



Contents

3 About us

- 3 Who we are
- 3 Where we operate
- 4 About this report
- 5 Independent Assurance Practitioner's Limited Assurance Report on Selected Key Performance Indicators

7 Governance

10 Targets

14 Messages from our leadership

17 Our key relationships

- 19 Employees
- 23 Unions
- 25 Customers
- 29 Communities
- 31 Industry bodies and business
- 35 Shareholders, bondholders and banks
- 36 Government and regulatory bodies
- 37 Suppliers and contractors
- 39 Civil society and media

40 Key material issues

40 Principles

- 42 Sourcing responsibly
- 45 Maintaining ethical behaviour and compliance

47 Prosperity

- 48 Creating value
- 53 Containing costs and ensuring appropriate capital allocation
- 55 Enhancing efficiency through machine learning and digitisation
- 58 Meeting long-term demand growth for cellulosic-based fibres
- 61 Increasing the sustainability of our products through circular design and adjacent markets
- 64 Developing and commercialising innovations in addition to adjacent businesses

67 People

- 68 Improving the lives of people
- 72 Ensuring the safety of our employees and contractors
- 80 Attracting, developing and retaining key skills
- 85 Engaging more closely with our employees
- 87 Supporting sound labour relations
- 91 Sharing value with our communities

98 Planet

- 99 Treating more lightly
- 103 Sourcing woodfibre responsibly
- 110 Safeguarding and restoring biodiversity
- 115 Prioritising renewable and clean energy
- 125 Helping to mitigate climate change
- 132 Focusing on water stewardship
- 137 Accelerating circular business models

144 Glossary

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



Risk



Case study



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.

About our theme

Covid-19 impacted the lives and livelihoods of billions of people, completely disrupting our world. Old certainties and realities are no more. As an organisation, we've adapted swiftly to the challenge of a changed world. The images used throughout this report reflect the theme of adaption, together with the beauty and promise of change. They also reflect our determination to adapt to change in a manner that will enable us not just to survive, but also to expand, grow and ultimately, thrive.

Who we are

Sappi is a leading global provider of powerful everyday materials made from woodfibre-based renewable resources. Together with our partners, we are moving quickly toward a more circular economy.

Sappi works to build a thriving world by acting boldly to support the Planet, People and Prosperity.

Our products are manufactured from woodfibre sourced from sustainably managed forests and plantations, in production facilities powered, in many cases, with bioenergy from steam and existing waste streams, and many of our operations are energy self-sufficient.

Our products include raw material offerings (such as dissolving pulp (DP), wood pulp and biomaterials) and end-use products (packaging and specialities papers, graphic papers, casting and release papers and forestry products).

Paper production
per year
5.7 million tons

Paper pulp
production per year
2.4 million tons

394,000 ha
Owned and leased
sustainably managed
forests in
South Africa

Dissolving pulp
production per year
1.4 million tons

Where we operate

Sappi Trading

Sappi Trading operates a network for the sale and distribution of our products outside our core operating regions of North America, Europe and South Africa. Sappi Trading also coordinates our shipping and logistical functions for exports from these regions

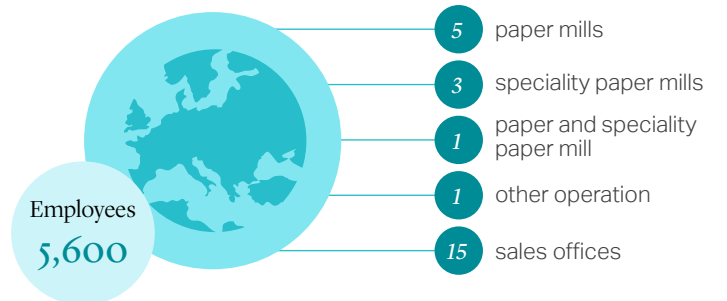
Sales offices

- Hong Kong
- Bogotá
- Johannesburg
- México City
- Nairobi
- São Paulo
- Shanghai
- Sydney
- Vienna

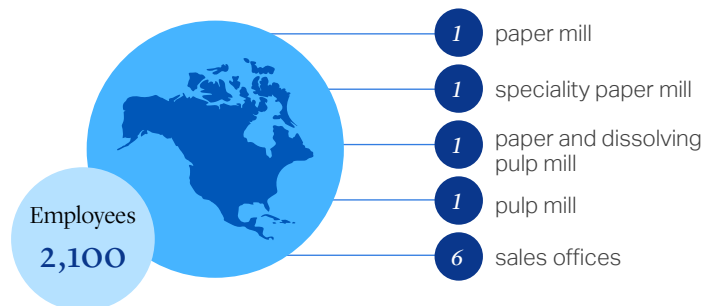
Logistics

- Durban

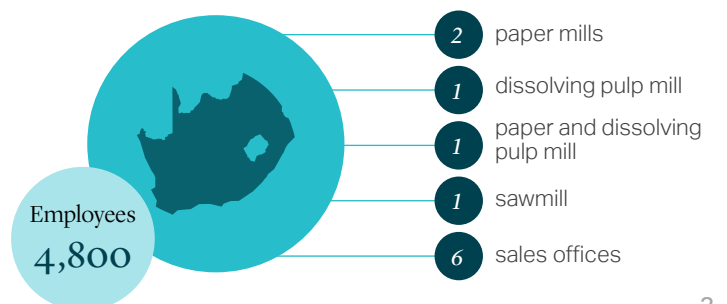
Europe



North America



South Africa



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 2019 to the end of September 2020. We report on a regional and global basis, wherever possible presenting data over five years to make the information relevant, accessible and comparable. 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™¹). Our annual integrated report provides a very clear link between sustainability and strategy and sets out how we create stakeholder value in a sustainable manner.

Aligning with the GRI

This report has been prepared in line with the Ⓢ [GRI \(Global Reporting Initiative\)](#) standards in terms of the core option. The relevant indicators Ⓢ can be found at [People Indicators](#) and [Planet indicators](#).

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.

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 within the context of the global forces shaping our world.

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.

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

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.

Identifying stakeholders

We have identified the stakeholders we expect to use our report on the basis of our ongoing engagement, both formal and informal, with them. The various ways in which we engage our stakeholders are set out in the Our 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 2020, we obtained external limited assurance on selected sustainability key performance indicators in this report (please refer to the Independent Assurance Practitioner's Limited Assurance Report on Selected Key Performance Indicators on the following pages).

Note: The regional sustainability report for SNA, as well as our corporate citizenship report can be found on www.sappi.com.

Assured data (Sappi group)

Direct emissions (Scope 1) (tCO₂e)	4,083,122.97 ^{LA}
Indirect emissions (Scope 2) (tCO₂e)	1,196,188.99 ^{LA}
Employee (own) LTIFR (rate)	0.44 ^{LA}
Contractor LTIFR (rate)	0.29 ^{LA}

LA: Limited assurance provided by KPMG.

External reviews of our sustainability performance

Our aim is to be a trusted partner to all our stakeholders. Our progress in this regard is highlighted by the fact that in 2020:



- We were confirmed as a constituent of the FTSE4Good Index Series



- We were rated as Prime by Iss-Oekom, one of the world's leading environmental, social and governance (ESG) research and rating agencies for sustainable investments



- All three regions – Europe, North America and Southern Africa – achieved a Platinum Medal in the Ecovadis Corporate Social (CSR) ratings



- The Platinum rating, a new medal category created in 2020, recognises the top 1% of companies evaluated for their environment, labour and human rights, ethics and sustainable procurement performance



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

¹ Copyright and trademarks are owned by the Institute of Directors in Southern Africa NPC and all of its rights are reserved.

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

To the Directors of Sappi Limited

We have undertaken a limited assurance engagement on selected key performance indicators (KPIs), as described below, and presented in the 2020 Group Sustainability Report of Sappi Limited (Sappi) for the year ended September 2020 (the Report). The engagement was conducted by a multidisciplinary team including safety, environmental 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 4 of the Report. The selected KPIs described below have been prepared in accordance with the Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards"), supported by Sappi's internally developed guidelines, and collectively referred to as "Sappi's reporting criteria".

Directors' responsibilities

The directors are responsible for the selection, preparation and presentation of the selected KPIs in accordance with Sappi's 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

The Greenhouse Gas (GHG) emission 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 the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards).

KPMG Inc. 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.

Our responsibility

Our responsibility is to express a limited assurance conclusion on the selected sustainability 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*, 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 require that we plan and perform our engagement to obtain limited assurance about whether the selected sustainability 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.

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)	
	Contractor LTIFR (rate)	

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

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 and reconciling information with underlying records.

Given the circumstances of the engagement, the procedures performed included the following:

- Interviewed management and senior executives 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 and senior executives in our interviews;
- Tested the processes and systems to generate, collate, aggregate, monitor and report the selected KPIs;
- 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 judgments 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 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 2020 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 Sappi's 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 Inc. Registered Auditor

*Per PAH Lalla
Chartered Accountant (SA)
Registered Auditor
Director*

KPMG Crescent
85 Empire Road
Parktown
Johannesburg
2193

18 December 2020



CHANGE

A photograph of a man in a dark suit and tie, gesturing with his hands while speaking. The image is partially obscured by a large teal circle and a white wavy shape.

GOVERNANCE

Enhancing trust

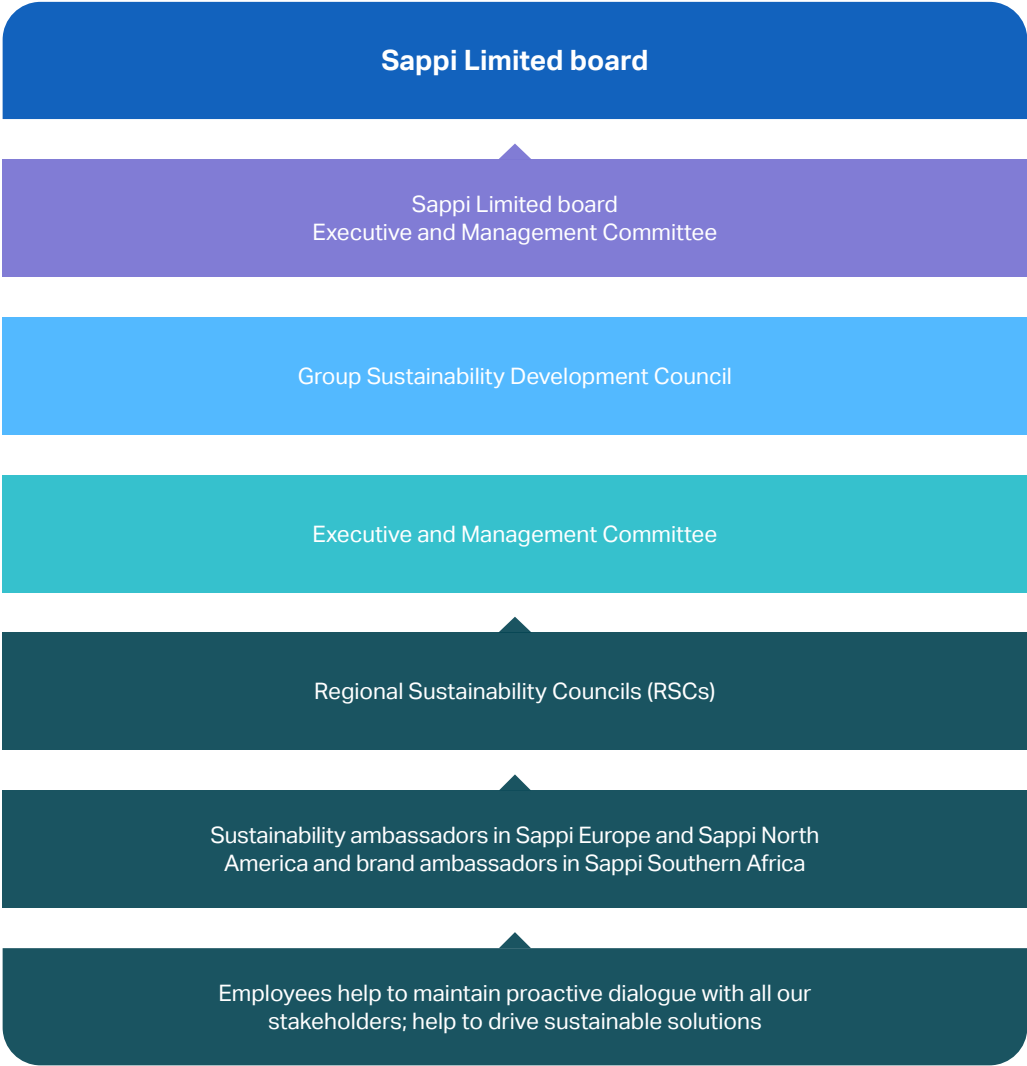
Regional Sustainable Councils (RSCs), in Europe, North America and South Africa, are responsible for establishing and implementing our on-the-ground sustainability strategy. Issues in this regard are presented at the quarterly Regional Sustainable Councils (RSCs) and Group Sustainable Development Council (GSDC) meetings. The GSDC is chaired by the Group Head: Investor Relations and Sustainability. The GSDC reviews key trends and developments together with strategy and implementation and makes recommendations that are fed through to the Social, Ethics, Transformation and Sustainability (SETS) Committee and ultimately, to the Sappi Limited board.

The SETS Committee has an independent role with accountability to the board and is comprised of a majority of independent non-executive members, whose duties are delegated to them by the board of directors in compliance with a board-approved terms of reference. The role of the SETS Committee is to assist the board with the oversight of sustainability issues within the company and to provide guidance to management's work in respect of its duties.

The Chairman of the SETS Committee has served as the President of the International Union for the Conservation of Nature; Chairman of the United Nations (UN) Commission for Sustainable Development; Chairman of WWF (SA) and currently serves on the steering committee of the Tokyo-based Innovation for a Cool Earth Forum.



Our sustainability governance structure





EXPAND

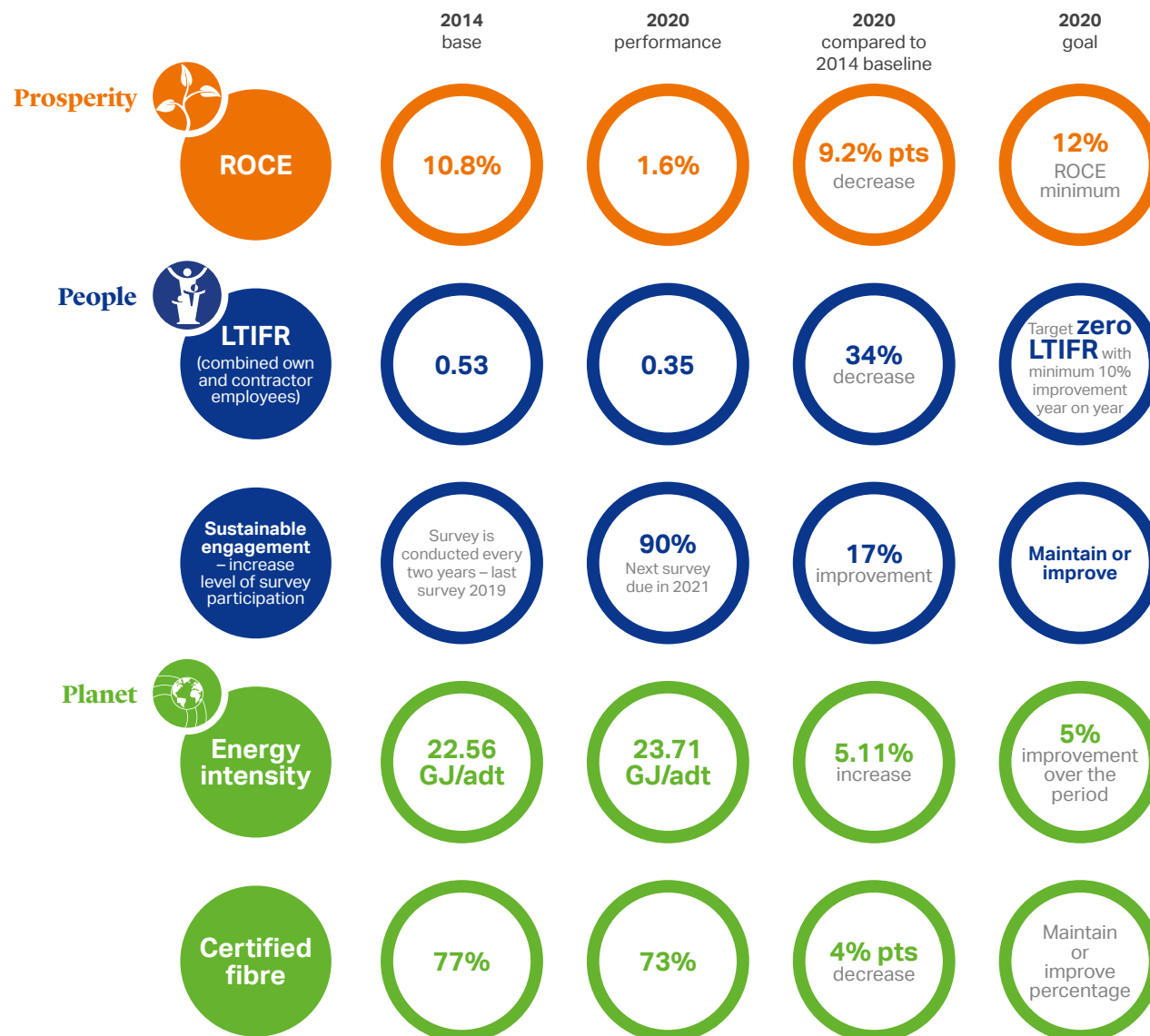
Our global sustainability 2020 goals

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

The base year is 2014, with the five-year targets from 2016 – 2020. Our performance in 2020 is set out alongside.

Now that these targets are closed out, going forward we will be reporting on our 2025 Thrive25 targets that are aligned with the United Nations (UN) Sustainable Development Goals (SDGs).

<https://www.sappi.com/new-sustainability-targets-for-a-thriving-world>



Our performance against our 2020 regional targets



PROSPERITY

The regional performance contributes to the global Prosperity target.



PEOPLE

Target	Performance in 2020 compared to 2014 base year	Self-assessment of 2020 performance
SEU		
Engaged employees in terms of participation and commitment.	Participation in employee engagement survey: 95% Level of engagement: 82%	
Achieve 0.52 for employee (own) LTIFR from a baseline of 0.99 in 2014	0.59 LTIFR, 40% improvement compared to the baseline	
SNA		
Offer training at average of 60 hours per employee per year with baseline of 74 hours per employee in 2014.	97 hours	
Achieve zero workplace injuries from a baseline of 0.56 employee (own) LTIFR in 2014.	0.20 LTIFR	
SSA		
Achieve Level 3 compliance in Broad-Based Black Economic Empowerment (BBBEE) (in respect of the new forestry codes) from a baseline of Level 4 in 2014.	Confirmed as Level 1 shortly after year end	
Combined employee (own) and contractor LTIFR to be better than best ever achieved on a continuous 12-month basis and Lost Time Injury Severity Rate (LTISR) to be below 25.	0.30 LTIFR and 55.56 LTISR	

Key

Self-assessment of 2020 performance

- Satisfactory performance
- Progress to be made
- Unsatisfactory performance



Our performance against our 2020 regional targets continued



PLANET

Target	Performance in 2020 compared to 2014 base year	Self- assessment of 2020 performance
SEU		
5% reduction of specific fossil CO ₂ emissions including purchased power emissions from 2014 as base year.	Performance 738.55kg CO ₂ e/adt, 7.96% increase	
Reduce energy intensity (GJ/adt) by 5% from 2014 as base year.	Performance 16.94 GJ/adt, 3.97% increase	
Ensure minimum 70% certified fibre delivered to our mills	80%, 6.4% pts improvement	
SNA		
Procure 60% certified fibre to meet customer demands for certified products	55%	
Reduce energy intensity (GJ/adt) with 5% from 2014 as base year.	26.17 GJ/adt, 1.69% increase	
Reduce paper mill raw material waste by 5% (lb/adt) from a baseline of 42 lb/adt in 2017.	43.8 lb/adt, 4% improvement	
Reduce pulp mill raw material waste by 10% (lb/adt) from a baseline of 20.7 lb/adt in 2014.	18.1 lb/adt, 13% improvement	
SSA		
10% reduction in GHG emissions (GHGe) CO ₂ eq/adt	11.5% reduction	
10% reduction in total specific process water usage (m ³ /adt) from 2014 as base year.	18.1% reduction	
10% reduction in specific fossil energy intensity (GJ/adt) from 2014 as base year.	9.3% reduction	
10% reduction in specific solid waste landfilled (t/adt) from 2014 as base year.	23.5% reduction	
70% certified timber delivered to our manufacturing plants	83%	



GROW

Leadership messages



Dear stakeholders

The Covid-19 pandemic has illustrated the fragility and interdependence of the global economy, sharpened the divide between the haves and have nots and highlighted our dependence on the environment. Against this backdrop, across the world there are calls to manage the consequences of the pandemic by building 'back better'.

Now, more than ever, the words 'Healthy Planet – Healthy People' have meaning.

We welcome this approach, given that we have long been aware of the need to transform our business model into a more circular one, invest in our people and support local communities, while investing in and searching for innovative ways to leave the planet better than we found it.

A few examples of the actions we have taken in this regard include establishing our Sappi Biotech division some years ago to maximise the full potential of every tree harvested. We have continued to engage with our employees and other stakeholders and responded to their needs and concerns. We have also expanded our corporate social investment work to incorporate both shared value and social impact. In addition, we have committed to set science-based emissions reduction targets aligned with the Science Based Targets initiative (SBTi), with each region establishing a decarbonisation map to accelerate progress.

Our commitment to a more equitable, inclusive and sustainable economy, together with these actions, among others, gave us the momentum to incorporate sustainability more fully into our recently launched Thrive25 business strategy: *Sappi exists to build a thriving world by unlocking the power of renewable resources to benefit people, communities, and the planet.*

In 2020 we closed off our previous set of 3P targets and set new 2025 targets under Thrive25. The indicators we selected are detailed throughout this report and are aligned with specific United Nations (UN) Sustainable Development Goals (SDGs), which we have identified as priorities and where we believe we can make a meaningful contribution to the 2030 global agenda.

Working collaboratively, with clarity and purpose, powered by agility and adaptability, I am confident we can achieve this.

Valli Moosa

*Chairman
Social, Ethics, Transformation and
Sustainability (SETS) Committee*

Leadership messages continued



Dear stakeholders

Our 2020 financial performance was severely impacted by the Covid-19 pandemic, related lockdowns and the economic aftereffect. We were more fortunate than some businesses in that in all regions, our operations were classified as 'essential', which meant production could continue – although our Condino Mill was required to close for a period of 10 days. Our 'essential' classification enabled us to could participate in Covid-related economic activity, such as the provision of paper labels for canned goods, packaging and specialities to meet e-commerce needs, as well as dissolving pulp used in disinfectant wipes and hospital gowns. Reduced demand forced us to curtail production across our sites. Where feasible we delayed planned maintenance shuts and we also postponed non-essential projects to support our liquidity management.

Against this turbulent environment, we had to adapt very quickly. Our actions were underpinned by the four key fundamentals of our recently launched Thrive25 business strategy: grow our business, sustain our financial health, drive operational excellence and enhance trust. The latter is based on improving our understanding of – and proactively partnering with – clients and communities, driving sustainability solutions, and meeting the changing needs of every employee at Sappi.

The manner in which our people pulled together demonstrated the power of trust. We moved swiftly to implement IT and HR processes that enabled our people to work from home. Where this was not possible, as with our production sites and certain office employees, we implemented strict protocols to ensure their safety – protocols which are still in place as 2020 draws to a close. And while some employees were temporarily furloughed, there were no large-scale Covid-related retrenchments. We proactively partnered with organisations and communities to provide support to society and help the less fortunate. We worked with our customers to respond to a dramatically different operating environment, demonstrating resilience and agility as we re-engineered certain processes and products to meet their needs. However, one challenge where we fell behind was safety as tragically, there was one contractor fatality in Sappi Forests. We deeply regret the incident and our thoughts and prayers are with the family of the deceased. Recognising our employees trust us to create a safe environment, we entrench the principles of Project Zero to ensure that they return home safely every day and continue a 24/7 safety mindset outside working hours. Equally, we trust our people to commit to safe behaviour to ensure their own safety and that of their colleagues.

I am proud of our people who leveraged their expertise and commitment to Sappi to take ownership of the 'new normal' and create meaningful solutions to unprecedented challenges. Together, we will continue to be a trusted, transparent, and innovative partner in building a biobased circular economy and realise our vision of a more renewable, response world. A world in which we balance Prosperity, People and Planet – and thrive.

Steve Binnie
Chief Executive Officer
Sappi Limited





ENHANCE

OUR KEY RELATIONSHIPS

17 PARTNERSHIPS
FOR THE GOALS



One of the strategic fundamentals of our Thrive25 strategy is to enhance trust. This means improving our understanding of – and proactively partnering with – various stakeholders, driving sustainability solutions and, in particular, meeting the changing needs of every employee at Sappi.



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

To achieve this, we establish and maintain proactive dialogue with all our stakeholders. In doing so we recognise that stakeholder needs are dynamic and that we need to be responsive to the evolving stakeholder landscape. In addition to responsiveness, our approach to engagement is based on the principles of inclusivity, materiality, relevance and completeness.

We assess the quality of our relationships both informally, as set out on the following pages and formally – regular employee and customer surveys, community forums and Poverty Stoplight in South Africa.

Our stakeholder work is aligned to the governance framework of King IV; namely performance and value creation, adequate and effective controls and trust, as well as reputation and legitimacy and ethics.

Trust is not possible without an ethical culture underpinning our everyday activities, which is why we train our employees, customers and suppliers on our Code of Ethics and also promote awareness of the Sappi Hotlines in each region that allow all stakeholders to report breaches of the Code in full confidentiality without fear of reprisal.

Read more: [Maintaining ethical behaviour and compliance](#).

Read more: <https://www.unglobalcompact.org/>
Letter from our CEO to the UNGC at
<https://www.sappi.com/2020GSDR-UNGC-letter>

Employees



Self-assessment of
quality of relationships:

Good

Why we engage

As we take Sappi into the future based on the clear roadmap entrenched in our Thrive25 strategy, leadership's task is to help our people understand the plan and clear their path to success. Our aim is to unlock the wide-ranging, significant expertise of our people today and tomorrow. In doing so, we secure our exciting future in woodfibre as a business that provides relevant solutions, delivers enhanced value and is a trusted partner to all our stakeholders.

Shared priorities

Our response

Constructive action with regard to Covid-19

- Our main focus was on the safety of our people and providing them with support, information and resources.
- In addition, we were able to continue to operate throughout the lockdowns that enabled us to reduce the impact on our people.
- Our operations were classified as essential and wherever possible, we provided the information technology (IT) support and human resources (HR) processes to allow people to work from home.
- Where people did contract coronavirus, they were provided with support and isolated according to health and safety protocols.
- In each region, we established Covid-19 information hubs in order to support our staff, customers and their families.

S Read more [Covid-19 and our response](#).

Involvement in safety

- The theme for Global Safety Awareness week was '*I Value Life*'. In the light of the Covid-19 pandemic, virtual webinars and e-media were used to convey the messages to our people.
- Involving our people in health and safety is part of our collaborative approach to doing business. 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 **SEU**, 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 **SNA**, all unions have the opportunity to participate in joint management worker safety committees.
 - In **SSA**, (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.

Employees continued

Effective wellness and recognition programmes

- Shared priorities** **Our response**
- Well-being and wellness programmes are tailored to the needs of each region.
 - Our recognition programmes include:
 - Sappi Limited**
 - Technical Innovation Awards
 - CEO Award for Excellence
 - SEU**
 - Annual Coryphaena Award
 - SNA**
 - TOUTS Recognition Awards and
 - periodic regional President’s Awards
 - SSA**
 - Excellence in Achievement Awards (EAA)
 - Annual safety awards
 - Sappi Trading**
 - SMART Awards

Read more: [Ensuring the safety of our employees and contractors](#)

Connection with Sappi’s strategic goals and high levels of engagement

We conduct engagement surveys every second year, with the last one taking place in 2019. Questions probe issues such as whether our people feel they have the right tools and resources to do their jobs well; whether their goals for career growth being met, whether they feel safe at work and whether they are clear on the direction in which Sappi is moving.

In 2020, group and regional leadership engaged extensively on the close out of our 2020Vision business strategy and the launch of our Thrive25 strategy. In South Africa, we introduced the Ask Alex initiative whereby the regional **SSA** CEO held employee roadshows (in person and online), with employees encouraged to ask him questions related to current and future operating conditions. In Europe the CEO established virtual update briefings and in North America virtual briefings were also undertaken.

Read more: [Engaging more closely with our employees](#)

Employees continued

Shared priorities

Our response

Resources that enable our people to grow intellectually, fulfil their potential and drive innovation in Sappi; policies and procedures that promote a diverse workforce

In FY2020 we:

- Invested an average of US\$434 per person in training and development
- Established a 2025 gender diversity target
- Continued to provide access to self-learning modules

Read more: [Attracting, developing and retaining key skills](#)



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

Encourage employee volunteerism through initiatives like

SEU
Support of various local education, cultural and environmental projects based on annual requests and identified needs.

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. Sustainability Ambassadors also lead and participate in local events, supporting community in programs as well as educating the community about the wood products industry, sustainable forestry practices, mill operations and the importance of recycling.

SSA
Employee well-being committees at each mill support local community projects as well as Mandela Day.

Read more: [Sharing value with our communities](#)



Employees continued

Shared priorities Our response

Understanding of Sappi’s commitment to sustainability that underpins our strategy

Globally, targeted internal publications and social media campaigns linked to global days like Global Ethics Day and our signing up to Business for Nature’s call to action #natureiseveryonesbusiness enhance understanding of the sustainability landscape in general as well as our actions to ensure that we play an active role in driving responsibility within this landscape, in particular.

Given the launch of our Thrive25 strategy and 2025 targets that are aligned with the UN SDGs, communication focused on SDG targets to show our people how they can become part of the global and regional drive and raising awareness of how our individual actions can collectively count towards a greater change.

SNA runs an active Sustainability Ambassador programme and held a virtual Sustainability Ambassador Assembly workshop this year. Due to the virtual nature of the workshop, there was greater diversity of participation as there were no travel costs involved.



Opportunities for value creation

- 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 base, we establish a base of technical skills needed by the industry.
- A diverse workforce enhances our ability to service global markets and promotes a culture of inclusivity.
- 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

- Recruitment and retention of key skills
- Loss of institutional memory as older employees retire

Unions



Self-assessment of
quality of relationships:

Fair

Why we engage

Unions are an important member of civil society and can contribute meaningfully to addressing societal challenges and creating sustainable growth and prosperity for all. In 2020, globally, 57% of our workforce was unionised, with 75% belonging to a bargaining unit. Given these high levels of representation, it makes sound business sense to maintain constructive relationships with our employees and their representatives in order to maintain and promote productivity, stability and engagement.



Shared priorities

Our response

Freedom of association,
collective bargaining and
disciplined behaviour

Sappi endorses the principles of fair labour practice as entrenched in the United Nations Global Compact and Universal Declaration of Human Rights. At a minimum, we conform to and often exceed labour legislation requirements in countries in which we operate. Protecting the right to freedom of association and collective bargaining is fundamental to the manner in which we do business. We engage extensively with representative trade unions. Discussions range from remuneration issues, to training and development, health and safety and organisational changes.

Given the active role taken by labour 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 that 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 well-being, 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.

Read more: [Supporting sound labour relations](#)



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

Safety and wellness
initiatives

The health and safety committees at all our operations provide a forum for consultation about the development/review of policies and procedures and changes that affect workplace safety or health. Wellness programmes include fitness and medical screening programmes, as well as psychological and financial support.

Unions continued

Shared priorities

Our response

Remuneration, working hours and other conditions of service

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 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 that could, in turn, lead to exploitative behaviour and an indirect form of forced labour. Against this backdrop, in all three regions, labour is sourced on the open market, we pay market-related wages in line with or above local legislation and ensure that working hours are fair.



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

Resolving grievances, engaging on strategy

- Well-established grievance channels, disciplinary procedures and whistleblower protocols provide a non- retributory framework.
- We regularly engage with unions on economic conditions, market dynamics and growth plans.



Opportunities for value creation

- Good employee/management relations enable us to resolve new and difficult labour issues as they develop.
- When employees understand strategic direction and operating context, they are more likely to be more committed to Sappi, leading to a more stable labour force and higher levels of productivity.



Challenges for value creation

- Multi-union landscapes, particularly in North America and South Africa, add to complexities in the labour environment.
- Unrealistic expectations about wages increases, particularly in light of the Covid-19 pandemic.

Customers



Self-assessment of
quality of relationships:

Excellent

Why we engage

The more closely we engage and collaborate with our customers, the more likely we are to understand and respond to their evolving needs by offering relevant solutions in the form of sustainable and practical products and services. This partnership approach builds the loyalty and long-term relationships that enable us to thrive.



Shared priorities

Our response

High levels of service

In **SEU**, we enhanced services levels by launching Paperini that allows customers to accurately track their paper deliveries. The tool, which can create an automated arrival notification and, subsequently, an automated credit note is currently being trialed by several logistics and carrier companies in Europe. We also established new infrastructure in Sweden and Denmark that enables us to distribute paper to printers within 48 hours.

The **SNA** eCommerce site is a customer portal with multi-language capability that connects customers 24/7 to real time information such as order status, inventory checks, document printing, claims reporting and order placement so they can plan and manage their business better. This included access to our carbon calculator where the greenhouse gas emissions associated with their order can be determined and the amount of emissions avoided by using a Sappi product that has a lower carbon footprint than the US pulp and paper industry average. In 2020, Sappi expanded the eCommerce customer experience to include casting and release papers globally.

During Covid-19 lockdowns all regions ensured that they engaged with customers to ensure we could meet their immediate requirements.

New or enhanced products that meet rapidly changing market demand

Consumers have become increasingly aware of social and environmental issues and our customers are looking to us for help in this regard. Against this backdrop, our Innovation and sustainability teams enable us to put sustainability at the heart of everything we produce, enhance our understanding of our customers' current and future needs and enable us to bring new products to market at a faster pace.

Where relevant, we will conduct R&D and develop products to suit customers' specific needs.

Read more: [Developing and commercialising innovations in addition to adjacent businesses](#)

Support for paper, packaging, dissolving pulp (DP) and sustainability goals

In FY2019, Sappi joined the Sustainable Apparel Coalition (SAC) and in 2020, Cloquet Mill completed the Higg Facility Environmental Module (FEM) sustainability self-assessment for Verve, our DP brand. The results position the mill as a leader in sustainable practices, evidenced by a low environmental footprint. The Higg FEM self-assessment tool is part of the Higg Index suite of tools that was developed by the apparel industry to evaluate materials, products, facilities, and processes based on environmental performance, social labour practices, and product design choices.

Customers continued

Shared priorities	Our response
Information and campaigns to promote print as a communication medium and encourage the use of packaging	<ul style="list-style-type: none"> • Globally and regionally, we continue to participate in industry initiatives like TwoSides. • SNA participates in the paper and paper packaging check-off programme that promotes the sustainable nature of paper and packaging. • We also participate in a number of tradeshow such as the PRINTING United tradeshow in Dallas, Texas (USA) where we presented our new Transjet Drive dye sublimation paper, different papers for large format inkjet printing and our new Ultracast casting and release papers. • The Covid-19 pandemic meant that events we sponsor, like the Citrus Symposium in South Africa were postponed. The pandemic also precluded our participation in the usual number of trade shows. However, where possible, we interacted on online platforms. • For example, the Sappi Packaging and Speciality Papers (PSP) sales and marketing teams hosted their first virtual Interpack Fair. Based on the motto 'Pro Planet: Paper Packaging – welcome to the new pack-age', the virtual event featured six livestream presentations that focused on our management of the Covid-19 situation, as well as our global packaging product offering.
Information about the fibre sourcing and production processes behind our brands	<ul style="list-style-type: none"> • Customers generally approach us for information about the fibre sourcing and production processes behind our brands, including carbon footprint. In response to these requests, in SEU, SNA and SSA we publish Paper Profiles and/or information sheets for our papers. We also respond to many questionnaires from our customers that collect data on our CO₂ reduction plans and performance. In SNA, we hold Customer Council meetings and have developed our own GHG emissions calculator that quantifies the amount of emissions associated with a customer order and how those emissions compare against the industry average. • At the request of our customers, in all three regions, we participate in EcoVadis. All three regions achieved Platinum medals in the latest Ecovadis rating. The Platinum rating, a new medal category created in 2020, recognises the top 1% of companies evaluated for their environment, labour and human rights, ethics and sustainable procurement performance. • S We also publish FAQs covering topics like climate change, as well as forest and energy certification.

Customers continued

Shared priorities Our response

Technical and thought leadership information

Globally, a series of technical brochures and thought leadership pieces are available on our website (S) www.sappi.com

- Communication regarding the haptics of touch and neuroscience of touch speak to the power of printed communication.
- The PSP site to provide targeted information on packaging and speciality papers. (S) www.sappi-psp.com
- The POP site is aimed at marketers, creatives, designers and printers looking to innovate in their categories. (S) www.sappipops.com
- Sappi etc is an educational platform for designers and printers. (S) www.sappi.com/sappietc

Our paper and paper pulp product offerings are supported by strong technical teams at our technology and R&D centres.



Opportunities for value creation

- 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 and forest management with deforestation and lack of understanding about the manner in which the forests and plantations from which we source woodfibre help mitigate global warming.

Customers continued

Collaborating to boost disruptive innovation

We joined forces with VIGC (Flemish Innovation Centre for the Graphic Communication) and EY to launch one of the first graphic arts industry hackathons – a method of creative problem solving designed to boost disruptive innovation. During 24 hours, teams of start-ups, scale-ups, corporates and students, supported by a team of experts and coaches, could collaborate and create digital and innovative solutions relevant for the graphic arts Industry. After the hacking, ideas were presented to a mixed jury. Winners of the innovation contest were given the opportunity to showcase their Minimum Viable Product/s to experts and industry decision-makers. at VGIC's Het Congress event. They also received a Sappi sponsorship of EUR3,000 as well as three months of mentorship by Sappi experts to help bring their ideas to fruition.



Communities



Self-assessment of
quality of relationships:

Fair to good

Why we engage

Recognising that we are part of the communities beyond our fence lines and that their prosperity and well-being are linked to our own, we strive to make a purpose-driven, meaningful contribution towards their well-being and development. We work to create positive social impact by jointly identifying and leveraging opportunities, thereby demonstrating our commitment to transparency and collaboration.

Community engagement meetings take various formats in our mills in the regions where they operate. These range from broad liaison forums for business, local government and communities to legally mandated environmental forums that form part of the licensing conditions of mills. In South Africa, there are local farmer and community forums related to our forestry communities.

In response to the corona pandemic, we refocused our response to enable rapid community support including through support for local (in our operating communities) clinics, hospitals, feeding schemes and schools.

[Read more on page 95.](#)

Shared priorities

**Community support
including employment,
job creation, business
opportunities, economic and
social impacts/contributions
and community support**

Our response

SEU

- Employees are encouraged to nominate and participate in local community projects and events.
- At a local community level our focus is to add to the well-being, safety and health of our communities. We support various local schools, sports and hobby clubs, forest products industry students, local safety and environmental organisations and local charities.
- As a pilot project, one of our mills created an opportunity for youth in the community to be Sustainability Ambassadors and engage with sustainability projects.
- Sappi is a partner in the Marc Cornelissen Brightlands Award that encourages talented pioneers to persevere in creating a sustainable world.

SNA

- Each unit has a Community Connections Group to channel local support.
- Education programmes are supported at targeted colleges and universities as are programmes to encourage study in fields relevant to our operations.
- Our employees participate in initiatives like Living Lands and Waters and the Charles River Watershed Association focused on environmental stewardship and education.
- The Ideas that Matter programme continues to recognise and support designers who support good causes. Since 1999 the programme has funded over 500 non-profit projects and has contributed more than US\$13 million to a wide range of causes around the world that use design as a positive force in society.
- The Employee Ideas that Matter programme provides direct funding to the non-profit organisations that our employees are most passionate about.

Communities continued



Shared priorities	Our response
Community support including employment, job creation, business opportunities, economic and social impacts/contributions and community support continued	SSA <ul style="list-style-type: none">Community support has been bolstered by the creation of a dedicated multi-disciplinary team comprised of the Enterprise and Supplier Development (ESD) team, the Human Resources team and the Corporate Citizenship team. This structure has been rolled out at each mill site and is referred to as the Community Management Committee (CMC). The purpose of this CMC is to identify shared value opportunities that help identify and support local entrepreneurs as well as to promote the sourcing of goods and services from local suppliers where possible. The CMC also report on the employment of locals and ensures investment in communities addresses specific needs. The CMC at all times aims to collaborate with government, NGOs and the private sector for scale.Given South Africa's significant development needs, the bulk of community support is allocated to this region. Support is directed to education, environment and socio-economic development, based on helping communities help themselves. Initiatives include:<ul style="list-style-type: none">Sappi Khulisa, our enterprise development scheme for timber farmersThe Abashintshi Youth programmeEducation throughout the education value chain, including early childhood development (ECD); Khulisa Ulwazi, our training centres for small growers and two training centres for local unemployed youth at Saiccor and the Ngodwana MillsSupport for local tourism through our mountain biking and trail running sponsorships and promoting recreational riding on Sappi land

Read more: [Sharing value with our communities](#)



Opportunities for value creation

- Enhanced licence to operate and thrive
- Promoting socio-economic development that 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

- Unrealistic expectations for jobs, supplier opportunities and service delivery
- Ensuring mutual ownership and commitment

Industry bodies and business



Self-assessment of
quality of relationships:

Good

Why we engage

Business makes a significant positive contribution to society and is a core partner in developing the world we want to see. Being an active member of trade, voluntary and other business forums and bodies ensures that we help to spread this message, and that issues of concern to us are included in the agenda. We also support and partner with industry initiatives aimed at promoting the use of our products. One of our longest global relationships is with the United Nations Global Compact, to which we have been a signatory since 2008. Under our Thrive25 strategy that emphasises partnership and collaboration we have been focusing more intensively on working closely and more often with those who share both our values and commitment to our industry.

Shared priorities

Our response

Issues that affect the sustainability of our industry and products that promote sustainability


The impact of increased regulations on business

The social and environmental credentials of our products

Ensuring that the positive role played by business in society is amplified and recognised

In FY2020:

Globally, we:

- Committed to the Science Based Targets Initiative in line with our group- wide decarbonisation strategy.  Read more: [Prioritising renewable and clean energy](#).
- Signed up to Business for Nature's call to action: #natureiseveryonesbusiness.
- Participated in a biodiversity information pilot with a range of brand owners, and biodiversity experts under the auspices of the Textile Exchange. The latter will be using the information to develop a biodiversity rating tool for brand owners.
- Collaborated with one of our DP customers on a blockchain project to enhance traceability within the supply chain.
- Joined the 4evergreen alliance, a group of prominent companies and organisations from all areas of the fibre- based packaging industry, to work together towards a more sustainable economy that minimises the product's environmental impact. We are collaborating with the 4evergreen alliance to develop a greater understanding of recyclability in packaging, understand the future need for recycling systems and communicate findings to stakeholders.
- Established a collaboration agreement with HP Indigo's Alliance One programme that covers commercial and market-related topics. Our Magno Gloss and Satin ranges, and our GalerieArt Gloss and Silk products have also all been certified for use on the HP Indigo-installed base.
- Provided comments to the *Nordic Swan* criteria renewal process.
- Participated in the task force under the auspices of the GRI (Green Resource Initiative) established to propose legislation to combat deforestation.
- Continued to support The Prince of Wales Global Sustainability Fellowship in Transforming the Pulp and Paper Industry at the Cambridge Institute of Sustainability Leadership. The fellowship seeks to contribute to new pathways within the context of the sustainable pulp and paper industry. It is exploring the valorisation of paper industry side streams and opportunities for further use of wood-based feedstocks in the chemicals and materials markets. Through scoping the potential of new processes and byproducts from cellulose, hemicellulose and lignin, opportunities to replace fossil-derived products will be advanced.

Industry bodies and business continued

Shared priorities

Our response

Clean energy generation, climate policy and climate regulations

The European Green Deal is a set of policy initiatives by the European Commission with the overarching aim of making Europe climate neutral in 2050. Sappi provided comments to the industry input that was handed in via the Confederation of European Paper Industries (CEPI).

The Society of American Foresters (SAF) promotes and supports science-based policies and actions that consistently recognise the positive role that forest management plays in: mitigating greenhouse gas (GHG) emissions through the sequestration of atmospheric carbon in resilient, well-managed forests (trees and soil), producing wood-based products to replace both non-renewable materials and fossil fuel-based energy sources. This policy was scheduled to be updated per SAF protocol. Sappi helped to rewrite the policy, expanding the discussion on the role that trees play in sequestering carbon, both as a living tree as well as a wood product.

The energy manager for Somerset Mill is a member of the Maine Climate Council, an assembly of scientists, industry leaders, bipartisan local and state officials, and engaged citizens to develop a four-year plan to put Maine on a trajectory to reduce emissions by 45% by 2030 and at least 80% by 2050. By executive order, the state must also achieve carbon neutrality by 2045.

In South Africa, Sappi is subject to a carbon tax that came into effect in 2019 and is due for payment at the end of October 2020. While we recognise the need to reduce fossil fuel usage in South Africa, the country urgently needs to promote socio-economic development and enhance competitiveness. Carbon tax poses a potential risk to such growth and competitiveness. We engaged National Treasury via PAMSA to motivate taking into account carbon sequestration by companies that own their own forests. Sappi's process starts with the planting of trees and our total supply chain is carbon positive. We are still awaiting clarity on whether the proposal will be accepted.



Opportunities for value creation

- Address complex topics
- Develop sustainable, transparent supply chains
- Maintain and expand markets for our products
- Enhance understanding of our social and environmental credentials
- Influence policy
- Promote dialogue



Challenges for value creation

- High costs and resource allocation of certain industry memberships

Industry bodies and business continued

Our membership of industry associations



Sappi Limited

- Business Leadership South Africa
- Cambridge Institute for Sustainability Leadership
- CEO Initiative
- Ethics Institute
- International Stakeholder member of the programme for the Endorsement of Forest Certification (PEFC)¹
- Paris Pledge for Action
- Sustainable Apparel Coalition
- TAPPI (Technical Association of the Pulp and Paper Industry)
- Textile Exchange
- United Nations Global Compact



SEU

- 4evergreen alliance
- Bio-based Industries Consortium (BIC)
- BioChem Europe
- CELAB: Towards a Circular Economy for Labels
- CEFLEX: A circular economy for flexible packaging
- Confederation of European Paper Industries (CEPI)
- Eurograph
- Ligninclub
- Print Power
- The Alliance of Energy-Intensive Industries
- The Forests Dialogue
- TwoSides



SNA

- American BioFuels Association (ABFA)
- American Forests and Paper Association (AF&PA)
- Alliance for Pulp & Paper Technology Innovation (APPTI)
- Biorenewable Deployment Consortia (BDC)
- Forests in Focus
- Forest Products Working Group
- Forest Stewardship Council™ (FSC™)²
- Paper and Paper Packaging Board
- Ruffed Grouse Society
- Sustainable Packaging Coalition (SPC)
- Sustainable Forestry Initiative® (SFI®)
- TwoSides
- University of Minnesota Sustainable Forests Education Cooperative
- University of Maine Paper Science Consortia



SSA

- Business Unity South Africa
- Fibre Processing and Manufacturing Skills Education and Training Authority (SETA)
- Forestry South Africa
- Forest Stewardship Council® (FSC®)
- National Business Initiative (NBI)
- Manufacturing Circle
- Packaging SA
- Paper Manufacturers' Association of South Africa (PAMSA)
- Printing SA (PIFSA)
- Recycle Paper ZA
- South African Chamber of Commerce and Industry (SACCI) and local chambers of commerce and industry
- TwoSides



Sappi Forests

- BiCEP (Biological Control of Eucalypt Pests)
- Biorenewable Deployment Consortium (BDC)
- CAMCORE Eucalyptus Genome Network (EUCAGEN)
- Forestry and Agricultural Biotechnology Institute (FABI)
- The Tree Protection Co-operative Programme (TPCP) – founding member

¹ PEFC logo licence code: PEFC/07-32-76.

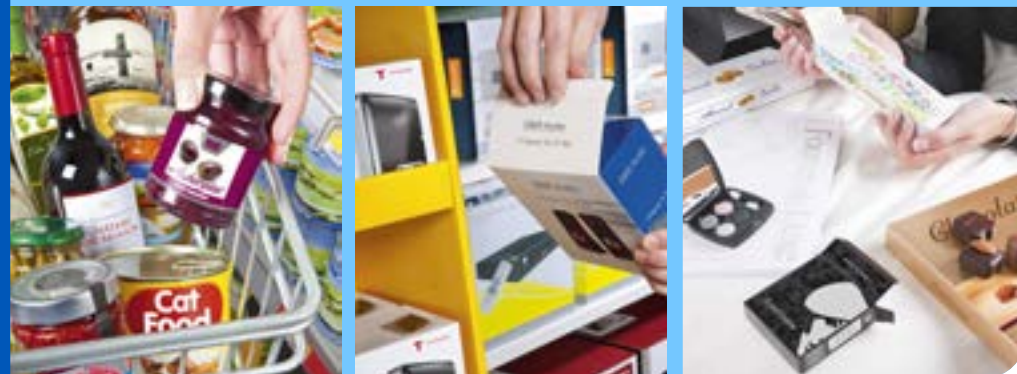
² FSC licence code: FSC-N003159.

Joining forces to help progress a sustainable circular economy

In FY2020 we joined the 4evergreen alliance that operates under the auspices of CEPI and brings together participants across the packaging value chain including pulp and paper manufacturers, converters and brand owners. The alliance aims to boost the contribution of fibre-based packaging in a circular and sustainable economy that minimises climate and environmental impact. The alliance works to:

- Increase awareness about the benefits of fibre-based packaging materials
- Improve the overall recycling rates of fibre-based packaging materials
- Produce guidelines and tools to enhance recyclability through packaging design, collection and sorting

The alliance is a timely response to support the EU's Single Use Plastics Directive, designed to accelerate development of alternative packaging and enable consumers to make more climate-friendly choices. The work of the alliance is also championing change towards the aim of the European Green Deal: climate neutrality by 2050.



Enhancing understanding of land use and GHG emissions

A member of the Sappi Forests Research team has been working with the World Resources Institute on the GHG Protocol Carbon Removals and Land Sector Initiative Project. This working group will develop guidance on:

- Types of emissions, removals and sequestration within the land sector
- Carbon emissions and removals from land use (e.g., forest management, crop and livestock production, bioenergy feedstock production, soil carbon, etc.)
- Carbon emissions and removals from land use change (e.g., deforestation, afforestation, wetland conversion, etc.), as well as direct and indirect land use change and related impacts from changes in production
- Agricultural GHG emissions (e.g., livestock methane emissions, soil nitrous oxide emissions, etc.)
- Biogenic removals and temporary to long-term storage in biogenic products/materials (e.g., furniture, building materials, etc.)
- Biogenic carbon dioxide emissions and removals from bioenergy production and consumption (e.g., biomass, biofuels, biogas)

- Land sector accounting approaches
 - Use of land-based vs. activity-based accounting methods
 - Addressing the timing of removals and emissions
 - Separate biogenic carbon emissions and removals accounting vs. bringing biogenic emissions and removals into Scopes 1, 2 and 3
- Quantification methods and data sources:
 - Reporting requirements
 - Target setting and tracking changes over time
 - Alignment with or revisions to other GHG Protocol standards and guidance.



Shareholders, bondholders and banks



Self-assessment of
quality of relationships:

Good to excellent

Why we engage

Our aim is to provide investors (shareholders and bondholders) and analysts with transparent, timely, relevant communication that provides them with an understanding of our industry, sets out the manner in which we hope to achieve our growth ambitions and facilitates informed decisions.



Shared priorities

Our response

Understanding Sappi's strategy

Return on investment

Transparent information about risks, opportunities and environmental, social and governance (ESG) performance, in particular the impact of climate change on strategic and financial decisions

Ability to generate sufficient cash flows to fund our business and service our debt

- Our investor relations (IR) department engages with shareholders and analysts on an ongoing basis.
- Our Chairman and CEO also engage with shareholders on relevant issues. We conduct ad hoc mill visits and road shows, and issue announcements through the Johannesburg Stock Exchange (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. Shareholders can attend and participate in the Annual General Meeting (AGM) as well as the four quarterly financial results briefings.
- We engage with various ratings agencies, particularly in terms of ESG performance. Recognising the importance of climate change in a financial context, we are incorporating the recommendations of the TCFD into our decision-making processes (discussed further under [Helping to mitigate climate change](#)).
- We participate in the Carbon Disclosure and Forest Footprint Disclosure projects every year, making our submissions publicly available.
- Our Chief Financial Officer and Head of Treasury engage with bondholders, banks and rating agencies continually on the performance of the company. A key point of discussion in FY2020 was the suspension of our credit facility financial covenants from June 2020 to March 2021 (which has been subsequently extended to September 2021).



Opportunities for value creation

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



Challenges for value creation

- Slow post-Covid economic recovery
- Uncertainty about regulatory developments, for example: carbon tax

Government and regulatory bodies



Self-assessment of
quality of relationships:

Good

Why we engage

We engage with government departments and regulatory bodies to provide input into issues and regulations that affect our industry. We also engage with regional and local governments and local authorities to obtain support for our operations, show how our activities contribute to local economic and social development and identify issues where we can work together for our mutual benefit.

A key issue in FY2020 was the classification of our operations as essential to enable us to continue with operations throughout the various national lockdown periods. Positive relations with governments enable us to provide assistance or partner on larger scale projects to bring positive impacts to communities and society.

Shared priorities

Our response

The social and economic benefits of our industry nationally as well as at a local level

Increased investment

Energy issues in general and in particular government moves on carbon taxation

The impact of increased regulations on business

- In Europe, we actively follow and influence policy processes to support the development of policies that are both ambitious and practical for the private sector to implement. Sappi is represented on the High Level Group on Finance and Sustainability Transition as well as the High Level Group on Trade Policy Innovation.
- We reviewed and provided input to the draft report of the European Parliament with Recommendations to the Commission on an EU Legal Framework to Halt and Reverse EU- driven Global Deforestation (2020/2006(INL)).
- We support specific government initiatives, including in South Africa, the Public and Private Growth Initiative (PPGI) that targets agriculture (including forestry) as one of the key sectors growth and under which the Forestry Master Plan falls. Under the auspices of Forestry SA, we are providing input into the plan.
- In North America, we review and provide input to pending legislation and regulations impacting our industry through state and Federal trade associations.



Opportunities for value creation

- 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

- Policies that take neither our high use of biobased energy into account nor recognise the important carbon sequestration role played by the sustainably managed forests and plantations from which we source woodfibre
- Uncertainty about regulatory developments, for example: carbon tax
- Administrative delays

Suppliers and contractors



Self-assessment of
quality of relationships:
Good

Why we engage

Suppliers and contractors are partners in Sappi's safety, sustainability and ethics journey. They contribute to and enable our progress. Consumers are focused on the whole value-chain and not merely the end-product. The actions and commitments of suppliers and contractors are thus critical to us and our customers.

We want to build long-term value partnerships, based on the importance of suppliers to a sustainable supply chain.

Shared priorities	Our response
Safety	Given our focus on zero harm in the workplace, we work with our contractors to ensure that they follow Sappi's safety systems.
Transparency	<p>In South Africa, Sappi Forests continues to work closely with contractors and their workers to implement the innovative Stop and Think Before You Act safety initiative.</p> <p>Globally, our procurement team made progress in assessing suppliers against our Supplier Code of Conduct: SEU: 61% of spend covered; SNA: 10% and SSA 1%.</p>
Increased value	SEU: In Europe, we procure wood through well- established wood sourcing companies wood procurement partners in Europe (Metsä Forest in Finland, proNARO in Germany, Sapin in Belgium and Papierholz in Austria) all of which operate with an established pool of forest owners and wood suppliers.
Decreased costs	In addition, we are a member of the Confederation of European Paper Industries (CEPI), which participates in actions supporting and promoting the development of sustainable forestry management tools, including forest certification.
Security of fibre supply	SNA: The Sappi Maine Forestry Program and the Sappi Lake States Private Forestry Program, staffed by SNA foresters, offer a wide range of services to landowners including contracting with experienced loggers and providing plans to enhance wildlife habitat and forest health. We work directly with landowners, loggers and suppliers to encourage sustainable forest management and provide markets for woodfibre material from harvesting and stand improvement activities. We continue to evaluate, promote and support smallholder certification options where feasible, thereby adding value to both the landowner and marketplace. Procurement practices extend far beyond avoiding 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® Fibre Sourcing Standard.
Certification	
Income generation and job creation.	

Suppliers and contractors continued

Shared priorities	Our response
Increased value	SSA: 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 high 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 as safety. In the past 10 years, we have settled claims involving 39,950 hectares of which claimants took ownership of 8,151 hectares and claims for 11, 271 hectares in which claimants preferred to seek compensation. 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 continues to pay growers in the group certification scheme a premium for certified timber. Our ESD department continues to develop and mentor SMMEs.
Decreased costs	
Security of fibre supply	
Certification	
Income generation and job creation.	



Opportunities for value creation

- Security of woodfibre supply
- Improved supplier relations
- Better understanding of the requirements of the Sappi group
- Expanded basket of certified fibre
- Support for local economic development
- Support for emerging supplier/ contractor development



Challenges for value creation

- Ensuring that SMMEs have the right social and environmental procedures in place

Civil society and media

Self-assessment of
quality of relationships:

Good

Why we engage

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 belief that it's our responsibility to use the full potential of each tree we harvest. 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.

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®) and our International Stakeholder membership of the PEFC. We leverage these platforms to actively contribute to the growth of forest certification world-wide and collaborate with diverse stakeholders.

Shared priorities	Our response
Business developments	<ul style="list-style-type: none">Join key credible organisations as membersDevelop personal relationships and engage continuallyProvide support to and sponsorship for key organisations on issues of mutual interest
The future of our industry	<p>SEU:</p> <p>We are actively involved in The Forests Dialogue (TFD) Steering Committee and provide annual sponsorship to the organisation. We contributed to the development of a new Forests & Climate initiative and supported the development of a number of publications including TFD's 20th anniversary book.</p>
Our impacts on our communities	
Protecting the environment	<p>SNA:</p> <p>We support the Ruffed Grouse Society efforts and the University of Minnesota Sustainable Forests Education Cooperative.</p> <p>SSA:</p> <p>In terms of civil society, 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 South Africa and have established a project that coordinated efforts to re- establish the <i>Warburgia salutaris</i> (pepper-bark tree) in communities and the wild.</p>

Opportunities for value creation

- Inform and educate media
- Encourage civil society to share our sustainability and Thrive25 vision through positive actions

Challenges for value creation

- Misunderstanding of our environmental impacts

SEARCH



Sourcing responsibly

Why it's material

As a responsible corporate citizen, sourcing ethically is not only the right thing to do, it's an important differentiator for value creation. Visibility into the supply chain helps identify issues and risks early and address consumer concerns about issues like child labour.





How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **3** Evolving technologies and consumer preferences
-  **4** Sustainability expectations

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Build trust

The global forces shaping our Thrive25 strategy

- Resource scarcity and growing concern for natural capital
- Continued erosion of trust in business, coupled with increasing social activism



**OUR
2025
TARGET**



SHARE OF PROCUREMENT
SPEND WITH DECLARED
COMPLIANCE WITH SUPPLIER
CODE OF CONDUCT

80%

This broad goal aligns with our focus on being a responsible corporate citizen and providing a safe working environment in which our employees can reach their full potential.



Sourcing responsibly continued

Our approach

As a thriving global business, we use our scale to positively impact stakeholders and industries around the world. We achieve this through ongoing engagement with our suppliers to help familiarise them with our Supplier Code of Conduct (Code). The Code outlines the commitments to economic, social and environmental responsibility that we expect our suppliers to uphold – commitments that, we believe, will strengthen their own businesses.

Key developments in 2020

We continued to move forward with the implementation the Code, embedding compliance thereof into new contracts as they were issued, as well as obtaining signed Declarations of Compliance from suppliers. In SEU especially, we made significant strides forward in ensuring supplier compliance with the Code. Through concerted effort of our procurement teams and responsiveness of our suppliers, during 2020 we managed to ensure 61% of our procurement spend was with suppliers who have signed a declaration of compliance. A tool was also established to enable tracking of progress and to ensure we have oversight at all times on coverage according to different procurement categories and suppliers. In SNA, 10% of procurement spend in compliance with the Code, while in SSA we are still in the early phases of rolling out the programme and have only achieved 1% of compliance.

Going beyond self-declarations of compliance, we are now working to initiate a supplier evaluation programme to actively solicit sustainability-related information from priority suppliers to enable further evaluation and mitigation of risk. Using Ecovadis as our selected tool will enable us to gain insights into our suppliers' sustainability performance, and further improve our ability to collaborate with our suppliers so that together we can make a greater positive impact on People, Planet and Prosperity.

📖 Read about [Our approach to Modern Slavery](#).

Sourcing responsibly continued

Monitoring fundamental rights



UNGC Principle 1:










Business should support and respect the protection of internationally proclaimed 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:

2020 scores and global rankings

Country	Score	Global ranking (out of 128 countries)
 Austria	0.82	8
 Belgium	0.79	14
 Canada	0.81	9
 Finland	0.87	3
 Germany	0.84	6
 Italy	0.66	27
 Netherlands	0.84	5
 South Africa	0.59	45
 United States of America	0.72	21
 United Kingdom	0.79	13

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.



Maintaining ethical behaviour and compliance



UNGC Principle 10:

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

Why it's material

Our reputation as an ethical company – largely determined by the ethical behaviour of our employees and representatives – underpins our ability to unlock further growth opportunities. Accordingly, we view ethics as the foundation of our business. Values and ethics are not only critical to maintain a licence to operate but also for developing stakeholder trust and for driving performance. We place a high premium on adherence to ethical behaviour as encapsulated in our Code of Ethics. The latter creates clear boundaries and a consistent framework across cultures and geographies as to what constitutes ethical behaviour.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

- 6 Uncertain and evolving regulatory landscape

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence
- Build trust

The global forces shaping our Thrive25 strategy

- Continued erosion of trust in business, coupled with increasing social activism

Our approach

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 enhances trust and underpins our ongoing viability as a thriving 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 to ensure that it remains aligned to current governance and business trends.

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
- All our operating sites are covered by Sappi internal audit scheme
- For forensic incidents, independent investigations are done that include due consideration for ethics management and forensic lessons learned
- Employee Engagement Surveys, held every second year, provide insight into the application of ethics by employees and leadership
- Senior management sign annual confirmations that all frauds and ethics incidents and related control breakdowns have been communicated for investigation and review
- As part of the Group Legal Compliance Programme, designated employees confirm compliance with Sappi's governance, regulatory, and ethics standards on a bi-annual basis

Maintaining ethical behaviour and compliance continued

Conducting forensic investigations

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 of Ethics and hotline communication, completion of ethics training by employees and reviewing processes for employees to disclose potential conflicts of interest.

All forensic investigations are undertaken with oversight from the legal department, human resources (HR) and executive management. Detailed formal reports are prepared for each incident and distributed to line and HR management. The Audit and Risk Committee and supporting committees receive and review reporting on all forensic activity.

In addition to the detailed scrutiny of all ethics incidents, various KPIs are used to monitor forensic and ethics management for SSA. The most important analyses relate to the numbers, classification and outcome of incidents and the timely resolution of [hotline calls](#).

Key developments in 2020

In line with our emphasis on ethical behaviour, we implemented a comprehensive training programme across all regions in 2020. Topics covered ranged from environmental law to anti-fraud and corruption. These training initiatives – incorporating relevant and practical examples – have been implemented to inculcate the correct ethical behaviour and responses to avoid a tick-box approach to ethics.





RENEW



PROSPERITY

Creating value

We work to build a thriving world by acting boldly to support People, Planet and Prosperity. Our drive to do so is predicated on our vision of being a sustainable business with an exciting future in woodfibre that provides relevant solutions, delivers enhanced value, and is a trusted partner to all our stakeholders. To achieve this, among other things, we are investing in market segments with strong growth; strengthening our competitive position in mature markets; continuing our commitment to innovation; adapting to market supply and evaluating our product mix to align with evolving needs and demand. Our overarching aim is to grow profitably while meeting the needs of People and treading more lightly on the Planet.

OUR PERFORMANCE

at a glance

The group's performance was severely impacted by the Covid-19 pandemic, related lockdowns and the economic aftereffect. As a second Covid wave looms, looking forward we are encouraged by the resilience of our business and the opportunities offered by our strategic focus on the transition of the business towards higher growth segments.

**14%**

decrease in saleable production

Sales
US\$4,609 millionLiquidity sound –
credit facility
covenant
suspension period
renegotiated**20%**decline in graphic
paper sales volumes
and 18% decrease
in dissolving pulp
(DP) sales**1.1 million**tons of commercial
downtime**12.9%**year-on-year growth
in packaging and speciality
volumes, robust demand
driven by consumer
preference and the shift
from plastic to paper

Creating value continued

Adding value to daily life

With a burgeoning global population that's becoming increasingly urbanised, with climate change and resource scarcity top of mind for many consumers, the world's demands for sustainable products based on renewable resources like woodfibre are set to grow. 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:

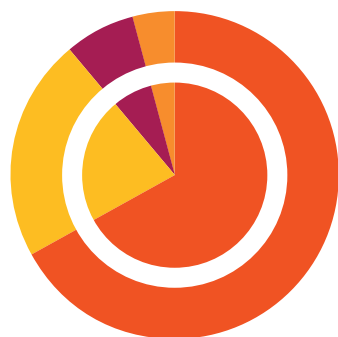
- Our Verve dissolving pulp is used world-wide by converters to create viscose fibre for fashionable clothing and textiles, pharmaceutical products as well as a wide range of consumer and household products.
- Quality packaging and speciality and papers are used in the manufacture of products such as 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.
- Our bioproducts offer a viable alternative to fossil-fuel based products.

Contributing to society

We contribute to society through payments to governments, suppliers and employees, as well as returns to shareholders.

Value added over the last three years

2020



- To employees as salaries, wages and other benefits (67%)
- Reinvested to grow the business (22%)
- To lenders of capital as interest (7%)
- To governments as taxation (4%)
- To shareholders as dividends (0%)

2019



- To employees as salaries, wages and other benefits (57%)
- Reinvested to grow the business (25%)
- To lenders of capital as interest (5%)
- To governments as taxation (8%)
- To shareholders as dividends (5%)

2018



- To employees as salaries, wages and other benefits (55%)
- Reinvested to grow the business (29%)
- To lenders of capital as interest (5%)
- To governments as taxation (7%)
- To shareholders as dividends (4%)

Creating value continued

Facilitating economic well-being

Direct impact

We facilitate social and economic well-being by using labour from local communities, and the services of small and medium enterprises in areas around plantations and our production facilities in areas around production facilities and plantations in South Africa.

Indirect impact

The indirect economic benefits of our operations impact on sectors including technical, construction and engineering services that 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 2020, we added value to the prosperity of the regions where we operate by:

- Providing work opportunities for the 9,250 people are employed by contractors working for Sappi Forests in South Africa.
- By creating millions of dollars' worth of goods each year. In 2020, in volume terms (metric tons '000), sales per region were:
 - SEU: 2,698
 - SNA: 1,516
 - SSA: 2,574
- 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.

Playing a strategic role

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 2019, the pulp and paper industry provides more than 180,000 jobs in Europe directly, and 1.5 million jobs in the value chain. It has a turnover of EUR90 billion and adds EUR20 billion to the European gross domestic product (GDP). It is strong in export markets, with an export rate of 22% of its paper and board production.¹



North America

The forest products industry accounts for approximately 4% of US manufacturing GDP, manufactures nearly US\$300 billion in products annually and employs approximately 950,000 men and women. The industry meets a payroll of approximately US\$55 billion annually and is among the top 10 manufacturing sector employers in 45 states². In Canada, paper mills contributed CAD\$6.7 billion to the national economy in 2020³.



South Africa

The forest products sector in South Africa employs 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.⁴

South Africa's pulp and paper sector contributed ZAR7.3 billion to the country's balance of trade, with ZAR4.9 billion of papers being imported and ZAR12.2 billion worth of pulp being exported in 2018.⁵

¹ <https://www.cepi.org/wp-content/uploads/2020/07/Final-Key-Statistics-2019.pdf>

² <https://www.afandpa.org/advocacy/economic-impact>

³ <https://www.ibisworld.com/canada/market-size/paper-mills/>

⁴ Forestry South Africa, latest statistics as at September 2019

⁵ <https://www.thepaperstory.co.za/wp-content/uploads/2020/04/PAMSA-2018-Industry-Statistics-Summary-edited.pdf>

Creating value continued

Promoting prosperity outside our own operations



In South Africa we promote prosperity through our Sappi Khulisa enterprise development programme that encompasses community tree farming and that, albeit in a different form (Project Grow), has been in operation since 1983. Whereas Project Grow focused solely on the growers, Sappi Khulisa focuses on the whole value chain including growers and the contractors who service them. The total area managed currently is 32,660 hectares. In 2020, under this programme, 284,038 tons of timber (2019: 425,001 tons) worth some ZAR232 million (2019: ZAR382 million) was delivered to our operations. Since 1995, a total volume of 4,505,979 tons to the value of ZAR2.7 billion has been purchased from small growers under this programme.

Currently, the programme involves over 3,644 growers and approximately 103 small, medium and micro enterprises (SMMEs) who are involved in silviculture, harvesting, loading, short- and long-haul activities.

We have established three training centres, Khulisa Ulwazi ('Growing knowledge'), 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 as safety.



Containing costs and ensuring appropriate capital allocation

Why it's material

We cannot achieve our vision of being a sustainable business with an exciting future in woodfibre that provides relevant solutions, delivers enhanced value and is a trusted partner to all our stakeholders, unless we grow profitably.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **2** Cyclical macro-economic context
-  **4** Liquidity
-  **6** Project implementation and execution

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- Changing consumer and employee profiles
- Growing populations with increasing rates of urbanisation



OUR 2025 TARGET



RETURN ON CAPITAL EMPLOYED (ROCE)

2% POINTS
ABOVE THE WEIGHTED
AVERAGE COST OF CAPITAL

As a responsible business operating in many locations around the world, this broad goal aligns with our focus on being a responsible corporate citizen and providing a safe working environment in which our employees can reach their full potential.




Containing costs and ensuring appropriate capital allocation continued

Our approach

Cost containment is a strategic pillar of competitive advantage, as is agility, which is central to the way we operate. We have a history of being agile to difficult trading conditions and we build on this to respond to unexpected developments like Covid-19.

Key developments in 2020

During Covid-19, all our production, warehousing and distribution facilities were designated as essential throughout our operating geographies. Other than the temporary closure of our Condino Mill in Italy for 10 days, all facilities were operational in alignment with lockdown and social distancing guidelines. However, the actions taken by governments across the world to reduce the spread of the virus created significant uncertainty in our markets and in general reduced demand or made it difficult for product to reach its destination. This necessitated the implementation of various **cost saving measures across our operations** in order to preserve liquidity and cash flow.

These measures included furloughing a number of employees in Europe and North America on temporary unemployment; curtailing **excess production** including temporarily shutting Paper Machine (PM) 7 at our Lanaken Mill and applying measures to **optimise working capital**. Where possible, we **deferred non-essential capital expenditure**. Due to government lockdown regulations that stopped all construction projects, we declared, we declared force majeure  at Saiccor Mill (discussed in further [here](#)). We **shifted annual maintenance shutdowns** at Ngodwana, Saiccor and Tugela Mills to as late as possible and **postponed other material discretionary projects** including Ngodwana Energy, our sugar extraction plant at Ngodwana Mill, the fuel rod plant at Tugela Mill and the planned furfural pilot plant at Saiccor Mill.

In line with our focus on taking decisive action to reduce costs and respond to market demand and disclosure in 2019 that we would review our assets in Europe and North America, we permanently shut PM9 and major components of the energy complex at our **Westbrook Mill**. We shifted PM9's base paper production to Cloquet and Somerset Mills, thereby leveraging our premium paper making assets in the region and continuing to provide an integrated solution to our global release paper customer base. The restructuring has allowed us to compete more effectively and enabled Westbrook Mill to focus on its core competencies of speciality coating, texture application and customised product designs, restoring the site as a healthy financial contributor.

In addition, following a thorough consultation process, we reached an agreement with mill employees to permanently close **PM2 at Stockstadt Mill** (coated woodfree paper production capacity of 240,000 tpa. The mill will now focus on its growing uncoated woodfree offering.

The actions taken mean that both mills are now better placed to compete in the marketplace and deliver increased returns.



Enhancing efficiency through machine learning and digitisation

Why it's material

According to McKinsey, companies that are digital leaders in their sectors have faster revenue growth and higher productivity than their less digitised peers. They improve profit margins three times more rapidly than average and, more often than not, have been the fastest innovators and the disruptors and transformers of their sectors.¹



How this issue links to other aspects of our business

Our global priority SDGs



Our emerging risks

Industry 4.0

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- Globalisation and high levels of connectivity
- The rapid pace of technological innovation, including AI

Our approach

Machine learning (ML) is no longer the preserve of artificial-intelligence researchers and born-digital companies like Google or Netflix. Recognising this and in line with our agile operating approach, we work to integrate ML into our business processes.

¹ The McKinsey Global Institute: Digitization, AI, and the future of work: imperatives for Europe

Enhancing efficiency through machine learning and digitisation continued

Key developments in 2020

We continued to drive our **data driven culture** in order to drive productivity and profitability. This involves standardising and consolidating regional data science platforms and digital transformation strategies to support our global Industry 4.0 initiatives, including machine learning and advanced analytics technologies.

One workstream involves the extensive use of **digital twins** to promote discovery, interpretation, and communication of meaningful patterns in data. In the Sappi context, a digital twin is a virtual model of a process, or semi-finished or finished product. By pairing the virtual and physical worlds, we can analyse data and monitor systems, thereby anticipating and avoiding problems before they occur, preventing downtime, developing new opportunities and planning for the future through the use of simulations. As an example: we have created a digital twin for every dissolving pulp (DP) batch produced at Saiccor Mill. Each batch contains information relating to all the upstream processes that contributed to that batch, including timber, liquor and digester cook, washing and bleaching. This digital twin data ensures that process engineers have all the necessary data available in context to analyse issues in the plant.

In parallel to the development and continuous improvement of Digital Twins throughout all the regions, significant focus and effort has been invested in enabling our domain experts (such as engineers and research scientists) in the Data Science domain using a tool called **RapidMiner**. This RapidMiner enablement programme aims to democratise data science within our organisation with a view to expediting problem solving, encouraging innovation and empowering the broader Sappi community by equipping them with data, skills and tools. Through the programme, our people are encouraged to bring their ideas and business problems to the data science team.

Enabling our data-driven culture

Our aim is to provide an integrated environment for data preparation, machine learning, deep learning, text mining, and predictive analytics. To achieve this, we use the **Braincube** data science software platform in addition to RapidMiner. We also provide our people with online and practical training and regular workshops are held to assist with developing ideas into a proof of concept.

All ideas pass through a series of funnels and gates, to ensure that the best ideas become operational and demonstrate value in terms of one or more of the following:

- Process optimisation
- Quality improvements
- Reduced costs
- Improved profitability
- Time saving

FAQ

WHAT IS MACHINE LEARNING?

McKinsey& Company say that machine learning (ML) is "based on algorithms that can learn from data without relying on rules-based programming".¹ Stanford University suggests that ML is "the science of getting computers to act without being explicitly programmed".² Carnegie Mellon University's definition states that the field of ML seeks to answer the question 'How can we build computer systems that automatically improve with experience, and what are the fundamental laws that govern all learning processes?'"

Regardless of the definition, at its most basic level, the goal of machine learning is to adapt to new data independently and make decisions and recommendations based on thousands of calculations and analyses. It's done by infusing artificial intelligence machines or deep learning business applications from the data they're fed. The systems learn, identify patterns, and make decisions with minimal intervention from humans. Ideally, machines increase accuracy and efficiency and remove (or greatly reduce) the possibility of human error.⁴



¹ <https://mckinsey.com/industries/technology-media-and-telecommunications/our-insights/an-executives-guide-to-machine-learning>

² <https://www.coursera.org/learn/machine-learning>

³ <http://www.cs.cmu.edu/~tom/pubs/MachineLearning.pdf>

⁴ <https://quantilus.com/why-is-machine-learning-important-and-how-will-it-impact-business/>

Enhancing efficiency through machine learning and digitisation continued

Innovative solutions for a thriving world

Promising initiatives currently underway include the following:

- **Pulp yield** is a significant economic factor, as woodfibre dominates the total pulp production cost. One way to reduce the woodfibre cost is to increase the pulp yield, thereby increasing operational competitiveness. For example, the annual wood cost savings of a 1% pulp yield increase for a 1,000 metric tons per day DP mill is about US\$1.8 million. Some of the additional indirect effects of higher pulp yield are:
 - Reduced recovery of boiler loading
 - Energy savings, for example, reduction in steam consumption
 - Better utilisation of invested capital.

A real-time prediction model was developed in RapidMiner to predict yield utilising only intrinsic viscosity and the cellulose content of pulp. This RapidMiner artificial intelligence (AI) evaluation allows us to identify the most important parameters influencing the pulp yield and tweak the operation conditions to maximise the pulp yield without compromising the pulp quality.

- Initial analysis with RapidMiner confirmed that the drum level control at one of our mills was the biggest single cause of **recovery boiler steam flow variation**. The project is now focusing on understanding the impacts of steam flow, feedwater temperature and liquor cycle properties on the steam flow.
- At Gratkorn Mill, the data science team is developing an automated process that will highlight **problematic areas in the profile data for the paper, coater and calendar machines**. Preliminary results show that the algorithm can identify peaks in the profile data that can then be related to a specific problem like stretching. The team is currently working on transforming the algorithm to Braincube so that the analysis can be conducted out real-time. In addition, the team is testing several anomaly detection algorithms in RapidMiner that consider all the measured profile variables simultaneously to reduce the time that it takes to identify a problem. Based on the learning from Gratkorn Mill, the data science team is currently developing predictive models to notify operations of **paper breaks** before they occur, based on current plant operating conditions. This application is currently being refined for Gratkorn Mill, with a view to implementing similar solutions at Tugela and Lanaken Mills in the near future.

- In conjunction with the University of Pretoria, we conducted a pilot study to determine if NIRA could be used to **classify susceptible eucalypt hybrids** against the pathogen *Chrysosporthe austroafricana* a fungal pathogen that causes the development of stem cankers on susceptible trees. The next step will be to verify the model independently and then deploy it operationally. It will be a useful tool to identify hybrids to maintain high purity in nurseries rapidly and cost-effectively.
- One workstream is testing the suitability of using **microdots for tracking and timber tracing** from felling to the chip pile at the mill.

- Utilising Braincube, we have developed a customisable suite of **root cause analysis (RCA) tools** that can be utilised across all regions to expedite troubleshooting. These tools are currently being refined and expanded to:
 - Ensure intuitive ease of use
 - Tackle specific business cases like paper break analysis that are frequently encountered in mills
 - Enable RCA on offline data where digital twins are not available



Meeting long-term demand growth for cellulosic-based fibres

Why it's material

Our extensive capacity in the DP sector is aligned with our strategy of diversifying into higher margin segments and positioning ourselves for future growth. This is highlighted by the completion of DP debottlenecking projects at Cloquet, Saiccor and Ngodwana Mills in recent years, thereby giving expanding our capacity to offer consumers fibres manufactured from a natural, renewable resource rather than from fossil fuels.

Global quarantine measures in 2020 negatively impacted textile and apparel markets, with our DP sales falling 18% year-on-year. However, Hawkins Wright¹ expect global textile markets to have recovered fully by 2022. This is partly due to the fact that while demand for office and formal wear remains subdued, many retailers are reporting strong demand growth for casual clothing and leisure wear, items that typically comprise a higher proportion of wood-based textile fibre than in the office wear segment.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **3** Evolving technologies and consumer preferences
-  **4** Liquidity
-  **6** Project implementation and execution

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- Changing consumer and employee profiles
- Growing populations with increasing rates of urbanisation



OUR 2025 TARGET



RETURN ON CAPITAL EMPLOYED (ROCE)

2% PTS
ABOVE WACC

As a responsible business operating in many locations around the world, this broad goal aligns with our focus on being a responsible corporate citizen and providing a safe working environment in which our employees can reach their full potential.

¹ Hawkins Wright: The outlook for dissolving pulp: Demand, supply, costs and prices, September 2020

Meeting long-term demand growth for cellulosic-based fibres continued

Our approach

We are confident about our strategy of investing in DP. The absorbency, breathability and superior feel of viscose and lyocel for which the bulk of our DP is used, will, we believe, continue to meet the needs of a growing population, particularly in affluent Asian markets.

Key developments in 2020

We continued with our ZAR7.7 billion **Vulindlela expansion project at Saiccor Mill** in KwaZulu-Natal in the first six months of FY2020. However, because of the coronavirus outbreak and nation-wide lockdown, we declared force majeure at the end of March, at which stage the project was 65% complete. Work on the expansion recommenced fully in July and completion is now anticipated in Q3 FY2021.

In a related development: In 2020, in view of our decarbonisation plans (discussed on [pages 119 - 120](#)), the decision was made to switch to **magnesium sulphite technology**, which is significantly more environmentally friendly than the calcium sulphite process currently in place at Saiccor Mill. As the current calcium sulphite pulp line is the source of lignin raw material, this switch will result in the permanent closure of LignoTech South Africa (SA), a joint venture between Borregaard and Sappi. Following the conversion, the pulping chemicals will be recovered and re-used resulting in a more efficient and environmentally friendly plant. The conversion of the pulp line will be completed mid-2021. In the interim, the calcium sulphite pulp line will be operated to some extent, resulting in limited production of liquid lignin by LignoTech SA until the permanent closure comes into effect – this will take place when the conversion of the calcium line is completed.

FAQ

WHAT IS DP?

DP is a highly purified form of cellulose extracted from sustainably grown and responsibly managed trees using unique cellulose chemistry technology. The majority of DP is used to make textiles, such as viscose and lyocell, where DP is converted to viscose and lyocell staple fibres. From there, the fibres are spun into yarns and ultimately textiles, providing naturally soft, smooth and breathable fabrics.

DP can also be processed into products used in food and beverages, health and hygiene, wrapping and packaging, pharmaceuticals and many other applications that touch our daily lives.





FAST FACTS

Cellulosic fibre properties are superior to cotton and polyester for many textile applications.

- Nonwovens/technical textiles
- Home textiles
- Apparel

- ✓✓ Key strength
- ✓ Qualifies
- ✗ Issues

Fibre properties and applications

		Cellulose fibres	Cotton	Polyester
Applications				
Function and feel	Durability	✗	✓	✓✓
	Absorbency	✓	✓	✗
	Breathability	✓	✓	✗
	Softness	✓	✓	✓
	Drape	✓	✗	✗
Appearance	Dyeability	✓✓	✓	✓✓
	Brightness/Lustre	✓✓	✓	✓
Sustainability	Renewable and biodegradable	✓✓	✓✓	✗
	Resource efficiency	✓✓	✗	✗
Overall value proposition		Natural and attractive, 'greener' alternative to cotton	Natural, functional and well established	Cheap, durable and versatile

Source: IHS Global, RISI, Hawkins Wright

Cloquet Mill's Higg sustainability self-assessment results exceed expectations



Cloquet Mill recently completed the Higg FEM sustainability self-assessment for Verve, our DP brand, with the results exceeding internal expectations. The results position the mill as a leader in sustainable practices, evidenced by a low environmental footprint.

The Higg FEM self-assessment tool is part of the Higg Index suite of tools that was developed by the Sustainable Apparel Coalition (SAC) to allow the apparel industry to measure their sustainability performance and drive supply chain transparency and decision-making. The Higg Index enables suppliers, manufacturers, brands, and retailers to evaluate materials, products, facilities, and processes based on environmental performance, social labour practices, and product design choices.

Sappi joined the SAC in February 2019 and remains a committed member of the organisation, participating in many of the SAC events and engaging in ongoing discussions on how to enhance the tools on offer.

Increasing the sustainability of our products through circular design and adjacent markets

Why it's material

Natural resources are the life force of our planet. Without many of these resources, life as we know it would not exist. Against this backdrop, we believe it's our responsibility to use the full potential of each tree we harvest by building a biobased circular economy. Our bioproducts are sustainable alternatives extracted from woodfibre to reduce the need for fossil-based materials used in everyday products.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **3** Evolving technologies and consumer preferences
-  **4** Liquidity
-  **6** Project implementation and execution

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- Changing consumer and employee profiles
- Growing populations with increasing rates of urbanisation

Only 9% of the world is circular today. This means that only 9% of 92.8 billion tons of mineral, metals, biomass and fossil fuels that enter the economy are re-used every year.¹

¹  https://www.circle-economy.com/news/the-circularity-gap-report-our-world-is-only-9-circular#.XFHdGc_7RQI

Increasing the sustainability of our products through circular design and adjacent markets continued

Our approach

Leveraging collaboration and innovation, our aim is to create closed loops in which raw materials, components and products lose as little of their value as little as possible.

Key developments in 2020

Symbio, our biocomposite cellulose fibre, brings the haptics of nature, strength and reduced environmental footprint to plastic composite materials. This product is present in various components of large scale production automobiles and has also been chosen as feedstock for the development of lightweight biocomposite materials, for the European Life Biobcompo project. The project, which includes leading vehicle and automotive parts manufacturers, aims to reduce vehicle CO₂ emissions by 8% through the replacement of conventional mineral fillers with biobased fibres, promote the use of more sustainable resources and demonstrate these technologies at industrial scale. Symbio is also being successfully used in kitchen and homeware products, bringing natural content to daily use items.

The commercialisation of our **Valida nanocellulose** gained traction with many repeat orders. As the use of sanitiser became more widespread during Covid-19, Valida was used as an opacifier and thickener in sanitising gels, providing a natural alternative for acrylate-based polymers and microplastics. When suspended in water, Valida cellulose fibrils form an insoluble 3D network based on hydrogen bonding and mechanical entanglement. Valida's other unique benefits include:

- Derived from renewable resources – sustainable alternative to fossil-fuel based polymers and microplastics
- Superior skin feel and moisturising qualities
- Unique texture
- High safety standards in terms of skin irritation, sensitisation, blockage and penetration – the product has passed cosmetics ingredient safety studies including those by SGS, a leading inspection, verification, testing and certification company.

Other areas of use include:

- Personal care products and cosmetics
- Decorative paints and coatings
- Construction applications
- Paper – we have been successfully developing our own advanced paper products, using our Valida technology, on various paper machines in all regions. This holds potential for a next generation of packaging, graphics and functional papers.

We are becoming increasingly recognised as key player in **lignosulphonate** markets – we continue to target higher value markets, many of which use lignin to replace oil-derived products. This particularly in view of the fact that markets increasingly require products based on renewable natural resources We are expanding from traditional uses such as dust control and concrete admixtures to:

- Lignin-based intermediates as substitution for phenols that are widely used in resins and polyols used in rigid foams
- Lignin-based intermediates for use in glues
- Lignin-based animal feed binders with natural antimicrobial and antifungal functionality to improve animal performance (gut health)
- Granulation aids for agricultural products
- Fuel pellet binders
- Replacement for starch in the manufacture of recycled paper

We have successfully illustrated the ability to extract **xylose sugars** as co-product from DP production at Ngodwana Mill, the technology is now ready for deployment; the 25MW biomass power plant at Ngodwana Mill in which we have a 30% stake is under construction and our technologies to produce furfural as co-product at our dissolving wood pulp mills is ready for industrial scale illustration with plans to do so well advanced.

Increasing the sustainability of our products through circular design and adjacent markets continued

Symbio's diverse applications



FAST FACTS

Symbio's key attributes



Lightweight
Up to 15% weight saving



Soft and warm touch



Excellent heat deflection
temperature



Matt natural surface



Low abrasiveness



Renewable content
up to 40%



Reduced cycle time



Unique smooth
wooden sound



Lower processor temperature



Reduced CO₂

Developing and commercialising innovations in addition to adjacent businesses

Why it's material

Innovation is at the heart of Sappi's strategy. No growth is possible without innovation. We view innovation not as an end in itself, but as an avenue for the provision of sustainable, competitive advantage that will make a significant difference. We make ongoing investment into R&D (US\$39 million in FY20) and promote a culture of innovation through the annual Technical Innovation Awards. Together with the wide-ranging, significant expertise of our people, these factors mean we are well positioned to collaborate with our stakeholders and offer relevant solutions, thereby generating meaningful revenue. Our focus is on understanding what our customers – and potential customers – need, and adapting to that need.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **3** Evolving technologies and consumer preferences
-  **4** Sustainability expectations
-  **9** Climate change

Our strategic fundamentals

- Grow our business
- Sustain our financial health
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- The move towards a circular economy
- Climate change continuing to impact businesses and reshape societies
- Resource scarcity and growing concern for natural capital



OUR 2025 TARGET



LAUNCH PRODUCTS WITH DEFINED SUSTAINABILITY BENEFITS

25 PRODUCTS

Manufacturing products from renewable resources is the core of Sappi's business and central to our commitment to the circular economy. Through R&D, practical innovation and new product development, we continually create new products, solutions and value from natural resources.

High demand for low grammages

Our considerable expertise in Functional Paper Packaging is evident in low grammages with an integrated mineral oil and grease barrier. The light papers with grammages of 75 g/m² and higher are particularly popular. This keeps products such as rice, cereals, tea and chocolate free of mineral oil saturated hydrocarbons (MOSH) and mineral oil aromatic hydrocarbons (MOAH) residue

and prevents any mineral oil from getting into the final product during production and transportation. Sappi offers these packaging papers in several other grammages, which are ideally suited to primary and secondary packaging. Papers like Sappi Guard MS also offer impressive heat sealability, resulting in a reduction in production steps as additional sealing media are not required.



Developing and commercialising innovations in addition to adjacent businesses continued

Our approach

Although our 2025 innovation goal is linked to products, we believe innovation is also about processes, as well as business strategy, ways of working and communicating, ways of making meaningful social impact. Innovation by itself means nothing, unless it is linked to the successful delivery of projects, from idea generation through to completion, which ultimately makes a meaningful impact on Sappi's profitability and enhances our competitive advantage.

Our focus on innovation is allowing us to take advantage of the changing dynamics between the environment, consumers and the products they require within the context of the global forces shaping our world. It also underpins our growth strategy that is targeted at high-impact, high-value areas.

Key developments in 2020

Ongoing legislative edicts and consumer concern mean companies are rethinking their packaging needs. Governments, retailers and brand owners all over the world are seeking paper based packaging solutions for their products, and eco-conscious consumers and shoppers are pressuring brand owners for **more biodegradable, recyclable and compostable packaging**, all reflecting a more circular economy. Against this backdrop, we continued to develop our packaging paper solutions with integrated functionality. For example, we recently added a 91g/m² version to our high-barrier paper range, opening up additional applications for manufacturers of branded goods. All high-barrier papers from Sappi ensure that the product quality of foods and other goods is preserved. They feature barriers against oxygen, water vapour, grease and mineral oil as well as outstanding print results, a wide range of finishing options, complete recyclability and integrated heat sealability.

Sappi Rockwell Solutions launched a **new r-PET lidding film** to give our customers a greater choice of options to meet their own sustainability goals. This makes Sappi Rockwell one of only two suppliers in this industry to provide recycled peelable coatings. These films combine the high performance of Rockwell's heat-seal, anti-fog and barrier coatings with base polyester film made from food-contact-approved r-PET, delivering environmental, waste and cost benefits to food manufacturers and retailers.

There is a global movement to limit or eliminate solvent-based casting systems in order to reduce chemical waste and pollution. We invested in chemistry and technology to create the industry's first premium high-fidelity casting paper compatible with solvent-free systems – **Ultracast Viva**, which we launched in 2020. Performance improvements include reduced curl, increased reusability and easier handling with expanded temperature limits for polyvinyl chloride (PVC), semi-polyurethane (PU) and 100% PU including aqueous PU chemistry.

With the world rapidly moving to adopt the internet of senses, one of printed paper's unique selling propositions, touch, is becoming increasingly important. Developed by **SEU**, our latest **graphic paper, Raw**, takes this to a new level. Raw offers a true uncoated feel with a coated print performance, while also delivering high bulk and natural whiteness. We expect the product to be used in high-value commercial print products, such as books, coffee-table journals and lifestyle catalogues.

In Europe, we collaborated with a machine manufacturer on a project for a well-known cereal manufacturer that switched its fully automated production to **paper-based, sealable barrier pouches**. Two further application projects focused on confectionery and snacks are already in the development stage. The project has given us and our collaboration partner a strong position to successfully implement paper-based packaging solutions for future customer demands.

Whereas technological disruptions – from the steam engine to electricity to the internal combustion engine to the computer chip – used to come once a generation, today they come fast and furiously, with dozens of innovations seeming to emerge annually.



Developing and commercialising innovations in addition to adjacent businesses continued

Thinking, striving and thriving

In the light of the global Covid-19 pandemic, the ability to innovate and creatively adapt to change has never been more important. Entries in our annual Technical Innovation Awards, now in its 20th year, did not disappoint and highlighted the drive to collaborate, communicate and leverage the synergies within OneSappi.

The Global TIA winning team comprised individuals from Gratkorn Mill in SEU and Westbrook Mill in SNA who won for their project, **'Image analysis: Hawkeye and Shadow-Caster'**. The project involved the design and implementation of a unique system to image, analyse and decipher non-uniform patterns in coated paper that lead to off-quality production if not detected. The first generation unit, the Shadow Caster, was first used in SNA and then brought to SEU, where a unique technique to determine better sources of paper machine fabric marking on the product was developed. This technique led to the Hawkeye unit, an improvement on the Shadow Caster, by including several light sources and angles offering a more complete diagnosis. The SNA and SEU use of these units and techniques to prevent off-quality production had already contributed US\$3 million in business benefit.

The winning team in SEU addressed the challenge of **increasing pulp integration, meeting customer satisfaction and improving sustainability**. At Ehingen Mill in Germany, the team helped to substantially increasing the amount of pulp we produce at the mill instead of purchasing it on the market. This substitution known as 'pulp integration' leads to many eco-effective benefits by avoiding carbon-emitting transport and reducing the refining and use of never-dried pulp. In the end, we pulp integration increased from 73% to 77%. Prior to this achievement, pulp integration had declined at Ehingen due to the perceived need for specific pulp qualities only attainable with market pulp. By challenging our assumptions related to fibre length and runnability, the team developed an innovative solution that delivered pulp integration with multiple benefits for environmental performance and product quality. Without the need to transport market pulp, Ehingen avoided more than 3 million ton-kilometres of rail transport and 13 million ton-kilometres of sea transport. All combined, the environmental impact included a savings of 4.273 tons of steam, 553 megawatts of electricity and 501 tons of carbon. Even more, Ehingen also increased the quality (dimensional stability) of its graphic paper grades and achieved a production record.

In SSA, the **'Steam packer improvement' team from Saiccor Mill** won the regional award. The team engineered and manufactured prototype steam packers to improve wood loading in the digesters, thereby improving the mill's overall digester yield and production. The trials showed a marked improvement, in some cases by 10%, with the added benefit of steam savings. The initiative has since been implemented at all other MgO₂ digesters and has yielded an improved contribution of 2.47% return on investment.

Although not a regional winner, a collaboration between the Gratkorn Mill team and the SSA Technology Centre highlighted the benefits of inter-regional collaboration. Over some years, the team identified and further developed – in collaboration with a chemical supplier – a surfactant-based digester additive. This chemical is added to the cooking liquor and improves liquor penetration into the woodchips, allowing a more uniform cook. This resulted in less rejects and improved pulp yield. Like all other pulp mills, Gratkorn is faced with high timber costs, amounting to 85% of the variable costs required to produce integrated magnephite pulp (Ecocell). Since the implementation of this application, the mill has been saving EUR1.3 million annually, as a result of increased pulp yield and reduced demand for expensive market pulp.





CONNECT



PEOPLE

Improving the lives of People

By creating a safe, healthy workplace for our people in which diversity is encouraged and valued, and people are provided with ongoing development opportunities so that they can develop to their full potential, we improve their lives, enhance productivity and our ability to service global markets.

Our 13,790 talented, committed employees around the world underpin our ability to achieve our Thrive25 strategy. Against this backdrop, we focus on creating an environment that values diversity and enables our people to strive for and achieve success by clearly committing to our values and the highest ethical conduct, placing safety at the centre and empowering individuals.

**United Nations Global Compact (UNGC) Principle 1:**

Business should support and respect the protection of internationally proclaimed human rights; and

UNGC Principle 2:

make sure their own corporations are not complicit in human rights abuses

Read more: <https://www.unglobalcompact.org/>

Letter from our CEO to the UNGC at

<https://www.sappi.com/2020GSDR-UNGC-letter>

UNGC Principle 3:

Businesses should uphold freedom of association and the effective recognition of the right to collective bargaining;

UNGC Principle 4:

the elimination of all forms of forced and compulsory labour;

UNGC Principle 5:

the effective abolition of child labour; and

UNGC Principle 6:

the elimination of discrimination in respect of employment and occupation.

Our 2020 performance at a glance

Our people

PER REGION



SEU

6,283



SNA

2,198



SSA

5,309


SAPPI
GROUP

13,790

PER GENDER (Sappi Limited)¹



WOMEN

2,682



MEN

11,107

Approximately
9,250 people
employed by Sappi Forests' contractors

46 hours of
training per employee

75% skills improvement
training, 25% compliance training

US\$434 training spend per employee

We promote social impact, spending
US\$3 million on shared value and
corporate social investment programmes

¹ One employee identifies as non-gender specific

Note: The people numbers given here differ from those supplied in the annual integrated report as the numbers in the latter are supplied by Finance which calculates numbers differently from Human Resources (HR). Those given here are supplied by HR.

Closing the gender gap at Carmignano Mill



Sappi is on a journey towards greater diversity and inclusion, cultivating a culture where all people can realise their potential. Carmignano Mill in Italy is helping to show the way. While women have traditionally been underrepresented in our industry, the mill is working to close this gender gap.

In 2020, women comprised 60% of new hires in 'white collar' roles spanning from innovation and process engineering to supply chain and customer service. Across Sappi Europe progress is also being made to attract more women to management roles. Since 2019, the proportion of women in management roles has increased from 13.6% to 16%.



Our 2020 performance at a glance continued

Promoting diversity and inclusion

A diverse workplace benefits 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 and strive to create a workplace free from discrimination and harassment; acknowledging and accepting differences among our people in age, nationality, class, ethnicity, gender, physical ability, race, sexual orientation and spiritual practice.

We view diversity as a key driver that enhances our competitiveness and sustainability and contributes to a thriving world. Accordingly, we have established a 2025 target to promote gender diversity. In addition, under our SSA 2025 targets we are striving to enhance our BBBEE-related performance, which includes goals for racial diversity.

Improving the lives of others

We work to improve the lives not only of our own people, but also those of our neighbouring communities through targeted social investment, social impact and shared value programmes.

Read more: [Sharing value with communities](#).

We also improve the lives of our customers by offering a wide range of products based on natural, renewable resources.

Monitoring turnover and new hires

Staff turnover is the result of retirements, resignations or changed business requirements. This brings new people with new skills into the business to drive innovation and a fresh approach while maintaining a certain level of continuity. However, there are costs to constant turnover, and employees who grow with Sappi add value based on their institutional knowledge and their understanding of our culture, customers and products. Accordingly, we monitor turnover very carefully. Our global voluntary and involuntary (total) turnover rate for 2020 was 6.62% (2019: 7.64%).

Recompensing fairly

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 ours are often the only, or major, employers that makes the local population very dependent on the company and that could, in turn, lead to exploitative behaviour and an indirect form of forced labour. Recognising this, we ensure we pay market-related wages in line with or above local legislation.



FAST FACTS¹

A recent PWC survey highlighted some interesting perceptions that are relevant to the world of work. Respondents' views were as follows:

- **73%** think technology can never replace the human mind
- **37%** are worried about automation putting jobs at risk – up from 33% in 2014
- **23%** say 'doing a job that makes a difference' is most important to their career
- **25%** say their ideal employer is an organisation with values matching their own
- **74%** are ready to learn new skills or completely retrain in order to remain employable in the future

¹ Workforce of the future: The competing forces shaping 2030, published by PWC and available at: <https://www.pwc.com/gx/en/services/people-organisation/workforce-of-the-future/workforce-of-the-future-the-competing-forces-shaping-2030-pwc.pdf>



Our 2020 performance at a glance continued

Income differentials between genders 2020

	Female comparative ratio	Male comparative ratio	Number of employees included in the calculation
SEU	90%	99%	1,081
SNA	106%	107%	726
SSA	114%	115%	2,705
Sappi group	105%	110%	4,512

When assessing income differentials we compare the person's salary to the midpoint of the salary scale for that level of position. For the purpose of gender income parity, we look for a close match between male and female. From an overall point of view there is a small pay gap between male and female with males being paid on average 10% above the salary scale midpoint and females 5% above the midpoint.



Please refer to *Our 2020 People indicators* on www.sappi.com/2020GSDR-People-indicators for tables detailing

- Total workforce by level and gender
- Gender split per region
- Workforce profile by gender and nature of employment
- Workforce by minority group (numbers)
- Gender and age split at executive level
- New hires (internal and external) by age group, gender and region
- New external hires: gender percentages
- All exits: voluntary and involuntary
- Voluntary exits as a percentage of permanent employees (voluntary turnover)
- Voluntary exits only (resignations)
- Absenteeism rate by gender and overall
- Total turnover rate (voluntary and involuntary)
- Voluntary turnover by gender – voluntary exits as a percentage of the number of employees per gender
- Voluntary and involuntary exits by gender, age category and region

Ensuring the safety of our employees and contractors

Why it's material

In terms of our safety first culture, we believe that nothing is so important that it cannot be done safely and that every individual has the power to have a positive impact. We do not accept that injuries and accidents are inevitable and remain committed to zero harm. We aim to achieve this through the continuance of 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 with our people.

Project Zero, our global initiative, aims to accelerate improved safety performance in areas of concern and to develop a safety awareness culture in all parts of our business. The initiative includes integrated health

and safety planning and management; training at all levels; participative information and control structures and adherence to international best practice and safety standards.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks



1 Safety



8 Employee relations

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Continued erosion of trust in business, coupled with increasing social activism



OUR
2025
TARGET

We aim to provide a safe working environment in which our employees can reach their full potential.



ACHIEVE

Zero

INJURIES

Ensuring the safety of our employees and contractors continued

Reviewing our safety performance in 2020

Definitions

LTI	lost-time injury
NLTI	Non-lost-time injury
LTIFR	The lost-time injury frequency rate is calculated by dividing the product of lost-time injuries and a group-wide standard for exposure hours by the unit's exposure hours, i.e. $LTIFR = LTI * 200,000 / \text{unit's actual exposure hours}$
LTISR	In a similar manner to the frequency rate, the lost-time injury severity rating is calculated by dividing the product of the number of days lost to the injury and the group-wide standard hours by the unit's exposure hours, i.e. $LTISR = \text{Number of days lost} * 200,000 / \text{actual exposure hours}$
II	The Injury Index is a product of the LTIFR and the LTISR and provides an overall sense of safety within the measured unit, i.e. $II = LTIFR * LTISR$
AIFR	The All Injury Frequency Rate is calculated by adding $(LTI + NLTI) * 200,000 / \text{actual exposure hours}$
OIR	The OSHA Incidence Rate is applicable only to SNA and is arrived at by taking the number of recordable incidents * 200,000 / exposure hours. A recordable incident is any report to a medical practitioner.



Ensuring the safety of our employees and contractors continued

Our 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. Our 24/7 safety focus is based on improved personal behaviour at home and at work, as well as on making safe choices underpinned by risk assessments, group sharing of all incidents and root cause investigations, enforcement of compliance and leadership engagement. Our collaborative approach means helping our people to practise safe habits at home and at work; 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, friends and families understand safety and the implications of non-conformance.

Key developments in 2020

📄 In response to the [Covid-19 pandemic](#), all operations and sites established the required sanitising and hygiene protocols, social distancing, temperature checks, self-declaration health check requirements with ongoing engagement and communications for the necessity of self-awareness at work and at home. One of the few positives to emerge from Covid was that the pandemic heightened adherence to safe attitudes and behaviours among our people.

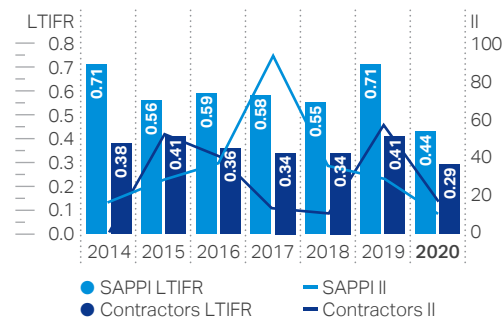
Despite a concerted focus on **safety**, tragically, there was one transport-related fatality in the Sappi Forests contractor division in South Africa, following that we conducted a detailed root cause analysis. However, all regions showed an overall improvement in injury and severity rates.

The improvement was partially due to the fact that because of Covid-19, there were fewer individuals on site, which could have resulted in fewer LTIs. In addition to the hours worked on site, the hours worked from home were included in the LTIFR calculation. The combination of these factors may have contributed to the improvements in the LTIFR.

The 15th **Global Safety Awareness Week** that is normally held in June each year and involves various face-to-face engagement sessions, was impacted by the Covid pandemic. Virtual webinars and e-media was used to convey the messages to our people. The theme for this year – I Value Life – emphasised personal commitment to own and colleagues' lives.

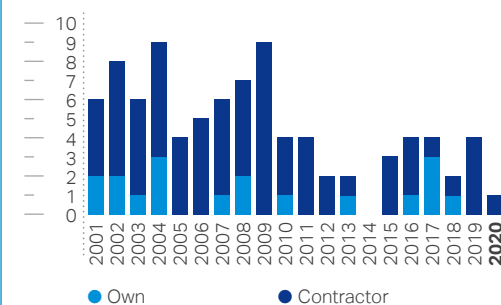


Sappi Limited lost time injury frequency rate



The LTIFR for both own employees and contractors improved from FY19 and in both cases, was the best ever for since 2014. As discussed opposite, safety improvements were partially related to Covid-19 lockdowns and reduced staff on site. Own Injury indices for both employees showed a significant improvement year-on-year.

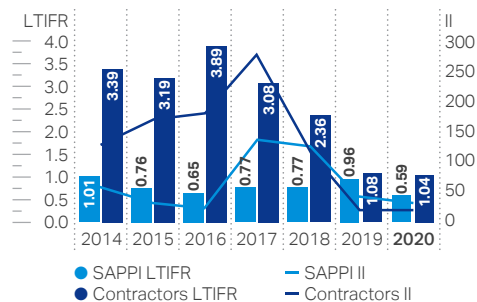
Sappi Limited fatalities



Ensuring the safety of our employees and contractors continued

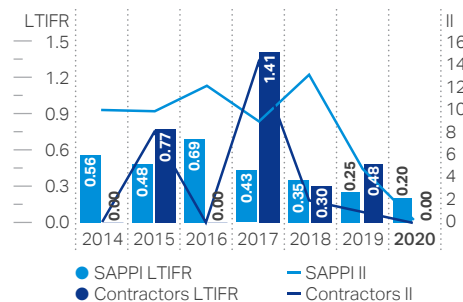
Reviewing our safety performance in 2020 continued

Sappi Europe lost time injury frequency rate



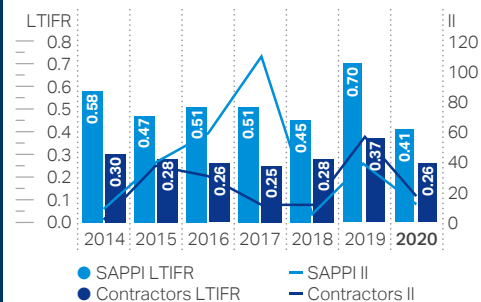
Performance was mainly driven by improvements on the incident rate for own employees that ended at a LTIFR of 0.59. Though above target, this is the lowest value for **SEU** and represents a significant improvement compared to the previous years. The combined LTIFR of 0.65 was the lowest value for the region in the present structure - in other words, since 2008.

Sappi North America lost time injury frequency rate



SNA completed FY20 with a LTIFR for own employees of 0.20 (FY19: 0.25, FY18: 0.35), thereby establishing the region's best LTIFR on record for the third consecutive year.

Sappi Southern Africa lost time injury frequency rate



Despite the tragic contractor fatality, at year end the LTIFR for own employees was 0.41 – a significant improvement from 0.70 in FY19; the rate for contractors also improved from 0.37 in FY19 to 0.26

As discussed on the previous page, safety improvements were partially related to Covid-19 lockdowns and reduced staff on site.

FAQ



WHAT IS THE BRADLEY CURVE?

The basic concept comes from the DuPont™ Bradley Curve™ that essentially correlates cultural maturity and number of injuries or accidents. According to the model, cultural maturity is split in four stages: reactive, dependent, independent and interdependent. The interdependent stage, which is the goal in most contexts, is really about collective responsibility, with widespread involvement, communication and accountability for each other.

Ensuring the safety of our employees and contractors continued

Driving our safety-first culture in 2020



SEU

A key focus was the integration of mills acquired in recent years into Sappi safety culture. The reduction of the LTIs in these units from 15 in FY19 to five in FY20 highlights the effectiveness of this approach. Some of the learnings from these units were used to evaluate risks at the established sites. In order to further enhance safety behaviour and mindset, the Bradley Curve concept was rolled out to all sites for white collar workers and is in the process of being extended to blue-collar levels. The region also promoted the use of the Last Minute Risk Assessment (LMRA) that will be continued going forward.

Key achievements in 2020

- The region achieved 3,000,000 exposure hours without an LTI
- Last contractor LTI in February; since then 600,000 hours without a contract LTI
- **Stockstadt Mill:** 1 million injury free hours (third time in four years)
- **Alfeld Mill:** 1 million worked hours (second time in four years)
- **Carmignano Mill:** Longest time span without a LTI since acquisition and reduction from seven to three LTIs



SNA

The region's impressive safety performance reflects the success of the entrenching personal accountability for hazard awareness, strong supervisor safety training and accountability programmes, as well as best practice sharing across the mills and in-depth training on safety basics for all employees. These included five-minute safety talks and pre-task job safety analyses and action plans for the prevention of serious injuries and fatalities.

Key achievements in 2020

- Decline in severity rate from 1,673 lost workdays in FY11 to 37 lost workdays (a record low) in FY20. This represents a 94% reduction year-on-year
- Zero LTIs at four out of our five manufacturing sites and the Westbrook Technology Centre



Ensuring the safety of our employees and contractors continued

Driving our safety-first culture in 2020 continued



SSA

We continued to implement our Visible Felt Leadership approach that involves the visible presence of managers and supervisors on the shop floor to drive culture change and the integration of safety management with our manufacturing systems. This approach was enacted at Ngodwana Mill, but was interrupted by the Covid-19 pandemic. We undertook a complete review of all manufacturing risk assessments to ensure all risks are identified and assessed correctly into potential severity. The findings of the survey were addressed and the completed actions as well as the effectiveness of the close out will be audited during FY21. We continued to focus on the eight lifesaving rules and will continue to focus on these going forward, together with the Stop and Think Before you Act safety programme.

Key achievements in 2020

- **Forestry Research Nurseries and Planning:** 1 million injury free exposure hours
- **Lomati Mill:** 1 million exposure hours worked by employees without an LTI; contractors five years without an LTI
- **Ngodwana Mill:** Contractors 1 million injury free exposure hours
- **Saiccor Mill:** Both employees and contractors each achieved 1 million exposure hours without an LTI, while Project Vulindlela achieved 2 million injury-free exposure hours
- **Stanger Mill:** Contractors 3 million injury free exposure hours; own employees 1 year without LTI
- **Tugela Mill:** employees 1 million exposure hours without an LTI
- **Zululand Forests division:** 3 million exposure hours without an LTI



Promoting wellness and well-being



- 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.



- 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.
- On-site flu vaccinations, employee assistance programmes in support of mental health, gym and other exercise subsidies.



- 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 well-being: Educating, empowering and upskilling our people to take ownership of their well-being. 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.

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

Promoting wellness and well-being continued

Recognised for supporting the well-being of our people at Gratkorn Mill



For the sixth year running, Gratkorn Mill was awarded the 'Gütesiegel für Betriebliche Gesundheitsförderung' (loosely translated as 'seal of approval for the promotion of workplace health') for its promotion of healthy lifestyles among staff. The recognition reflects the many ways that the mill supports its people, from offering exercise programmes through to the provision of vaccines and check-ups with the company doctor. The seal, which is the highest Austrian award for exemplary and sustainable investments in the health of employees, reflects Sappi's commitment to supporting the health, safety and well-being of our people.

Promoting the well-being of others during Covid-19



“We will forever be thankful to Sappi for assisting us with resources that we value at our school. This is not the first time Sappi has shown the spirit of Ubuntu to our school and we appreciate the effort the company puts into bettering the condition of our school and community at large.”

Mrs Mhlongo
(Principal, Skeyi Primary School)

As Sappi is part of the community and our own staff come from our neighbouring communities; we believe it is incumbent upon us to promote the spirit of ubuntu and lead by example. Accordingly, as part of our ongoing support to neighbouring communities during the Covid-19 lockdown period, the Umkomaas forestry team visited various organisations to hand over Typek paper donations, together with hand sanitiser, cloth, surgical masks and boxes of soap.



Offloading donated items at Skeyi Primary School

Attracting, developing and retaining key skills

Why it's material

We live and work in an environment where new skills emerge as fast as others fade and where yesterday's solutions do not solve tomorrow's problems. Under our Thrive25 strategy, one of our strategic fundamentals is to 'enhance trust'. We aim to meet the challenges of a constantly changing business environment to build mutual trust between our employees and our business. One of the ways we are achieving this is by developing and growing Sappi talent in a manner that meets the changing needs of every employee. It also means trusting that they will use these opportunities to contribute to our success.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks



8 Employee relations

Our strategic fundamentals

- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Continued erosion of trust in business, coupled with increasing social activism
- Globalisation and high levels of connectivity
- Changing consumer and employee profiles



“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

Alvin Toffler

Attracting, developing and retaining key skills continued

Our approach

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.

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 that 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.

Key developments in 2020

The **attraction, development and retention of skills** are all interlinked. As discussed under employee engagement, we recognise that current and future employees, in particular Generation Z-ers, want companies to have a positive purpose that improves the world in some way. We believe that the fact that we offer true circular economy solutions and that sustainability underpins everything we do, plays a key role in attracting and retaining key skills.

In terms of **training and development**, our focus is to invest in current and future talent and develop the competencies of our people in three categories; namely leadership, behavioural and technical competencies. Our emphasis on providing learning solutions aligned with an increasingly tech-savvy workforce is important in **retention**, as are our compensation programmes. These are designed to achieve our goals of building trust and attracting, motivating and retaining employees who can help to deliver value. The primary components of pay include base salary, benefits e.g. medical and retirement, annual incentive awards and long-term incentives. Compensation levels are set to reflect competitive market practices, internal equity as well as company and individual performance, including sustainability aspects of performance.

A key development was reshaping our people strategy in line with Thrive25 to focus on leadership and culture that enhances One Sappi; builds capability for current and future requirements; strengthens employee engagement and experience and builds a worldclass human resources team.

Percentage of employees with individual development plans

	2017	2018	2019	2020
SEU	42%	46%	46%	48%
SNA	51% (of salaried employees)	70% (of salaried employees)	65% (of salaried employees)	62% (of salaried employees)
SSA	36%	51%	67%	61%
Sappi Trading	53%	41%	40%	64%



Please refer to *Our 2020 People indicators* on www.sappi.com/2020GSDR-People-indicators for tables showing

- Performance appraisals for all eligible employees by gender

Attracting, developing and retaining key skills continued



SEU

In FY20 learning in SEU focused on six main pillars:

- The **70:20:10 holistic development approach** to ensure continuous learning and personal growth
- **Performance management processes** to facilitate the definition and creation of an individual development plan for each employee, matching their needs and potential
- **Line manager as coach for people's growth and success** (SLII and Team Coaching with GROW, 10 Agile leadership principles)
- **5-0-5 coaching template** supporting the transfer of learning
- **Global Leadership Framework** to ensure growth and success as a leader in Sappi
- **Building a productive learning culture** by delivering learning in a blended way, ie through classroom teaching, newsletters, readings, challenging projects, new responsibilities, assignments, and our **digital learning platform "Universe"**

The region also continued to:

- Develop leaders through the **Sappi Leadership Academy** and launch of the **'Dynamo'** leadership development programme – a structured organisational programme premised on eight Simple,

Swift and Smart steps – to first level line managers in five languages

- Train and develop over 200 young **apprentices** through a 3-4-year vocational training programme. This initially took place mainly at our German-speaking mills, but has now been introduced in Finland and Belgium. The aim is to build a technical talent pool that will replace staff going on retirement over the next 3-4 years
- We built on last year's launch of the **concept of agile leadership** to support our ambition to become an agile organisation, with the leadership team exploring and defining what an agile mindset is and what enables an agile organisation. The exercise was conducted with external support
- Promote capacity building on **continuous improvement (CI)** tools with the assistance of CI experts
- Further embedding the **coaching programme**
- Extending **mastery and foundational sales training** with in-house formulated online learning modules such as 'customer knowledge' and '1-on-1 printing'
- Compiling a first line **management programme** based on initial programmes such as giving, receiving and acting on feedback, change, coaching, etc.

From apprentice to energy scout in Germany

At all our mills world-wide, we're on a continuous journey to reduce waste and maximise the use of materials and resources. These eco-effective operations are essential to accelerate the transition to the biobased, circular economy our planet demands.

At Ehingen Mill, four apprentices took this eco-effective mission to heart. They set out to determine how much compressed air was leaking inside the mill and offer solutions that would promote efficiency and consequently, reduce the mill's energy use. They conducted this research while social distancing during the Covid-19 pandemic – no easy feat.

Understanding the value of compressed air

The mill uses compressed air for various purposes from moving products and operating pneumatic tools to pumping liquids. Compressed air is a clean, reliable, accessible resource that is often undervalued per unit compared to its other utility counterparts like water, gas and electricity.

Understanding not only the financial value per unit of wasted air but the financial impact of a less efficient system requires a step-change in the perception of compressed air from being 'free' to just as valuable as other utilities.

More eco-effective use

Using 'sound' cameras, the apprentices were able to identify areas to optimise the compressed air and calculated potential energy savings of as much as EUR83,600 a year. In addition, this optimisation could further reduce Ehingen Mill's carbon footprint. With this analysis in hand, management is working on solutions to implement their recommendations and make the mill even more eco-effective.

This initiative shows the important contributions that apprentices make to our business and affirms their value in our global operations.



Attracting, developing and retaining key skills continued



SNA

The following training initiatives were conducted in this region:

- Expanded the **internship programmes** in place at our three mills to help create a pipeline for entry level talent – engineers and some functional positions – thereby offsetting the losses associated with the ongoing wave of retirements
- Initiated the **manager in training** programme
- Participated in the **global leadership** programme
- Re-launched **legal training** for all salaried employees
- Conducted targeted salesforce training for both the graphics and packaging and speciality groups
- Expanded **curriculum-based training** using the convergence platform at Somerset Mill for both hourly employees and entry level engineers. This mill is also customising Cloquet Mill's supervisor training module for their own purposes
- Continued with Westbrook Mill's **multi-craft training** to move to a single craft shop

- Cloquet Mill completed six sessions of **supervisor training** and began introductory **production training**
- Conducted **OSHA 10-hour safety training** for safety liaisons across mills
- Continued with ongoing **Lean Six Sigma training**, with an emphasis on virtual Rapid Lean Six Sigma and quarterly refresher training for all green and black belts

FAQs

WHAT IS LEAN SIX SIGMA?

Lean Six Sigma is a method that relies on a collaborative team effort to improve performance by systematically removing waste and reducing variation. It combines lean manufacturing and Six Sigma – a set of techniques and tools for process improvement – to eliminate the eight kinds of waste: defects, over-production, waiting, non-utilised talent, transportation, inventory, motion, and extra-processing. Lean Six Sigma not only reduces process defects and waste, but also provides a framework for overall organisational culture change. It helps to change the mindset of employees and managers to one that focuses on growth and continuous improvement through process optimisation. This change in culture and mindset helps to maximise efficiency and increase profitability.

WHAT IS RAPID LEAN SIX SIGMA?

Rapid Action Tools complement traditional Lean Six Sigma methods with a just-in-time, simple to deploy process and toolset for engaging frontline employees in 60-day or shorter rapid improvement projects.

WHAT ARE THE 'BELTS' IN THE SIX SIGMA SYSTEM?

At the project level, a six sigma role varies from yellow belt and green belt to black belt and Master Black belt. The referencing of 'belts' by colour is a simple and effective way of quickly understanding the skill set and experience level. Green belts operate under the guidance of black belts in a Six Sigma project.



Attracting, developing and retaining key skills continued



SSA

Key focus areas for SSA in FY2020 were the following:

- The deployment of a new approach to performance management called **'performance enablement'**. This is based on the setting of quality SMART goals, frequent coaching style feedback and simplified performance reviews.
- Development and implementation – with input from mill managers – of a **trainee production manager programme** in order to build a pipeline of work-ready production superintendents. The programme comprises online learning, classroom learning and structured practical assignments. Full time candidates have two years to complete the programme, while part-time candidates have four years.
- The development and deployment of a foreman-focused safety culture programme called **Lean&Me** in manufacturing operations. The programme incorporates refresher training on key manufacturing practices such as shift handovers and incident investigations, underpinned by visible leadership, coaching-style feedback and building relationships in teams.

- The first group of potential leaders participated in **LeadX**, a recently launched two-year leadership development programme targeting future heads of department.
- A refreshed **Code of Ethics** course.
- The Sappi Skill Centres at Saiccor and Ngodwana significantly reduced trainee numbers due to lock-down restrictions significantly. Despite the constraints, a new venture was created to **manufacture cloth masks** for Sappi and local communities. Read more: **Creating community-focused solutions during Covid-19**.



Sappi Trading

In FY2020 the following training courses and programmes were attended by employees in our various sales offices:

- **'Incoterms 2020: basics'** online course was attended by employees in Hong Kong and Shanghai; 'Incoterms 2020' classroom training attended by employees in Mexico, Brazil and Colombia
- **'Virtual selling'** attended by Sales team in Australia, Brazil, Colombia, Hong Kong, Mexico, Shanghai and South Africa
- **'Employee central and applicant tracking system – user training'** was attended by employees in the majority of sales offices
- **'Antifraud and corruption'** and 'competition law' attended by all employees in Mexico
- **'Working from home webinar'** attended by employees in Hong Kong and Mexico
- **'Health and safety for Covid-19'** was attended by employees in South Africa; while **'safety, health, environment and quality – occupational health'** was attended by employees in Hong Kong

FAQ



WHAT IS INCOTERM 2020?

Incoterms 2020 rules are the official terms published by the International Chamber of Commerce (ICC). They are a voluntary, authoritative, globally-accepted, and adhered-to text for determining the responsibilities of buyers and sellers for the delivery of goods under sales contracts for international trade.

Engaging more closely with our employees

Why it's material

The days of employees simply collecting a pay check are over. In fact, research suggests that they're willing to earn less if doing so translates into more meaningful work.¹ People are increasingly looking for meaning in their lives. Given the amount of time spent at work, it makes sense to look to the workplace as a source of meaning. People want to come to work, understand their job and know how their work contributes to overall purpose and success of the organisation. When they do, there are positive implications for productivity and profitability.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

1 Safety

8 Employee relations

Our strategic fundamentals

- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Continued erosion of trust in business, coupled with increasing social activism
- Changing consumer and employee profiles
- Globalisation and high levels of connectivity



**OUR
2025
TARGETS**



**PARTICIPATE IN EMPLOYEE
ENGAGEMENT SURVEY**

>85%

**PERCENTAGE OF STAFF
FULLY ENGAGED WITH OUR
BUSINESS**

>83%

According to a recent survey², 90% of workers said that they are more likely to stay at a company that takes and acts on feedback.



¹ <https://hbr.org/2018/11/9-out-of-10-people-are-willing-to-earn-less-money-to-do-more-meaningful-work>

² <https://www.achievers.com/resources/white-papers/2020-engagement-retention-report/>

Engaging more closely with our employees continued

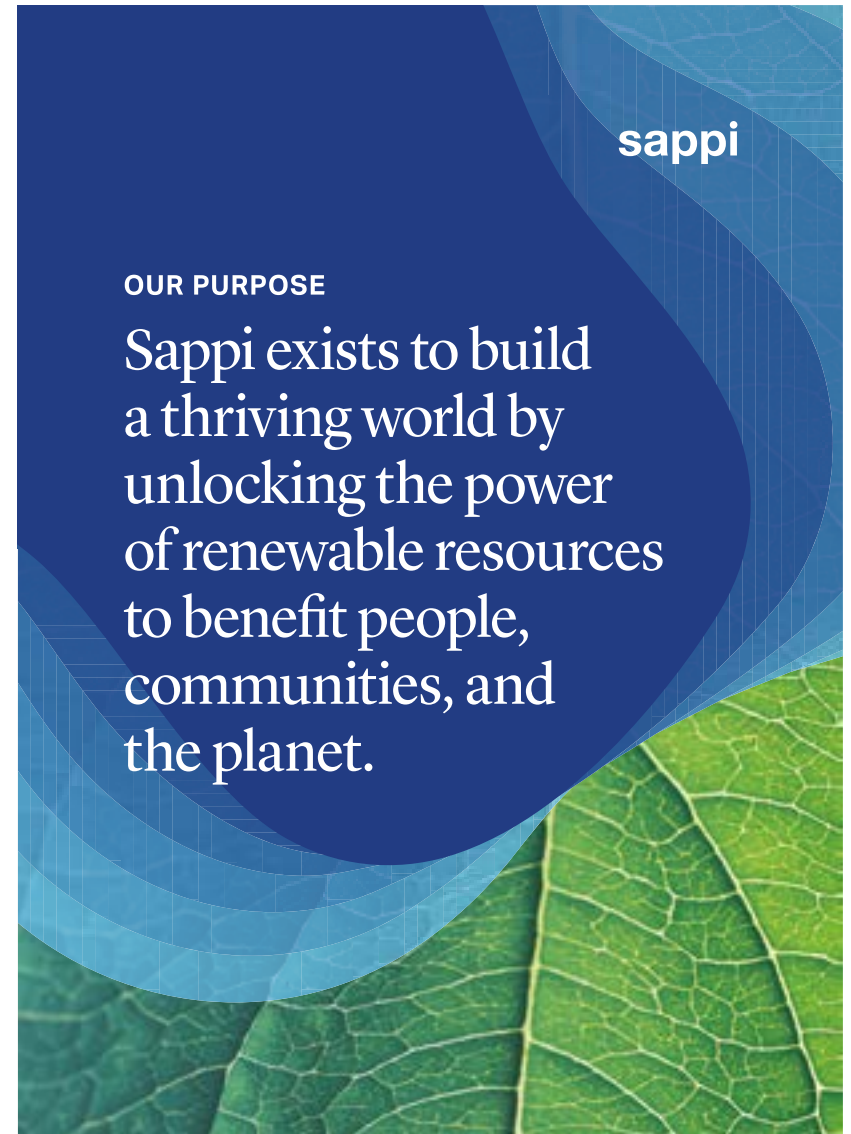
Our approach

While engaging effectively with our employees has always been a priority, its importance has been highlighted by Covid-19. The way our people work has been redefined. So too, have our stakeholders' needs and expectations. The pandemic might be temporary, but the changes we are seeing now are not likely to be: Now more than ever, hearing what our employees have to say and taking appropriate action is critical as together, we navigate the realities of the 'new normal' in our quest to build a thriving world.

Key developments in 2020

We hold **Employee Engagement Surveys** every two years, with the previous one taking place in 2019. This survey indicated that employee engagement was high, with 42% of employees fully engaged, 39% unsupported or detached and 19% fully disengaged. The key themes identified for action were talent and recognition; teamwork and communication; development and empowerment and leadership and direction. We are on track to close out all the actions that are monitored quarterly. The 2021 survey, due to begin in March 2021, will be undertaken by a new survey provider that will provide faster and more granular reporting, as well as prioritisation of focus areas and mobile (cellphone and tablet) solutions.

As we look to the future, we recognise that society in general and our people, in particular, expect us to play a role beyond making and selling. Teams from all regions and product segments spent a year building the 2020-2025 **Thrive25 strategy** that focuses strongly on the power of purpose: Sappi exists to build a thriving world by unlocking the power of renewable resources to benefit people, communities and the planet. We embarked on an extensive roll out to familiarise our people with our purpose, business strategy and refreshed brand. We communicated through newsletters, posters, presentations and detailed engagement with staff by management and leadership.



Supporting sound labour relations

Why it's material

We believe open lines of communication between ourselves and organised labour are vital to achieving our ambitious growth and value creation objectives. We continue to endorse 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. Sappi promotes freedom of association and engages extensively with representative trade unions. Globally, approximately 57% of our workforce is unionised, 75% belonging to a bargaining unit.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  1 Safety
-  2 Cyclical macro-economic context
-  8 Employee relations

Our strategic fundamentals

- Drive operational excellence
- Sustain our financial health
- Enhance trust

The global forces shaping our Thrive25 strategy

- Continued erosion of trust in business, coupled with increasing social activism
- Changing consumer and employee profiles

Our approach

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.

Read more: [Our key relationships: unions.](#)



Supporting sound labour relations continued



SEU

Approximately 63% of SEU employees belong to a union.

Negotiations occur at the various country and industry-specific Collective Labour Associations, and the contract terms range from one to two years. The labour framework in Europe consists of Works Councils and collective labour agreements that differ from country to country. Works Councils are elected every four to five years at each mill site as well as the sales offices in Germany, Austria and the Benelux countries. Within the collective labour framework, Sappi is represented by industry employer representatives.

Meetings with the Works Councils take place twice a year with representatives from each manufacturing site and the Chief Executive Officer for the region and regional Human Resources Director. The purpose of the meeting is to share information and consult on topics of interest such as business performance, planned business changes, industry development and pan-European topics.



SNA

In North America, 61.4% of our employees are unionised. Our workforce is represented by 12 collective bargaining agreements covering each of the plant sites. The majority of our hourly employees – generally production unit employees – are represented by the United Steelworkers (USW) union, but employees are also represented by various craft, guard and railroad unions. In this region, labour agreements are usually for three years.



SSA

Union representation stands at 51%. The recognised trade unions with which we engage are: CEPPWAWU (The Chemical, Energy, Paper, Printing, Wood and Allied Workers Union); Solidarity; the Association of Mining and Construction Workers Union (AMCU) and the National Union of Metal Workers of South Africa.

Our wage negotiations with recognised trade unions take place at the Pulp and Paper and Sawmilling Chambers under the auspices of the Bargaining Council for the Wood and Paper Sector in South Africa, and our agreements are generally annual. Shortly after year end, we will make a decision on whether we will continue to engage with the latter or to move to company level engagements going forward.

The complexity of the work environment in our South African operations is compounded by the number of labour legislative requirements. Against this backdrop, we have established a number of forums with our shop stewards and trade unions with a view to sharing information and discussing matters of mutual interest as well as working together on matters that pertain to Sappi specifically and not to the industry as a whole. These forums include:

- The National Employment Equity and Skills Development Forum that meets quarterly and is attended by union officials from three unions, shop steward representatives and management representatives. The primary focus of this forum is to mutually agree on the employment equity plan and Workplace Skills Plan as submitted to the Department of Labour and to the Fibre Processing and Manufacturing Skills Education Training Authorities
- Shop Steward Forums at each mill that meet with management to discuss mill-specific work issues and conditions
- The Partnership Forum, a joint union and Sappi senior management, meets quarterly to share information on business performance, strategy direction, industry developments and union priorities
- The Pulp and Paper Chamber, an industry body that deals with wage negotiations and other employment relations and conditions of employment issues affecting the industry. Currently the chamber has established a work group to investigate a collective bargaining framework in an attempt to enhance the collective bargaining process in our industry

Supporting sound labour relations continued

Key developments in 2020

In **SEU** there was an industry-wide strike in Finland that affected Kirkniemi Mill, and that lasted 15 days for blue-collar employees and 24 days for white-collar employees. In order to resolve this strike, an industry-wide collective bargaining agreement was entered into, requiring us to waive three extra days of work per annum that were negotiated years ago in exchange for shortening the summer stop and cutting other Collective Labour Agreement (CLA)-related benefits to achieve a cost-neutral outcome.

The consultation process related to the closure of the PM1 at Stockstadt Mill and impact on 170 positions was successfully completed with the assistance of the employee representatives and facilitator at the mill. The machine was closed from October 2020.

In **SNA**, the overall industrial relations climate in SNA was satisfactory despite furloughs due to Covid-19, the decision to close PM9 and certain biomass energy operations at Westbrook Mill and some contract negotiations with the Westbrook United Steelworkers' (USW) union regarding relative to proposed changes in the union medical plan. The membership ratified the package shortly after financial year end.

In terms of the asset closures at Westbrook Mill, we entered into 'effects bargaining' with the USW and other trade unions whereby a voluntary severance package, equal to that which was bargained for union employees that were involuntarily retrenched, was made available to employees who accepted voluntary retrenchment. This was offered to encourage those union members who were close to retirement to consider the benefits of taking the package, thereby enabling employees with less seniority to remain with Sappi. Due to voluntary resignations and other attritions prior to the discontinuation of these operations, the number of active employees losing their positions was significantly lower than originally anticipated.

In **SSA**, collective bargaining was extremely tough. The Pulp and Paper Sector was unable to reach an industry settlement as parties deadlocked and unions issued a notice to strike following a balloting process. The strike, which began on 05 October 2020. The strike was generally peaceful except at Saiccor Mill where the company experienced sporadic incidents of violence, largely driven by the various community groups. SSA reached a settlement of 3% increase on basic wage with labour at company level backdated to 01 July 2020, and a further 1% with effect from 01 January 2021. This represents an overall increase of 3.5%. Shift allowances remained at 10.5%, which is still 0.5% ahead of the industry.

At year end, sawmilling wage negotiations were still underway at industry level with forestry negotiating at company level.

Our forestry and sawmilling sector wage negotiations were concluded without a strike. For forestry, we settled on a 3% wage increase backdated to 01 July 2020, with a further 1% increase coming into effect from 01 January 2021. Regarding sawmilling, we settled on a 3% increase backdated to 01 July 2020.



Supporting sound labour relations continued

Ensuring disciplinary procedures enhances trust



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

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

Communicating operational changes

As one of our strategic fundamentals is to enhance trust, we believe it's important for all our people to understand and trust, our processes for communicating operational changes. These 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 well-being 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.

Across all countries, information about significant operational changes should 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 **SEU**, information about significant operational changes is only communicated when these are concrete enough to enable proper consultation where the process followed is according to a set timeline.

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.



Sharing value with our communities

Why it's material

While Covid-19 has highlighted the interconnected nature of our being, as a responsible corporate citizen we recognised many years ago that our well-being and financial prosperity are inextricably linked to the communities in which we operate. Our corporate citizenship initiatives and programmes are in line with, and supportive of, our business strategy and are developed with input from key stakeholder groups. We have prioritised community support projects with a particular focus on education, environment, health and welfare. Our preference is for multi-year programmes that create sustained impact in our communities. The majority of our spend is allocated to South Africa, given the development needs of the country.



How this issue links to other aspects of our business

Our global priority SDGs



Our additional SSA priority SDGs



Emerging risks

- Social unrest
- Land restitution

Our strategic fundamentals

- Enhance trust

The global forces shaping our Thrive25 strategy

- Rising social inequality
- Continued erosion of trust in business, coupled with increasing social activism



FAST FACTS

The *Sustainable Development Goals Report 2020*³ that was published in July 2020 highlights how Covid-19 has derailed progress in meeting the Sustainable Development Goals (SDGs). Among the key findings:

- An estimated **71 million people** are expected to be pushed back into **extreme poverty** in 2020, the first rise in global poverty since 1998.
- **1.6 billion already vulnerable workers** in the informal economy – half the global workforce – may be significantly affected, with their incomes estimated to have fallen by 60% in the first month of the crisis.
- The **more than one billion slum dwellers** world-wide are acutely at risk from the effects of Covid-19, suffering from a lack of adequate housing, no running water at home, shared toilets, little or no waste management systems, overcrowded public transport and limited access to formal health care facilities.

- Many countries have seen a surge in reports of **domestic violence** against women and children.
- **School closures** have affected 90% of students world-wide (1.57 billion people). Lack of access to computers and the internet at home means remote learning is out of reach of many.
- As more families fall into **extreme poverty**, children in poor and disadvantaged communities are at much greater risk of **child labour**, child marriage and child trafficking. The global gains in reducing child labour are likely to be reversed for the first time in 20 years.

¹ <https://hbr.org/2018/11/9-out-of-10-people-are-willing-to-earn-less-money-to-do-more-meaningful-work>

² <https://www.achievers.com/resources/white-papers/2020-engagement-retention-report/>

³ The full report can be downloaded at <https://unstats.un.org/sdgs>

Sharing value with our communities continued

Our approach

Our support for society is integral to the way we do business, and not something stands separate. Accordingly, we identify societal challenges 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. In addition, support for activities associated with forestry continues to grow (indigenous tree planting and conservation efforts; use of forestry areas for mountain biking and bird watching).

The underlying goals of our programme are to create a stronger social licence to operate, help establish customer loyalty and attract talent, all underpinned by trust.

In **SEU**, at a local community level, our focus is to add to the well-being, safety and health of our communities. Employees are encouraged to nominate and participate in **local community projects and events**. There is a focus on **SDG targets** to engage and share with employees how they can become part of the global and regional drive as well as sharing with local communities and raising awareness of how our individual actions can collectively count towards a greater change. Mills and sales offices support various **local schools, sports and hobby clubs, forest products industry students, local safety** and environmental organisations and local charities.

In **SNA**, employees are encouraged to participate in outreach and community projects such as the Charles River Watershed Association and each unit has a Community Connections Group to channel local support. **Education programmes** are supported at targeted colleges and universities, as are programmes to encourage study in fields relevant to our operations, while corporate sponsorships are focused on environmental stewardship and education. The **Ideas that Matter (ITM)** programme continues to recognise and support designers who support good causes. Since 1999 the programme has funded over 500 non-profit projects and has contributed more than US\$13 million to a wide range of causes around the world that use design as a positive force in society. As part of our commitment to the communities in which we live and work, we bring employees' charitable ideas to life by providing direct funding to funding to the value of US\$25,000 annually to the non-profit organisations that they are most passionate about through the **Employee Ideas that Matter (EITM)** programme.



Sharing value with our communities continued

In **SSA**, employee well-being committees at each mill support **local community projects** based on annual requests and identified needs. These are coordinated via the annual Mandela Day (67 minutes) initiative. Community support at all operations is coordinated through a Community Management Committee (CMC). The CMC identifies shared value opportunities that help support local entrepreneurs and promote the sourcing of goods and services from local suppliers. The CMCs also report on the employment of locals and ensure investment in communities addresses specific needs. The CMCs aim to collaborate with government, NGOs and the private sector for scale.

Project support is provided to **Sappi forestry communities** including fresh water, ablution facilities, fencing, buildings and structures and vegetable gardens.

We provide support throughout the **education value chain**, beginning with Early Childhood Development (ECD). Under this initiative, in KwaZulu-Natal caregivers from Sappi communities receive training through the TREE (Training and Resources in Early Education) organisation while in Mpumalanga an ECD Centre of Excellence at the Sappi Elandshoek community has been developed with support from Penreach, a non-profit social impact organisation working towards educational excellence in disadvantaged rural communities.

The Sappi Skills Centres at Ngodwana and Saiccor Mills provide structured technical vocational skills training to increase employability and income generation. Candidates are also identified for artisan positions. In addition, we have established three Khulisa Ulwazi ('Growing knowledge' centres for Sappi Khulisa growers and land reform beneficiaries.

Our youth development project - Abashintshi ('The Changers') - continues to have significant impact in the target communities, having helped to change perceptions about Sappi, create open channels of communication between communities and Sappi and put in place systems to create economic opportunity. The project trains youth to mobilise their communities to develop themselves in line with the ABCD model (asset-based community development).



Khulisa, a shared value project that has leveraged Sappi's assets and core capabilities to generate economic value in a way that also produces value for society, continues to grow, as does our community honey project. The latter project trains community members in sustainable bee harvesting methods, offering mentoring, support and market access opportunities.

We provide support to various **environmental organisations** including Birdlife SA and WWF-SA. The **Pepper Bark Tree** (Warburgia Salutaris) project has taken the lead in efforts to protect South Africa's most endangered tree by reintroducing the tree into communities. Sappi's intervention has enabled seedlings to be grown on a large scale. To date over 30,000 trees have been distributed to communities in Mpumalanga, Swaziland and KwaZulu-Natal. We have now established an annual target of 15,000 trees to ensure that it is reintroduced across many communities in sustainable numbers.

We use the **Poverty Stoplight tool** to measure aspects of multi-dimensional poverty in the families of community beneficiaries so that we can target, prioritise and develop initiatives that speak to real needs on the ground.



Sharing value with our communities continued

Key developments in 2020

Our social impact strategy rests on two pillars: shared value and corporate social investment. Our aim is to create positive, meaningful and sustainable systems change for the benefit of our communities, particularly for those at disadvantage as a result of complex, long-term systemic issues. In doing so, we enhance our social licence to operate, become a more attractive employer and build trust with customers and other stakeholders.

The **coronavirus pandemic** impacted our regular corporate citizenship programmes as regular activities were suspended. We responded swiftly to protect the safety of our stakeholders and meet community needs.

Spend in 2020

- Sappi Europe: €100,000
- Sappi North America: US\$362,173
- Sappi Southern Africa: ZAR40 million

Harnessing Gen Z's passion for sustainability at Maastricht Mill

Sustainability is a key focus across Sappi, but at Maastricht Mill in The Netherlands, the team has gone one step further. During 2019, Maastricht sponsored six young people to become the mill's sustainability ambassadors.

Once Covid-19 restrictions are lifted, the ambassadors are poised to have an overseas experience in a developing country, to learn and foster global citizenship with Dutch sustainability charity, Global Exploration. In the meantime, they have raised funds for their trip by helping to raise awareness of Maastricht Mill's sustainability projects and achievements.

The students conducted research and learned about sustainability-related activities at the mill. For example, one of the project teams explored the ways in which the mill collaborates with adjacent industries by sharing its state-of-the-art wastewater treatment plant. Another team gained insight into Sappi's research and development endeavours, familiarising themselves with the innovative ways we are expanding our use of woodfibre in adjacent markets, including cosmetics and the automotive industry.

The ambassadors then created posters that helped communicate the results of each project by sharing their posters and experiences on their social media channels from Facebook and Instagram to LinkedIn. The constant stream of posts is helping to expose their classmates and other Gen Z'ers to innovative Sappi sustainability projects that they most likely would not otherwise have encountered.



Sharing value with our communities continued

Creating community-focused solutions during Covid-19 in South Africa

Partnering with our stakeholders

The coronavirus pandemic highlighted the plight of many vulnerable people situated in the rural areas of South Africa and in our neighbouring communities. In line with our Thrive25 strategy, we reach out to communities and partnered with our stakeholders to create solutions.

We entered into a partnership with the Southern Lodestar Foundation [\(https://lodestar.org.za/\)](https://lodestar.org.za/), a non-profit organisation that provides innovative food solutions for children. Their highly nutritious instant porridge – known as A+ – is being used in school breakfast programmes. Together, Sappi, the Southern Lodestar Foundation and the Spar Group spearheaded a collaborative effort in terms of which 60,000kg of A+ instant porridge was distributed to vulnerable communities in KwaZulu-Natal and Mpumalanga. We used our knowledge and access to rural community health networks to ensure that the porridge was reaching those that needed it most in many peri-urban and rural areas adjacent to our mills and plantations.



In an effort to ease the **shortage of masks**, we procured thousands of surgical masks for community clinics and health care centres in KwaZulu-Natal and Mpumalanga. However, there was also a need for thousands more re-usable cloth masks for our own employees who were continuing to deliver essential services during the national lockdown. We installed sewing machines at the Saiccor and Ngodwana Skills Centres, which meant that apprentices who were not able to continue with their normal training schedule due to the restrictions, sprang into action making cloth masks. These were distributed to own and contractor employees as well as to neighbouring schools. At year end, apprentices had produced just under 73,000 masks. The mask venture has progressed further into the manufacture of overalls.

To heighten awareness of the pandemic and promote understanding we created and distributed **easy-to-understand illustrated infographics** in English and Zulu within our own operations, the employees and families of our contractors and the broader public via the Abashintshi. The latter are a group of Sappi-sponsored young people who act as change agents within their communities. Read more: <https://www.sappi.com/abashintshi-planting-seeds-of-opportunity>

“Since sharing the infographics, I have been impressed to hear positive talks inside taxis, people expressing their commitment to obey the law and to take all the necessary precautions to fight the virus.”

Phumlani Mhlongo,
Abashintshi
change agent



In keeping with the Typek brand message to 'Live a life of note', the public were encouraged to share their messages of **hope and inspiration** on how they were 'living a life of note' during the South African lockdown, using Facebook and Instagram. Entries in the Typek campaign stood a chance of winning ZAR1,000 a day, with Sappi pledging an additional ZAR1,000 a day to the Solidarity Fund. Sappi SA also donated a donation of Sappi Triple Green Tissue and Typek office paper to the Department of Trade and Industry (dti) for future distribution to deserving recipients.



Sharing value with our communities continued

Paying it forward in response to Covid-19 in North America
Past ITM winners stepped up and paid it forward to help a world in need.

MASS Design Group supports hospitals with Covid-19 Design Response team

Hospitals around the world are rapidly transforming their physical environments and systems to keep employees and patients safe. MASS Design Group, recipient of an ITM grant in 2010, has formed a Covid-19 Design Response team in support of this effort. Drawing on the valuable insight from lessons learned in the field, this team is responding to hospital and community healthcare partner needs by sharing strategies and rules of thumb with those retrofitting different spaces for infection control.

The Covid-19 Design Response team has partnered with the Mount Sinai Hospital and Ariadne Labs to conduct a three-week study to understand which spatial design interventions can help mitigate the risk of infection. As the team shares their conclusions, they hope to scale the research and collaboration between healthcare staff and designers to encourage thoughtful spatial interventions and literacy with Covid-19 units nation-wide.



Studio Usher secures internet access for five million virtual students

In 2013, *Studio Usher* received an ITM grant to develop communication materials in print, digital, and motion for EducationSuperHighway, an organisation providing advocacy and consultation to states and school districts in order to connect American public school classrooms to high-speed Internet. The organisation worked to bring broadband to 99% of all K-12 (ie ranging from kindergarten to 12th grade) public schools. The project had

been slated to shut down in April 2020 as their mission was accomplished. But in the face of Covid-19, with 55 million K-12 students sheltering in place and schools moving their classrooms online, this dynamic organisation hired back most of their staff to focus on connecting the five million students in the US who do not have access to the internet at home.



Sharing value with our communities continued

Paying it forward in response to Covid-19 in North America

Made by We supported sustainable farmers during Covid-19

In 2019, *Made by We* received a grant to support Farm Commons, an online community and platform filled with legal resources and tutorials for the sustainability-minded farmer. *Made by We* developed an all-in-one workbook with hands-on materials for both new and experienced farmers to help them become more comfortable with farm law. The workbook and kit paired in-depth information with hands-on learning techniques and serves as a physical reference for Farmers.

As the danger of Covid-19 became a reality, *Made by We* was able to quickly add a new section to the Farm Commons website. The non-profit released free Covid-19 resources for free on a regular basis, ranging from webinars to podcasts and other advice for farmers trying to understand their legal and financial options during the pandemic. By quickly and creatively pivoting their model, Farm Commons continued to support the farmers who rely on them for resources, services, and most importantly, community.



Supporting our people in SEU

Helping those facing real hardship

In response to Covid-19, the Sappi board of directors together with group and regional leadership teams (Europe, North America, Southern Africa and Sappi Trading) volunteered to take a 10% reduction in salary for three months.

Using the money generated in this way, SEU established a dedicated Hardship Fund to help employees who faced real hardship as a direct result of the impact of the virus. The fund was opened up to enable SEU employees to contribute towards and apply to the fund for themselves or on behalf of someone else. In the spirit of not only looking out for our own safety it was felt important to allow the open application to help support employees experiencing hardship directly caused by Covid-19 as e.g. extra medical and rehabilitation expenses not covered by an insurance and any loss of income.

“There is a very human cost to this crisis, so we have established a fund to help those in special need, built by voluntary gifts. We hope this gesture goes some way to illustrate that the determination and commitment shown during this time is very much appreciated from the top down, and that we intend to support one another through this period.”

Berry Wiersum
CEO Sappi Europe





RESOLVE



PLANET

Treading more lightly

By treading more lightly on the planet and using the full potential of each tree, we can produce more with less – an approach that has obvious environmental and economic benefits and that 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, enhancing our impact on biodiversity and implementing sustainable forestry through internationally accredited, independent forest certification and environmental management systems.



United Nations Global Compact (UNGC) Principle 7:

Businesses should support a precautionary approach to environmental challenges.

UNGC Principle 8:

Businesses should undertake initiatives to promote greater environmental responsibility.

UNGC Principle 9:

Businesses should encourage the development and diffusion of environmentally friendly technologies.

OUR PERFORMANCE
at a glance



Globally, specific particulate matter emissions decreased by
153.7%
over five years



Globally, the percentage of waste benefited has increased by
10.9%
over five years.



Globally, specific waste landfilled has decreased by
12.4%
over five years



Globally, our combined specific Scope 1 and Scope 2 GHG emissions have decreased by
5.1%
over five years



Globally, energy self-sufficiency has increased by
6.3%
over five years



Globally, our use of renewable energy has increased by
1.2%
over five years

**Globally' in this context means within the Sappi group*

The precautionary approach

Ⓢ 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 beneficiating waste
- Saving water and energy at every step in production processes
- 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
- 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 three times a year, 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.

Adopting environmentally friendly technologies

We view conducting our business in an environmentally sustainable manner as integral to our licence to operate on an individual, community, country and global level. It also makes sound business sense, given that we depend on natural resources such as water and woodfibre for our ongoing viability as a business and it is in our interest to use these resources as responsibly as possible. We invest in new technology and upgrading mill processes as these become feasible or pre-empting changes in manufacturing regulations.

Unlocking the power of renewable resources

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.

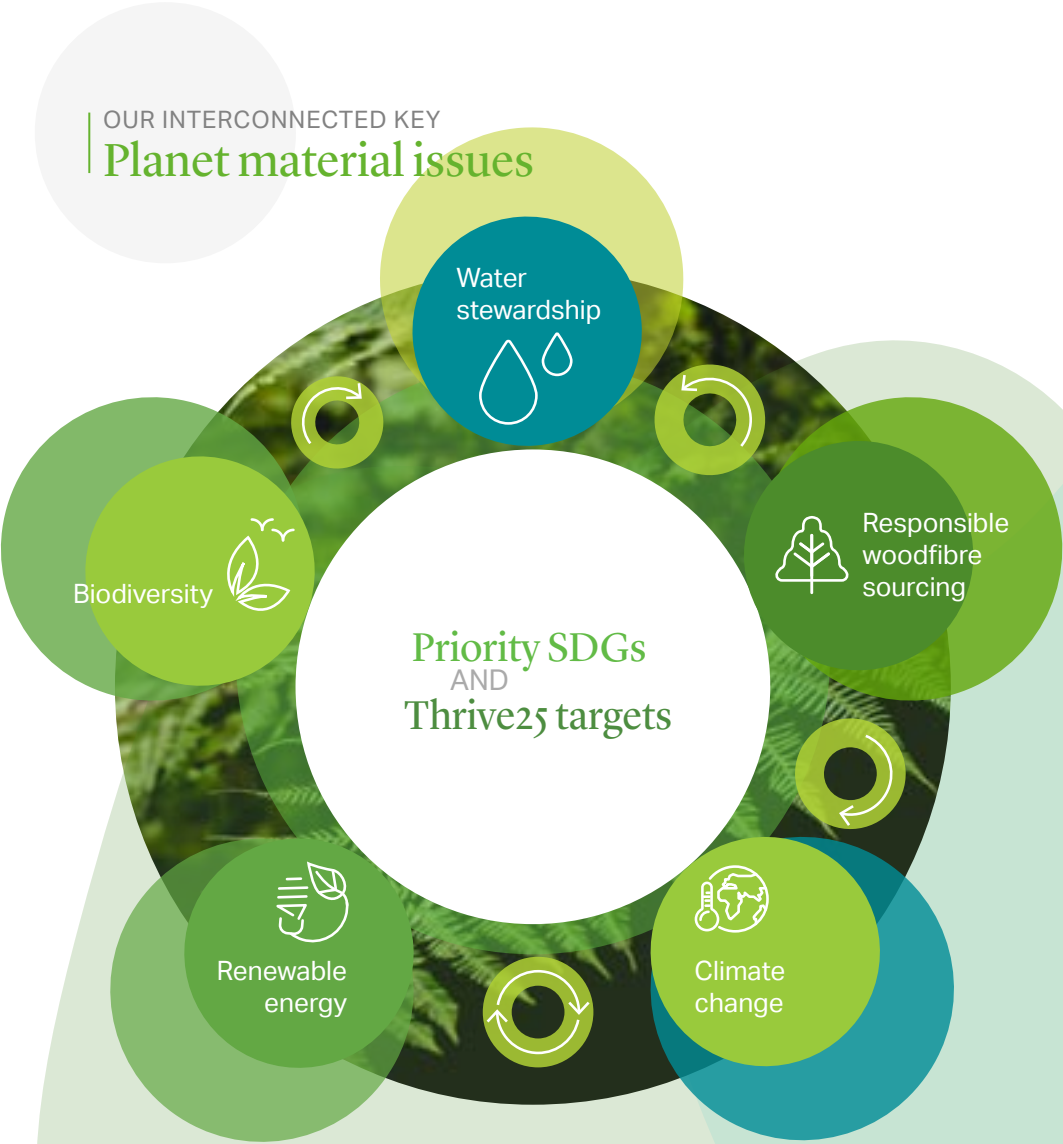
Tracking key metrics

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. These goals have now been closed out and we are moving forward with our Thrive25 goals.

Promoting environmental responsibility

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



Leading by example

Circularity ecosystems

Sustainable solutions

Using the full potential of each tree we harvest

Responsible sourcing

Responsible management of natural resources

Innovative R&D

Sourcing woodfibre responsibly

Why it's material

One of consumers' sustainability expectations is that their shopping baskets should not drive the destruction of the world's tropical forests. Forests and forestry play an important role in mitigating climate change as reducing deforestation and forest degradation lowers greenhouse emissions. In addition, sustainable forest management can maintain or enhance forest carbon stocks and sinks, while wood products can store carbon over the long term and can substitute for emissions-intensive materials reducing emissions.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

- 3** Evolving technology and consumer preferences
- 4** Sustainability expectations
- 9** Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Climate change continuing to impact businesses and reshape societies
- Resource scarcity and growing concern for natural capital



OUR 2025 TARGET



SHARE OF CERTIFIED FIBRE

>75%

With Sappi's excellence in sustainable forest management and commitment to stewardship, we want to continue to increase our positive contribution to healthy landscapes. We practise sustainable forestry because it promotes sustainable forestry because it provides clean air and water, protects biodiversity and defends against climate change, among many other critical benefits. Forest certification validates our forest management practices and those of our suppliers in the well-managed forests and plantations from which we source woodfibre. We strive to continually increase the share of certified woodfibre supplied to our mills.

Agricultural expansion continues to be the main driver of deforestation and forest degradation and the associated loss of forest biodiversity. It is the second-leading cause of climate change after burning fossil fuels and accounts for nearly 20% of all greenhouse gas emissions — more than the world's entire transport sector.¹

¹ FAO 2020: The State of the World's Forests – Forests, Biodiversity and People 2020

<http://www.fao.org/3/ca8642en/ca8642en.pdf>

Sourcing woodfibre responsibly continued

Our approach

We work to keep forestlands forested. What this means, in practical terms, is living up to our commitment of zero deforestation by ensuring that forests and plantations from which we source woodfibre are expertly tended, harvested and regenerated for healthy regrowth. We achieve this by utilising the following leading global certification systems: Forest Stewardship Council (FSC); Programme for the Endorsement of Forest Certification (PEFC); Sustainable Forestry Initiative® (SFI®) program, and other PEFC-endorsed systems. Using these systems means we know the origin of the woodfibre we use – a fundamental prerequisite for responsible woodfibre sourcing.

We strongly support forest certification, because transparency and traceability are powerful tools to enhance sustainable supply chains and to combat global problems like illegal logging and its dire consequences. The power of these certification systems is enhanced by the fact that they not only impact the level of forest practices in certified forests but also impose tough requirements on the non-certified wood that is being mixed with the certified material, and thus the impact extends far beyond the certified forests.

We require rigorous tracing practices and documentation of the origin of all 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 (DDS). These systems comply with the requirements of the European Timber Regulation, the US Lacey Act and other regional jurisdictions. Information on the origin and tree species of any delivery within the CoC is accessible at any point along the supply chain.

In addition, we keep forestlands forested by:

- Working collaboratively with our suppliers to further enhance our transparent supply chains and promote sustainable forestry practices
- Ensuring that our suppliers implement practices to promptly regenerate forests post-harvest – required under the global forest certification standards we uphold
- Implementing our Supplier Code of Conduct to continually assess supply-chain, ethical and legal risk
- Neither harvesting nor buying woodfibre that originates from tropical natural forests

Advancing transparent supply chains

We work with a wide range of partners to advance sustainable forest management practices and transparent, responsible supply chains. We are an active member of PEFC International, FSC's economic chambers North and South, and SFI®, and engage with them through a variety of working groups and committee activities. Close engagement is maintained directly and through the industry organisations CEPI (Confederation of European Paper Industries) and American Forests and Paper Association (AF&PA). We also belong to the Forest Resources Association (FRA), the American Forest Foundation (AFF) and the Society of American Foresters (SAF). In South Africa, we belong to Forestry South Africa (FSA) and the Paper Manufacturers Association of South Africa (PAMSA).

Through our involvement in The Forests Dialogue steering committee we actively collaborate with multiple stakeholder groups, and work to build agreement on forest and land-use challenges. We are founding partners of both the 4Evergreen (an alliance of fibre-based packaging leaders) and the Recycling Partnership and an active board-level participant in the Paper and Packaging Board.

We are a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute (FABI) at the University of Pretoria. Through the TPCP we also belong to the internationally collaborative programme BiCEP (Biological Control of Eucalyptus Pests). In addition, we belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria and to CAMCORE, an international, non-profit organisation dedicated to the conservation and utilisation of subtropical and tropical tree species.

FAQ

ARE THERE FORESTS ON SAPPI-OWNED LAND IN SOUTH AFRICA?

Yes, there are. Approximately 98% of the forest types originally identified on Sappi land still exist in their original form. These forests, which are protected, cover 9,500 hectares and include Drakensberg Montane Forests, Swamp Forests, Foothills Mistbelt Forest and Lydenburg Kloof Forest, among others. Natural forest has been successfully protected in South Africa since the early 1900s, so there has been no forest conversion in South Africa for the last 100 years. In this region, we only source from plantations, never from indigenous forests.



Sourcing woodfibre responsibly continued

The certification process at a glance

Forest management



Accredited, impartial certification bodies conduct regular audits of our own plantations, as well as third-party and outgrowers' plantations. All our owned and leased plantations in South Africa are FSC-certified for forestry management.

Chain of custody



We prefer to buy certified woodfibre and strive to continually source more. At minimum, we require our suppliers to provide evidence that all woodfibre is sourced from controlled, non-controversial (S) sources in accordance with our [Group Woodfibre Procurement Policy](#).



Sappi's mills' certified Chain of Custody systems enables us to track certified material from the forest through our production processes.



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

Promoting sustainable forest management with certification

Globally in FY20, **73% of woodfibre supplied to our mills was certified**, with these regional percentages SEU: 80%; SNA: 55%; SSA: 83%. The rest was procured from controlled, non-controversial sources.

Sourcing woodfibre responsibly continued

“As the SAFAS standard is home grown, directly relevant to a range of South African conditions and more flexible with respect to group schemes, we hope that this move will facilitate the full involvement of small-scale growers and improve the sustainability of the forestry industry.”

Michael Peter,
Executive Director of
Forestry South Africa

Key developments in 2020


We continued to offer consumers an **alternative to fossil-based packaging**, based on wood from sustainably managed forests. Read more: [📖 *Developing and commercialising innovations in addition to adjacent businesses*](#).


In 2020, globally 73% of the woodfibre supplied to our mills was certified with the rest procured from controlled, non-controversial sources. Our owned and leased plantations in South Africa maintained FSC certification. The **100% coverage of the FSC, PEFC and SFI®** Chain of Custody systems we use ascertains that all the woodfibre we purchase and process is traceable to its origin, and is sourced from legal, controlled, non-controversial sources.

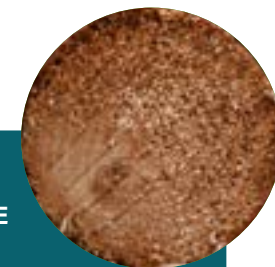
Sappi has actively participated in the development of **SAFAS (Sustainable African Forestry Assurance Scheme)**, which was endorsed by PEFC International in 2019. Following a two-stage audit process, Sappi Forests' plantations expect to be PEFC-certified by December 2020, thereby supplementing the FSC certification already achieved. Our South African mills will soon be able to apply for PEFC CoC certification.

FAQ

WHERE DOES SAPPI'S WOODFIBRE COME FROM?

All suppliers are requested to provide the wood origin information (country of harvest and where applicable sub-national region and/or concession of harvest) and a list of tree species at least annually and/or  upon request in line with our [Supplier Code of Conduct](#) and [Group Woodfibre Procurement Policy's](#) requirements.

Read more about the type of tree species  we use at: <https://www.sappi.com/files/sappi-faqs-forests-matterpdf>



Sourcing woodfibre responsibly continued

Growing healthy forests and plantations, together

Our business depends on trusted relationships and active engagement with wood suppliers, forest owners and other stakeholders. We work with them to promote sustainable forestry that keeps forestlands forested for generations to come.

Ensuring best practice forestry management in North America



Our stumpage and wood supply agreements include requirements to comply with applicable laws, including the use of Best Management Practices (BMPs) to ensure that wood procurement operations adapt appropriately to seasonal adverse weather conditions and other weather events to ensure that soil productivity and water quality resources are protected. A key procurement provision is to build inventory at mills during the winter months to avoid logging activities during the spring break-up / mud season. We specify that wetlands and other wet areas should be logged when soils are in a frozen condition and that BMP guidelines appropriate to the site should be adhered to. We also identify, mitigate and avoid adverse impacts on Forests with Exceptional Conservation Value (FECV), which includes areas identified by NatureServe with a G1 (Globally Critically Imperilled) or G2 (Globally Imperilled) ranking for species and native plant communities.

Pest and disease management experts will visit any private grower that reports pest and disease issues to SNA.

In this region, we belong to the Cooperative Forest Research Unit based at the University of Maine, where scientists conduct applied research that provides Maine's forest landowners, forestry community, and policymakers with the information needed to ensure both sustainable forestry practices and science- based forest policy.



Sourcing woodfibre responsibly continued

Growing healthy forests and plantations, together continued

Positive feedback on our forestry programmes

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.

David and Teresa Price, landowners in Maine, had the highest praise for Sappi:

“We recently had our 48-acre lot logged through Sappi's Maine Forestry Program. We cannot speak highly enough about how positive our experience was. Sappi took a lot of time explaining the programme and exploring exactly what we wanted done. They walked the property and re-flagged property lines carefully. Whenever we emailed them, they responded immediately. The loggers were also excellent and took time to talk to us whenever we wanted and cleaned up after themselves.

Detailed descriptions of the logs that were harvested were sent to us on a regular basis. We love the view we have now and would highly recommend this programme.”



FAST FACTS

Sustainable forest management is a critical element in the bid to close the emissions gap, and limit the global temperature rise to 1.5°C above pre-industrial levels. In addition, forests:

- Are home to **80% of life on land**
- Are **essential to human life**, purifying the air and water, providing food, and the raw materials for medicines
- Influence the **global climate** and **rainfall patterns**
- Act as **carbon sinks**, absorbing approximately 2 billion ton of carbon every year

Walking the talk

Commenting on SNA's 2020 external forestry certification audits, the auditor said: *“Most companies talk the talk’ but it is not consistent throughout the company/ operations. Sustainability is obviously engrained in Sappi culture. This is impressive and refreshing to see”.*

Under the audits, conducted by Bureau Veritas, a third-party certification body, the Allentown facility was added as a converting site under SNA's multi-site CoC

certificates and Westbrook was changed from a secondary manufacturing site to a converting site to reflect the shut-down of the paper machine and the use of base-paper from Cloquet and Somerset Mills.

In FY20, in this region we completed a detailed risk assessment of our woodbasket against the FSC-approved and published national risk assessments (NRAs) for the United States of America and Canada. The results of the recently finalised NRAs

confirm that our operations predominantly occur in areas at low risk for controversial sources. Within the United States of America, all our operations and supply areas are considered low risk across all five Controlled Wood Standard risk categories, thus no additional mitigation/ control measures are necessary to avoid controversial sources. Where 'specified risk' was determined in Canada, we identified and implemented control measures as needed to mitigate.



Sourcing woodfibre responsibly continued

Growing healthy forests and plantations, together continued

Collaborating for sustainable forestry in the Umbagog Refuge

'A national treasure'. That's what the Umbagog National Wildlife Refuge, which straddles the New Hampshire and Maine border, has been called. And that's why SNA was extremely proud to be selected by the US Fish and Wildlife Services to lead their timber harvest.

The benefits of sustainable timber harvesting

Timber harvesting is essential to maintain and restore resilient and sustainable forests. When planned and supervised by qualified foresters with input from the public and other resource specialists, responsible timber harvesting supports – and can even enhance – fish and wildlife habitat, improved water quality, reliable water supplies and recreation. Once the timber reaches our Somerset Mill, we transform it into renewable, recyclable and biodegradable woodfibre products as part of the circular economy. Timber harvests are also an important source of income for local and state governments.

About the harvest

The timber harvest in the Umbagog Refuge is designed to promote the US government's long-term goal of a multi-aged, mixed species forest with more than 70% canopy closure. The harvest we were asked to assist with is the first of a series of harvests scheduled to occur in 15-year increments. Our harvesting procedures will promote and release the regeneration of red spruce, sugar maple and yellow birch, which have been marked for harvest. Some spruce, fir, white birch, sugar maple and American beech trees are also included. Our harvesting plan involves single tree and group selection harvesting. Group cuts are distributed throughout the harvest area with single tree selection used between groups.



Expanding knowledge and forestry certification in South Africa

In South Africa, a team of qualified extension officers works with growers in our Sappi Khulisa enterprise development scheme to ensure responsible planting and harvesting practices. In addition, we have established three Khulisa Ulwazi (Growing knowledge) training centres and developed training material in conjunction with the Institute of Natural Resources. Training is offered to all value chain participants, including land reform beneficiaries and covers all aspects of forestry, including core operational skills as well as safety, legal compliance and

business management. A mobile grower app assists Khulisa growers in accessing their plantation information, financial statements and training material. Growers can also send Sappi requests or submit documents through the app.

We have established a group FSC certification. There are currently of 44 members representing a total of 42,000 planted hectares. We pay growers in this scheme a premium for certified timber.



Safeguarding and restoring biodiversity

Why it's material

The UN Biodiversity Summit in September 2020 highlighted the urgency of action at the highest levels in support of a post-2020 global biodiversity framework that contributes to the 2030 Agenda for Sustainable Development and places the global community on a path towards 'living in harmony with nature' – the 2050 Vision for Biodiversity. Science tells us that about 25% of our assessed plant and animal species are threatened by human actions, with a million species facing extinction, many within decades. In addition, US\$44 trillion of economic value generation – over half the world's total gross domestic product (GDP) – is moderately or highly dependent on nature and its services and, as a result, exposed to risks from nature loss. As our primary input, woodfibre is a renewable natural resource, Sappi depends on ecosystem services such as healthy soils, clean water, pollination and a stable climate. Accordingly, biodiversity is a key focus area.





How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  4 Sustainability expectations
-  9 Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- The move towards a circular economy
- Climate change continuing to impact businesses and reshape societies
- Resource scarcity and growing concern for natural capital



OUR 2025 TARGET



ENHANCE BIODIVERSITY
IN CONSERVATION AREAS

10%
IMPROVEMENT

Biodiversity is the foundation of our business and we work to enhance it on our lands and promote awareness of the importance of this issue among our stakeholders.

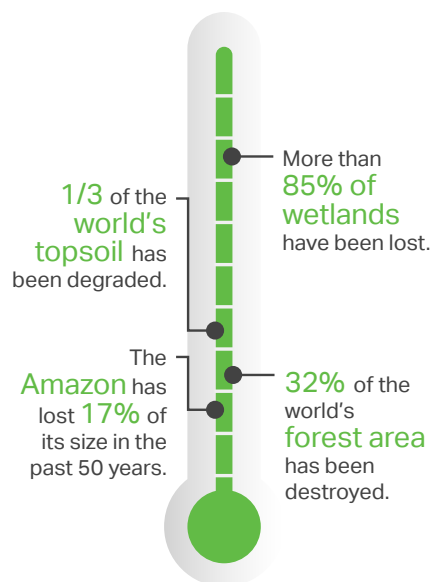
Safeguarding and restoring biodiversity continued



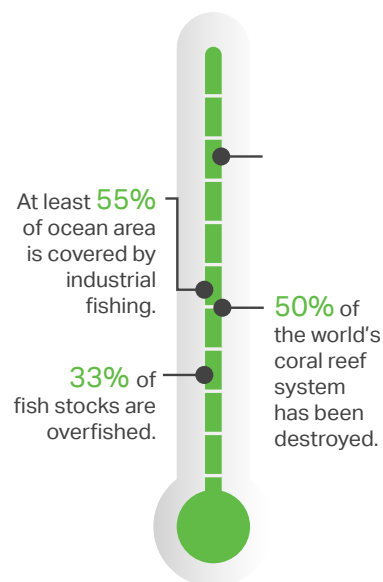
FAST FACTS¹

Human activity is eroding the world's ecological foundations

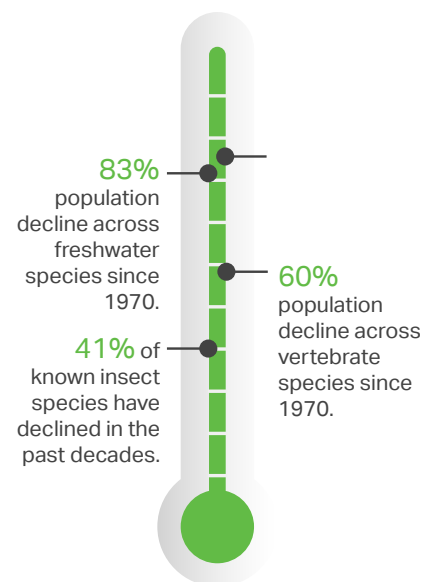
Terrestrial ecosystems



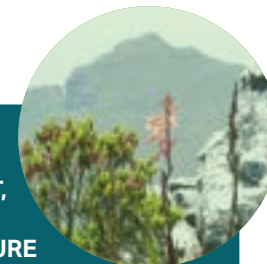
Oceanic ecosystems



Species



FAQ



IN THE SOUTH AFRICAN CONTEXT, WHAT IS A PROCLAIMED NATURE RESERVE?

Proclaimed nature reserves are areas that are formally gazetted as protected areas. The Biodiversity Stewardship Scheme run by the South African National Biodiversity Institute (SANBI) recognises different levels of protection, depending on the commitment of the landowner. The category of nature reserve is the highest level of protection that can be awarded to an area. All stewardship projects are based on partnerships, between landowners, provincial conservation authorities and NGOs, which are developed to secure biodiversity. Stewardship agreements compiled between provincial conservation authorities and land owners recognise the land owner as the custodian of biodiversity and will ensure the land is managed and protected in a way that will conserve its biodiversity.

¹ Source: World Economic Forum

<https://www.weforum.org/agenda/2020/05/5-reasons-why-biodiversity-matters-human-health-economies-business-wellbeing-coronavirus-covid19-animals-nature-ecosystems/>

Safeguarding and restoring biodiversity continued

Our approach

In South Africa, where we are one of the country's major landowners, we have a particular responsibility to manage biodiversity in accordance with best practice principles. Of our 394,000 hectares of owned and leased land, approximately one third is managed for biodiversity conservation.

We entrench our commitment to biodiversity by:

- Maintaining 160 Important Conservation Areas (ICAs) and seven nature reserves on our plantations (Read more: [Connecting with nature](#))
- Monitoring water quality and fish species present: We use the aquatic biomonitoring SASS (South African scoring system) methodology to determine the composition of macroinvertebrate fauna present in rivers on our landholdings, as well as river health. Understanding what fish species occur within our smaller river systems helps us understand the importance value of aquatic ecosystems and where possible to implement corrective actions to reduce our impact on the natural environment. We also involve local schools in mini SASS monitoring programmes.
- Developing and implementing long-term integrated weed management plans on all our plantations as invasive alien plants are widely considered as a major threat to biodiversity, human livelihoods and economic development.
- Maintaining and enhancing soil function – a crucial component of sustainable forest management and biodiversity, because soil is the foundation of the forest system. The trees we grow in our plantations are long-lived with little or no mechanical cultivation occurring. As a result, the structure of soils is maintained or improved, while topsoil nutrients are increased as nutrients and minerals are taken up deep within the soil profile. Trees are also able to take up nutrients from relatively acidic soil (soil with low pH) and are thus able to grow on degraded soils that are unsuitable for agriculture.



Safeguarding and restoring biodiversity continued

Key developments in 2020

We signed up to **Business for Nature's call to action**, a global coalition of non-governmental organisations (NGOs) and business groups including the International Chamber of Commerce, WWF, We Mean Business, the World Business Council for Sustainable Development (WBCSD) and the International Union for Conservation of Nature (IUCN).

Business for Nature's campaign 'Nature Is Everyone's Business' has particular relevance for Sappi, given that our business is dependent on sustainably sourced woodfibre.

We made progress in terms of our **Thrive25 target** by addressing our first biodiversity objective underpinning this task – understanding what types of vegetation are present on our plantations, as well as their importance value. This enables managers to develop appropriate management plans for implementation. It is also important, from a conservation management perspective, to identify those vegetation types that are least protected, in order to prioritise efforts to safeguard the vegetation type from possible extinction.

Our potential contribution to conserving vegetation types at the provincial level can be calculated by comparing what is present on Sappi property with the vegetation types in the province.

- In Mpumalanga, of the fifteen vegetation types present on Sappi land, six are well represented, enabling a potential contribution of between 9 – 18% of hectares conserved for the vegetation type in the province.
- In KwaZulu-Natal, of the twenty vegetation types present on Sappi land, four are well represented, enabling a potential contribution to conserving the vegetation of between 8 – 13.5% in this province.

Maintaining healthy ecosystem services

Revitalising a watershed in Finland

Kirkniemi Mill, located in a lakeside city just one hour's drive from Helsinki, produces far more than exceptional coated papers destined for high-quality printers. Thanks to a project with the Länsi-Uusimaa Water and Environment Association, the mill is also supporting the revitalisation of threatened aquatic species in the nearby Mustionjoki River.

The project involves building fish passages to restore salmon stocks and freshwater pearl mussel populations in the river, which belongs to the Karjaanjoki watershed that provides Kirkniemi Mill with one of its most important raw materials, water.

The four power plant dams around the watershed have acted as an especially tough barrier to salmon fish migration. All are in the area of the Mustionjoki River, which flows from Lake Lohjanjärvi to the Gulf of Finland. By building the fish passages, the project enables salmon to bypass the dams on their important journey to and from the Gulf. Similarly, the passages also benefit the unique population of freshwater pearl mussels that have been threatened by the dams.

Project activities are part of the European Commission's Freshabit programme to improve the ecological status, management and sustainable use of freshwater habitats. With its scenic lakeside vistas and old ironworks reflecting Finland's proud industrial heritage, this project, co-funded by Sappi, also supports the recreational and tourist value of the region. Together, we're revitalising a watershed that is important to all Finns – especially the 8,500 owners of summer cottages around the lake in addition to permanent residents.



Maintaining healthy ecosystem services continued

Connecting with nature

Nature reserves are becoming more and more important in an increasingly urbanised world. Only by spending time in protected places do we have a sense of how rich our countryside could be. Without such benchmarks, we lose all sense of what we should cherish. We also lose all sense of the wild and our connection to it. Sappi Forests participates in the national stewardship programme through which we have seven proclaimed nature reserves on our land including:

- **The Oosterbeek Nature Reserve and Angle Ridge Nature Reserve** (2,997 hectares ha) are both located in the Highlands Management unit of Sappi's Twello plantation. These reserves lie within the headwaters of the Mhlumati and Mtsoli Rivers within the InKomati Water Management Area, which is of strategic importance in supplying water to the region, including Mozambique. The value of these areas lies in the fact that they are areas of outstanding natural beauty and are part of the Barberton Centre of Endemism and Barberton Mountainlands, an ecosystem gazetted as Vulnerable.
- **The Mount Morgan Nature Reserve**, a grassland portion (1,013 ha) of the Montrose and Kempstone Management Units of Sappi's Twello plantation, is an area of outstanding natural beauty containing serpentine outcrops with associated endemic species (unique serpentine flora: e.g. Berkheya coddii, species of Inezia) adapted to high levels of heavy minerals.
- **The Ngodwana River Valley Nature Reserve** is a grassland and woodland area (965 ha) of the Sappi Nootgedacht plantation in Mpumalanga. The area is representative of a transition between two Endangered vegetation types – Northern Escarpment Dolomite Grassland and Legogote Sour Bushveld – and lies adjacent to Coetzeestroom Nature Reserve. Accordingly, it's important for protected area consolidation and expansion.
- The 940 ha **Clairmont Mountain Nature Reserve** comprises several habitats with high conservation value including 811 ha of grasslands; 129.6 ha of indigenous forests; and 3.6 ha of wetland. Due to this diversity of habitats, Clairmont Mountain is also rich in biodiversity and home to a number of Critically Endangered, Endangered, Vulnerable and Red Data List species. It is also home to species of cultural importance, including a host of medicinal plants.

- The small **Roelton Nature Reserve** (118.3 ha) forms part of the KwaZulu-Natal Mistbelt Grassland Important Bird and Biodiversity Area (IBA). As an IBA, this site is recognised internationally as an importance site for bird conservation. Roelton hosts a breeding site of the Blue Swallow – a bird that is classified as 'Critically Endangered' on the International Union for the Conservation of Nature (IUCN). The reserve is also home to the Mistbelt Chirping Frog, currently listed as 'Endangered', by the IUCN Red List of Threatened Species.
- The **Karkloof Nature Reserve**, of which Sappi owns a portion, is a vital and significant area because of its biodiversity. The Reserve comprises predominantly Mistbelt Forest and Mistbelt Grassland.

Every year, we provide the Endangered Wildlife Trust with feedback on the numbers and locations of various species.



Supporting conservation in North America

In North America, SFI®, to which Sappi belongs, is deploying trail cameras (31 study areas to date) to survey carnivore species in areas across the state of Maine to assess the variation in occupancy probabilities between different forest stand types and ages, harvest histories, landscape configuration, latitudes, and other anthropogenic influences to investigate how timber harvesting may influence carnivore distributions of conservation interest. Our support of the SFI's' actions includes support for the Ruffed Grouse Society that creates healthy forest habitat for the benefit of ruffed grouse, American Woodcock and other forest wildlife. We also support the University of Minnesota Sustainable Forests Education Cooperative that offers continuing education opportunities to forestry and natural resource professionals in a broad range of fields.

Prioritising renewable and clean energy

Why it's material

Prioritising renewable and clean energy is strongly linked to the need to mitigate climate change. In order to meet the ambitions of the Paris Agreement, there is growing consensus around the world that CO₂ emissions will need to fall to net zero by 2050. In certain regions where we operate, we are experiencing strong regulatory pressures to decarbonise our operations. Additionally, within our markets, some customers are pursuing their own ambitious commitments and looking for us to do our part.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  **3** Evolving technology and consumer preferences
-  **4** Sustainability expectations
-  **9** Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Climate change continuing to impact businesses and reshape societies



OUR 2025 TARGETS



INCREASE SHARE OF RENEWABLE AND CLEAN ENERGY

9% PTS

DECREASE SPECIFIC TOTAL ENERGY

5%

As an energy-intensive industry, Sappi's fuel choices have a major impact on air emissions. We're focused on increasing the share of renewable and clean energy within our energy consumption, while also continually improving our energy efficiency.

Globally, the concentration of major greenhouse gases, including carbon CO₂, methane and nitrous oxide, rose to new record high values during 2019. The global annual average atmospheric CO₂ concentration was the highest in the modern 61-year measurement record.¹

¹ State of the Climate report, published by the American Meteorological Society and available at: <https://www.ametsoc.org/ams/index.cfm/publications/bulletin-of-the-american-meteorological-society-bams/state-of-the-climate/>

Prioritising renewable and clean energy continued

Fossil vs renewable energy

Fossil fuels



Coal, crude oil and natural gas are all fossil fuels – so called because they were formed over millions of years, from the remains of dead organisms: Coal from dead trees and other plant material; crude oil and gas from dead marine organisms.

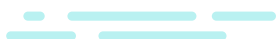
In the process carbon is 'locked up'.



When fossil fuels are combusted – to heat our homes, propel our cars and power factories, the CO₂ that was previously locked up is released.

In other words, 'new' fossil CO₂ is emitted to the atmosphere.

CO₂ is a greenhouse gas that traps heat in Earth's atmosphere



Trees absorb CO₂, sunlight and water to produce the carbohydrate energy that is needed for growth and give off oxygen as a by-product during the process of photosynthesis.



Renewable energy



When wood or wood-derived biofuels like black liquor are burned, the CO₂ captured during photosynthesis is released – in other words, no 'new' CO₂ is released into the atmosphere.



In the sustainably managed forests and plantations from which we secure woodfibre, harvesting is balanced with regeneration and replanting and the process of carbon capture beings all over again.

Prioritising renewable and clean energy continued

Our approach

Lower use of fossil fuels and greater use of renewable energy help to reduce carbon footprint. As the pie chart on [page 119](#) shows, own black liquor resulting from concentrating process liquors is our most significant fuel source. This is significant because black liquor is classified as a renewable biofuel, which in turn means that the higher our use of black liquor, the lower our fossil fuel emissions. It's important to note that our use of energy is balanced by the carbon sequestration of the sustainably managed forests and plantations from which we source woodfibre.

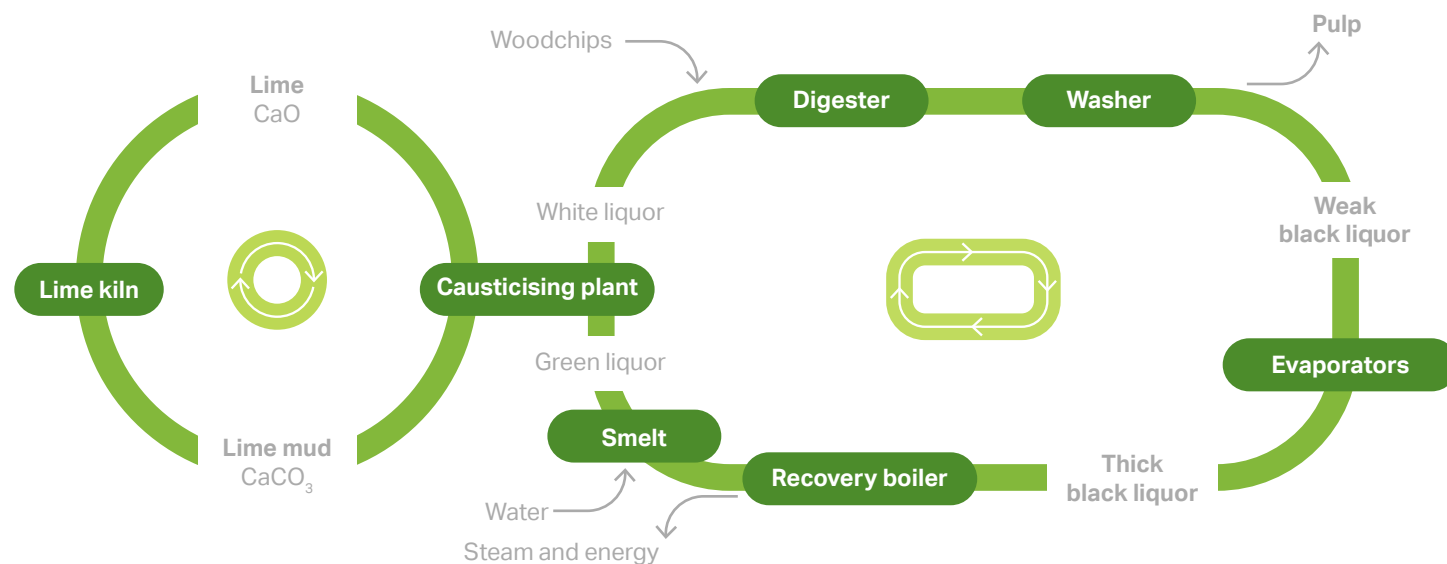
Change to read: In addition to black liquor, own and purchased biomass and renewable energy used for purchased power generation, we also use the following forms of renewable energy:

- The wastewater at some of our mills in SEU goes through an anaerobic digestion process. The methane generated during this process is essentially biogas and used to generate steam and power. The sludge generated in the wastewater treatment is dried, recycled, burnt or used as fertiliser. Alfeld, Ehingen, Gratkorn, Lanaken and Stockstadt Mills generate their own biogas, thereby replacing purchased natural gas.
- Our Alfeld, Cloquet, Gratkorn and Westbrook Mills generate power from their own hydro plants.
- Where available, some mills procure green electricity from the grid.



FAST FACTS

In the kraft pulping and recovery process, black liquor is the spent cooking liquor that results from digesting pulpwood into paper pulp thereby removing lignin, hemicelluloses and other extractives from the wood to free the cellulose fibres. Black liquor contains more than half of the energy content of the digested wood.



Prioritising renewable and clean energy continued

Promoting energy efficiency

We are committed to reducing our use of traditional fossil fuels and increasing our use of renewable 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 cogeneration.

Cogeneration

Most conventional power generation is based on burning a fuel to produce steam, with the steam pressure turning the turbines and generates power. Cogeneration, or combined heat and power (CHP) makes use of more than one form of energy provided from a combustion source – most commonly excess heat, usually in the form of relatively low-temperature steam exhausted from the power generation turbines. Such steam is suitable for a wide range of heating applications and effectively displaces the combustion of carbon-based fuels. We have cogeneration power plants at 14 of our mills.

Electricity sales

In some instances, Alfeld, Carmignano, Condino, Ehingen, Stockstadt, Gratkorn and Maastricht Mills (SEU), Westbrook and Somerset Mill (SNA), and Ngodwana Mill (SSA), excess energy is generated that is sold into the power grid. This power is used for district heating in the vicinity of Sappi's plants and for export into the public grid, thereby replacing fossil fuels.

Cooking with gas: circularity in action

Matane Mill produces its own biogas from raw process wastewater using anaerobic reactor technology. In this process, anaerobic biomass transforms organics in the raw wastewater (mainly sugars) into methane gas.

Significant environmental benefits ...

This biogas fuel is then consumed to dry bleached chemi-thermomechanical (BCTMP) pulp in the final step of production. The process displaces the light oil previously used, thereby reducing

fossil fuel consumption by 87% and also reducing greenhouse gas emissions to the environment as well as solid waste to landfill by 24%. Biogas fuel currently accounts for 79.5% of Matane Mill's on-site fuel consumption.

And economic benefits

What's more, installing the anaerobic reactor plant debottlenecked the capacity limitations of the wastewater treatment facility, presenting the opportunity for increased market pulp production.

Overhauling the Kaplan turbines at Gratkorn Mill's hydro-electric power plant

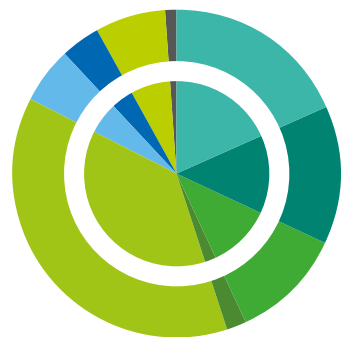
An essential component of Gratkorn Mill's electric power supply is the onsite hydro-electric power plant with its two Kaplan¹ water turbines. During the past three years (2018-2020), both water turbines were completely renovated. Thanks to this major overhaul, an increase of availability and an increase of hydro-electric power generation of almost 5% will be achieved. This aligns with our 2025 sustainability goals of increasing the renewable energy we use. A green and renewable energy source, hydro-electric power generation at the mill has the following advantages:

- A high level of efficiency and very low thermic losses
- Reliable energy supply with high availability over 90 years of operation
- Low operating costs
- There are no fossil CO₂-emissions and no other waste air emissions
- Enhanced floodwater management: In combination with our weir system, the hydro-electric power plant means we can regulate the water flow amount to the Mur river in case of floodwater

¹ Viktor Kaplan (1876-1934) was an Austrian engineer and the inventor of the Kaplan turbine

Prioritising renewable and clean energy continued

Breakdown of fuel type (%)



- Purchased coal (18.42%)
- Purchased natural gas (13.70%)
- Non-renewable energy in purchased power (11.12%)
- Other fossil fuel (1.88%)
- Own black liquor (37.47%)
- Own biomass (mostly bark) (5.70%)
- Purchased biomass (3.82%)
- Renewable and nuclear energy in purchased power (6.91%)
- Other renewable fuel (0.8%)

Key developments in 2020

Renewable energy

Globally, our use of **renewable energy** stood at 54.9% of which 68.3% was own black liquor. Unfortunately, specific energy intensity, which had been on a downward trend until last year, increased by 7% – the result of production curtailment across all regions. On the positive side, energy self-sufficiency increased by 6.2%.

In June 2020, we committed to setting **science-based targets** through the Science Based Targets initiative (SBTi). The SBTi is a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). As an early supporter of the Paris Agreement, our overarching aim in terms of science-based targets is to fully contribute to SDG13, to ensure a more sustainable future for all and limit the increase in the global average temperature to well-below 2°C and pursue efforts to limit warming to 1.5°C. Through heightening our focus and ambition on climate action, we look to increase our contribution to building a resilient, thriving world. Within the context of Sappi's 2025 sustainability targets, we have established a global specific greenhouse gas (GHG) emissions target of 17% reduction in combined specific Scope 1 & 2 emissions under the United Nations Sustainable Development Goal (SDG) 13: Climate Action. The global target is supported by targets specific to each region.

While these are not yet science-based targets, they will catalyse an ambitious emissions reduction trajectory. We now have two years to work with the SBTi on setting and validating our science-based targets. This will give us precision for our longer-term 2030 and 2050 targets, will help our customers on their sustainability journeys and is an important milestone of our own. This commitment marks an important next step in our ongoing decarbonisation journey. It places Sappi within a group of ambitious corporate leaders who are serious about climate action and ensuring a sustainable future for all. It will also sharpen our focus, ambition and responsibility to get on a trajectory towards climate neutrality by 2050.

Sappi recognises the science of climate change and acknowledges the role we need to play in reducing our emissions. Moving forward with the SBTi and Sappi's own climate action, will position our business for the future, making us more resilient and more sustainable.

We established **cluster 1.5** – comprised of experts across the group – so called because of the identified global need to limit global warming to 1.5° above pre-industrial levels. The cluster has prioritised novel technologies for fuel switching and deep decarbonisation in terms of Scope 1 & 2 emissions across energy, pulping, papermaking and bleaching.

We also took the decision to move forward with our fuel rod project: Some 150 years of intensive coal mining in South Africa have produced about a billion tons of discarded thermal-grade coal fines. Once discarded, these sulphur-containing ultra-fines cause health problems. They can also contribute to several environmental problems, emitting greenhouse gases as they decompose. To utilise this energy source, we constructed a small-scale plant to manufacture fuel rods that comprise a mixture of coal slurry, biomass and Sappi's lignin based binder, which can be used as a coal replacement, thereby reducing greenhouse gas emissions. Following positive test results at Tugela Mill, we plan to construct a plant at the mill. This was delayed because of Covid-19, but will be progressed in FY21.

Similarly, construction of the 25 MW biomass power plant at Ngodwana Mill in which we have a 30% stake and that will use biomass from the surrounding plantations, was delayed because of the pandemic, but is now moving forward.

Prioritising renewable and clean energy continued

Mapping our decarbonisation journey

The global drive for decarbonisation is manifest in each region where we operate. It includes developments such as the European Green Deal, the American Energy Innovation Act and, in South Africa, the government's procurement programme for renewable energy and the carbon tax that was implemented in 2019.

In alignment with our commitment to the SBTi, in each region we have established a detailed decarbonisation roadmap.



SEU

Our regional roadmap lays out ambitious initiatives to reduce emissions and maximise material and resource use in our nine mills across Europe. It reflects over 80 projects, which will be prioritised and implemented throughout the 2021-2025 period. Our three main priorities in this region over this period are:

- Our most significant potential impact in emission reductions lies in exiting coal in the three mills that still partially use this fuel. We plan to implement projects that enable the shift to using carbon neutral biomass or natural gas. An example of this is our planned upgrade to Boiler 11 at [Gratkorn Mill](#) in **Austria**. This involves a shift from a coal boiler to a multi-fuel boiler in two phases with the goal to finally use only sustainable and renewable fuels.
- We've committed to procure more green electricity from the grid where it is available. This will reduce our Scope 2 emissions, especially at our three mills in Germany.
- All mills will embark on 'eco-effective' projects to improve energy efficiency and reduce emissions on an ongoing basis, investing in state-of-the-art technology and processes.



SNA

In this region we have made good progress on decarbonising our four mills already. Our newly acquired Matane Mill in Canada uses nearly 100% renewable energy. Our other three mills operate at a very high renewable capacity presently, approximately 80% in 2020¹ and by the end of 2021 we will no longer be using coal at any location. In the short term, we will continue to focus on energy efficiency projects. Longer term we will have opportunities to upgrade equipment due to retirements, such as a power boiler at Cloquet. Other opportunities include reducing:

- Scope 1 emissions from our Somerset Mill by reducing and/or eliminating tyre-derived fuel (TDF). By burning TDF we keep waste tyres from the region going to the landfill. Unfortunately, the global warming potential is high and therefore it is an opportunity to address the climate challenge but creates a new challenge for the region on how to manage waste tyres.
- Scope 1 emissions from our mill site landfills. Our new waste reduction goal will help but we still account for previously landfilled waste that decomposes in the landfill and presently those emissions are not captured. Due to the high global warming potential of landfill gas, primarily methane, there is a significant opportunity to reduce emissions by capturing and reusing or incinerating the landfill gases.

- Scope 2 emissions with new energy contracts for renewable power as both countries in which we operate in are committed to 'greening' the power grid.

We will continue to access other technologies that allow for the electrification of our operations in anticipation of a future greener grid, as will modifying our lime kilns to burn renewable fuels.

¹ When renewable energy certificated are deducted the amount is 77.5%

Prioritising renewable and clean energy continued

Mapping our decarbonisation journey continued



SSA

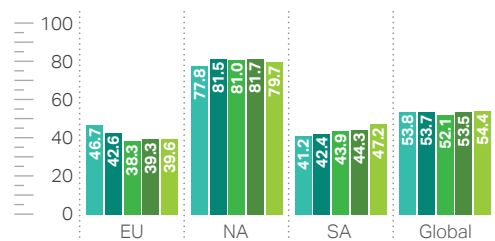
In this region we have prioritised:

- Reducing fossil energy (mainly coal and heavy fuel oil). As an example, our Vulindlela expansion project at Saiccor Mill will significantly reduce fossil Scope 1 emissions and the work being done on a hybrid fuel rod project at Tugela Mill will also partially displace fossil energy.
- Potentially installing solar photovoltaics on three mill sites – while the payback is six years, the environmental return on investment is significant.
- Promoting our use of renewable energy - Ngodwana Energy, the biomass project under the Renewable Energy Independent Power Producers' Programme (REIPP) programme in which we have a 30% stake, will be improving the renewable energy % on the national electricity grid.
- Implementing energy efficiency projects at all our mills.

To accelerate progress, our roadmap will be adapted as new ideas are developed and new insights and technologies become available.



Percentage renewable energy (%)

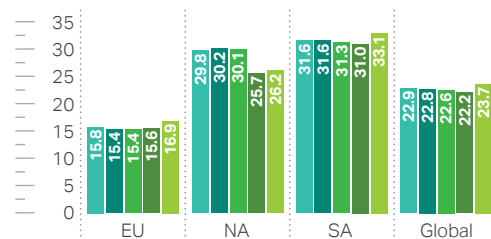
**Note:**

Includes renewable and nuclear energy, renewable energy certificates not deducted

Globally there was a slight increase, mainly due to **SSA** where the shut-down of the calcium line at Saiccor Mill in Q3&4 resulted in lower coal boiler usage and an increase in liquor firing availability. There was a slight decrease in **SEU** as Alfeld Mill produced less 'green' power due to the repair standstill of the steam turbine generator #4 and Lanaken Mill used a higher percentage of fossil fuels. In **SNA** there was a slight decrease as pulp mill curtailment at Cloquet Mill meant more natural gas was consumed and less black liquor burned. Somerset Mill used more natural gas due to a Covid-related price decrease.

Energy intensity (GJ/adt) (STE)

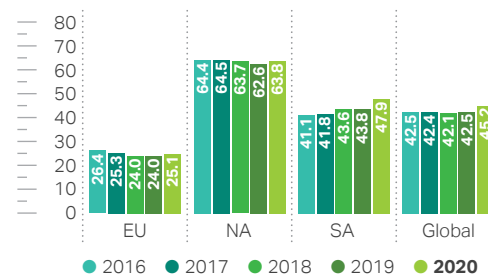
GRI: 302-3

**Note:**

Figures based on net calorific values

Globally there was an increase in energy intensity, mostly caused by reduced production due to Covid-related curtailment. In **SEU**, there was an increase for all mills, except Carmignano Mill. There was an overall increase in **SNA**, due to a curtailment in paper and dissolving pulp (DP) production at Cloquet Mill, reduced production at Westbrook Mill. However, energy intensity decreased at Somerset Mill due to increased use of natural gas related to cost efficiency and less biomass firing. The increase in **SSA** was the result of curtailed production due to weak markets as well as mill instability, power outages and equipment downtime.

Energy self-sufficiency



There was an increase across all regions. In **SEU**, energy self-sufficiency increased at Stockstadt Mill because of the new steam turbine generator, while at Gratkorn Mill it increased due to commercial downtime in paper production. In **SNA**, the increase was due to additional uptime for #2 boiler as the normal planned outage at Somerset Mill was delayed until FY21 due to Covid-19. In **SSA**, Saiccor Mill increased energy self-sufficiency as power generation by the turbines improved and there was a reduction in usage of heavy fuel oil, electricity and coal usage reduction due to active management of steam venting and improved boiler availability.



Please refer to *Our 2020 Planet indicators* on www.sappi.com/2020GSDR-Planet-indicators for these and other graphs detailing

- Renewable and nuclear energy breakdown (%)
- Energy consumption in the organisation (GJ/adt)
- Energy intensity (GJ/adt)

Accelerating our decarbonisation journey in Europe

Transitioning to renewable fuels at Gratkorn Mill

Under a regional-specific Thrive25 target, **SEU** aims to deliver a 25% specific greenhouse gas reduction by 2025. The complete modernisation of boiler 11 at Gratkorn Mill plays an important role in achieving this ambition. The investment into state-of-the-art technology will see a shift from a coal boiler to a multi-fuel boiler in two phases with the goal to finally use only sustainable and renewable fuels. The rebuild will enable the mill to reduce CO₂ emissions by 30%. In addition, the chosen technology for the project will additionally allow us to sharply reduce dust and nitrous oxide (NOx) emissions.

The largest production site within Sappi Europe, Gratkorn Mill manufactures high quality coated woodfree paper for the global printing and writing market. Ongoing investments have kept the site technologically ahead, with its facilities housing one of the largest and most advanced coated fine paper production lines in the world.

This further investment proves our steadfast commitment to not only maintaining and improving our production sites but to progressing our sustainability journey – and that of our customers. The rebuild is expected to be complete in late 2021.



Becoming more energy efficient

Pulp and paper manufacturing is energy intensive. But with Sappi, the energy we both consume and produce is increasingly efficient and beneficial to surrounding communities.

Condino Mill relies on a combined heat and electric power plant (CHP) that uses methane to generate the mill's electricity and steam. The technology enables us to recover waste heat that would normally be lost in the power generation process for use in other activities. With the CHP we are thriving producers, not just consumers of energy.

In 2014, an agreement was signed between the mill and the municipality of Condino to distribute residual thermal energy from the mill to the community.

After some infrastructure investments, today the mill supplies this recovered energy to heat the local schools, senior home, nursery, public library, police and fire stations, city hall, community houses and even the public pool.



In 2020, the mill delivered 3,200 MWh of thermal energy to the community. If the local users burned this with conventional gas instead, it would emit 600 tons of carbon into the atmosphere. The heat recovery system still has capacity to delivery extra heat that the mill management is exploring with the town.

The project is yet another example of how Sappi invests in the communities that we also call home and enhances people's everyday lives.



Mapping our decarbonisation journey continued

Accelerating our decarbonisation journey in Europe continued

Looking beyond 2030 in pursuit of climate neutrality

Sappi Europe's decarbonisation plan guides us in our journey to reduce GHG emissions up to 2030. So what's the plan from 2030 and beyond? To further advance beyond the levels of our ambitious 2030 emissions targets, it is understood that new breakthrough technologies will be required. Moving beyond the current state of the art, available technologies that our 2020-2030 plan will deploy, from 2030 and beyond we need technologies not yet available.

Moreover, we need radical innovation and industry collaboration to reimagine how we make pulp and paper. Without such breakthroughs it's difficult to imagine how we can continually improve an already low carbon footprint and achieve neutrality. Our newly established Future Group in Sappi Europe, brings together Sappi experts from manufacturing, R&D, procurement and sustainability to work together to investigate future technologies and their relevance in our mills.

In addition, we actively participate to a range of collaborations and research consortiums that are focused on developing and testing innovative technologies that may hold promise for future deployment in our sector. Some examples of this collaboration include:

- The **SPIRE** (Sustainable Process Industry through Resource and Energy Efficiency) Public-Private Partnership, also known as Processes4Planet (P4Planet), which is focused on enabling collaboration to transform European process industries to make them circular and achieve overall climate neutrality at EU level by 2050, while enhancing their global competitiveness.
- The **CEPI Energy Solutions Forum** aims to accelerate the development and implementation of carbon reducing technologies and concepts in the pulp and paper sector.

- **NEGEM Project:** Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways, a European Horizon 2020 Programme, to assess the realistic potential of Negative Emission Technologies and Practices (NETPs) and their contribution to climate neutrality, as a supplementary strategy to emissions mitigation.
- The **Heat is On** project is focused on realising solutions for optimal process efficiency in drying and dewatering as well as in systems for heat recovery across Industries.



Helping to mitigate climate change

Why it's material

Concentrations of greenhouse gases in the Earth's atmosphere are at record levels, and emissions that saw a temporary decline due to the pandemic are heading towards pre-Covid levels, while global temperatures continue to hit new highs. Climate change is already affecting every country on every continent through changing weather patterns, rising sea levels, and more extreme weather events. Recent reports of methane leaking from the sea floor in Antarctica and unprecedented wildfires in the Arctic region in 2019 and 2020 highlight the seriousness of the situation.






How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  3 Evolving technology and consumer preferences
-  4 Sustainability expectations
-  9 Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Climate change continuing to impact businesses and reshape societies



OUR 2025 TARGET



DECREASE SPECIFIC GHG (SCOPE 1+2) EMISSIONS

17%

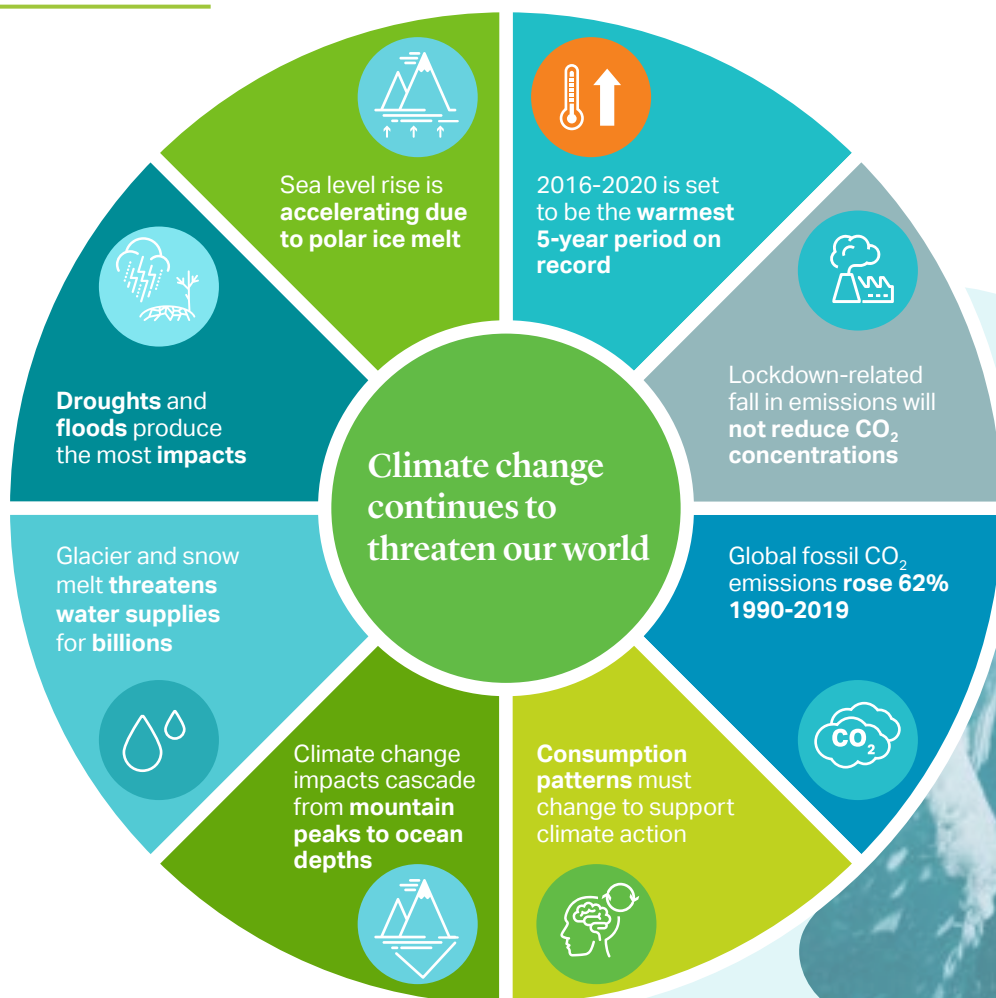
Taking urgent and appropriate actions to combat climate change and its impacts is a shared responsibility. We are focused on the continued reduction of Sappi's greenhouse gas emissions.

The five-year period since the signing of the Paris Agreement on climate change will be the hottest on human record — with average global temperatures of 1.1°C above pre-industrial levels.

Helping to mitigate climate change continued



FAST FACTS¹



¹ Source: United in Science 2020

Helping to mitigate climate change continued

Key developments in 2020

Climate scenario planning

We currently developing a **climate change strategy** that will be published in FY2021. In addition, following the establishment of a working group to implement the recommendations of the **Task Force on Climate-related Financial Disclosure**, Sappi is taking a purposeful phased approach to the use of **climate scenarios** in our climate change-related risk assessment and strategic planning processes. Currently we are involved in two projects using climate scenarios.

The first scenario was modelled at Saiccor Mill. We retained an independent consultant who used publicly available models. This work builds on earlier flood risk assessment work conducted in 2010 and again in 2017. We used Representative Concentration Pathways (RCPs) 2.6, 4.5 and 8.6. For the middle of the road projection RCP 6.0, we intend to upgrade the water model with the work being done by the Global Change Institute (GCI) at the University of the Witwatersrand (described in the following paragraph) when it is complete. The scenario planning process used at Saiccor Mill could be replicated at our other mills in South Africa.

For our mills in SNA and SEU we will be using climate data to assess physical risk consistent with RCP8.5 values. For our two primary upstream considerations, water and woodfibre sources in both North America and Europe we will be relying on available government and academic reports that generally use a combination of RCP values.

The second climate scenario project is with other industry members and the GCI in South Africa. Phase 1: 2020: Generation 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 and 2040 to 2100. Phase 2: 2021 onward: A second iteration of the variables generated for the one-year product, refining the indicators and making them more specific for species or issues; and/or including more ensemble members or scenarios to broaden the robustness of the evaluation; and/or 1 km data for selected parts of the country.

Our plantations and Saiccor Mill have been prioritised because South Africa is already experiencing climate-related physical and transitional risks whereas the risk in North America and Europe is not as profound. The overarching time horizons for our assessments to ensure a more consistent approach in all three regions are short: 1-2 years; medium: 3-5 years (2025); and long 5-30 years (2050), consistent with our five-year goal setting process as well as our commitment to the SBTi.

Mitigating climate change impacts

In South Africa, we own and lease approximately 394,000 hectares of plantations that are already being impacted by climate change. Accordingly, as traditional tree breeding is a relatively slow process and in order to keep up with environmental changes, Sappi Forests' tree breeding programme is producing and selecting the most optimally suited hybrid varieties for each climatic zone. Our tree breeding division has a target of developing a hybrid varietal solution for all our sites by 2025. We are also making use of genetic tools, like DNA fingerprinting, to enhance and accelerate their breeding and selection process. In addition, as pine and eucalypt hybrids are more successfully propagated through rooted cuttings rather than seed, a strategy is being rolled out to meet future requirements.

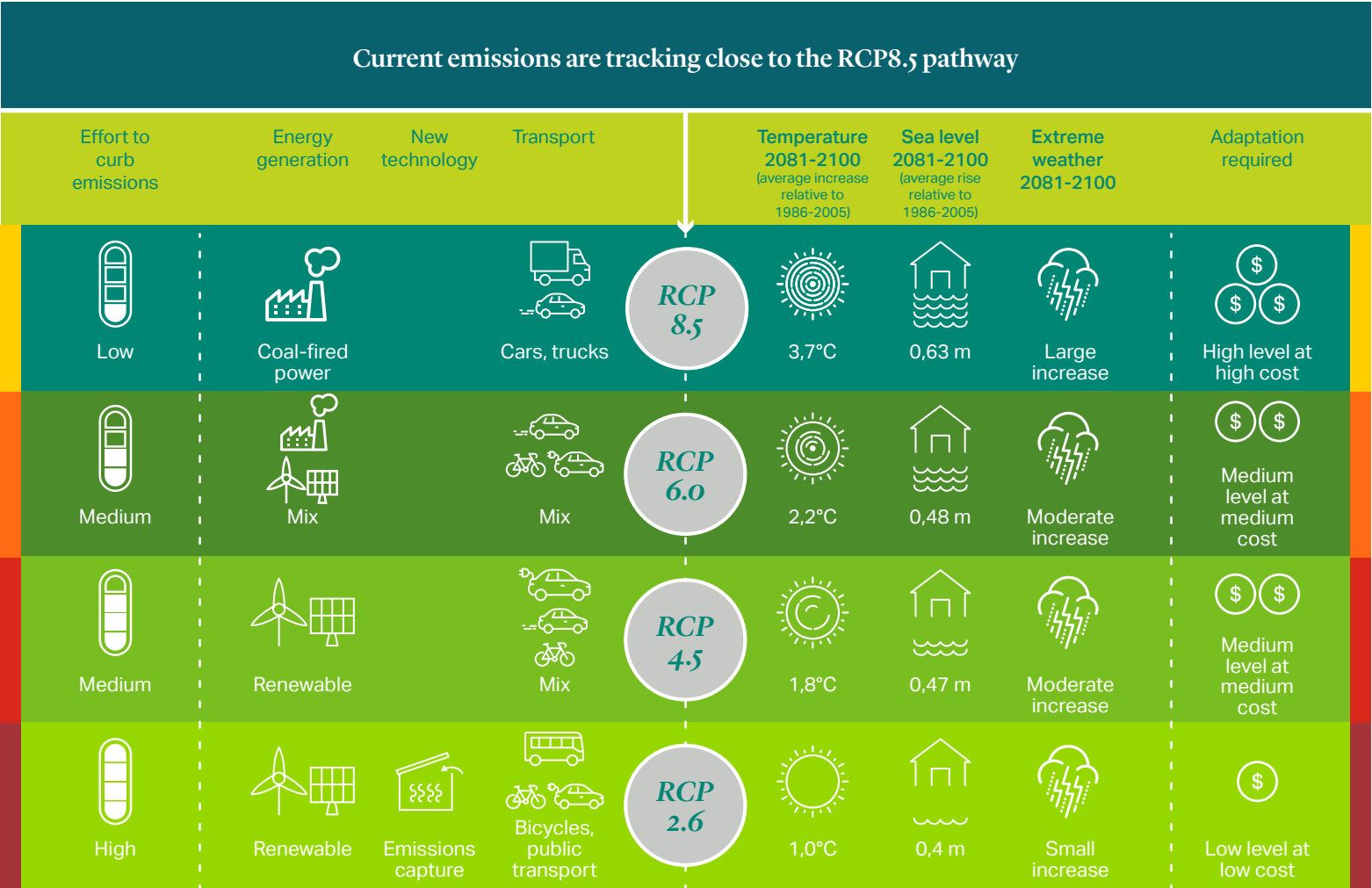
Helping to mitigate climate change continued

FAST FACTS¹

RCP stands for 'Representative Concentration Pathway' - To understand how our climate may change in future, we need to predict how we will behave. For example, will we continue to burn fossil fuels at an ever-increasing rate, or will we shift towards renewable energy?

1.5°C increase in temperature is recognised as the threshold at which climate change becomes dangerous.

The RCPs try to capture these future trends. They make predictions on how concentrations of greenhouse gases in the atmosphere will change in future as a result of human activities. The four RCPs range from very high (RCP8.5) through to very low (RCP2.6) future concentrations. The numerical values of the RCPs (2.6, 4.5, 6.0 and 8.5) refer to the concentrations in 2100.

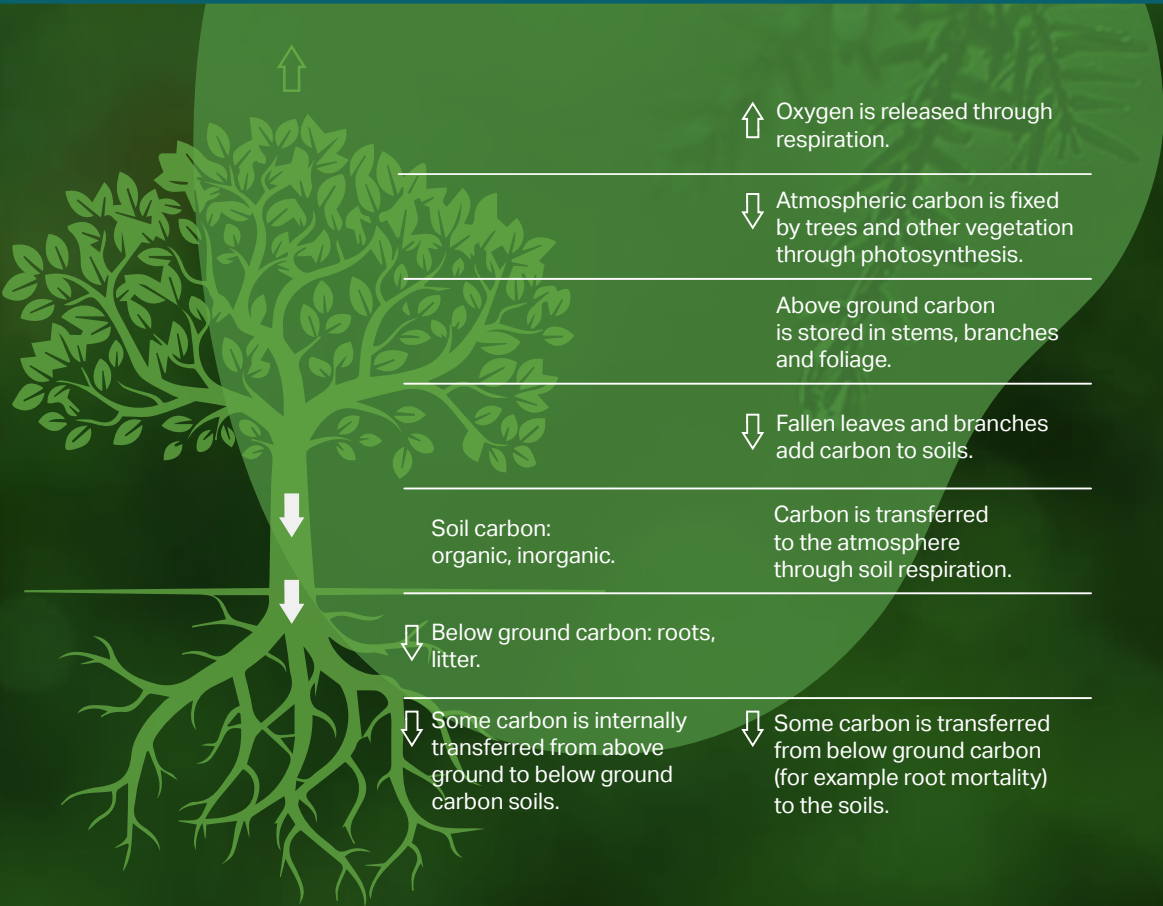


Helping to mitigate climate change continued

FAQ

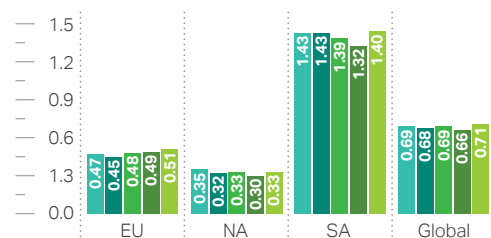
HOW DO TREES ACT AS CARBON SINKS?

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



Measuring and monitoring our GHG emissions

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

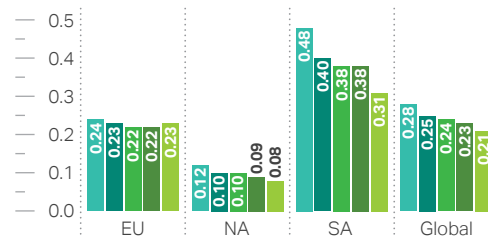


Note:

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.

Globally, there was an increase. In SEU, this was largely due to lower saleable production, attributable to increased product portfolio and trials at Condino Mill; lower Covid-19 related production at Gratkorn Mill and a lower load on the CHP system at Lanaken Mill. Emissions at Ehingen Mill increased due to a reduced volume of spent liquor (related to reduced pulp production). The increase in SNA was the result of more natural gas firing and less combustion of black liquor at Cloquet Mill due to curtailment of the pulp mill. Somerset utilised more natural gas because of Covid-19 related price reductions. The increase in SSA was due to curtailed production at Ngodwana and Stanger Mills; as well as boiler instability at the latter – the result of equipment failures and power outages that led to increase use of heavy fuel oil during start-ups. At Ngodwana Mill, less biomass was burned in the Pulverised Fuel (PF) boiler increasing coal consumption. This was attributable to the Ngodwana energy biomass boiler interfacing; PF boiler tube leak; reduced PF boiler steaming rate due to newsprint commercial downtime and reduced PF boiler steaming rate due to TG2 transformer failure.

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

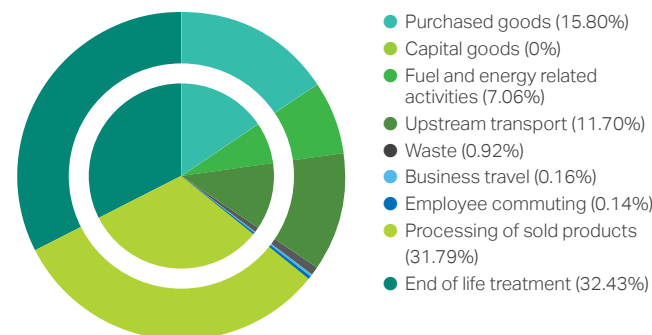


Note:

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

Globally, there was decrease. However, there was an increase in SEU as Kirkniemi Mill purchased more power and reduced production at Stockstadt Mill led to process inefficiencies. Emissions decreased in SNA, mainly due to a significantly lower purchased power emission factor as a result of less coal power plants supplying the north east region with electricity. In SSA, emissions also decreased. This was due to an increase in recovery boiler availability at Saiccor Mill and a related increase in power self-sufficiency. Imported power at Ngodwana Mill decreased because of better quality coal (enhanced steam generation) leading to high levels of power self-sufficiency. However, the biggest driver for this was the commercial downtime on newsprint – a product generally associated with very high power demand. All the pulp produced for newsprint is either from groundwood or external sources and no energy is given back to the system as is the case with kraft linerboard.

Scope 3 GHG emission categories (2020)



Scope 3 emissions are defined as indirect emissions not included in Scope 2 from activities of the organisation, occurring from sources that they do not own or control and covering emissions along the value chain.

Our Scope 3 carbon footprinting is based on guidelines provided by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (also referred to as the Scope 3 Standard). We are committed to acting responsibly throughout our value chain. Calculating Scope 3 emissions allows us to make decisions not only based on price but also on the environmental performance of suppliers and customers, as well as consumer behaviour. Integrated and non-integrated mills are also more comparable when the total Scope 1 + 2 + 3 emissions are considered.

The GHG Protocol divides Scope 3 emissions into 15 categories. Sappi reports upstream emissions (Categories 1 – 7 comprising of emissions from purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated, business travel and employee commuting) as well as downstream emissions

(Categories 10 and 12, comprising of emissions from processing of sold goods and end of life treatment of sold goods), the other categories are not relevant for Sappi. Upstream emissions comprise of 35.8%, and downstream emissions of 64.2% of total Scope 3 emissions.

Excluded categories:

Category 8, Upstream leased assets, is not applicable. Category 9, Downstream transportation and distribution, is not applicable, because Sappi pays for the transport and is therefore included in Category 4, Upstream transportation and distribution. Category 11, Use of sold products, is not applicable as our products do not directly consume energy in the use phase.

There was an increase in Scope 3 emissions from FY18 to FY19 due to an increase in data accuracy. Reduced production because of Covid-19 caused a reduction in Scope 3 emissions when comparing FY20 to FY19.



Please refer to *Our 2020 Planet indicators* on www.sappi.com/2020GSDR-Planet-indicators for these and other graphs detailing

- Specific NO_x emissions
- Specific SO_x emissions
- Specific particulate matter emissions

Using our expertise to help create a climate-smart future

Mitigating climate risk on our plantations



We mitigate climate-related risk to our plantations by:

- Adjusting and directing our tree breeding strategy using modelled future climate data that helps us to produce and select the most optimally suited hybrid varieties for each climatic zone
- Replacing pure species with hybrids 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
- World-leading tree improvement programmes (see Advanced breeding techniques)
- Using satellite imagery and drones to rapidly detect and respond to change
- Monitoring 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
- Implementing an extensive fire protection strategy (see next box), as climate change raises the potential for fires

Collaborating to reduce fire risk

In line with our focus on being a trusted partner and establishing and maintaining proactive dialogue with all our stakeholders, we incorporate a broad spectrum of stakeholders into our fire protection strategy, including our staff, neighbouring communities and fire protection associations (FPAs). In fact, SSA was a pioneer, having introduced aerial fire-fighting to the South African forest industry in 1981.

Fire risks are managed via an integrated Fire Risk Management System. In addition, significant investment has improved fire detection, while fire crew training and improved equipment has significantly improved response times to fires. Sappi

staff play key roles in the provincial and local FPAs that have contributed greatly to changing South African legislation about the prevention and protection against wildfire. Involvement and leadership provided at FPAs ensures integrated fire management practices are embedded in the greater community and resource efficiencies and reaction is optimised. For example, together we ensure that suppression resources are optimally placed on high fire risk days, response readiness is confirmed and deployment is coordinated in an integrated manner. This enhances risk management both on and off our property.



Advanced breeding techniques



Research and development of genetically improved planting stock has been conducted at Sappi's Shaw Research Centre in Howick for over 25 years. Tree improvement is aimed at increasing pulp yield produced per hectare by testing various species and hybrids across Sappi's diverse landholdings. As well as growth improvements, trees are bred for superior wood properties and resistance to biotic and abiotic threats including frost, drought, pests and diseases. A broad genetic base, acquired over 25 years and a skilled breeding team exploiting new technologies are some of the assets of the programme.

Focusing on water stewardship

Why it's material

Globally, water withdrawal rates have tripled over the last 50 years, a trend that is expected to continue, doubling by 2050. While water is a renewable resource, with the expected rate of groundwater withdrawal over the next few decades, we run the risk of removing more water from our aquifers than can be replenished by nature. In addition, demands and competition for water are expected to increase even further as the global climate changes, putting more pressure on water supplies.



How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

- 4 Sustainability expectations
- 9 Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence
- Enhance trust

The global forces shaping our Thrive25 strategy

- Climate change continuing to impact businesses and reshape societies
- Resource scarcity and growing concern for natural capital



OUR 2025 TARGET



REDUCE SPECIFIC WATER USE IN WATER STRESSED LOCATIONS

18%

Water is vital to all life, and especially to our business. Water not only nourishes trees but is used to make pulp and paper, generate steam power and so much more in our mills. That's why we take our role as responsible water stewards in the regions where we live and work so seriously. Our water reduction target focuses especially on our mills in South Africa where we have some of our largest operations.



FAST FACTS

3 in 10 people lack access to safely managed drinking water services



6 in 10 people lack access to safely managed sanitation facilities.



Women and girls are responsible for water collection in 80% of households without access to water on the premises meaning that girls often miss out on school

Over 1.7 billion people are currently living in river basins where water use exceeds recharge.

70% of all water abstracted from rivers, lakes and aquifers is used for irrigation



2 in 5 people do not have a basic hand washing facility

Focusing on water stewardship continued

Our approach

Pulp and paper operations are highly dependent on the use and responsible management of water resources, with pulp production involving a higher level of specific water use than the production of paper. 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 papermaking 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. Withdrawal from surface sources (mostly rivers) accounts for the largest percentage of water use. This withdrawal is subject to licence conditions in each area where we operate.

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.

Re-use

Water is recycled and re-used 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 re-used 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.

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.

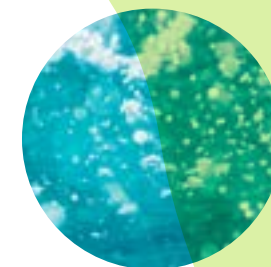
Wastewater (effluent)

Our closed loop cooking processes essentially serve as the first stage of effluent treatment, as they reduce chemical loading into the environment. 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 land. At our mills, once the water is used, re-used and treated, it is returned to surface water sources.

Testing

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

According to the
World Health
Organisation, more
people die from
unsafe water than
from all forms
of violence,
including war



Focusing on water stewardship continued

Key developments in 2020

Water is a significant input for Sappi. In 2020, globally we **extracted 277 million m³ litres of water for all purposes**. The impact of Covid-19 on our specific water consumption was significant, with production curtailment (S) and downtime taking their toll. [Read more](#). At half year (the end of March 2020) specific water consumption was 33,36 m³/adt (FY2019: 34.17 m³/adt, while at year end (30 September), it was 41.51 m³/adt – an increase of 24.4%, giving a total average of 36.82m³/adt.

Throughout our operations, we continue to focus on the responsible use of water. For example, in addition to the other environmental benefits our **Vulindlela expansion project at Saiccor Mill** will result in water consumption being reduced by around 5% and water use efficiency increasing by approximately 17%.

In South Africa, which is classified as a water-scarce country in terms of the World Resources Institute criteria, climate change has meant we are increasingly focusing on water availability and cost. As discussed under [Helping to mitigate climate change](#), we have engaged a third party service provider to run **water-related scenarios on Saiccor Mill**. We have also established a Water Stewardship Working Group that is currently assessing the water risk and mitigation actions related to all our mills and forestry operations, as well as to our neighbouring communities. In addition, we are partnering with WWF South Africa on a water stewardship project in the uMkhomazi catchment area.

We delineate riparian zones, ensuring that these are kept free from commercial trees and that corridors for wildlife are created.

Commercial forestry plantations account for **3% of total water** use in South Africa while agriculture and crop irrigation use approximately 60%.



We strictly avoid spraying near watercourses.



We prevent erosion, by leaving harvesting residue on the ground and using appropriate harvesting and extraction methods.



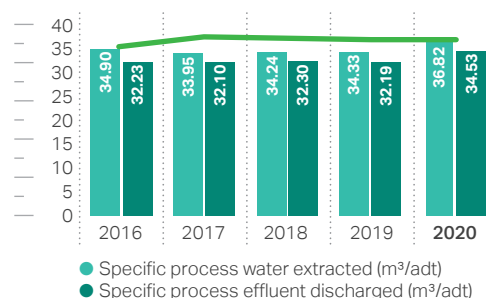
We regulate drainage and minimise erosion through the appropriate planning and construction of roads to ensure water run-off is not directed straight into rivers.



Our plantations are not irrigated, but use only rainwater.

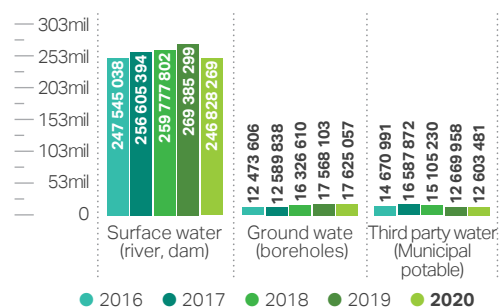
Focusing on water stewardship continued

Specific process water returned to extracted (m³/adt)



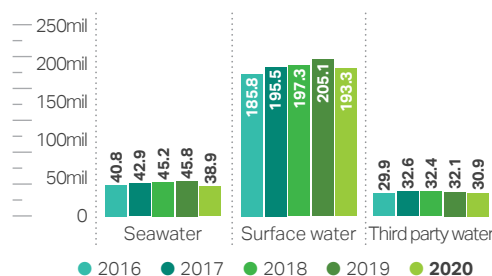
Globally there was an increase in specific water consumption. In **SEU**, due to reduced production, all mills increased consumption with the exception of Carmignano and Alfeld Mills. In **SNA**, the increase was driven by curtailed production at Cloquet Mill. In **SSA**, consumption was stable, with increases at Stanger and Saiccor Mills offset by a decrease at Tugela Mill

Total water withdrawal by source (m³/annum)

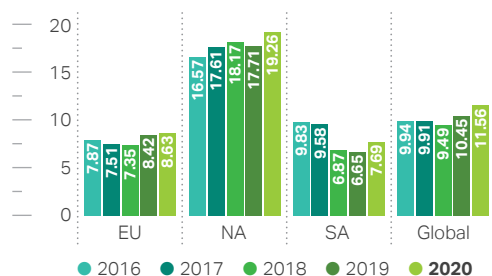


Total water withdrawal decreased globally and regionally due to reduced production.

Total water discharge by destination (m³/annum)



Specific COD (kg/adt)

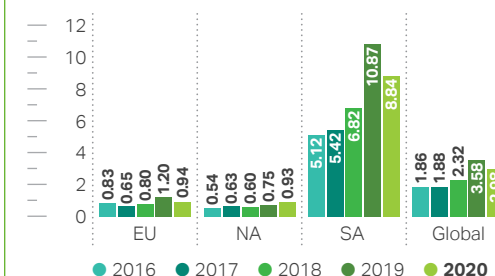


Globally there was a slight increase. In **SEU**, the slight increase was due to reduced paper production compared to pulp production at Ehingen Mill. At Stockstadt Mill, production was unstable, which caused upsets in the wastewater treatment plant. Looking forward, **SEU** plans to increase pulp integration, which will lead to increased specific COD load. To mitigate this, Alfeld Mill will increase its pulp mill evaporation capacity and the capacity of the anaerobic part of its effluent treatment plant. This in turn will increase the process stability of the biological effluent treatment and will lead to decreased values for TSS and COD in the final effluent. At Gratkorn Mill, in alignment with BAT requirements a switch to closed circle magnesium oxide-based pre-bleaching and a capacity increase of the sludge handling equipment with screw presses will

be implemented in mid- 2021. In **SNA**, the increase was due to poor washing and evaporator condensate quality during Qs1 & 2, with curtailment having a negative impact. Improvements at Matane and Somerset Mills only partially offset the increase. Note that integrated mills, like Cloquet and Somerset Mills where kraft pulp is produced, have higher COD values than not integrated mills. In **SSA**, the increase was due to cleaning of the pith clarifier at Stanger Mill as well as mill instability in terms of stop/starts. The increase at Tugela Mill was due to the cleaning of emergency dams and several liquor tanks.

Saiccor Mill has been excluded from this graph as it is the only mill in the group to use the sulphite pulping process in the production of DP. (Both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process). However, over five years, Saiccor Mill has reduced specific COD by 3.5% and will continuously improve its water quality footprint through further capital investment.

Specific TSS (kg/adt)



Globally, there was a decrease. In **SEU**, all mills except for Maastricht decreased TSS emissions or kept them stable, with Lanaken Mill returning to former values after finalising the pm 8 rebuild. As described above, as with COD, projects at Alfeld and Gratkorn Mills will have a positive impact on TSS levels. In **SNA** the increase was driven by curtailment at Cloquet Mill as well as primary clarifier rake failure in Q1. There increase at Somerset Mill was to carryover from the polishing pond, as dredging was delayed due to Covid-19. Matane and Westbrook Mills both showed improvements that only partially offset the increase. Nonetheless, both mills maintained compliance with the environmental regulations during these episodes. In **SSA**, there was overall decrease, attributable at Saiccor Mill to calcium line downtime and at Stanger decrease to successful chemical trials on the effluent system. The decrease at Tugela Mill was the result of improved clarifier and belt press efficiency, reduced fibre loss on the paper machine and reduced operation of the screw press.

Focusing on water stewardship continued

Flattening the sodium curve at Ngodwana Mill

Irrigation effluent is pumped from Ngodwana Mill daily into two dams that are used as buffer capacity to manage both effluent temperature and any settling of fibre before being pumped to the irrigation fields.

Gypsum is used to treat effluent for soil remediation. The capacity of the previous gypsum dosing system did not address instantaneous and spike demand for additional gypsum.

Infiltration rate is defined as the rate at which soil can absorb rainfall or irrigation water and it varies with the water quality. There are two common water quality factors influencing infiltration rate, one of which is the sodium absorption rate (SAR), representing the concentration of sodium relative to calcium and magnesium. In general, the higher the SAR, the less suitable the water is for irrigation and the infiltration rate generally decreases.

The objective of a recently completed project at the mill was to 'flatten the curve'. When there are excursions in the mill that influence the sodium in the effluent, the sodium concentration in the SAR equation increases. The mill countered this by adding more gypsum (CaSO_4). However, by the time the gypsum was added, much of effluent had passed the control point and was already being used for irrigation purposes.

To deal with this issue, the mill recently concluded a two-phase project. The first phase involved the installation of electronic equipment to divert and control the high and low conductivities to the dams. The second phase was the installation of an automated gypsum dosing system.

The project enabled the mill to catch the high sodium excursions and then bleed them in slowly with the rest of the irrigated effluent. This has reduced the effect of the high sodium on the SAR and by 'flattening the curve', has reduced SAR spikes.



Accelerating circular business models

Why it's material

There is a growing recognition among designers, businesses and consumers that we must move away from a linear 'take, make, waste' model of consumption where we extract raw materials, manufacture products and discard them to landfills. The pulp and paper industry is circular by nature, producing recyclable products made from renewable resources that are manufactured using a high proportion of renewable energy. We approach the environmental impact of our operations from an holistic perspective grounded in life-cycle thinking, from procurement of raw materials and energy through manufacturing, use and the next life of our products. The benefits of this holistic approach include less waste, lower costs and reduced environmental impact.





How this issue links to other aspects of our business

Our global priority SDGs



Our top ten risks

-  4 Sustainability expectations
-  9 Climate change

Our strategic fundamentals

- Grow our business
- Drive operational excellence

The global forces shaping our Thrive25 strategy

- The move towards a circular economy
- Climate change continuing to impact businesses and reshape societies
- Resource scarcity and growing concern for natural capital



OUR 2025 TARGETS



LAUNCH PRODUCTS WITH DEFINED SUSTAINABILITY BENEFITS

25 PRODUCTS

REDUCE SPECIFIC LANDFILLED SOLID WASTE

14%

Manufacturing products from renewable resources is the core of Sappi's business and central to our commitment to the circular economy. Through R&D, practical innovation and new product development, we continually create new products, solutions and value from natural resources.

The circular economy is based on three principles: design out waste and pollution; keep products and materials in use; regenerate natural systems¹

¹ Source: Ellen MacArthur Foundation

Accelerating circular business models continued



FAST FACTS¹

Each year the world throws away:



300 million tons of plastic



50 million tons of electronic waste



1/3 of all food produced

Creating a circular economy offers US\$4.5 trillion economic opportunities by:



Avoiding waste



Stimulating business growth



Generating job opportunities

Our circular approach

In keeping with our focus on circular economy principles, we are working to increase our use of renewable energy and eliminate waste through superior product and process design. As an example, we are increasingly benefiting waste. 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. 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.

Over five years, globally, we have reduced specific waste to landfill by 7.3%. During this period, the amount of solid waste combusted for heat use increased by 5.5% and the percentage of beneficially used waste by 10.9%, with the quantity of waste beneficiated standing at 75.3%.

Our focus: recovery and re-use



¹ Source: World Resources Institute

Accelerating circular business models continued

Key developments in 2020

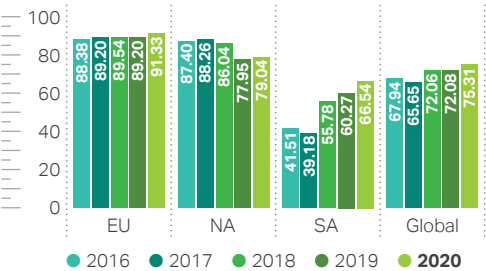
In 2020, we increased the percentage of solid waste beneficiated from 72.1% in 2019 to 75.3%. This meant that waste sent to landfill decreased by 7.6% year-on-year. Recognising that our sphere of influence extends beyond our mill gates, we work collaboratively across the supply chain to share best practices and drive meaningful change. As examples, in 2020 we worked with members of the textile value chain to assess the use of recovered textiles in pulping and also continued work as the co-lead of the committee operating under the auspices of the Alliance for Pulp and Paper Technology Innovation (APPTI) to demonstrate and deploy membrane-based technology for black liquor. Other members of the committee include the Georgia Institute of Technology (Georgia Tech), members of the US forest products industry and membrane system/process developers.



FAST FACTS

Stanger Mill in South Africa uses **bagasse** (sugar cane waste residue) as an input material. The is depithed, and the pith given to farmers as a **soil enhancer**.

Beneficial use of solid waste (%)



Globally, there was an increase. In **SEU**, the increase was due to Condino Mill reusing the fibre containing sludges to produce various products. Beneficial use also increased at Carmignano and Lanaken Mills. In **SNA**, the increase in beneficial use was driven by Somerset Mill – the result of an increase in the rate of burning of own bark for steam generation following the woodroom upgrade. In **SSA**, the increase was due to Saiccor and Tugela Mills beneficiating more wood waste and Ngodwana Mill increasing ash sales.

FAQ

VIRGIN OR RECYCLED? WHICH IS BETTER?

It depends

There is a place for both virgin and recycled fibre, depending on end use: The primary environmental benefit of using recycled fibre – which can only be recycled five to seven times, depending on the paper grade – is that keeping fibre out of landfill reduces landfill volume and the greenhouse gas emissions associated with decomposition. Virgin fibres have a significant strength advantage because recycled fibres are shorter in length than virgin fibres, which makes the paper more susceptible to breakage and also makes it less absorbent

Closing the loop requires both

Each time fibre is recycled, it becomes shorter and weaker. We need to introduce virgin pulp into paper production to maintain the strength and quality of the fibres. In this way, recovered and virgin fibres complement each other ecologically and economically. Without virgin fibre, the recycled paper loop would come to a stop.

The paper application matters

Optimising the life of recovered fibres requires use in the right applications. For instance, higher quality paper products requiring brightness and low contamination should use virgin fibres. Using recovered fibres for these applications requires too much processing with adverse impacts on energy and water consumption, waste generation and the recovery yield from the fibres.

Recovered fibre in South Africa

Sappi ReFibre has developed an outsourced business model that recovers large volumes of paper and benefits members of the informal sector. This aligns with our focus on shared value, whereby we promote win-win partnerships with entrepreneurs and communities. Ngodwana and Tugela Mills have waste plants that treat recovered board and paper for the manufacture of linerboard and fluting for onward conversion into cartons and boxes.



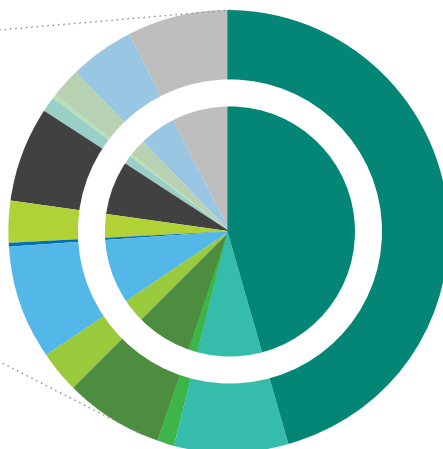
Accelerating circular business models continued

Global breakdown of solid waste types in Sappi (%) (2020)



- Bark (from own operations) (30,80%)
- Other (18,15%)
- Sludge (from pulp and paper mill and biological treatment) (23,79%)
- Boiler ashes (18,31%)

Global breakdown of "other" solid waste types in Sappi (%) (2020)



- Wood waste (knots, sawdust, slivers, fines oversize, pallets, other wood) (41,6%)
- Paper- and packaging waste (7,6%)
- Other combustible waste (1,2%)
- Green liquor dregs/sodium sulphate rejects (6,6%)
- Slaker rejects (2,8%)
- Lime mud (7,8%)
- Wires and felts (0,2%)
- Domestic waste (2,8%)
- Plastics, polystyrene, plastic packaging (6,2%)
- Hazardous waste (1,16%)
- Used oil (0,2%)
- Other/scrap metals, iron, empty cans (2,0%)
- Oil contaminated waste (0,1%)
- Other waste (rolls, small chemicals, grinding roll waste etc.) (4,1%)
- Other waste (6,8%)

As indicated above, we generate very little hazardous waste, 1.16% of the total. This is closely controlled and carefully managed, both at our operations and the receiving facilities.



Please refer to *Our 2020 Planet indicators* on www.sappi.com/2020GSDR-Planet-indicators for these and other graphs detailing

- Total weight of waste by type and disposal method
- Specific landfilled waste

Accelerating circular business models continued

Circularity in action: gaining traction

Becoming more eco-effective at Condino Mill

Surrounded by the scenic mountains and forests of Trentino in northern Italy, the over 130 employees at Condino Mill are especially conscious of their environment. Finding ways to become more eco-effective—reducing waste, emissions and maximising material and resource use—is a challenge they have embraced with enthusiasm and ingenuity.

In 2020, the mill achieved a major eco-effective win by turning sludge that would normally go to landfill, into a valuable new resource for the construction industry. Reflecting the pure nature of Glassine, one of the main paper grades produced from Condino, the mill's sludge is rich in fibre with low chemical content and other additives.

The mill found the right partner to leverage the value of the sludge in La Società Specialised Polymers Industry (SPI), an award-winning start-up that is making waves by turning paper-making sludge into thermal insulation panels for use in buildings. By transforming the sludge into a building material that will last for years, this is an eco-effective solution with long-term benefit. Preparing the sludge for SPI also requires relatively little energy. The mill only presses it to remove some of the water, without having to dry it completely as normally required in recycling processes. Since SPI is located in the region, carbon emissions during transport are also minimal.



Doing more with less at Kirkniemi Mill

Resource efficiency is key in all operations at Kirkniemi Mill. We make more efficient use of resources throughout the life cycle of our products, starting with product development.

Sappi has launched a product from the Kirkniemi Mill based on the new Spraytec coating technology. With the technology, the product has a unique combination of high bulk and gloss. The customer can choose a lower paper base weight while maintaining the thickness and feel of their publication. The printed product becomes lighter and less tonnage of paper is needed.

Thanks to Kirkniemi's own product development work, the environmental impact during the product's life cycle is reduced when less raw material is used to produce a printing surface that meets the customer's needs, and the environmental impact of its transportation and final product distribution is reduced. The introduction of new coating technology has also reduced the need for drying energy on the machine line.



Accelerating circular business models continued

Circularity in action: gaining traction continued

Reclaiming and reusing caustic at Somerset Mill

Somerset Mill's undertook a project was undertaken to reduce the volume of purchased caustic, lower the cost of its boiler flue-gas desulphurisation (FGD), reduce a large source of chemical usage in the mill's operation and offset the acid usage in its onsite waste treatment plant.

Why caustic?

The mill operates as a large steam plant, using a large volume of demineralised water as a main water source for its recovery boiler and two multi-fuel power boilers. Demineralised water has traditionally been generated by an ion exchange process that relies on periodic regeneration of resin beads with a caustic solution of sodium hydroxide.

The innovative solution

The mill designed and installed a system to create on-site a 4% caustic solution that supplies the ion exchange unit for regeneration and a 3% caustic solution to displace purchased caustic in a power boiler FGD scrubber.

The benefits

Benefits include reductions in:

- Overall caustic purchases of wood-related products by 660 dry short tons per annum – positive financial implications
- The amount of fresh water used in the FGD scrubber by 45,400 litres – environmental benefits
- Waste treatment acid usage amount, expected to total 816 tons per annum – further environmental benefits, and
- Deliveries of caustic to the mill – positive implications for carbon footprint.

The result? A more diluted scrubber than the industry standard, thereby enhancing the mill's competitive 3P advantage.

Shortly after year end, this initiative was a winner in the American Forest & Paper Association (AF&PA) annual Better Practices, Better Planet 2020 Sustainability Awards that recognise exemplary sustainability programmes and initiatives in the paper and wood products manufacturing industry.

<https://afandpa.org/media/news/2020/11/13/af-pa-announces-award-winning-sustainability-projects>



Sappi North America honoured with the SEAL Business Sustainability Award

In 2020, Cloquet Mill was named a winner in the 2019 SEAL Business Sustainability Awards for Environmental Leadership. The award celebrates companies for their leadership, transparency, and commitment to sustainable business, and honours specific environmental and sustainability initiatives.

The mill received the award for its land application programme, initiated in 2004 with the Minnesota Department of Agriculture's ag-lime program and the Minnesota Pollution Control Agency as a solution to an impending challenge with landfill space. Essentially, the programme repurposes boiler ash and lime mud byproducts into sustainable agricultural fertiliser that is accessible to the local community at a minimal cost. This reduces the commercial chemical products needed for high-quality growing conditions in the region.

To date, SNA has provided 200 tons of materials to 300 sites per year, with some farmers seeing a 30% increase in crop yield.



Accelerating circular business models continued

Circularity in action: gaining traction continued



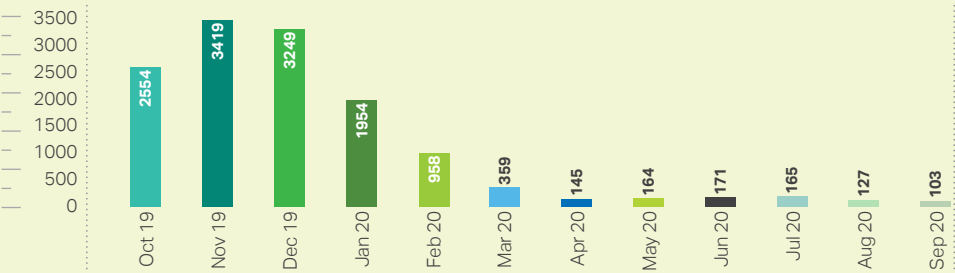
Making smart decisions at Saiccor Mill

As part of the recent woodyard upgrade at Saiccor Mill, scalping screens were installed for the removal of slivers from the woodchips. On commissioning slivers, it was noticed that a large amount of 'good' chips were carried over with slivers and subsequently disposed as woodyard waste to landfills. Through continuous sliver observations, investigations, as well as trial and error, the Saiccor team came up with the idea of installing retention bars on the scalping screens.

Between October 2019 and January 2020, the woodyard disposed on average 2,600 tons per month. After the implementation of the retention bars, the sliver pile tonnage reduced to an average of 240 tons per month. That meant that around 2,360 tons of acceptable chips were retained in the process.

This simple, inexpensive, but highly effective solution that cost approximately ZAR10,000 saved the mill about ZAR30 million per annum in terms of waste disposal and timber loss costs.

Sliver reduction (tons)





TRANSCEND



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%.

BCTMP – Bleached Chemi-Thermo Mechanical Pulp

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 that 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 that 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 that 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 that can contain a variety of anionic and/or cationic species. They are classified as types of ionic solvents with special properties.

dissolving pulp (DP) – 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.

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

EIA – Environmental impact assessment.

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.

FSA – Forestry South Africa.

Forest Stewardship Council (FSC) – Is a global, not-for-profit organization dedicated to the promotion of responsible forest management world-wide.

 <https://ic.fsc.org/en>



Glossary continued

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 that 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.

natural/indigenous 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.  (<https://www.pefc.org>)

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

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.



Glossary continued

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 that drives innovation and commercialisation of biomaterials and biochemicals.

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

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

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

Sappi Southern Africa (SSA) – The business unit within Sappi that 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. <https://www.forests.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.