with plantations ranging from less than a hundred hectares to several thousand hectares. We pay small growers in the scheme a premium for certified timber.

How forest certification works



Chain of Custody (CoC) claims are only valid if each link in the chain is certified. For a final product to qualify for CoC claims, all entities that take legal ownership of the material/product along the supply chain must be CoC-certified to ensure an unbroken chain from the certified forest to the final certified wood-based products.

Independent third-party accredited certification bodies conduct CoC audits to verify that an entity’s wood flow accounting system conforms to applicable forest certification systems’ CoC standards.

All our mills are CoC-certified and our own plantations in South Africa are 100% FSC-certified for forestry management.

Expanding responsible forestry

The **Sappi Maine Forestry Program** and the **Sappi Lake States Private Forestry Program**, staffed by Sappi North America foresters, offer a wide range of services to private landowners. Sappi’s staff monitor the implementation of best management practices on harvest sites to ensure adequate regeneration, conservation of soil and water resources, and adherence to harvest plans.

In South Africa, a team of extension officers works with growers in our **Sappi Khulisa** enterprise development scheme to ensure responsible planting and harvesting practices.



Mitigating the impact of climate change in our plantations

We continually monitor and review forest best practices in light of changing environmental factors, helping to mitigate any increased threat from water shortages or drought



Climate change investigations determine which plantations are most at risk, and identify which climatic variables are likely to change, as well as the magnitude and direction of such change. This shapes our planting plan.



Modelled future climate data helps us to produce and select the most optimally suited hybrid varieties for each climatic zone.



The use of satellite imagery focused on rapidly detecting and reacting to damage (drought, pests, diseases) to our plantations enables quick response to any change.



Maintaining a broad genetic base facilitates response to new challenges such as pests, disease and climate change while providing continuous genetic improvement over the long term.



We are replacing pure species with hybrids that are less sensitive to changes in temperature. Our tree breeding division has a target of developing a hybrid varietal solution for all our sites by 2025.



Implementing an extensive fire protection strategy is essential, as climate change exacerbates the potential for fires.



We annually measure approximately 500 permanent sample plots. This information gives us real-time estimates of growth rates. This allows us to react quickly to any decline that may be observed.



Assessing climate change

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. However, given [SEU](#)’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 (five to 10 years). In [SNA](#), our operations do not currently face material risks from climate change. With the exception of fibre from Brazil for Westbrook Mill, we source from northern hardwood and softwood baskets that have not suffered under any drought conditions or from fire.

In [SSA](#), where our operations are being impacted by climate change, we make significant investments in the prevention of fire, pests and diseases, as well as site species matching to tolerate drought, frost and other weather events. We have seen a large steady decline in rainfall in our best growing areas in KwaZulu-Natal (KZN) with a significant decline in mean annual increment and production from these areas.

However, as detailed on the [previous page](#), we take focused steps to mitigate this risk.

Accountability for climate-related issues

While accountability for climate change is ultimately the responsibility of the SETS committee, on a day-to-day basis it is the responsibility of the Group Head Technology who reports directly to the CEO.

This individual is responsible for overseeing:

- Climate change-related research, such as the group’s tree improvement research programmes which focus on improving the sustainable supply of woodfibre
- Research related to the reduction of greenhouse gas (GHG) emissions as well as more efficient water usage – particularly important in South Africa, where climate change is putting pressure on freshwater resources
- Expansion projects where climate-related issues such as energy efficiency, decreased energy usage and reduction in GHGs are always a consideration.



Producing and using renewable energy

Enhancing energy self-sufficiency, improving energy-use efficiency and decreasing our reliance on fossil fuels, thereby reducing our carbon footprint, are key strategic goals.

Our global target is to reduce energy intensity by 5% by 2020 compared with a 2014 baseline. In FY19, compared with our 2014 baseline, there was an improvement of 1.31%.

At our Alfeld, Ehingen, Gratkorn, Lanaken and Stockstadt Mills, **biogas generated on site replaces purchased natural gas.**

Our Alfeld, Cloquet, Gratkorn and Westbrook Mills **generate power from their own hydro plants.**

Reductions in greenhouse gas emissions

Energy use in our manufacturing process

Positive economic implications

Our use of renewable (and nuclear) energy in 2019 as a percentage of total energy was 52.93%, of which 66.35% was own black liquor.

We operate combined heat and power (CHP) plants in many of our mills. These plants generate electricity as well as heat, which is used at the paper machines to dry the paper. Such efficiencies mean our **CHP units are twice as energy efficient as conventional power plants.** We have co-generation power plants at 14 of our mills.

We **sell surplus electricity** from Alfeld, Ehingen, Gratkorn, Maastricht and Stockstadt Mills in SEU; Somerset and Westbrook Mills in SNA and Ngodwana Mill in SSA. In some instances, for example at Gratkorn Mill, surplus heat from the process is used for district heating while Westbrook Mill donates steam to a local hospital.

All our mills in Europe and South Africa are ISO 50001-certified.

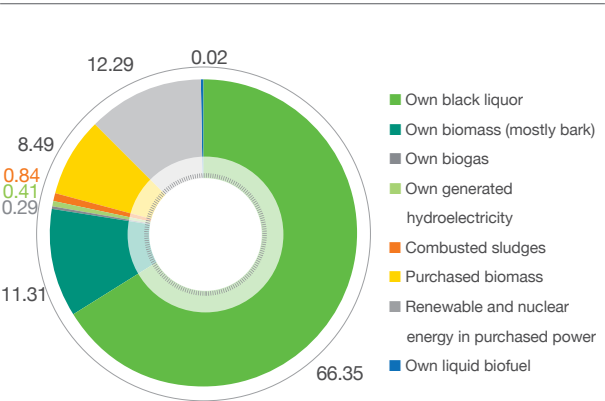
Our high use of energy is balanced by the carbon sequestration of the forests and plantations from which we source woodfibre.

Producing and using renewable energy *continued*

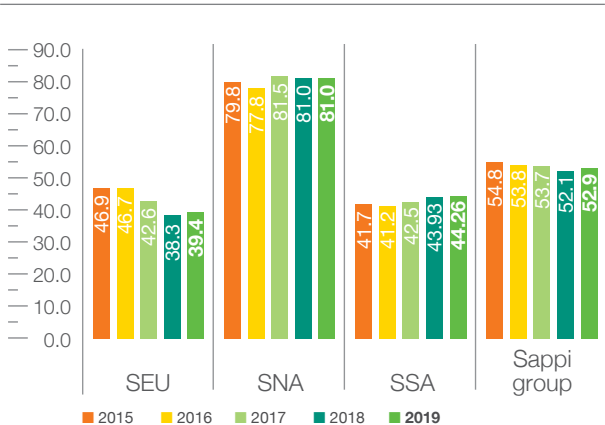
Using renewable, rather than fossil fuel, energy sources is important, as burning fossil fuels releases ‘new’ CO₂ previously locked up in the earth’s crust in the form of oil, gas or coal. When renewable energy like biomass is burned, the CO₂ released is equivalent to that which was bound from the atmosphere during the process of photosynthesis—so, no ‘new’ carbon is being introduced.

The reason for the much higher percentages of renewable energy in our mills in [SNA](#) and [SSA](#) than in [SEU](#) 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 from those that only produce paper, as the black liquor (dissolved organic compounds from wood) created during the manufacture of pulp is a biofuel and primary source of renewable fuel for steam and power production.

Renewable and nuclear energy breakdown (%)



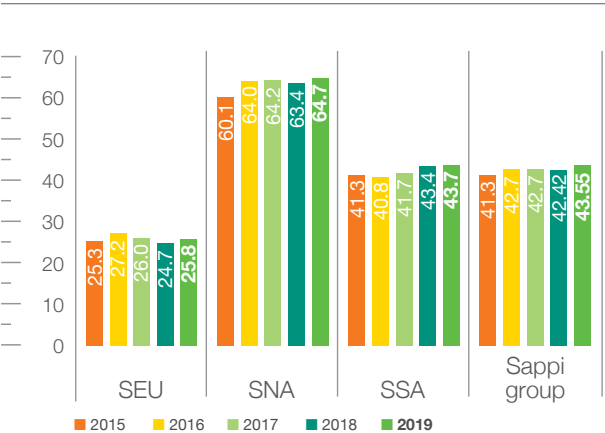
Renewable energy (%)



Comment^{1 2}:

Globally, there was a slight increase. In [SEU](#), the increase was attributable to fewer standstills of the ‘green power’ steam turbine generator at Alfeld Mill compared to 2018. Renewable energy use at Stockstadt Mill increased due to the start-up of a new, highly efficient ‘green power’ steam turbine generator. The situation in [SNA](#) and [SSA](#) was stable.

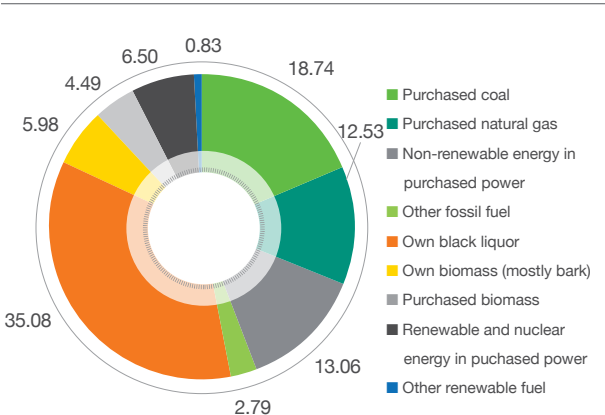
Energy self-sufficiency (%)



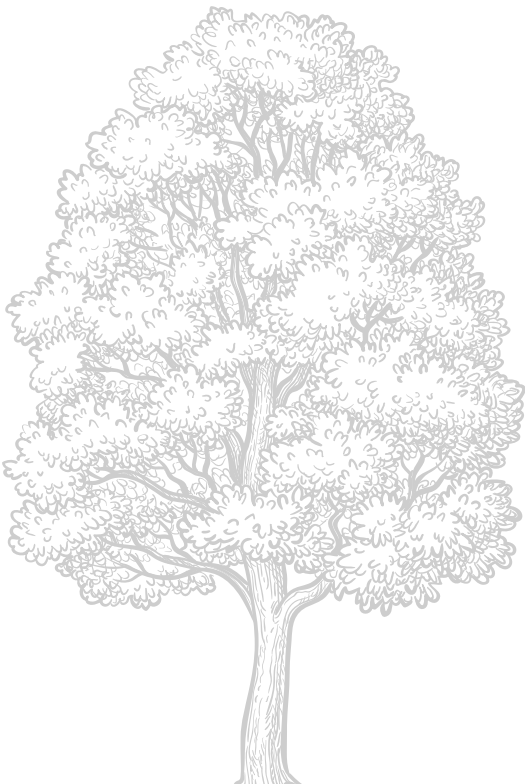
Comment:

Globally, there was a slight increase. In [SEU](#), the increase was attributable to fewer standstills of the ‘green power’ steam turbine generator at Alfeld Mill compared to 2018. Renewable energy use at Stockstadt Mill increased due to the start-up of a new, highly efficient ‘green power’ steam turbine generator. In [SNA](#), there was a slight increase, with both Somerset and Westbrook Mills stable and Cloquet Mill reducing both purchased and total energy. The trend in [SSA](#) was stable.

Fuel sources (%)



¹ Includes renewable and nuclear energy
² Renewable Energy Certificates not deducted.

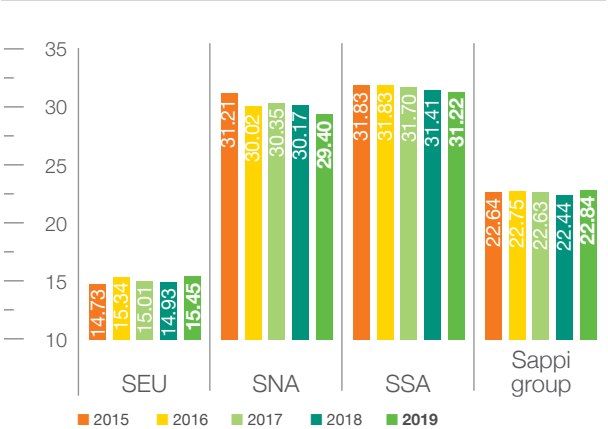


Producing and using renewable energy *continued*

Energy consumption in the organisation (GJ/adt)



Energy intensity (GJ/adt)



Comment³:

Globally, there was a slight increase in specific energy intensity. In [SEU](#), the small increase was caused mainly by the rebuild of PM8 at Lanaken Mill. All other mills slightly increased their energy intensity because of reduced production. The integration of Condino and Carmignano Mills positively impacted specific total energy consumption. However, the integration of Rockwell Solutions, where production differs from the other mills, had a negative impact. There was a slight decrease in [SNA](#), driven by increased DWP production at Cloquet Mill, increased pulp sales at Somerset Mill and an improvement at Westbrook Mill. [SSA](#) was stable.

CASE STUDY

Reducing coal and electricity consumption

As part of Stanger Mill's energy management system, in 2019, efforts were focused on coal consumption and electricity.

- **Coal:** The mill endeavoured to source good quality coal and reduced coal consumption. This was supported by ongoing optimisation of boiler airflows and grate speeds, replacement of cyclones on #4 boiler, mill-wide lagging and steam trap repairs. The distributed control system upgrade on boilers also assisted in process optimisations. This resulted in a steam-to coal average of 7.1 for the year and a reduction of specific steam of 5.0 t/t in 2018 to 4.9 t/t in 2019.
- **Electricity:** A new energy efficient compressor was installed and paper machine drives were upgraded to energy-efficient drives. In addition, non-essential plants were switched off during peak periods. This reduced specific electrical energy from 4.6 GJ/t in 2018 to 4.5 GJ/t in 2019.

³ Figures based on net calorific values.

Focusing on greenhouse gas emissions

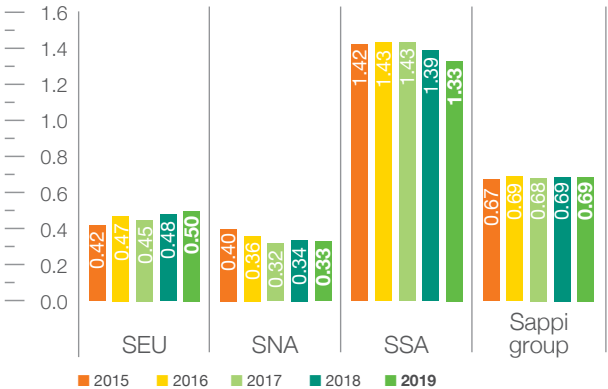
Mitigating climate change and staying well below 2° C degrees temperature rise requires urgent and collective action to reduce greenhouse gas emissions. As a responsible business, we need to focus on reducing our GHG emissions. This not only helps us achieve our aim of treading more lightly on the Planet but considers impending carbon taxes in many countries (already introduced in Finland and South Africa).

CASE STUDY

Calculating GHG emissions

In 2019 SNA updated the eQ GHG calculator and made it available on the **SNA** e-commerce portal. This online tool enables our salesforce and customers to calculate the carbon savings achieved by buying of **SNA** graphic and packaging products as compared to the industry average, highlighting our superior carbon footprint compared to the competition.

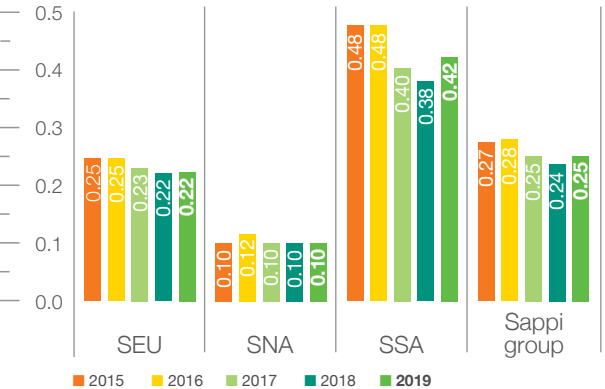
Direct emissions (Scope 1) (t CO₂e/adt)



Comment⁴:

Globally, specific direct emissions were stable. In **SEU**, the slight increase was attributable to the rebuild of PM8 at Lanaken Mill, which led to significantly lower saleable production, and from the integration of Rockwell Solutions, with its production differing from our other mills. Reduced production at other mills led to a small increase. There was a slight decrease in **SNA**. The increase in total GHG emissions at Somerset Mill, due to increased use of tyre-derived fuel based on economics, was offset by higher production levels. Coal use at Westbrook Mill reduced. GHG emissions went up at Cloquet Mill due to increased throughput from the lime kiln. In **SSA**, the slight decrease was due to: Improved use of renewable energy resulting in reduction of coal combustion and higher power imports at Ngodwana Mill; improved coal quality, ongoing optimisation of airflows, grate speeds and general boiler optimisation at Stanger Mill and improved boiler efficiencies at Tugela Mill.

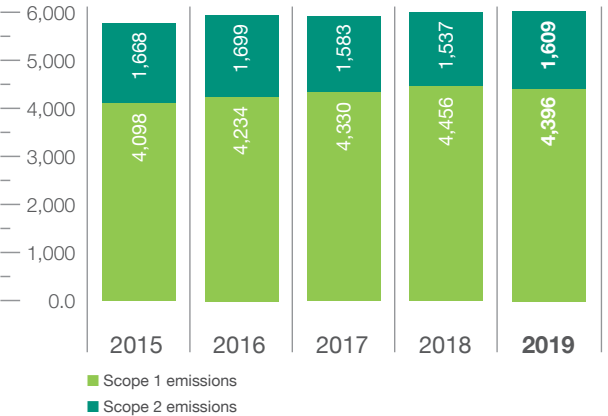
Indirect emissions (Scope 2) (t CO₂e/adt)



Comment⁵:

Globally, there was an increase in specific indirect emissions. **SEU** was stable, with an overall decrease was offset by Lanaken Mill, where the rebuild on PM8 led to reduced production. The increase in **SNA** was due mainly due to the increase in the CO₂ emission factor in power purchased from the power utility. Total purchased power at Cloquet Mill decreased, partially offsetting the increase at Somerset Mill. There was an increase across all mills in **SSA** due primarily to a deterioration of 9.4% in the emission factor of power purchased from Eskom, the state power utility, even though Stanger Mill improved Scope 2 efficiency. Other reasons included: Imported power at Ngodwana Mill increased due to a pulverised fuel boiler tube leak in Q2 and a shut in Q3. Commissioning the new woodyard at Saiccor Mill and filling chip piles consumed additional power. In addition, the new screening plant at the mill consumes additional power without additional production. The turbine generator #7 was also steam restricted and stopped regularly.

Absolute direct (Scope 1) and indirect emissions (Scope 2) (m tCO₂e)

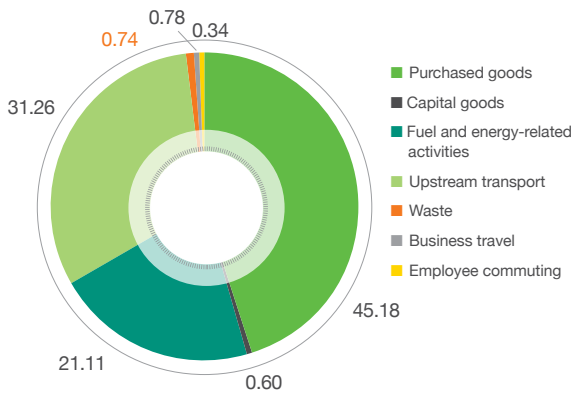


⁴ Scope 1 emission calculations are based on the GHG Protocol, using IPCC emission factors (chapter 2, table 2.2, 2006) and 5th Assessment GWP factors

⁵ Scope 2 emissions are calculated on the market-based method as defined by the GHG Protocol.

Focusing on greenhouse gas emissions *continued*

Scope 3 categories (%)



Comment:

We are committed to acting responsibly throughout our value chain. Calculating Scope 3⁶ emissions will allow us to make decisions based on price and suppliers' environmental performance. Integrated and non-integrated mills will also be more comparable when the sum of total Scope 1 + 2 + 3 emissions is considered.

The GHG Protocol divides Scope 3 emissions into 15 categories. Sappi reports emissions in categories 1-7, as these are most material to our business. To provide a clearer picture of Sappi's Scope 3 emissions, we plan to improve the accuracy of Scope 3 data and investigate categories 8-15 more closely in FY20.

For most raw materials and upstream transport, standard secondary emission factors have been used from public databases, primarily from DEFRA and Ecolnvent. Primary emission factors were used for pulp suppliers. Accuracy of Scope 3 emissions will be increased by using more primary data-collecting emission factors directly from suppliers.

The three most significant categories for Sappi are purchased goods (category 1), fuel and energy related activities (category 3) and upstream transport (category 4) which comprise approximately 98% of the total Scope 3 emissions.

CASE STUDY

Ratcheting up pulp integration at Ehingen Mill

In 2019, a team at Ehingen Mill worked to increase the level of pulp integration, ie the amount of pulp a mill produces onsite compared to pulp purchased on the market. Given Ehingen's changing product portfolio over the last four years, pulp integration had been declining due to the needs for specific pulp qualities only attainable by using market pulp. However, an innovative approach led to reversing this trend and achieving a significantly higher integration rate in 2019. A diverse mill project team succeeded in finding the right processes, recipes and grade structure that made it possible to increase the integration from 73.4% to 77.3%. This reduced the mill's dependency on purchasing market pulp, and delivered a range of positive environmental impacts through avoided transport, reduced refining, and use of never-dried own pulp. This corresponded to savings of 4.273 tons of steam, 553 MWh electricity, 500 tons CO₂.

⁶ Sappi uses the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (also referred to as the Scope 3 Standard) to determine indirect emissions resulting from value chain activities (Scope 3 emissions).

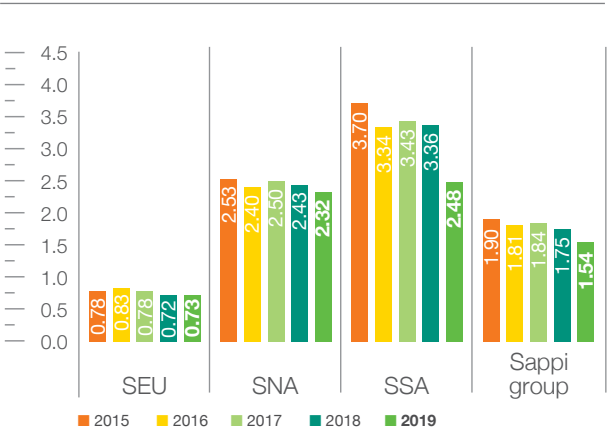
Decreasing emissions

CASE STUDY

Reducing NOx emissions at Stockstadt Mill

The project team at Stockstadt Mill worked to find an innovative solution to reduce NOx emissions: They examined the combustion process of thick liquor in the utilities department. Working inside one of the boilers, they experimented with the fuel injectors. By altering the fuel injectors to have an asymmetrical combustion gradation, the team observed greater efficiency in reducing NOx levels. The modified fuel injectors improve the temperature profile in the combustion chamber and reduce the formation of thermal NOx. After a 12-month trial period, the results are excellent. At all operating parameters the new NOx target figures are fulfilled. The mill's self-developed new fuel injectors will enable it to meet new regulatory limits at every load range of combustion without further investments in fluegas purification plants. The mill has been able to reduce NOx figures by over 18% from below 400 mg/Nm³ to below 325 mg/Nm³.

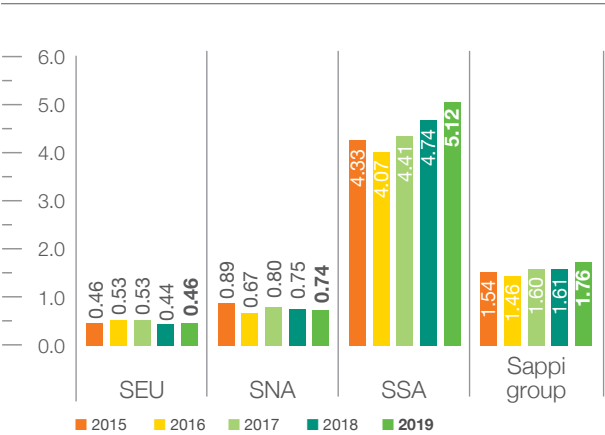
Specific NOx air emissions (kg/adt)



Comment:

Globally, there was a decrease. There was a slight increase in **SEU** due mainly to an increase in the fluegas at boiler no 2 at Kirkniemi Mill. Rebuild of PM8 at Lanaken Mill which resulted in significantly lower levels of production and the integration of Rockwell Solutions also contributed to the slight increase. There was a slight decrease, in **SNA**, due mainly to increased production levels at Cloquet and Somerset Mills. There was a decrease across all mills in **SSA**.

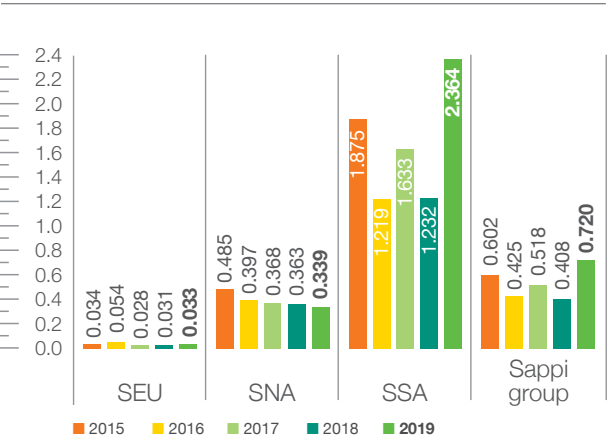
Specific SOx air emissions (kg/adt)



Comment:

Globally, there was an increase. The slight increase in **SEU** was caused by the higher sulphur content of coal used in boiler no 9 at Stockstadt Mill (low-sulphur coal is not available on the market). The increase was also driven by lower levels of production at Lanaken Mill due to the rebuild of the PM8. These impacts were only partly compensated for by a decrease in the other mills in the region. There was a slight decrease in **SNA** given less coal combustion at Westbrook Mill. Emissions went up in **SSA** due to an increase in high concentration low volume (HVLC) gas volumes attributable to higher levels of dissolving wood pulp production. The situation should improve once maintenance on the Tugela Copeland scrubber is completed in 2020.

Specific particulate matter air emissions (kg/adt)



Comment:

Globally, there was an increase. The increase in **SEU** was very low, due mainly to increased operating time of the recovery boiler at Stockstadt Mill. The measured concentration at the bark boiler fluegas at Ehingen Mill was also higher. There was a decrease in **SNA** where emissions at Cloquet Mill were significantly lower due to recovery boiler precipitator upgrades. Emissions at Somerset Mill increased due to an unfavourable stack test as the result of mechanical issues with the east precipitator on the no 1 boiler. The precipitator has now been rebuilt and a new test scheduled. The situation at Westbrook Mill improved due to reduced coal burning. There was an increase in **SSA**, due mainly to the performance of the grit collectors on boilers no 3 and no 4 at Stanger Mill. However, these will be replaced in 2020 while maintenance and optimisation of boilers no 1 and no 2 at the same mill, and of the boilers at Tugela Mill, is in progress and will continue through 2020.

Managing water responsibly

Globally, there is enough freshwater for the world's population but it is **distributed unevenly** and too much of it is **wasted, polluted** and **unsustainably managed**.



Water is essential for the **healthy growth of trees**, one of the key inputs to our processes. It's also used in major stages of our manufacturing processes.



Water quality is just as important as water quantity. We manage it by:

- **Regulating drainage and minimising erosion**, thereby preventing run-off into streams and rivers.
- **Planning and constructing roads** to prevent erosion and ensure water run-off is not directed straight into rivers.
- Ensuring **run-off** after harvesting is **kept to a minimum**, including leaving harvesting residue on the ground and ensuring that the correct harvesting and extraction methods are used.
- Using **fertiliser only once in each rotation** (fertiliser reaches water sources by means of run-off).
- Using **short-lived pesticides** that have little or no impact on downstream ecosystems.

Water quality in our plantations



Water in our plantations

Our **world-leading improvement programmes** are focused on growing better trees faster, breeding for drought resistance and matching tree species with sites.

In our plantations, we apply **best practice management techniques** to produce woodfibre with properties that allow it to be pulped using less energy and water.

Our plantations require **no irrigation** at all, using only rainwater and groundwater.

Planting trees too close to water can reduce stream flow. We mitigate this risk by delineating riparian zones and **ensuring water sources are kept free of commercial trees**.



Water quantity in our plantations



All our mills use and treat water in accordance with **comprehensive environmental permits**. Water management is included in our operational environmental management plans, which are reviewed and updated annually.

We focus on **identifying opportunities to save water** throughout our pulp- and paper-making production process, **recycling extensively** within these processes and **improving the quality of the wastewater** (effluent) we discharge.



Water sources

Most of the water used in our operations is drawn from **surface water in the form of lakes and rivers**, with small amounts of groundwater and municipal water used. In addition, about 50% of a tree is water, which is used in the manufacturing process.



Manufacturing

Water is used in **all major process stages**, including raw materials preparation (woodchip washing), pulp cooking, washing and screening, and paper machines (pulp slurry dilution and fabric showers). Water is also used for process cooling, materials transport, equipment cleaning, general facilities operations, and to generate steam for use in processes and on-site power generation as well as various other purposes.



Evaporation

Throughout the process, especially on the paper machines and cooling towers, water is converted to **water vapour** and emitted from the process. These vaporised sources re-enter the atmosphere and will ultimately end up as precipitation in the local ecosystem.



Reuse

Water is **recycled and reused several times** throughout the mill and requires different levels of treatment depending on its use. For example, water used in the steam systems (boiler feedwater) must be purified to minimise corrosion. Once steam is condensed, it is recaptured and reused in the steam system. By contrast, raw water can be used without any treatment for non-contact cooling systems and can be returned directly to water sources as long as it is not too warm.



Wastewater (effluent)

Most of the water used in the pulp and papermaking process requires treatment prior to discharge to any receiving waters. At some mills, solid materials collected in the various treatment stages are dewatered and used as a fuel for energy production.

Converting waste to energy also reduces the volume of organic materials sent to landfill. At our mills, once the water is used, reused and treated, it is returned to surface water sources. **Approximately 95% of our water intake is returned.**

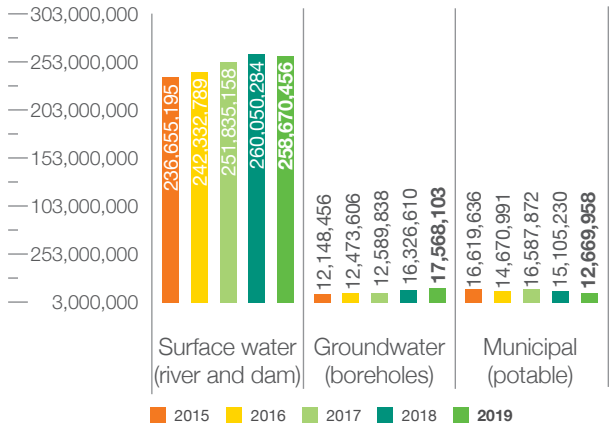


Testing

Both freshwater and wastewater are routinely tested, either at mill sites or in laboratories. We use various metrics to ensure that we comply with all relevant environmental regulations.

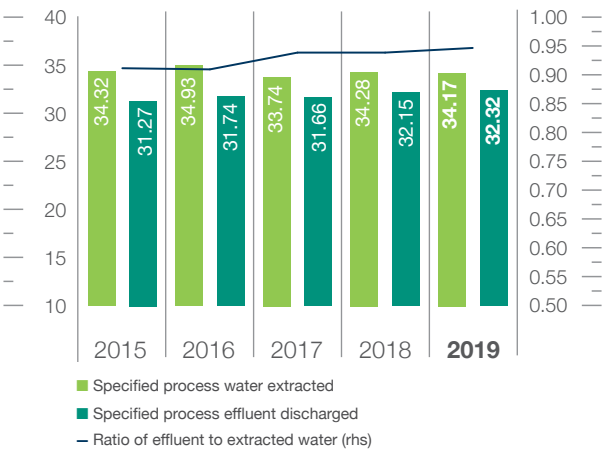
Managing water responsibly *continued*

Total water withdrawal by source (m³/adt)



Comment:
Globally, the trend for total water withdrawal was stable. It decreased in [SEU](#), while in [SNA](#) total surface water withdrawal decreased at Cloquet Mill and was stable at Somerset Mill. Withdrawal in [SSA](#) was stable.

Specific water returned to extracted (m³/adt)



Comment:
Globally, consumption was stable. There was an increase in water consumption in SEU, due mainly to the rebuild of PM9, PM8 and PM6 at Gratkorn, Lanaken and Maastricht Mills respectively. Water consumption was higher year-on-year at Stockstadt Mill because of 15% higher pulp production. The decrease in specific water consumption in SNA was due to increased production at Cloquet and Somerset Mills, combined with decreased total use. Decreased water consumption in SSA was due to initiatives at all mills:

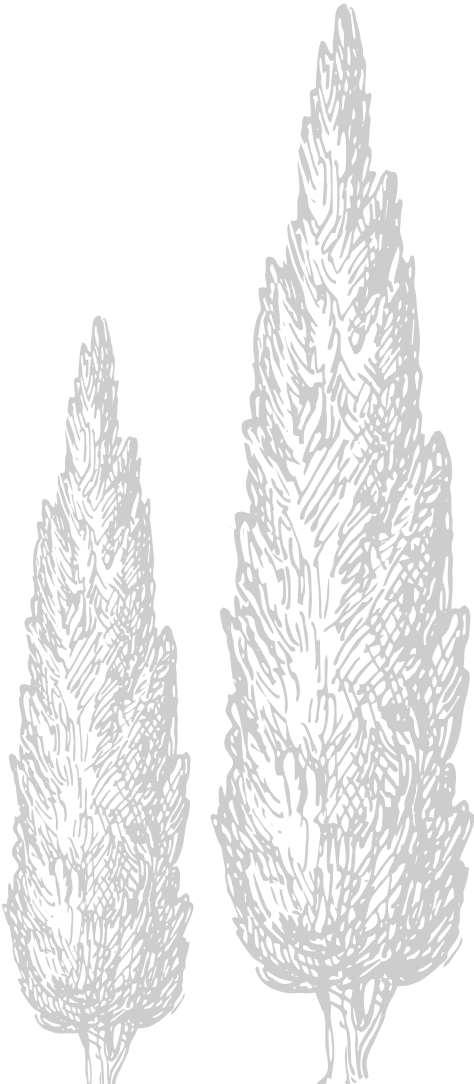
- **Saiccor Mill:** Reduced specific consumption due to an increase in production and a number of water-savings initiatives including repairing leaks, reducing tank overflows and an improvement in condensate recovery

- **Ngodwana Mill:** Improved efficiencies because of increased production rates
- **Stanger Mill:** Sugar mill off-crop shut (the mill uses sugar cane waste residue – bagasse), process water was replaced with recovered water in the pulp mill, process optimisations, improved water use in the bagasse depithing plant.
- **Tugela Mill:** Improved water balance controls on the paper machine to reduce unnecessary make-up; improved stability on paper machine and spray dryer; further water reduction especially on PM2 with cleaning processes and reduced overflowing of backwater tank; increased stability on the digester; reduced make-up water by stopping waste plant when PM2 was not operating.

CASE STUDY

Reducing water use at Stanger Mill

In reviewing ways to reduce water use, the mill focused on the significant water users in the mill – the pulp and wet depithing operations. We have replaced processed freshwater with recovered water at the screw feeder and rock cyclone in the pulp mill. This was followed by optimisations on the pith clarifier and belt washer. The pulp mill water use reduced from an average volume of 6.8 m³/min in 2018 to 6.1 m³/min in 2019.



Managing water responsibly *continued*

CASE STUDY

Getting more from less

Ngodwana Mill identified an opportunity for cost-efficient improvement in its steam generation process: Investigations indicated that the quality of feed and boiler water was good enough to allow the boiler to operate at the ‘sweet spot’ in terms of its most optimal ratio – total dissolved solids (TSS) concentration of the blowdown water to TSS concentration of the feedwater. This ratio is known as the cycles of concentration (COC). The steam generation process optimisation at Ngodwana Mill focused on maximising the boiler COC, bringing significant improvements in economies of treatment chemicals, water and fuel.

The boiler COC optimisation required no capital investment. The first step was to understand the system dynamics and determine the baseline: The proposal to increase the boiler COC was done through the Ngodwana Mill standard trial procedure. The boiler COC was increased from 80 to 90 COC for a one-month period. The quality of boiler water was monitored very closely during the trial period and a trial review was done completing the first three-month stage.

Following this, the COC was increased from 90 to 100 COC 12 months. Samples of boiler tubes were taken as per standard practice during the annual shut within the course of the extended trial period to assess the general impact of water quality on the tubes. Results indicated that the water quality was good and had no abnormal impact on the tubes. A decision was made to keep the boiler COC permanently at 100 COC until the next shut while continuing with the regular water analysis.

Key process indicators were identified as follows:

- Boiler water quality (silica iron and conductivity)
- Boiler blowdown rate and chemical use reduction
- Boiler water make-up rate and energy input reduction
- 2020 shut inspections

The commissioning of the new condensate polisher plant at Ngodwana Mill has improved the feed water quality sufficiently and created an opportunity to maximise the boiler cycles. By implementing the concept of getting more from less, we optimised steam boiler cycles and were able to reduce the annual total cost of boiler water treatment by 10-15% without negatively impacting water quality or putting the system at risk.

Since we have increased the boiler cycles, the combined boiler blow-down has reduced by 2.5 tons (demineralised make-up at elevated temperature and effluent reduction). The boiler chemical dispersant consumption which affects the annual rand cost was reduced by 16.5%, which meant 5 tons less was disposed to effluent drains.



Managing water responsibly *continued*

CASE STUDY

Pioneering innovation in wastewater treatment

Sappi Europe’s re-build of PM8 at Lanaken Mill put a number of elements in place to produce bulky wood-free sheets. During the project, investments were made to achieve environmental benefits throughout the mill’s assets. Through the PM8 redesign and technology, improved energy efficiency will be realised once the machine is fully online. The wastewater treatment plant was another area of focus to prepare the mill for the new pulp and production capacity.

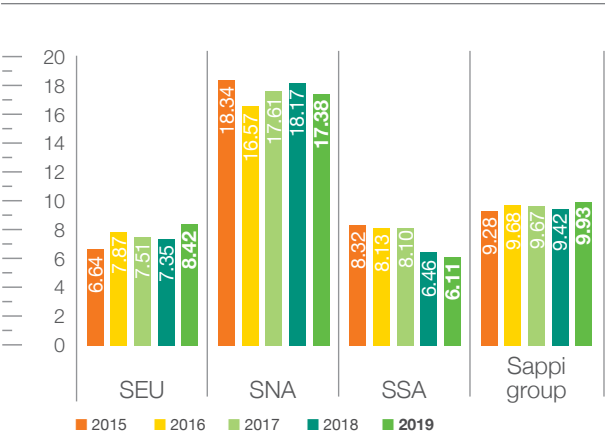
The mill’s wastewater treatment plant incorporated a series of innovative technologies, many never deployed previously in the paper industry and all developed on site at Lanaken Mill. The treatment plant uses a series of anaerobic and aerobic systems, together with advanced oxidation technology which reduces lignin in the final effluent. The state-of-the-art facility optimises the

limited space available and triples capacity. The new wastewater plant gives the water clarity and reduces the Chemical Oxygen Demand (COD) levels.

The mill is now well positioned to deal with future challenges by ensuring that increased pulp production and different species mix or other changes will not impact the ability of the mill’s effluent to meet and exceed expectations laid out in Belgium’s water regulations.

Going forward, there are also new opportunities that the wastewater treatment plant can provide to move the installation from cost to earning. From producing biogas to creating new material streams from the alginates recovery, collaboration with R&D and the academic community is now ongoing to explore this circular economy opportunity.

Specific COD (kg/adt) (excluding Saiccor Mill)



Comment:

Globally, there was an increase, attributable mainly to **SEU**: Alfeld Mill increased pulp integration and also increased spruce wood input from 50% to 65%, which had a negative effect on the biodegradability of COD. The increase at Gratkorn Mill reflects to a higher amount of bleach plant wastewater with low biodegradability due to increased pulp production and increased sludge losses. Levels at Stockstadt Mill rose due to increased pulp production and lower performance in the anaerobic reactor. An electric power outage in July 2019 caused neutralisation disturbances and acidified the reactor, decreasing efficiency. Ehingen Mill somewhat offset the increase with a decrease in COD due to the improved evaporation of spent liquor. Wastewater treatment at Lanaken Mill is expected to stabilise following the major rebuild in 2019.

In **SNA**, total COD was stable year on year, however specific COD improved based on increased pulp sales at Somerset Mill. There was a decrease in **SSA**, due largely to commissioning a new chlorine dioxide plant and resulting effluent improvements.

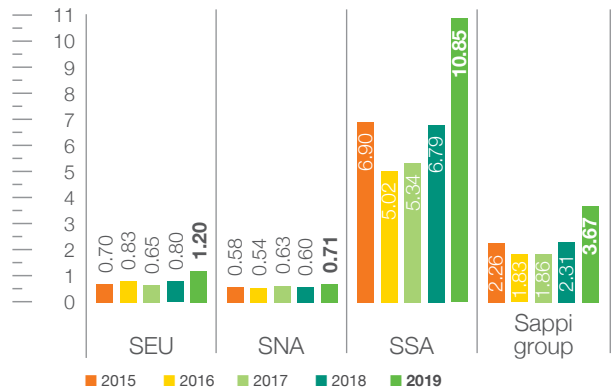
Note:

SEU aims to increase pulp integration, which will lead to increased specific COD load. To mitigate this increase, the following plans are in place:

- **Alfeld Mill** will increase its pulp mill evaporation capacity and the capacity of the anaerobic part of its effluent treatment plant. This will be realised through two projects to be completed before the end of June 2021. This will increase the process stability of biological effluent treatment and lead to decreased values for TSS and COD in the final effluent.
- At **Gratkorn Mill**, we are investigating magnesium oxide-based pre-bleaching with recirculation to brown stock washing in according with best available technology (BAT) requirements. In addition, a capacity increase of the sludge-handling equipment is in the planning stages.

Managing water responsibly *continued*

Specific TSS (kg/adt) (including Saiccor Mill)



Comment:

Globally, there was an increase across all regions: In **SEU**, emissions increased at Gratkorn Mill due to hydraulic peaks and bottlenecks in the sludge-handling capacity. At Lanaken Mill, following the rebuild of PM8, there was a change in wood species which led to increased organic load in the wastewater treatment plant. However, wastewater treatment at the mill is expected to stabilise in 2020. At Stockstadt Mill, the increase was due to problems with the recovery plant.

In **SNA**, at Cloquet Mill, inefficiencies in the on- and offsite wastewater treatment plants contributed to the increase. TSS increased at Somerset due to high sludge volumes and a high level of sludge in the polisher pond. The increase at Westbrook Mill was due to several one-time events.

The increase in **SSA** was due to unstable conditions (plant trips and shut) at Saiccor Mill which contributed to a higher level of fibre in the effluent. At Tugela Mill, the additional solids to effluent and high fibre loss from the paper machines and waste plant were caused by instability during and after the plant shut and clarifier 2 not functioning optimally.

Note:

Going forward, action plans in each region include:

- SEU:** Alfeld Mill will increase its pulp mill evaporation capacity and the capacity of the anaerobic part of its effluent treatment plant. This will be realised through two capex projects which will be completed before the end of June 2021. This will increase the process stability of the biological effluent treatment and lead to decreased values for TSS and COD in the final effluent. Gratkorn Mill is planning a capacity increase of the sludge-handling equipment.

- SNA:** Dredging the polishing pond in FY20 and an increase in the food-to-mass ratio in the waste treatment aeration basins to lower sludge volumes.
- SSA:** Increased plant stability at Saiccor and Tugela Mills will decrease TSS to effluent.





Deriving value from waste

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

The least desirable method of solid waste disposal from an environmental perspective is landfill. Organic waste emits methane, a greenhouse gas with 28 times the global warming potential of CO₂ while inorganic waste can leach, resulting in soil, surface- and/or groundwater pollution.



Logs are debarked at the pulp mill. Globally, most of Sappi's solid waste generated is in the form of **bark**. In all regions, this is used as a fuel for onsite energy generation. In South Africa, bark is also used for composting and landfill stabilisation.



Bagasse supplied to Stanger Mil in South Africa is depithed, and the pith given to farmers as a soil enhancer.



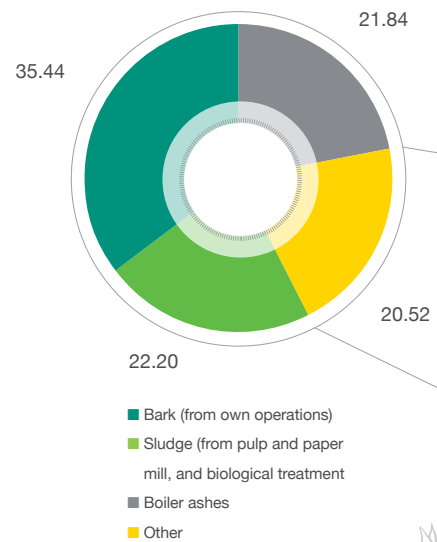
At Saiccor Mill and Lomati Sawmill in South Africa, we are assessing the possibility of extruding **sawdust** and binding it with lignin to form fuel rods, which would be used for energy, replacing coal.



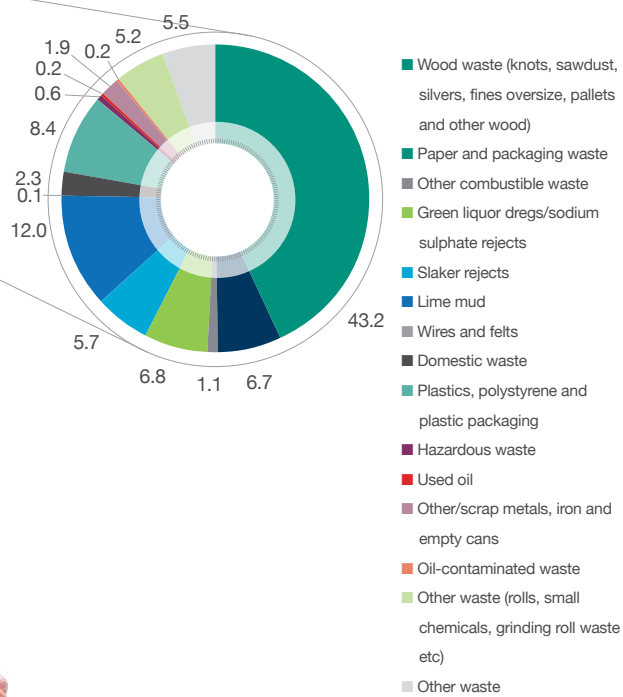
Over five years, globally, we have reduced specific waste to landfill by **23.59%**. During this period, the amount of solid waste combusted for heat use has increased by **33.13%** and the quantity of waste sold has increased by **41.08%**.

Minimising waste *continued*

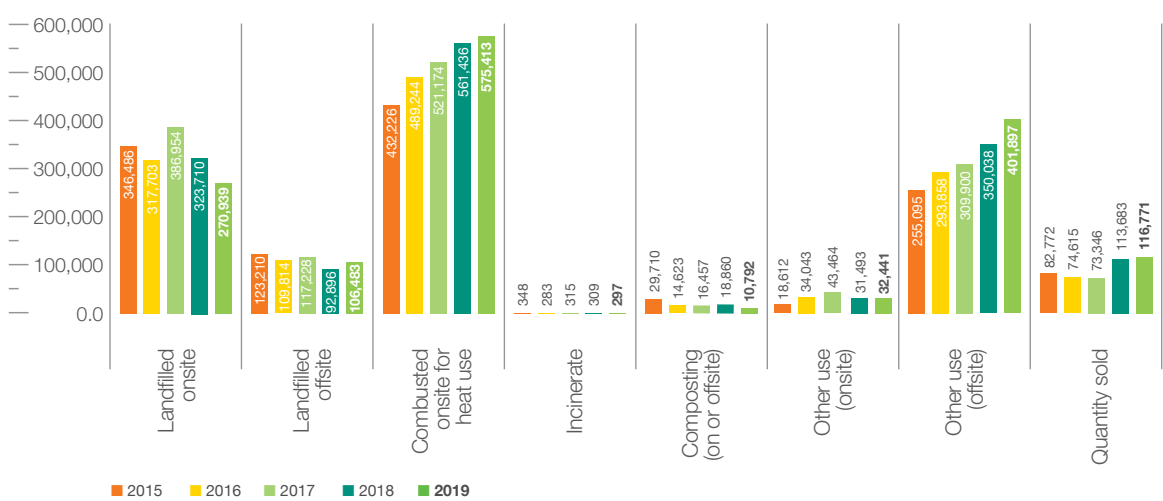
Global breakdown of solid waste types in Sappi (%)



Global breakdown of “other” solid waste types in Sappi (%)



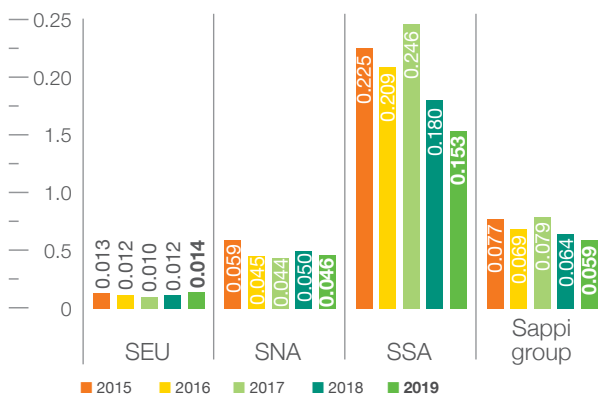
Disposal methods of solid waste (t/adt)



Comment:

In **SEU**, on-site combustion decreased mainly to the closure of the bark boiler at Stockstadt III which in turn increased the off-site combustion. The situation in **SNA** was stable, while in **SSA**, increased beneficiation led to a decrease in landfilled waste.

Specific landfilled solid waste (t/adt)



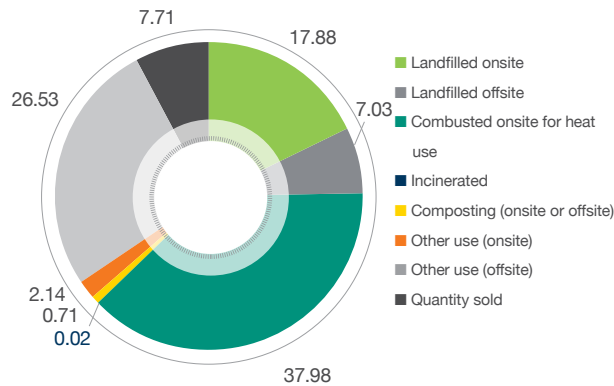
Comment:

Globally, there was a decreased in waste sent to landfill. However, there was an increase in **SEU**, due mainly to the acquisition of Rockwell Solutions and a higher amount at landfilled soil waste at Gratkorn Mill. The decrease in **SNA** was due a reduction of landfilled dregs at Cloquet mill and less boiler ash being sent to landfill at Westbrook Mill. The decrease in **SSA** was primarily because of an increase in ash sales at Ngodwana Mill.



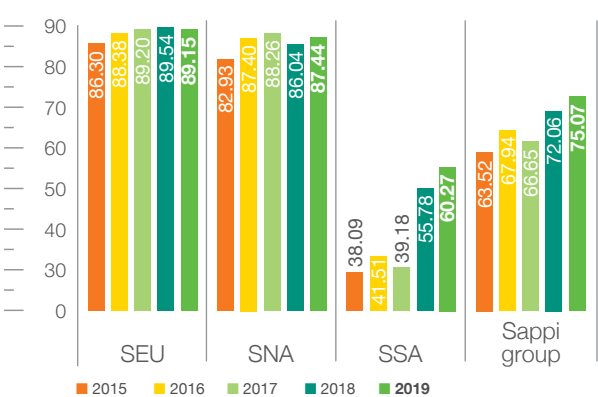
Minimising waste *continued*

Disposal methods of solid waste (%)



Comment:
In **SEU**, onsite combustion decreased mainly due to the closure of the Stockstadt Mill bark boiler which in turn increased offsite combustion. In **SNA**, landfilled was stable, while in **SSA**, levels decreased because of higher levels of beneficiation.

Beneficial use of solid waste (%)



Comment:
Globally, there was an increase year-on-year. **SEU** was stable and there was a slight increase in **SNA**, due to a reduction in landfill, improved sludge burning at Cloquet Mill, increased bark burning at Somerset Mill and lower offsite landfilling at Westbrook Mill. In **SSA**, Saiccor Mill beneficiated more ash (used in blockmaking and cement production), while Ngodwana Mill increased ash sales.

CASE STUDY

Reducing pallet wrapping film at Ehingen Mill

In 2019, at Ehingen Mill, we worked to reduce the amount of wrapping film used to cover pallets of paper for shipment. By lowering film thickness and optimising the wrapping processes in the finishing department, we have been able to decrease the amount of film used to pack paper pallets about to be shipped. Through simple measures like cutting the protective wrapping film more precisely, we save 35.4 tons of film per year and have reduced the volume of eventual waste for our customers. The new process still ensures that goods arrive at the customer safely and well protected. The initiative was the result of in-house lean updates and active brainstorming among colleagues.



Teamwork

The goby fish and shrimp

The shrimp builds and maintains a burrow that both animals live in and the fish offers the shrimp protection from predators. The goby just sits in the entrance of the burrow, keeping guard and warning the shrimp, which is nearly blind, with a flick of its tail, of danger. And before the shrimp emerges from the burrow, it touches the goby's tail with its long antennae. To show it is safe to come out, the goby gently wiggles its tail.



Sappi and the United Nations Global Compact



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

30 September 2019

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 embedding the goals as set out in the Ten Principles into our everyday business activities across the group.

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 progress in terms of the global Sustainable Development Goals (SDGs) which came into effect at the beginning of 2016.

In keeping with the overarching spirit of the UNGC and 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



Forests and the SDGs

Sappi's business depends on forests. As forests are directly or indirectly linked to all the UN Sustainable Development Goals (SDGs), this reliance is both an opportunity and a responsibility. Our opportunity is to invest and promote healthy forests for our benefit and the myriad benefits they deliver to the planet. Our responsibility is to ensure that our reliance on forests does not come at the expense of other products and ecosystem services that forests provide. With our strong commitment to, and expertise in, forestry we strongly believe sourcing and using wood sustainably and responsibly is part of the solution, not the problem.

Forests' contribution to SDGs



Source: FAO. 2018. *The State of the World's Forests 2018 – Forest pathways to sustainable development*. Rome

What does this goal mean to Sappi?

Water is an essential natural resource on which our company depends. We need to use it responsibly and demonstrate that we take this responsibility seriously. Water quality, availability and access are critical issues impacting sustainable development, but the diversity and severity of water issues vary widely between regions, countries or specific locations.

As an energy-intensive industry, our fuel choices have a big impact. Where SDG13 focuses more directly on CO₂ emissions, the point of relevance for this goal is explicitly on the share of renewable energy within our total energy consumption. The proposed indicators should help to profile our progress as well as encourage us to continually improve and look for new energy solutions. A reduction in energy intensity is another, complementary way that Sappi can contribute to this goal.

Given that we are a responsible business operating in many locations around the world and an employer of over 13,000 people, this goal is strongly linked to Sappi's commitments to Prosperity and People.

Manufacturing products from sustainably harvested, renewable forest resources is the core of our business. Correspondingly, there are many points of relevance for how Sappi can contribute to this SDG, especially from the perspectives of manufacturing, product design and product use/end of life. We operate according to circular economy principles by using resources efficiently and reducing waste generation, from manufacturing processes through to end-of-life product recycling. With investments in R&D and new product development, Sappi's innovation continually strives to create new products and value from woodfibre and side streams. Not only does this work improve resource use but, in many cases, it also generates products that have superior sustainability credentials to the conventional products that they replace.

How are we translating the goal into action?

We have proposed a global indicator which will focus on water consumption as measured by water use efficiency (m³/adt). It will only apply to Sappi mills located in water-scarce locations. Across all Sappi mills, the topic of water stewardship will be embedded to ensure we take a proactive and responsible approach to managing water issues holistically, even in locations not considered water-scarce.

Global goals will focus on the share of renewable energy in power and on specific total energy (STE, GJ/adt).

Indicators that adequately cover the scope of this goal and reflect both the desire to measure and reduce negative impacts (accidents) and quantify positive contributions (contribution to local economies) and specifically reflect sustainability aspirations. Proposed indicators are:

- Safety (LTIFR)
- % procurement spend with declared compliance with Supplier Code of Conduct
- Gender diversity: Proportion of women in middle and senior management
- Employment engagement survey
- EBITDA

The global indicators we have proposed include reduction of specific landfilled waste and new products launched with defined sustainability benefits.

Aligning with the United Nations Sustainable Development Goals



In alignment with the spirit of the first UN Summit on the Sustainable Development Goals (SDGs): *Gearing up for a decade of action and delivery for sustainable development*, in 2019 we established a working group to prioritise the SDGs most relevant to our business and develop related action plans. As set out below, we have identified seven global priority SDGs where we can make the biggest contribution, either by reducing our negative impacts or increasing our positive contributions. In South Africa, we have also identified *SDG1: No poverty* and *SDG4: Quality education*. For further details, please see our 2019 SSA Corporate Citizenship Report.

What does this goal mean to Sappi?

Taking urgent and appropriate actions to combat climate change and its impacts is a shared responsibility reinforced in the Paris Agreement and regional and national regulations and/or initiatives. For Sappi the obvious and direct connection to this SDG is through our CO₂ emissions and actions and commitments we take to reduce them.

This SDG seeks to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

While Sappi is already engaged and contributing to many partnerships and collaborations, there are many further opportunities in the sustainability arena for Sappi to become more involved generally, or in pursuit of our SDG commitments specifically. The intention with this goal is further strengthen our contribution to partnerships in a way that is well aligned with our priority SDGs and topics, and where a partnership approach can support us in contributing more actively and effectively to various issues.

How are we translating the goal into action?

We are looking to set an ambitious strategic goal to decarbonise to prevent a 1.5° C temperature rise and at intensifying efforts to work with suppliers and customers to reduce CO₂ emissions (Scope 3 actions.)

With Sappi's excellence in sustainable forest management and strong reliance on forest certification systems, we can make a positive impact on this goal by continuing to increase our positive contributions to sustainably managed forests and using our established global forest certification goal as an indicator. Looking ahead, we plan to take a more active, collaborative role on forest-related issues and expand our use of social media on this issue.

We will focus on building and activating partnerships to contribute to our priority SDGs and priority topics including: climate change and forests, sustainable forest management, water stewardship, responsible procurement, innovation, circularity and energy policy.



Sappi and the United Nations Global Compact *continued*

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 Organization (ILO).

We also conform to, and in many cases, exceed prescriptions in 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.

Prioritising SDGs

SSA is involved with a National Business Initiative project to identify a set of priority SDGs and sector-level objectives for the agri-processing sector against which the sector can measure and scale impact. We are contributing to align these with Sappi's priority SDGs. This is a two-year project and could result in a few projects where Sappi would be collaborating with other industry players to improve the livelihoods of rural communities.

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 on social responsibility, labour standards and human rights, and
- Commit to openly and transparently reporting on human rights violations in our value chain, should these occur.

This policy further commits us to working with communities to address indigenous people's interests and to resolving land claims in South Africa by working with the claimants to achieve resolutions that benefit all parties.

In terms of our [Group Supplier Code of Conduct](#), 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 World Justice Project Rule of Law Index® measures rule-of-law adherence in 126 countries and jurisdictions world-wide based on eight factors: constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice and criminal justice.

The fourth factor, fundamental rights, encompasses adherence to the following: effective enforcement of laws that ensure equal protection, the right to life and security of the person, due process of law and the rights of the accused, freedom of opinion and expression, freedom of belief and religion, the right to privacy, freedom of assembly and association, and fundamental labour rights, including the right to collective bargaining, prohibition of forced and child labour, and elimination of discrimination.

Under this index, the countries in which we have manufacturing operations are classified as set out in the table below. This confirms our understanding that human rights violations in these countries are limited. Scores range from 0 to 1, with 1 indicating the strongest adherence to the rule of law:

Country	Score	Global ranking (out of 126 countries)
Austria	0.82	7
Belgium	0.79	14
Finland	0.87	3
Germany	0.84	6
Italy	0.65	28
Netherlands	0.84	5
South Africa	0.58	47
United States of America	0.71	20

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, nor have we identified operations and significant suppliers as having any 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.



Sappi and the United Nations Global Compact *continued*

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 2019, globally, 62% of our workforce was unionised, with 69% belonging to a bargaining unit.

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

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 for individual wellbeing, and to achieve our group goals and objectives. In each region, disciplinary codes ensure appropriate procedures are applied consistently, while grievance policies entrench the rights of

employees, including the right to raise a grievance without fear of victimisation, 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.

Communicating operational changes

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

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

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

In **SEU**, information about significant operational changes is only communicated when these 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 reasons for changes, planned measures with impact on employees, number of affected employees and timing, but early enough to still enable proper consultation.

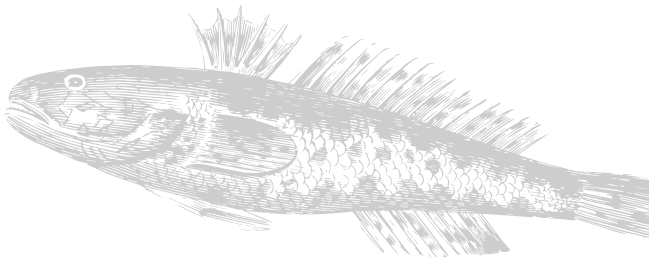
In **SNA**, the notice period in terms of federal law is 60 days. Details on operational changes are not specified in collective bargaining agreements.

In **SSA** (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. However, the standard practice is a minimum of 30 days, and a maximum of 60 days' notice for consultation 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.

SSA is party to the bargaining council for the wood and paper sector as well as forestry in

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 regulated by ministerial sectoral determination. The normal notice period applies.

Most of the countries in which Sappi Trading is based are not covered by 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 on operational changes is required for large companies, but there is no particular need to communicate to unions in advance.



Sappi and the United Nations Global Compact *continued*

Involving health and safety committees

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

- In **Europe**, formal health and safety committees are in place at different levels of the business in line with statutory requirements. All employees are represented by the safety committees.
- In **North America**, all unions have the opportunity to participate in joint management worker safety committees.
- In **South Africa**, (including Sappi Limited), health and safety representatives are elected from non-supervisory staff. In line with legislation, there is one representative for every 50 workers.
- **Sappi Trading** 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.

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 which makes the local population very dependent on the company and which could, in turn, lead to exploitative behaviour and an indirect form of forced labour.

In South Africa, as in the other regions where we operate, Sappi pays market-related wages in line with or above local legislation. In 2013, in South Africa, 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. We check compliance with this stipulation regularly. [SSA](#) adjusted the minimum wage in the forestry division by 4.5% in addition to the 5.6% adjustment in June

2018. This has resulted in an average increase of 10% for the minimum wage in forestry. In 2019, employees earning above the minimum wage in the forestry division received a wage increase of 6.5%.

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

Promoting economic inclusion

We are focused on promoting economic inclusion and eliminating poverty through our Abashintishi programme and Sappi Khulisa enterprise development scheme which has been in operation since 1983.

The latter initiative 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 34 139 hectares. In 2019, under the programme, 425,001 tons (2018: 483,359 tons) of woodfibre worth ZAR382 million (2018: ZAR387 million) was delivered to our operations. Since 1995, a total volume of 4,221,941 tons to the value of ZAR4.2 billion has been purchased from small growers in terms of this programme.

We also work actively with the authorities and communities on land reform projects to promote the inclusion of previously disadvantaged South Africans into the economy.

Land claims in South Africa

Sappi is currently engaged in 75 land claims in South Africa. Four claims have been settled and the extent of the land agreed, but we are waiting for finalisation from the KZN and Mpumalanga regional land claims commissioners. To date, 19 claims have been agreed but the extent of the land still has to be finalised with regional commissioners or claimants.

Of the 75 claims, 22 have been referred to court, either because we questioned their validity or the extent of the claim. In the past 10 years, we have settled 37 claims involving 33,992 hectares of which claimants took ownership of 8,151 hectares and claims for 11,629 hectares in which claimants preferred to seek compensation. The balance of the land has either been withdrawn from the claim by the Restitution on Land Rights Commission or the claim rejected by the Land Claims Court.

Sappi and the United Nations Global Compact *continued*

First established in KZN in 2015, the Abashintshi (isiZulu for ‘change agents’) programme includes life skills training for the youth, the Ifa Lethu programme for the elderly (protecting cultural heritage), holiday programmes for school children and asset-based community development (ABCD). The latter is based on the premise that communities can drive the development process themselves by identifying and mobilising existing, but often unrecognised, assets. Go to the [People](#) section for further details.

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.

Children’s rights

Sappi Limited scored well in the 2019 Corporate Sector and Children’s Rights Benchmark study, achieving a score of 7.7 out of 10 compared with an industry average of 5.9 and also reaching “Leader” status.

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.

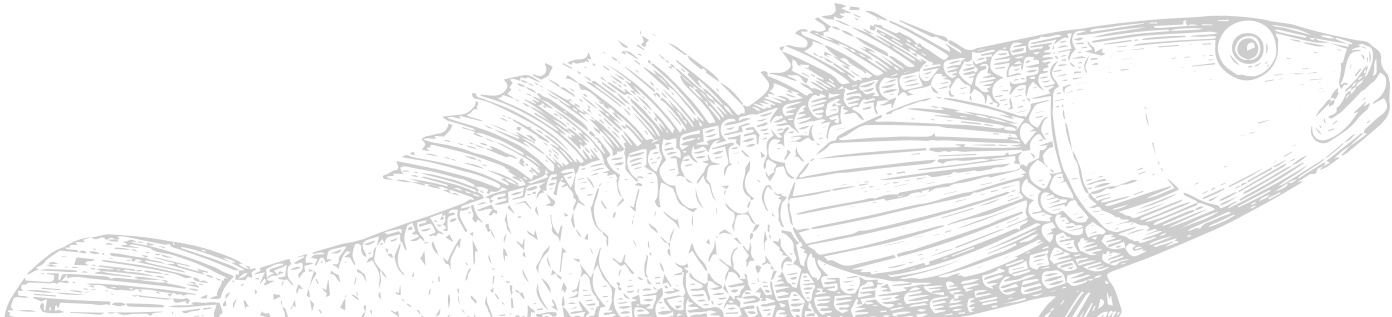
The [Group Human Resources Policy](#) and [Group Human Rights Policy](#) state that Sappi prohibits discrimination based on race, gender, colour, ethnicity, age, religion, political and sexual orientation, union membership, physical disability or HIV/AIDS status.

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

In South Africa, we have employment equity targets to promote economic and social transformation of the previously disadvantaged.

Females tend to be under-represented in our workforce due to the nature of our operations – a manufacturing environment which involves shift work. In 2020, we will be establishing a 2025 global target to enhance gender diversity.

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



Sappi and the United Nations Global Compact *continued*

Statement on modern slavery

Modern slavery is defined as slavery, servitude, forced or compulsory labour and human trafficking. The 2016 Global Slavery Index estimates that 45.8 million people in 167 countries are living in modern slavery today. The majority are victims of exploitation in private-sector activities, such as manufacturing, construction and agriculture. The UK Modern Slavery Act requires commercial organisations in any sector with a global annual turnover of £36 million or more that do business in the United Kingdom to disclose the steps they are taking to address modern slavery in their business and supply chain.

To demonstrate our commitment to preventing the occurrence of modern slavery and human trafficking in our operations and supply chains, Sappi is publishing this voluntary modern slavery statement: **Modern slavery (slavery, servitude, forced labour and human trafficking) is a global concern with long-lasting impacts on affected individuals and communities.**

There is an increasing focus by consumers on ethical fashion and the social and environmental impacts of the products they use. Given that our products are an indispensable part of daily life and given that we have direct and indirect customers in over 150 countries, we recognise that we have a responsibility to ensure that slavery does not enter our supply chain.

While we do not currently see this as a material issue, we take a zero-tolerance approach towards modern slavery in any form. Our policies and operational processes embed our commitment to respect for human rights. As stated in our *Group Human Rights Policy*, we subscribe to the principles of the International Labour Organization (ILO), uphold and commit to the ten principles set out in the United Nations Global Compact, and support the observance of human rights as set out in the Universal Declaration of Human Rights.

We do not tolerate any form of workplace discrimination, harassment or physical assault, or any form of child, forced, or compulsory labour. We seek to reflect the diversity of the communities in which we operate in our workforce. We respect the rights of our employees and contractors, including freedom of association and collective bargaining. Throughout our operations, we seek to avoid complicity in human rights abuses, and to uphold relevant international standards.

We have intensified this focus with the rollout across the group in 2019 of a new *Group Supplier Code of Conduct* requiring our suppliers to implement policies such as freely chosen employment which prevents the use of forced, slave, bonded, indentured or involuntary prison labour and to align with the United Nations Universal Declaration on Human Rights, as well as the ILO Convention No 138 on Minimum Age.

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 anticipate harm before it occurs and to take active steps to prevent any harm from occurring. We achieve this by:

- Minimising the environmental impact of our operations in terms of raw materials and energy use
- Developing new production methods and products, and finding innovative ways of benefiting waste
- Saving water and energy at every step in production processes. This begins in our South 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’ comprising experts in various fields
- Having environmental targets in place in each region. Progress towards targets is reported to management teams in each region regularly, quarterly to the Global Sustainable Development Council (GSDC) and to the Social, Ethics, Transformation and Sustainability (SETS) 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®), as well as ISO 9001, ISO 14001, OHSAS 18001 and, in Europe the Eco Management and Audit System (EMAS) and ISO 50001 in Europe and South Africa.

We view conducting our business in an environmentally sustainable manner as an obligation – one that 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.

This obligation includes investing in new technology and upgrading mill processes as these become feasible or pre-empting changes in manufacturing regulations. Please [click here](#) to view the environmental benefits that will result from our expansion project at Saiccor Mill.

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 that 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 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 co-generation.

We track key metrics for fibre, emissions, energy use and the impact of our operations on air, water and solid waste.

We use this data when setting improvement goals for either our operations or interactions with our key stakeholder groups—employees, customers and our local communities. In 2015, we established 2020 global goals in addition to regional goals to deal with specific issues. Progress against these goals are disclosed in our annual integrated report, our Group Sustainability Report, Sappi North America Sustainability Report and Sappi Southern Africa Corporate Citizenship Report, all available on www.sappi.com/sustainability.

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

Sappi and the United Nations Global Compact *continued*

At global level, in 2015, we became a signatory to the Paris Pledge for Action.

In **SEU**, we:

- Continue with our eco-effectiveness campaign whereby Sappi people share their stories about achieving greater levels of environmental responsibility (see 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), United Nations Environment Programme (UNEP), Messe Düsseldorf and Interpack, the world's leading trade fair for processes and packaging
- Are actively contributing to the development of an industry standard for delivering chemical information through the paper and pulp supply chain and the development of a paper and pulp industry declared substances list. The consortium is a joint working group under CEPI and the European Pulp and Paper Chemicals Group (EPCG), with Sappi as chair.

- We will be participating in CEPI's Evergreen Project which launched shortly after year end. The project seeks to be a cross-industry alliance that includes brand owners to boost the role of fibre-based packaging in a circular and sustainable economy – that minimises climate and environmental impact. It will work to advocate for fibre-based packaging, address the challenges of recyclability and facilitate value chain cooperation.

In **SNA**, we:

- Play an active role in Living Lands & Waters, a non-profit, environmental organisation focused on cleaning up America's great rivers and forest restoration (www.livinglandsandwaters.org/who-we-are/sponsors.html)
- We are a long-standing supporter, together with publishers, cataloguers and other paper companies, of Recycling Works in Publishing (RWIP). We have now joined The Recycling Partnership as a funding partner and, together with the organisation, will be working to help transform recycling nation-wide, increase materials recovery, and reduce the creation of greenhouse gases that add to climate change (www.recyclingpartnership.org)
- The Sappi Maine Forestry Program and the Sappi Lake States Private Forestry Program assist forest landowners to meet their objective for managing their woodland. Sappi's trained foresters are able to develop a forest management plan geared to the interests of the landowner including wildlife management and aesthetics, marketing timber to generate maximum return and providing an extensive network of environmental and marketing resources.

- Our Cloquet Mill has had a long-standing relationship with the University of Minnesota Extension Service. 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 **SSA**, 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-sized growers. There are currently 44 members in the scheme with plantations ranging from less than a hundred hectares to several thousand hectares. While our own plantations are 100% FSC-certified, we recognised that we needed to obtain certification over and above the FSC group scheme certification, based on the difficulty of getting small growers certified and on customers' requests for PEFC labelled products. PEFC endorses national certification schemes, which meant South Africa had to develop a new certification scheme including a forest management standard. This is now known as the South African Forest Assurance Scheme (SAFAS.)
- Qualified extension officers work with growers in Sappi Khulisa, our supplier and enterprise development scheme, 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
- 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 KZN.
- Support the Pepper Bark Tree (*Warburgia salutaris*) project which in turn supports the efforts of the Kruger National Park to protect South Africa's most endangered tree by reintroducing it into communities. Sappi's intervention has enabled seedlings to be grown on a large scale. An annual target of 15,000 seedlings/trees distributed is ensuring that the tree is reintroduced across many communities in sustainable numbers, and
- We provide support to various environmental organisations including SANBI (South African National Biodiversity Institute), Birdlife SA, WWF-SA, the Honorary Rangers of the Kruger National Park, and the UCT animal demography unit (ADU) indigenous tree mapping project.

Sappi and the United Nations Global Compact *continued*

Annually, we provide information to CDP’s carbon disclosure and forest footprint disclosure projects and make our submission publicly available. In each region, we sponsor environment-related publications accessible to the general reader.

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

Technology is a cornerstone of our business and is supported by technology centres in each region covering each section of the value chain, as set out in the box below.

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



Our R&D centres across the world

We spent US\$42 million on R&D in 2019. Technology is a cornerstone of our business and is supported by technology centres in each region covering each section of the value chain:

- SEU**
Maastricht centre of excellence
- Papermaking processes

- SNA**
Westbrook centre of excellence
- Coated woodfree paper and speciality casting and release paper development

- SSA**
Forestry research centre (Tweedie)
- Tree breeding
 - Propagation techniques
 - Silviculture

- Sappi technology centre (Pretoria)*
- Fibre processing
 - Paper sciences
 - Chemical sciences
 - Environmental
- Sappi DWP's centre of excellence (Umkomaas)*
- Applications testing
 - Fundamental cellulose properties

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

Sappi and the United Nations Global Compact *continued*

Anti-corruption

Principle 10:

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

Maintaining a sound ethical culture forms the foundation of Sappi’s long-term sustainability and creation of value for our stakeholders.

We recognise that building an accountable organisation underpins our ongoing viability as a business. Accordingly, the Social, Ethics, Transformation and Sustainability (SETS) Committee monitors our activities on matters such as social and economic development, including the United Nations Global Compact (UNGC) 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 for Sappi on compliance with the convention either externally or internally.

We regularly review the Code of Ethics (Code) to ensure that it remains aligned to current governance and business trends. Accordingly, in September 2016, we launched a revised Code which incorporated the new Sappi values: At Sappi we do business with integrity and courage; making smart decisions which we execute with speed. In 2018, in light of our increased focus on safety, we added: Our values are underpinned by an unrelenting focus on and commitment to safety. Sappi’s ethics management strengths include:

- The completion of mandatory online ethics management training for all employees
- Sappi hotlines, operated by independent service providers, are available to all stakeholders
- Retaliation against whistle-blowers is not tolerated
- An anti-fraud policy provides guidance to Sappi management in identifying and managing fraud
- Annual fraud and ethics risk assessments are conducted to identify potential weaknesses. These assessments are integrated into Sappi’s control framework that covers 100% of our operations
- For forensic incidents, independent investigations are done which include due consideration for ethics management and forensic lessons learned, and
- Employee engagement surveys, held every second year, provide insight into employee and management ethics application.

The internal audit (IA) department is responsible for performing or assisting with forensic investigations. During forensic investigations, particular attention is paid to the circumstances contributing to the incident and management’s tone in responding to these incidents. IA pays also reviews the ethics management arrangements and ethics controls for particular units and processes during certain audits. Audit steps include confirming the status of our Code and hotline communication, completion of ethics training by employees and reviewing processes for employees to disclose potential conflicts of interest.

In March 2019, we again rolled out the [employee engagement survey](#), which includes an evaluation of values and ethical leadership as perceived by employees. The results in this area will be a useful guide to understanding the culture of ethical behaviour and conduct in Sappi and where improvements can be made.

We are also of rolling out a [Group Supplier Code of Conduct](#) which calls on suppliers to commit to ethical behaviour, human rights, health and safety, diversity and equal opportunity and environmental awareness.

In 2018, Sappi Limited signed the Business Leadership South Africa Integrity Pledge, thereby committing ourselves to actively combating corrupt practices wherever encountered, preventing anti-competitive behaviour, adopting a zero-tolerance approach to corrupt behaviour and protecting whistle-blowers.

Kinship

Coyotes and badgers

When coyotes and badgers team up, the pairs track small, burrowing animals such as prairie dogs and ground squirrels. Each animal takes advantage of the other's hunting adaptations. If the prey is above ground, the coyote usually chases it down, and the badger takes over the hunt if the prey descends underground. Not only do these unlikely hunting partners find food together, but they have more success in this partnership than if they go it alone.



GRI – Sustainability Reporting Standards

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-1	Name of the organisation	Sappi Limited
GRI 102	General disclosures	102-2	Activities, brands, products and services	AIR Who we are , page 6 Product review , pages 72-79
GRI 102	General disclosures	102-3	Location of headquarters	108 Oxford Road, Houghton Estate, Johannesburg, South Africa
GRI 102	General disclosures	102-4	Location of operations	AIR: Where we operate , pages 8-9
GRI 102	General disclosures	102-5	Ownership and legal form	AIR: Share statistics , pages 148-149
GRI 102	General disclosures	102-6	Markets served	AIR: Where we operate , pages 8-9
GRI 102	General disclosures	102-7	Scale of the organisation	AIR How we create value , pages 10-11 Understanding our business model , page 12-15
GRI 102	General disclosures	102-8	Information on employees and other workers	GSR: People – Profiling our people
GRI 102	General disclosures	102-9	Supply chain	GSR: Prosperity – Value added in 2019
GRI 102	General disclosures	102-10	Significant changes to the organisation and its supply chain	AIR: Our acquisition of Matane Mill is described in the Q&A with the CEO , page 22
GRI 102	General disclosures	102-11	Precautionary principle or approach	GSR: Sappi and the United Nations Global Compact – Principle 7: Businesses should apply a precautionary approach to environmental challenges.

AIR = annual integrated report 2019 **GSR** = group sustainability report 2019

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-12	External initiatives	GSR: Key relationships – Communities – Industry bodies and business – Suppliers and contractors – Civil society (and media)
GRI 102	General disclosures	102-13	Membership of associations	GSR: Key relationships – Industry bodies and business
GRI 102	General disclosures	102-14	Statement from senior decision-maker	GSR: Leadership messages
GRI 102	General disclosures	102-15	Key impacts, risks and opportunities	GSR: Strategic trends shaping our business Our business model Key material issues AIR: Risk management , pages 34-41
GRI 102	General disclosures	102-16	Values, principles, standards and norms of behaviour	GSR: Key material issues – Governance
GRI 102	General disclosures	102-17	Mechanisms for advice and concerns about ethics	AIR: Corporate governance – Reporting on compliance and ethics concerns, page 119
GRI 102	General disclosures	102-18	Governance structure	AIR: Corporate governance , pages 108



GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-19	Delegating authority	The Social, Ethics, Transformation and Sustainability (SETS) Committee is responsible for advancing the group-wide sustainability agenda. AIR: Social, Ethics, Transformation and Sustainability (SETS) Committee Report , page 115
GRI 102	General disclosures	102-20	Executive-level responsibility for economic, environmental and social topics	The Group Head Investor Relations and Sustainability is a member of the Management Committee, reporting to the Chief Executive Officer, Sappi Limited.
GRI 102	General disclosures	102-21	Consulting stakeholders on economic, environmental and social topics	GSR: Sustainability governance



GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-22	Composition of the highest governance body and its committees	AIR: The composition of the board is reported in the annual integrated report . We indicate the number of executive and non-executive directors and indicate that the Chairman and CEO are separate. We also confirm that we have evaluated the independence of the directors and indicate which directors are independent. We use the JSE Listings Requirements, King IV and the Companies Act (specifically with reference to the Audit and Risk Committee) to evaluate the independence of directors. We also report the date of appointment and tenure of directors, other commitments/positions, gender, race, competence and the average age of directors.
GRI 102	General disclosures	102-23	Chair of the highest governance body	Our CEO and Chairman are separate and the Chairman is independent.
GRI 102	General disclosures	102-24	Nominating and selecting the highest governance body	AIR: Corporate governance , page 108
GRI 102	General disclosures	102-25	Conflicts of interest	AIR: Corporate governance , page 118
GRI 102	General disclosures	102-26	Role of highest governance body in setting purpose, values and strategy	AIR: Corporate governance , page 108

GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-27	Collective knowledge of highest governance body	AIR: Social, Ethics, Transformation and Sustainability (SETS) Committee Report , page 115
GRI 102	General disclosures	102-28	Evaluating the highest governance body's performance	AIR: Social, Ethics, Transformation and Sustainability (SETS) Committee Report , page 115
GRI 102	General disclosures	102-29	Identifying and managing economic, environmental and social impacts	AIR: Corporate governance – Combined assurance framework, page 120
GRI 102	General disclosures	102-30	Effectiveness of risk management processes	AIR: Corporate governance – Combined assurance framework, page 120
GRI 102	General disclosures	102-31	Review of economic, environmental and social topics	AIR: Social, Ethics, Transformation and Sustainability (SETS) Committee Report , page 115
GRI 102	General disclosures	102-32	Highest governance body's role in sustainability reporting	Independent Assurance Practitioner's Limited Assurance Report on Selected Key Performance Indicators , page 6 Sustainability governance , page 10
GRI 102	General disclosures	102-33	Communicating critical concerns	Our group risk assessment process ensures that the board receives information regarding our critical concerns.
GRI 102	General disclosures	102-34	Nature and total number of critical concerns	These are reported throughout the AIR and GSR.

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General Disclosures	102-35	Remuneration policies	AIR: Remuneration Report , pages 123-141
GRI 102	General disclosures	102-36	Process for determining remuneration	AIR: Remuneration Report , pages 123-141
GRI 102	General disclosures	102-37	Stakeholders' involvement in remuneration	Information is fed to the board via the Human Resources and Compensation Committee.
GRI 102	General disclosures	102-38	Annual total compensation ratio	We do not report publicly on this ratio.
GRI 102	General disclosures	102-39	Percentage increase in annual total compensation ratio	We do not report publicly on this ratio.
GRI 102	General disclosures	102-40	List of stakeholder groups	GSR: Key relationships
GRI 102	General disclosures	102-41	Collective bargaining agreements	GSR: Sappi and the UNGC: Principle 3
GRI 102	General disclosures	102-42	Identifying and selecting stakeholders	We define stakeholders as those who have an interest in and potential to impact our business as well as those who may be impacted by our business.
GRI 102	General disclosures	102-43	Approach to stakeholder engagement	GSR: Key relationships
GRI 102	General disclosures	102-44	Key topics and concerns raised	GSR: The links between our operating context, risk, key relationships and key material issues

GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-45	Entities included in the consolidated financial statements	Group Annual Financial Statements (see www.sappi.com/annual-reports)
GRI 102	General disclosures	102-46	Defining report content and topic boundaries	The content has been informed, amongst other things, by: the expectations of our stakeholders; our internal risk management processes which have informed the identification of our most material issues; strategic trends shaping our business, the requirements of the King IV governance standard; and with consideration to the recommendations of the GRI's Sustainability Reporting Standards. Material aspects have been chosen with the aim of demonstrating our impacts, risks and opportunities and how we create, preserve and erode value over time.
GRI 102	General disclosures	102-47	List of material topics	GSR: The links between our operating context, risk, key relationships and key material issues
GRI 102	General disclosures	102-48	Restatements of information	All significant items are reported on a like-for-like basis, with no major restatements.
GRI 102	General disclosures	102-49	Changes in reporting	GSR: About this report – Joint ventures About this report – New acquisitions
GRI 102	General disclosures	102-50	Reporting period	01 October 2018 – 30 September 2019
GRI 102	General disclosures	102-51	Date of most recent report	2019
GRI 102	General disclosures	102-52	Reporting cycle	2019

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 102	General disclosures	102-53	Contact point for questions regarding the report	Graeme Wild, Group Head Investor Relations and Sustainability
GRI 102	General disclosures	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.
GRI 102	General disclosures	102-55	GRI content index	This report is available on www.sappi.com/sustainability .
GRI 102	General disclosures	102-56	External assurance	GSR: Independent Assurance Practitioner's Report on Selected Key Performance Indicators
GRI 103	Management approach	103-1	Explanation of the material topic and its boundary	The material topics have been informed, amongst other things, by: the expectations of our stakeholders; our internal risk management processes which have informed the identification of our most material issues; strategic trends shaping our business, the requirements of the King IV governance standard; and with consideration to the recommendations of the GRI's Sustainability Reporting Standards. Material topics have been chosen with the aim of demonstrating our impacts, risks and opportunities and how we create, preserve and erode value over time.
GRI 103	Management approach	103-2	The management approach and its components	Our suite of policies, available at www.sappi.com/policies , governs our management approach. Initiatives dealing with specific topics can be found throughout the GSR and the AIR. Grievance mechanisms are in place for stakeholders to register issues.

GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 103	Management approach	103-3	Evaluation of the management approach	GSR: Sustainability governance
Economic performance				
GRI 201	Economic performance	201-1	Direct economic value generated and distributed	GSR: Prosperity – Value added in 2019
GRI 201	Economic performance	201-2	Financial implications and other risks and opportunities due to climate change	A detailed assessment of the risks and opportunities of climate change, including (where feasible) an assessment of the financial implications, is provided in our most recent CDP submission, publicly available at www.cdp.net .
GRI 201	Economic performance	201-3	Defined benefit plan obligations and other retirement plans	AIR: Remuneration Report , pages 123-141
GRI 201	Economic performance	201-4	Financial assistance received from government	We do not receive any significant financial assistance from government.

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Market presence				
GRI 202	Market presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	We do not provide a comprehensive range of ratios of entry level wage compared to local minimum wages due to the differences in the various countries in which we operate and the challenges associated in doing so.
GRI 202	Market presence	202-2	Proportion of senior management hired from the local community	In South Africa, our policies and procedures for broad-based black economic empowerment (BBBEE) ensure that we employ locally.
Indirect economic impacts				
GRI 203	Indirect economic impacts	203-1	Infrastructure investments and services supported	GSR: Prosperity – Adding value to daily life
GRI 203	Indirect economic impacts	203-2	Significant indirect economic impacts	GSR: Prosperity – Adding value in each region where we operate

GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Procurement practices				
GRI 204	Procurement practices	204-1	Proportion of spending on local suppliers	In terms of procurement practices, Sappi’s most material concerns relate to using procurement in our South African operations to stimulate BBBEE. GSR: Our local enterprise and supplier development (ESD) scheme and intensified focus on ESD are described under operating context: The rise of populism, social disruption and Generation Z.
Anti-corruption				
GRI 205	Anti-corruption	205-1	Operations assessed for risks related to corruption	GSR: UNGC and SDGs – Sappi and the United Nations Global Compact – Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.
GRI 205	Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	GSR: Our key material issues – Ethical behaviour and corruption
GRI 205	Anti-corruption	205-3	Confirmed incidents of corruption and actions taken	AIR: Reporting on compliance and ethics concerns , page 119

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Anti-competitive behaviour				
GRI 206	Anti-competitive behaviour	206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	No such actions.
Materials				
GRI 301	Materials	301-1	Materials used by weight or volume	GSR: Planet – Our key inputs are woodfibre, water, energy and chemicals. We disclose specific water and energy usage in this section, but do not disclose woodfibre and chemicals inputs as these are considered confidential.
GRI 302	Energy	302-1	Energy consumption within the organisation	GSR: Planet – Producing and reusing renewable energy, see pie chart detailing fuel sources.
GRI 302	Energy	302-3	Energy intensity	GSR: Planet – Producing and using renewable energy
GRI 302	Energy	302-4	Reduction of energy consumption	GSR: Our key material issues – Energy, see graph detailing reduction on energy intensity.



GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Water and effluents				
GRI 303	Water and effluents	303-2	Management of water discharge-related impacts	GSR: Planet – Managing water responsibly
GRI 303	Water and effluents	303-3	Water withdrawal	GSR: Planet – Managing water responsibly
GRI 303	Water and effluents	303-4	Water discharge	GSR: Planet – Managing water responsibly GSR: Our key material issues – Water
GRI 303	Water and effluents	303-5	Water consumption	GSR: Our key material issues – Water
Biodiversity				
GRI 304	Biodiversity	304-2	Significant impacts of activities, products and services on biodiversity	GSR: Unpacking our business model , in South Africa have a negative impact on biodiversity at stand level (not plantation level).
GRI 304	Biodiversity	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	GSR: Key Material Issues : Maintaining biodiversity

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Emissions				
GRI 305	Emissions	305-1	Direct (Scope 1) GHG emissions	GSR: Planet – Focusing on greenhouse gas emissions
GRI 305	Emissions	305-2	Indirect (Scope 2) GHG emissions	GSR: Planet – Focusing on greenhouse gas emissions
GRI 305	Emissions	305-3	Other indirect (Scope 3) GHG emissions	Planet – Focusing on greenhouse gas emissions – Scope 3 categories
GRI 305	Emissions	305-5	Reduction of GHG emissions	GSR: Planet – Reducing greenhouse gases
GRI 305	Emissions	305-7	Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions	GSR: Planet – Decreasing emissions
Effluents and waste				
GRI 306	Effluents and waste	306-2	Waste by type and disposal method	GSR: Planet – Minimising waste





GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Employment				
GRI 401	Employment	401-1	New employee hires and employee turnover	GSR: People – Monitoring turnover and new hires
GRI 401	Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	We do not currently report specifically on this parameter, as we operate in multiple countries with different requirements. We do not believe that it is sufficiently material to provide information on this issue at this level of detail.
GRI 401	Employment	401-3	Parental leave	We do not report specifically on the link with parental leave as this is not seen as being material.
Labour/management relations				
GRI 402	Labour/management relations	402-1	Minimum notice periods regarding operational changes	GSR: Sappi and the UNGC – Communicating operational changes

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Occupational health and safety				
GRI 403	Occupational health and safety	403-1	Workers' representation in formal joint management-worker health and safety committees	GSR: People – Promoting health and wellbeing
GRI 403	Occupational health and safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, absenteeism and number of work-related fatalities	GSR: People – Monitoring turnover, new hires and absenteeism
GRI 403	Occupational health and safety	403-4	Worker participation, consultation and communication on occupational health and safety	GSR: People – Promoting health and wellbeing
GRI 403	Occupational health and safety	403-5	Worker training on occupational health and safety	GSR: People – Reviewing our safety performance in 2019: Our management approach
GRI 403	Occupational health and safety	403-6	Promotion of worker health	GSR: People – Promoting health and wellbeing

GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
GRI 403	Occupational health and safety	403-8	Workers covered by an occupational health and safety management system	All workers are covered.
GRI 403	Occupational health and safety	403-9	Work-related injuries	GSR: People – Reviewing our safety performance in 2019: Our safety statistics

Training and education

GRI 404	Training and education	404-1	Average hours of training per year per employee	GSR: People – Reviewing our safety performance in 2019: Our safety statistics
GRI 404	Training and education	404-2	Programmes for upgrading employee skills and transition assistance programmes	GSR: People – Reviewing our safety performance in 2019: Our safety statistics
GRI 404	Training and education	404-3	Percentage of employees receiving regular performance and career development reviews	GSR: People – Appraising our people

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
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Diversity and equal opportunity

GRI 405	Diversity and equal opportunity	405-1	Diversity of governance bodies and employees	GSR: People – Profiling our people
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Human rights

GRI 412	Human rights assessment	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Given the jurisdictions in which we operate, we do not believe this to be material to Sappi.
GRI 412	Human rights assessment	412-2	Employee training on human rights policies or procedures	This is covered in Code of Ethics training.

Non-discrimination

GRI 406	Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	We promote a workplace where diversity and inclusion are encouraged. Should there be incidents of discrimination, these are swiftly dealt with, but are not publicly disclosed.
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GRI – Sustainability Reporting Standards *continued*

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Child labour				
GRI 408	Child labour	408-1	Operations and suppliers at significant risk for incidents of child labour	This issue has been addressed in our Group Supplier Code of Conduct and Group Human Rights Policy, which explicitly forbids the use of child labour (see www.sappi.com/policies).
Forced or compulsory labour				
GRI 409	Forced or compulsory labour	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	We do not believe this is an issue. Forced labour is explicitly forbidden in our Group Human Rights Policy (see www.sappi.com/policies). GSR: UNGC and SDGs – Sappi and the United Nations Global Compact, which includes a statement on modern slavery.
Local communities				
GRI 413	Local communities	413-1	Operations with local community engagement, impact assessments and development programmes	GSR: People – Sharing value

GRI standard number	GRI standard title	Disclosure number	Disclosure title	Sappi response 2019
Public policy				
GRI 415	Public policy	415-1	Political contributions	Our policy is not to make political contributions.
Customer health and safety				
GRI 416	Customer health and safety	416-1	Assessment of the health and safety impacts of product and service categories	Our products that are used for food and toy packaging undergo stringent testing and certifications.
Marketing and labelling				
GRI 417	Marketing and labelling	417-1	Requirements for product and service information and labelling	GSR: Key relationships – Customers
Customer privacy				
GRI 418	Customer privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	We take customer privacy very seriously (see www.sappi.com/legal-notice).

Glossary

AF&PA – American Forest and Paper Association.

AGM – Annual General Meeting.

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 biobased economy 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.

Cham Paper Group Holding AG (CPG) – Speciality paper business acquired by Sappi, which included CPG's Carmignano and Condino Mills (Italy) and its digital imaging business located in Cham (Switzerland) as well as all brands and know-how.

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

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

CHP – Combined heat and power.

coated mechanical paper – Coated paper made from groundwood pulp which has been produced in a mechanical process, primarily used for magazines, catalogues and advertising material.

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

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

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

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

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

deep eutectic solvents – Systems formed from a eutectic mixture of Lewis or Brønsted acids and bases which can contain a variety of anionic and/or cationic species. They are classified as types of ionic solvents with special properties.

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.

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

EIA – Environmental impact assessment.



Glossary

Glossary *continued*

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.

fmcg – 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.

Forest Stewardship Council® (FSC®) – Is a global, not-for-profit organisation dedicated to the promotion of responsible forest management worldwide. (FSC-C015022) (www.ic.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 gas (GHG) – The GHGs included in the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

hemicellulose sugars – The biorefinery process for second generation hemicellulose sugars involves recovering them from the prehydrolysate liquor, and then separating them.

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 50001 covers energy management.

JSE Limited – The main securities exchange in South Africa.

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

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

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

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 and sodium sulphide used to extract lignin during kraft pulping. Black liquor is the resultant combination of lignin, water and chemicals.

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.

naturallindigenous forest – A forest of naturally regenerating native trees.

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

NBSK – Northern Bleached Softwood Kraft pulp. One of the main varieties of market pulp, produced from coniferous trees (ie spruce, pine) in Scandinavia, Canada and northern USA. The price of NBSK is a benchmark widely used in the pulp and paper industry for comparative purposes.

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

newsprint – Paper produced for the printing of newspapers mainly from mechanical pulp and/or recycled waste paper.

NGO – Non-governmental 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.

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.

printing and writing papers – A generic term for a group of papers intended for commercial printing use such as coated woodfree paper, coated mechanical paper, uncoated woodfree paper and newsprint.

Programme for the Endorsement of Forest Certification™ (PEFC™) – Is an international non-profit, non-governmental organisation dedicated to promoting sustainable forest management (SFM) through independent third-party certification. PEFC works by endorsing national forest certification systems and is represented in 49 countries through national organisations such as SFI® in North America. (www.pefc.org)

pulpwood – Wood suitable for producing pulp – usually not of sufficient standard for sawmilling.

Glossary *continued*

raster – A rectangular pattern of parallel scanning lines followed by the electron beam on a television screen or computer monitor

release paper – Base 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.

Sappi Biotech – The business unit within Sappi which drives innovation and commercialisation of biomaterials and biochemicals.

Sappi Dissolving Wood Pulp – The business unit within Sappi which oversees the production and marketing of dissolving wood pulp (DWP).

Sappi Europe (SEU) – The business unit within Sappi which oversees operations in the European region.

Sappi North America (SNA) – The business unit within Sappi which oversees operations in the North American region.

Sappi Southern Africa (SSA) – The business unit within Sappi which oversees operations in the Southern Africa region.

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.

SETS – Social, ethics, transformation and sustainability.

silviculture costs – Growing and tending costs of trees in forestry operations.

solid waste – Dry organic and inorganic waste materials.

specialities and packaging papers – A generic term for a group of papers intended for commercial and industrial use such as flexible packaging, label papers, functional papers, containerboard, paperboard, silicone base papers, casting and release papers, dye sublimation papers, inkjet papers and tissue paper.

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.

specific total energy (STE) – The energy intensity ratio defined by the total energy consumption in the context of the saleable production.

Sustainable Forestry Initiative® (SFI®) – Is a solutions oriented sustainability organisation that collaborates on forest-based conservation and community initiatives. The SFI forest management standard is the largest forestry certification standard within the PEFC™ program. (www.sfiprogram.org)

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 1,000 kg.

tons per annum (TPA) – Term used in this report to denote tons per annum (tons a year). Capacity figures in this report denote tons per annum at maximum continuous run rate.

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.

United Nations Global Compact (UNGC) –

A principle based framework for businesses, stating 10 principles in the areas of human rights, labour, environment and anti-corruption.

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 biological diversity.