

Welcome to your CDP Forests Questionnaire 2020

F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

A global leader in dissolving pulp and paper-based solutions, Sappi Limited is headquartered in Johannesburg, South Africa; has over 12,000 employees; manufacturing facilities on three continents, in ten countries, ten operations in Europe, four operations in North America and five operations in South Africa and customers in over 150 countries worldwide. Sappi works closely with customers to provide relevant and sustainable dissolving pulp, paper (speciality, packaging and graphic), paper pulp, and biomaterial products and related services and innovations. Our market-leading range of paper products includes: flexible packaging, label, release liner, containerboard, graphic papers, casting release papers and in our Southern African region: tissue, newsprint, uncoated graphic and business papers. These products serve the fashion, fast-moving consumer goods (FMCG) and industrial sectors. Our dissolving pulp products are used worldwide by converters to produce viscose fibre, pharmaceutical products as well as a wide range of household and consumer products.

Sappi drives product innovation and the development of new uses for a renewable resource, woodfibre, as well as for the biomass and other residues from its production processes. One such area is in the field of biomaterials (cellulose composites, nanocellulose and lignins), biochemicals including hemi-cellulose sugars and bio-energy forest products materials which Sappi believes will play a key role in its future range of products, both as commercial products and for applications within Sappi.

Assets total US\$5.6 billion and in FY2019, sales amounted to US\$5,746 million. Sappi has a primary listing on the JSE Limited and a Level 1 ADR programme that trades in the over-the-counter market in the United States. At the end of FY2019 Sappi had 6,330 public shareholders.

Sappi creates value in the following manner:

- Dissolving pulp: Sappi's dissolving pulp products are used worldwide by converters to create viscose fibre for fashionable clothing and textiles, pharmaceutical products, as well as a wide range of consumer and household products.
- Specialities and packaging papers: Quality specialities and packaging 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.

- Printing and writing papers: The group’s market-leading range of coated and uncoated graphic paper products are used by printers in the production of books, brochures, magazines, catalogues, direct mail, newspapers and many other print applications.
- Bioproducts: We are unlocking the chemistry of trees and meeting the challenges of a carbon-constrained world by establishing a strong position in adjacent businesses including: nanocellulose, sugars and furfural, lignosulphonates, biocomposites and bio-energy. Extracting more value from each tree is at the core of our core business model.
- Forests: Sappi’s 100% Forest Stewardship Council® (FSC®)-certified plantations in South Africa give the company a high-quality woodfibre base. We own and lease approximately 390,000 hectares of which 135,000 hectares are maintained by Sappi Forests to conserve the natural habitat and biodiversity found there. All this land is FSC-certified.

In FY2019, production included: 5.7 million tons of paper; 2.2 million tons of paper pulp; 1.4 million tons of dissolving pulp. In FY2019, in terms of production of group sales, Europe accounted for 50%, North America for 25% and South Africa for 25%.

At Sappi, we take a holistic view of value creation. Value for Sappi is not only about delivering returns to our shareholders, it is about maximising the value of every resource along our value chain to ensure those returns are sustainable. We recognise that our sphere of influence and impact extends beyond our mill gates. Through this lifecycle approach that harnesses the power of the circular economy, we strive to minimise our negative impacts and increase our positive impacts on People and the Planet. We then measure our value creation in terms of our defined targets.

F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	October 1, 2018	September 30, 2019

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

USD

F0.4

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on. For each forest risk commodity selected, identify the stages of the supply chain which best represents your organization’s area of operation.

	Commodity disclosure	Stage of the value chain
Timber products	Disclosing	Production Processing Trading Manufacturing
Other - Rubber	This commodity is not produced, sourced or used by our organization	

F0.5

(F0.5) Are there any parts of your direct operations or supply chain that are not included in your disclosure?

No

F1. Current state

F1.1

(F1.1) How does your organization produce, use or sell your disclosed commodity(ies)?

Timber products

Activity

Growing/production of raw materials
Using as input into product manufacturing

Form of commodity

Hardwood logs
Softwood logs
Sawn timber, veneer, chips
Unprocessed wood fiber
Pulp
Paper

Source

Owned/managed land
Smallholders
Multiple contracted producers
Trader/broker/commodity market
Contracted suppliers (processors)
Contracted suppliers (manufacturers)

Country/Area of origin

Austria

Belarus
Belgium
Bosnia & Herzegovina
Brazil
Canada
Chile
Croatia
Czechia
Denmark
Estonia
Finland
France
Germany
Hungary
Ireland
Latvia
Lithuania
Luxembourg
Netherlands
New Zealand
Norway
Poland
Romania
Russian Federation
Serbia
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
United Kingdom of Great Britain and Northern Ireland
United States of America
Uruguay

% of procurement spend

11-20%

Comment

Woodfibre costs (including harvesting costs) represented approximately 18% of Sappi's procurement costs which were US\$624 in FY2019.

F1.2

(F1.2) Indicate the percentage of your organization's revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber products	91-99%	Some revenue is derived from energy sales, but this energy derives from the pulping of woodfibre, meaning that Sappi's business is entirely dependent on timber. Additionally, at Sappi's Stanger Mill in South Africa, we use bagasse (sugar cane waste residue) as an input material.

F1.3

(F1.3) Provide details on the land area you control and/or manage that is used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber products

Type of control

Other type of control, please specify
Own land and concession/lease

Country/Area

South Africa

Land type

Tree plantations

Area (Hectares)

255,000

% Area certified

100

Certification scheme

FSC Forest Management certification
FSC Forest Management Group certification

Conversion of natural ecosystems during the reporting year

No

Area converted during the reporting year (hectares)

% covered by natural forests

Please explain

Sappi owns and leases 390,000 ha of land of which 255,000 ha is planted and all of which is FSC-certified. The land planted to trees was originally grassland. This conversion from grassland to trees has resulted in an increase in tree cover in the country. These plantations are managed for a sustainable supply of timber, hence there is no impact on natural forest or woodland. The remaining 135,000 ha is unplanted with 20,000 ha consisting of roads and other infrastructure, 100,000 ha consisting of natural vegetation and 15,000 ha under restoration. The areas under restoration are sites from which forestry operations and plantations have been withdrawn, mainly to conserve water. These areas are being restored to natural habitats.

F1.4

(F1.4) Provide details on the land you control and/or manage that was not used for the production of your disclosed commodity(ies) in the reporting year.

Forest risk commodity

Timber products

Country/Area

South Africa

Type of control

Other type of control, please specify
Own land and concession/lease

Land type

Set-aside land

Area (hectares)

135,000

% covered by natural forests

7

Please explain

Approximately 98% of the forest types originally identified on Sappi land still exist in their original form; 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. The areas covered by natural vegetation are managed according to best practice with respect to fire management, weed control, poaching and grazing by livestock in order to maintain healthy natural habitats for biodiversity conservation. This land consists of a network of riparian zones, wetlands, mountain tops, rocky areas, steep slopes and some areas especially set aside for the protection of critically endangered species. Sappi owns seven

proclaimed nature reserves and about 166 other sites that are recognised and managed for the important conservation values they contain.

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber products	Consumption and production data available, disclosing

F1.5a

(F1.5a) Disclose your production and/or consumption data.

Forest risk commodity

Timber products

Data type

Production data

Volume

1,400,000

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Dissolving pulp

Forest risk commodity

Timber products

Data type

Production data

Volume

2,200,000

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Paper pulp

Forest risk commodity

Timber products

Data type

Production data

Volume

5,700,000

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Paper

Forest risk commodity

Timber products

Data type

Production data

Volume

65,594

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Lignosulphonates

Forest risk commodity

Timber products

Data type

Production data

Volume

39,667

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Sawn timber

Forest risk commodity

Timber products

Data type

Consumption data

Volume

5,981,223

Metric

Liters

Data coverage

Partial commodity production/consumption

Please explain

Consumed pulp wood

Forest risk commodity

Timber products

Data type

Consumption data

Volume

987,113

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Consumed wood chips

Forest risk commodity

Timber products

Data type

Consumption data

Volume

1,105,796

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Consumed purchased paper pulp

Forest risk commodity

Timber products

Data type

Consumption data

Volume

119,968

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

Consumed recovered paper

F1.5b

(F1.5b) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Rio Grande do Sul

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Santa Catarina

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sao Paulo

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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 Sappi's Supplier Code of Conduct and Group Woodfibre Procurement Policy's requirements.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction
Parana

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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 Sappi's Supplier Code of Conduct and Group Woodfibre Procurement Policy's requirements.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction
Minas Gerais

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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 Sappi's Supplier Code of Conduct and Group Woodfibre Procurement Policy's requirements.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Bahia

% of total production/consumption volume

0.7

Please explain

Sappi neither owns nor manages land in Brazil, and does not have production there either. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount totalled less than one percentage (0.70%) of the total purchased woodfibre volume. 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 Sappi's Supplier Code of Conduct and Group Woodfibre Procurement Policy's requirements.

Forest risk commodity

Timber products

Country/Area of origin

Any other countries/areas

State or equivalent jurisdiction

% of total production/consumption volume

99.3

Please explain

The full breakdown of the countries of origin in 2019 of Sappi's woodfibre supplies was as follows: Austria (4%), Belgium (2%), Brazil (1%), Canada (6%), Chile (4%), Czech Republic (1%), Estonia (1%), Finland (7%), France (1%), Germany (12%), Slovakia

(1%), South Africa (32%), Spain (1%), Sweden (2%), United States (21%), Uruguay (4%); less than 0.5% from each: Belarus, Bosnia and Herzegovina, Croatia, Denmark, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Serbia, Slovenia, Switzerland, United Kingdom. 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 Sappi's Supplier Code of Conduct and Group Woodfibre Procurement Policy's requirements.

F1.6

(F1.6) Has your organization experienced any detrimental forests-related impacts?

Yes

F1.6a

(F1.6a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Forest risk commodity

Timber products

Impact driver type

Physical

Primary impact driver

Forest fires

Primary impact

Reduction or disruption in production capacity

Description of impact

In South Africa Sappi owns and leases 390,000 ha of land of which 255,000 ha is planted. The remaining 135,000 ha is unplanted with 20,000 ha consisting of roads and other infrastructure, 100,000 ha consisting of natural vegetation and 15,000 ha under restoration. Climate change exacerbates the likelihood of forest fires which in turn have the potential to impact the sustainability of this fibre base.

Primary response

Engagement in multi-stakeholder initiatives

Total financial impact

19,909,000

Description of response

The cost of fire damaged timber in FY2019 was US\$4 million; insurance costs were US\$909,090 and fire prevention was US\$15 million. Following devastating fires in 2007/2008 Sappi implemented an extensive fire protection strategy through which risks

are now 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 fire protection associations (FPA). Involvement and leadership provided at FPAs ensures integrated fire management practices are embedded in the greater community and resource efficiencies and reaction is optimised. Example: Ensuring 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 on and off property

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Timber products

Value chain stage

Direct operations
Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

> 6 years

Tools and methods used

Internal company methods
External consultants
FSC Global Forest Registry
National specific tools and databases
Other, please specify

Supplier Code of Conduct; Code of Ethics; PEFC and FSC databases to ascertain the certification status and validity of certificates of suppliers; FSC Controlled Wood Risk Assessments

Please explain

The Sappi group has an established culture of managing key risks. In the broadest sense, effective risk management ensures continuity of operations, service delivery, achieving objectives (strategic and otherwise) and protecting the interests of the group. At a group and regional level, the group and regional Risk Management Councils meet bi-annually to identify, assess and discuss risks. The top risks are then identified, captured and plotted on a heatmap in terms of likelihood and severity. Key risks, including forest risks, are monitored and publicly reported on annually. We have a process for determining materiality and likelihood of all Sappi's risks. Forest risks considered include regulatory, reputational, climate and weather related (fire and pests), forest management, operational resource management (water, energy), licence to operate and customer behavioural change. At operational level, due diligence procedures are in place in all regions to fulfil the PEFC Due Diligence Systems and FSC Controlled Wood requirements and risk assessment procedures related to the EU Timber Regulation/Lacey Act are also in place. Sappi's procurement conducts risk evaluation of each country and each supplier from which we source wood. If sourcing from any regions where the FSC Controlled Wood National Risk Assessments (NRA/CNRA) show specified risk, we implement mitigation and monitoring measures. Supplier data (origin, tree species, environmental performance) is gathered at least annually. The Supplier Code of Conduct supports the work. Regular internal and external third-party (SGS, Soil Association, BV, NEPCo) audits monitor the compliance with the requirements of FSC CoC/CW, PEFC CoC and SFI CoC and Fiber Sourcing systems. The principles of ISO 14000 and FSC, PEFC, and SFI are well entrenched across the group. At asset (regional and operating unit e.g. mills) level, risks pertaining to that specific asset are assessed and mitigation actions are managed by the management team of that specific asset. The risks to assets are reviewed on a six-monthly basis by the management team responsible for the asset and all major assets are covered by insurance. On an annual basis, the risks associated with Sappi's non-forestry assets are reviewed by external consultants. The results of these reviews are converted to mitigation action plans, if required.

F2.1b

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

Woodfibre is Sappi's major input which we used to produce 7.6 million tons of saleable production in 2019. Woodfibre is a versatile, renewable, natural resource in high demand from many sectors. This market demand can at times lead to local competition and short supply especially when production has been reduced due to natural events such as fire, insects or disease. Availability is assessed as part of an ongoing risk management process. In Europe, Sappi mitigates fibre supply risk by procuring wood through well-established wood sourcing companies (proNARO GmbH in Germany, Sapin S.A in Belgium, Papierholz Austria GmbH in Austria, Metsä Forest in Finland) all of which operate with an established pool of forest owners and wood suppliers. In South Africa and North America our combination of approaches includes both short- and long-term wood supply agreements. In South Africa, we limit risk in terms of availability of supply by owning and leasing 255,00 ha of 100% FSC-certified tree plantations. We also limit risk through our world-leading tree improvement programmes which focus on fibre gain, fibre characteristics and the mitigation of pests and diseases. We are adjusting and directing our tree breeding strategy through the use of modelled future climate data. Traditional tree breeding is a relatively slow process and in order to keep up with environmental changes, Sappi's 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 plantations by 2025. We are also making use of genetic tools, like DNA fingerprinting, to enhance and accelerate their breeding and selection process. Sappi is a member of SFI which is involved in several activities in the state of Maine from which we source woodfibre. These include a three-year project on soil productivity, a Weymouth Point study on the long-term impacts of whole tree harvesting; and LiDAR remote sensing analysis which is being used to enhance the design and operation of inventory programmes for Maine's forest industry stakeholders. Wall-to-wall enhanced forest inventory maps of percent softwood, stem density, quadratic mean diameter, basal area and volume are generated for the entire Ashland West study area.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

The inability to procure high-quality woodfibre (pulp wood, chips, paper pulp) could severely impact our ability to operate and is covered in Sappi's top ten risks under 'natural resource constraints'. At operational level, quality is determined as part of the fibre procurement process by assessing fibre sources, silviculture and harvesting techniques etc. Sappi also enhances good quality and sound forestry management practices by utilising credible, third-party-verified forest certification schemes. Globally in 2019, approximately 75% of the woodfibre supplied to our operations was certified. All

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

Sappi's forest planning section documents, monitors and models its woodfibre resources to ensure that a continuous, high quality supply of timber is available as required by different markets. Accurate information about growing stock is obtained from systematic sampling of stands and growth models used to model stand development over time. Conventional sampling is supplemented by LiDAR data. LiDAR surveys are also used to accurately map the terrain and improve our slope classification of compartments. We also developed ground roughness maps to indicate the presence of boulders and other obstacles for ground based machinery. This information assist to improve harvest planning, to select the most appropriate harvesting systems and as a result reduce environmental impacts.

Adjustments to growing stock are made for damage caused by pests and diseases as well as climatic extremes and fire risk. Sophisticated software is then used to produce annual operational, tactical and strategic supply plans. The planning section incorporates species recommendations from the research section in the three-year planting plan. In addition, we use remote sensing and GIS analysis to assist with the identification and management of biotic and abiotic risks. We enhance our fibre base through leading-edge tree improvement programmes which aim to produce high-quality wood with the required pulping characteristics and increase yield per hectare. We achieve this mainly through genetic selection of planting stock.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, always included

Please explain

Recognising that forests are linked to almost all of the United Nations Sustainable Development Goals (SDGs) goals and that healthy ecosystems are vital to our survival, wellbeing and prosperity, conducting our business in an environmentally sustainable manner is a necessity and an obligation. This obligation is integral to our licence to operate on an individual, community, country and global level. Sappi's Group Woodfibre Procurement Policy describes the company's goals, principles and requirements for the procurement of wood based raw materials. Furthermore, the impact of our woodfibre sourcing activities on ecosystems and habitats is monitored in terms of the internationally recognised, third-party verified certification systems we use. Given that impacts of our activities to the ecosystems and habitats are pivotal for raw material quality and availability, related risk management is integrated throughout all decision-

making levels. In South Africa, we participate in the national stewardship programme and have seven declared nature reserves under this programme. We provide the Endangered Wildlife Trust with feedback on the numbers and locations of various species from landowners. 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 actions of the SFI includes support for the Ruffed Grouse Society which creates healthy forest habitat for the benefit of ruffed grouse, American Woodcock and other forest wildlife. Support is also given to Dovetail Partners who conduct forest dwelling bat surveys in Aitkin and Carlton counties in support of a broader initiative related to bat habitat conservation efforts in Minnesota; and support for the University of Minnesota Sustainable Forests Education Cooperative which offers continuing education opportunities to forestry and natural resource professionals in a broad range of fields.

Regulation

Relevance & inclusion

Relevant, always included

Please explain

Sappi is exposed to a number of laws and regulations across a wide range of jurisdictions. A legal compliance programme designed to increase awareness of, and compliance with, applicable legislation is in place. The Group Compliance Officer reports bi-annually to the Group Audit and Risk Committee. Our aim is to minimise our impact on the environment. The principles of ISO 14000, FSC™, SFI®, PEFC™ and other recognised programmes are well entrenched across the group. We have also made significant investments in operations and maintenance to reduce air emissions, waste water discharges and waste generation. We closely monitor the potential for changes in pollution control laws, including GHG emission requirements, and take action in our operations accordingly. We invest to maintain compliance with applicable laws and cooperate across regions to apply best practices in sustainability. Regulations related to forestry risk are not only monitored by the legal department but also by the regional sustainability managers, discussed at regional sustainability councils and also at the Group Sustainable Development Council, as well as being monitored through the enterprise-wide risk management process. An example is the European Green Deal, a set of policy initiatives aimed at making Europe climate neutral by 2050. Sappi complies with EU Timber Regulation, the US Lacey Act, and Australian Illegal Logging Prohibition Regulation. Tree species identified as endangered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are neither utilized nor imported. In South Africa, we are involved with the beneficiaries of land reform. Poor post-settlement support is one of the key reasons cited by experts for the failure of many land reform projects in South Africa. We work to overcome this hurdle

by working with land-reform beneficiaries to assist with the management of timber on their properties, post settlement. 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 manage those plantations. We have entered into supply agreements with the new beneficiaries and provide them with assistance.

Climate change

Relevance & inclusion

Relevant, always included

Please explain

Sappi has committed to science-based targets through the Science Based Targets initiative (SBTi). This commitment highlights Sappi's increased strategic focus on decarbonisation and aligns our low-carbon transformation plans with climate science. In all three regions where Sappi operates, climate change could alter the frequency and intensity of forest disturbances such as insect outbreaks, invasive species, wildfires, and storms. These disturbances can reduce forest productivity and change the distribution and abundance of tree species. In South Africa, we mitigate risk to our plantations by: 1) Adjusting and directing our tree breeding strategy using modelled future climate data. This will help us to produce and select the most optimally suited hybrid varieties for each climatic zone; 2) 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; 3) Using satellite imagery and drones to rapidly detect and respond to change; 4) 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; 5) Implementing an extensive fire protection strategy, as climate change raises the potential for fires. Forests and forestry play an important role in mitigating climate change: reducing deforestation and forest degradation lowers greenhouse emissions, sustainable forest management can maintain or enhance forest carbon stocks and sinks and wood products can store carbon over the long-term and can substitute for emissions-intensive materials reducing emissions. Sappi plays a pivotal role in this regard and offer consumers an alternative to fossil-fuel based packaging, based on wood from sustainably managed forests. Sappi requires rigorous tracing practices and documentation of the origin of all woodfibre, and evidence that all wood is sourced from controlled, non-controversial sources. We neither harvest nor buy woodfibre which originates from tropical natural forests and our wood sourcing causes zero deforestation.

Impact on water security

Relevance & inclusion

Relevant, always included

Please explain

Water is a significant input for Sappi. In 2019, globally we extracted 289 million litres of water for all purposes, in production terms, 34.17m³/air dry tons specific process water. In South Africa, which is classified as a water-scarce country in terms of the World Resources Institute criteria, all our plantations are subject to a water use licence and are not irrigated. We avoid unnecessary water use by delineating riparian zones and wetlands on our plantations and ensuring these are kept free of commercially planted trees. Water quality is managed by regulating drainage and minimising erosion, thereby preventing run-off into streams and rivers. Pesticide use conforms to the strict FSC standards which aim to minimise the use and impact of these on the environment. Our fertiliser use is kept to a minimum—being used only once in each rotation. This limits the potential impact on water sources in terms of nutrient load. Consequently, rivers, streams and lakes are not negatively impacted by forestry operations, although there is some sedimentation. We have a number of procedures to ensure runoff after harvesting is kept to a minimum. These include leaving harvesting residue on the ground and ensuring that the correct harvesting and extraction methods are used.

In addition, climate change has led to an increased emphasis on water footprint in South Africa. This, in turn, is causing greater focus on the location of forestry plantations, which could affect the quality and quantity of groundwater, the use of water by our operational units, quality of water released back into natural water systems and control of effluent discharge. The cost, availability and use of our water supply also have a direct impact on our input costs.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

Sappi's products are significantly affected by cyclical changes in industry capacity and output levels as well as by the impact on demand from changes in the world economy. Because of supply and demand imbalances in the industry, these markets historically have been cyclical with volatile prices. In addition, turmoil in the world economy has historically led to sharp reductions in volume and pressure on prices in many of our markets. We are continuously taking action to improve efficiencies in all aspects of our business.

Loss of markets

Relevance & inclusion

Relevant, always included

Please explain

The association of paper products with deforestation is a risk that could cause loss of markets. We mitigate this risk by ensuring 100% traceability in the woodfibre supply chain. Our commitment to zero deforestation means knowing the source of woodfibre; ensuring that suppliers implement practices to promptly regenerate forests post-harvest, which is required under the global forest certification standards that Sappi is committed to upholding. It also means implementing our Supplier Code of Conduct to continually assess supply-chain, ethical and legal risk; and not sourcing from suppliers associated with deforestation. We work to build transparent supply chains and maintain close relationships with our suppliers. Forest certification systems with third-party verified forest management and chain-of-custody processes ensure that responsible forest management practices are implemented in the forest and that woodfibre from certified forests can be identified throughout the supply chain.

Brand damage related to forest risk commodities

Relevance & inclusion

Relevant, sometimes included

Please explain

Reputational risk from brand damage associated with negative social and environmental impacts or corruption is considered in our risk assessments in each region, as it could cause loss of sales and affect our licence to trade. We mitigate this risk through our use of forest certification (globally, in FY2019, 75% of the woodfibre supplied to Sappi's mills was certified) and environmental management systems. These include ISO 14001 and ISO 9001 (globally), ISO 50001 (Europe and South Africa) and EMAS (Europe). In addition, we neither harvest nor buy woodfibre which originates from tropical natural forests and we're committed to ensuring that our wood sourcing causes zero deforestation. Sappi requires 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. Our significant investment in shared value programmes also helps to associate the risk of brand damage associated with social impacts. We spent US\$4.1 million in 2019, the bulk of which was allocated to South Africa. Social impacts are covered in our Group Supplier Code of Conduct and Group Human Rights policy and cover areas such as child labour and young workers; forced, slave, bonded, indentured or involuntary prison labour; working hours; compensation; freedom of association and collective bargaining; discrimination, diversity and safety. In terms of safety, the majority of our operations are OHSAS 18001 certified. The Code of Ethics and Group Supplier Code of Conduct also cover environmental issues.

Corruption

Relevance & inclusion

Relevant, always included

Please explain

The need for strong governance and sound ethics underpins all Sappi's risks assessments, and in terms of forest-related risks, the Supplier Code of Conduct, helps ensure that Sappi's values and ethical standards are clearly understood and supported by all our suppliers, their first-tier suppliers and other stakeholders and is a strong tool against corruption together with Sappi's Code of Ethics. Actions are taken against employees who do not abide by the spirit and provisions of our code. Online Code of Ethics, anti-bribery and corruption training as well as social media training have been provided to employees across the group over the past three years.

Stakeholders can report instances of corruption to Sappi hotlines in each region, in full confidentiality. In 2019, 43% of calls related to corruption, fraud and theft. The hotline report rates, categories of reports and outcomes of cases broadly align with international whistle-blower benchmark data.

In addition, the group has a policy that obliges all employees to disclose any interest in contracts or business dealings with Sappi to assess any possible conflict of interest. The policy also dictates that directors and senior officers of the group must disclose any interest in contracts as well as other appointments to assess any conflict of interest that may affect their fiduciary duties.

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

Sappi plays an important role in society, offering efficiently manufactured, recyclable products, made from renewable raw materials. The forestry industry is one of the strategic economic sectors in each region where we operate, and makes a significant contribution to economic growth and job creation, particularly in rural areas, where employment and income generation opportunities are more limited than in cities. In Europe and North America, many of the forests are owned by private people, often smallholders in rural areas. Forestry offers thus both work and income, and contributes both directly and indirectly to the economies and social well-being of rural areas, Sappi's pulp and paper mills are most often situated in rural communities and play thus an important role in providing job opportunities for local people and positive economic impact for the regions. In Southern Africa, our plantations are generally situated in rural areas where there are high levels of poverty and unemployment. Sappi's contractors

employ approximately 10,000 people, which has a significant positive social impact. In addition, our community tree farming enterprise development initiative, Sappi Khulisa ('Khulisa' means 'to grow' in isiZulu) which began in 1983, is aimed at community tree farming and has successfully uplifted impoverished communities in KwaZulu-Natal and the Eastern Cape. The total area currently managed is 34,139 hectares. In 2019, under the programme 425,001 tons of woodfibre was delivered to our operations. Since 1995, a total volume 4,221,941 tons has been purchased from small growers in terms of this programme.

Other, please specify

Relevance & inclusion

Relevant, always included

Please explain

Senescence in forests and an imbalance in growth/ harvesting are issues in North America. Although we do not own land in this region, we address this issue through our Private Lands Stumpage Program, which helps to promote forest health and generate a revenue stream for land owners, thereby helping to keep forest land forested.

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion

Relevant, always included

Please explain

Sappi adopts a partnership approach, whereby collaborate with our customers and innovate to suit specific needs in terms of e.g. recyclability, biodegradability, etc. Market demands are constantly evolving and we continue to strive to offer new or enhanced products and solutions to meet these needs. In terms of providing information to our customers about the fibre sourcing, production processes, and environmental performance behind our brands, we participate in EcoVadis and Sedex. In all three regions we have achieved gold EcoVadis scores, putting us among the top 5% performers evaluated by EcoVadis. In Europe and South Africa, we publish product-specific Paper Profiles (www.paperprofile.com), and in Europe also EMAS-reports. The annual Wood Origin Declarations give mill-specific information on the countries of origin and tree species. In terms of support, dissolving pulp technical centres of excellence are located at Saiccor and Cloquet Mills. In addition, customers can make use of the competence centre for speciality papers and paper laboratory at Alfeld Mill. Sappi North America (SNA) provides annual summaries of forest-based and supply-chain due diligence summaries and risk assessments to customers and stakeholders for review and comment. SNA also provides sourcing information to multiple external third-party platforms that rank the sustainability of products/companies for the convenience of our customers. Information related to our sourcing practices and programmes to support small private landowners

are available on the website and in printed/mailed brochures, some owned and produced exclusively by Sappi and others by regional/state-wide collaboratives in which Sappi participates. We engage directly with customers one-on-one through a variety of avenues/mechanisms to explain our due diligence systems and sustainable practices. Input from customers is used to refine and improve both the communication of our approaches and our practices directly. In 2019, SNA committed significant financial resources as an investor into the new Forests in Focus tool, which is a tool that strives to assess and evaluate forest-based risks within wood baskets for customers, investors and stakeholders, using credible scientific public data collected by state and federal government agencies.

Employees

Relevance & inclusion

Relevant, always included

Please explain

According to Bloomberg, Generation Z-ers accounted for 32% of the global population in 2019. This generation, which we are targeting as future employees, want companies to have a positive purpose that contributes to a better world. To reach our employees, we inform them about our forest-related activities through induction training and targeted internal publications. Sappi's high premium on adherence to ethical behaviour is entrenched in our Code of Ethics (Code). The code sets out expected behaviour in various aspects including corruption, ethical behaviour, human rights, as well as health, safety and the environment. Ongoing Code of Ethics training is provided to employees across the group.

Sappi runs employee engagement surveys every second year to assess connection with the company. We implement action to close gaps identified by employees during the survey.

Investors

Relevance & inclusion

Relevant, always included

Please explain

There is growing interest among investors of sustainability-related issues, most notably deforestation and climate change. Sappi's investor relations (IR) department engages with shareholders and analysts continually: our Chairman and CEO engage with shareholders on relevant issues; we engage with various ratings agencies, particularly on ESG performance; we conduct ad hoc mill visits and road shows and issue announcements through the JSE Stock Exchange News Services (SENS), in the press

and on Sappi's website (see www.sappi.com/SENS).

Sappi also engages with various ratings agencies including FTSE/Russell, MSCI and ISS ESG (formerly Oekom), particularly in terms of ESG performance. We are a constituent of the FTSE4Good Index Series. We have also been classified as Prime by ISS ESG one of the world's leading environmental, social and governance (ESG) research and rating agencies for sustainable investments.

Local communities

Relevance & inclusion

Relevant, always included

Please explain

The communities situated around our mills and forestry operations are integral to our licence to operate. Sappi's pulp and paper mills are most often situated in rural communities and play thus an important role in providing job opportunities for local people and positive economic impacts for the regions. Sappi's aim is to promote shared value which we achieve by encouraging initiatives which facilitate partnerships and collaboration between communities, government and the private sector.

The Abashintshi (isiZulu for 'change agents') programme in South Africa which was first established in KwaZulu-Natal in 2015 is just one example of a community-focused project which is having a positive impact. Based on the Asset-Based Community Development (ABCD) methodology and with the objective of establishing and helping activate entrepreneurial enterprises among their communities, the Abashintshi are taught how to facilitate life skills and to encourage community members in recognising their assets, and adopting a "can-do" attitude, putting these assets to work. The ABCD methodology is based on communities driving the development process themselves by identifying and mobilising existing, but often unrecognised, assets.

The programme has resulted more than 500 small businesses that have either been started up or rejuvenated with the assistance of the Abashintshi. These range from brickmaking projects, poultry and pig farms to creches and home industries, among a host of others. Since its inception the programme has been extended to more than 63 communities in KwaZulu-Natal and Mpumalanga and today involves more than 126 Abashintshi. They are generating an income for themselves through their own businesses and they are helping community members to improve their own businesses.

Sappi Forests has encouraged field days, security co-operation, riverine clearing programmes, participation in conservancies, etc. to improve relationships with neighbours. The growth of activities at ward level in the various fire protection associations is also fostering positive relationships with neighbours. Participation of farmers in the local Fire Protection Associations has grown significantly through the on-

going encouragement of local Sappi management.

NGOs

Relevance & inclusion

Relevant, sometimes included

Please explain

Sappi engages with civil society organisations on issues of mutual interest and belongs to key organisations relevant to our operations. We engage with various civil society groups regarding our societal and development impact. Sappi is an International Stakeholder member of PEFC, a member of FSC's economic chambers North and South, and a member of SFI in the U.S. Sappi is represented on the steering committee of The Forests Dialogue, whose purpose is to contribute to sustainable land and resource use, the conservation and sustainable management of forests, and improved livelihoods by helping people engage and explore difficult issues, find collaborative solutions, and make positive changes. Through participating in many NGO convened sustainability-related conferences and events we actively seek the opportunity to share views and information about forest management and related issues.

In South Africa, Sappi is currently involved with WWF in a water stewardship programme. In North America, Sappi has from time to time financially supported shared biologist positions with NGOs committed to promoting forest health and wildlife diversity. Sappi North America also contributes to numerous NGO initiatives aimed at evaluating forest-based risks, trends, forest health, biodiversity, etc.

Other forest risk commodity users/producers at a local level

Relevance & inclusion

Relevant, always included

Please explain

The Sappi Maine Forestry Programme and the Sappi Lake State Private Forest Programme assist forest landowners to meet their objectives for managing their woodland. Sappi's trained foresters are able to develop a forest management plan geared to the interests of the landowner including wildlife management and aesthetics, marketing of timber to generate maximum return and providing an extensive network of environmental and marketing resources. In Sappi Southern Africa, qualified extension officers provide growers in our Sappi Khulisa enterprise development scheme with ongoing growing advice and practical assistance.

Regulators

Relevance & inclusion

Relevant, always included

Please explain

Sappi engages with government departments and regulatory bodies and sits on a number of High Level Expert groups, to provide input into issues and regulations that affect our industry. We also engage with regional and local governments and local authorities. Areas of mutual interest include: energy issues in general, transition to a low-carbon industry, and developments around carbon taxation; the impact of increased regulations on business; the social and economic benefits of our industry nationally as well as at a local level and enhancing sustainable forest management and land use.

In South Africa we are involved in some 60 land reform projects, helping beneficiaries to manage ±19,000 hectares of land. To ensure sustainable production from these properties, we have entered into supply agreements with the new beneficiaries and provide them with assistance. The level of assistance depends on the requirements of the project, but ranges from a pure supply agreement to a comprehensive forestry enterprise development agreement. The latter is a supply agreement which incorporates development objectives whereby Sappi provides technical and business training as well as administrative support to help entrench these new timber suppliers. While Sappi supports the land claim initiatives generally, we have been frustrated by the implementation of policies and levels of bureaucracy. The forest industry is a key driver of rural growth. If government could unlock some of the bureaucratic lagging, the attendant benefit would flow directly to rural communities. Should the issue of bureaucratic lagging not be resolved, it could heighten social tensions and social unrest which, in turn, could negatively impact Sappi's operations.

Suppliers

Relevance & inclusion

Relevant, always included

Please explain

Sappi's business depends on trusted relationships and active engagement with wood suppliers and forest owners. Sappi's own forests are in South Africa, and thus in all other regions our wood procurement is dependent on external wood suppliers. Sappi requires compliance with its Supplier Code of Conduct, Group Woodfibre Procurement Policy and the FSC and PEFC (incl. SFI) Chain of Custody requirements. Sappi's wood sourcing partners (Sapin S.A. in Belgium, proNARO GmbH in Germany, Papierholz Austria GmbH in Austria and Metsä Forest in Finland) in Europe buy wood mainly from non-industrial private forests, municipalities and state-owned forests. Wood chips, a by-product from sawmilling, are purchased from sawmills. Sappi also purchases paper pulp from external pulp suppliers, mainly from Europe and the Americas. Sappi's mills in the

United States are located in Maine and Minnesota and wood is sourced from landowners and commercial loggers.

Other stakeholders, please specify

Relevance & inclusion

Relevant, always included

Please explain

In FY2019, Sappi joined the Sustainable Apparel Coalition and are using its sustainability measurement suite of tools, the Higg Index, to drive environmental and social responsibility throughout our supply chain. With this membership, we join over 240 global brands, retailers and manufacturers, as well as government, non-profit environmental organisations and academic institutions that are collectively committed to improving supply chain sustainability in the apparel, footwear and textile industry.

In Europe, Sappi is actively working in a number of forest-sector collaborations to ensure a thriving forest bio-economy remains an integral part of the EU Green Deal. Through sustainable forest management practices, responsible sourcing, efficient use of resources and manufacturing innovation, the sector provides fibre-based and low-carbon solutions and products and thus boosts the transition into a circular-economy.

Across the group, Sappi participates in industry associations and collaborations. These include the TwoSides, Technical Association of the Pulp and Paper Industry (TAPPI); Confederation of European Paper Industries (CEPI), Eurograph, European Joint Undertaking on Biobased Industries, Print Power, Save Food, The Alliance of Energy-Intensive Industries, The Two Team Project (focusing on breakthrough technology concepts in the industry that could enable a more competitive future), American Forests and Paper Association (AF&PA), Paper and Paper Packaging Board, Agenda 2020 Technology Alliance, Forest Products Working Group, Sustainable Packaging Coalition (SPC), The Recycling Partnership, Public Private Growth Initiative, Fibre Processing and Manufacturing Skills Education and Training Authority, Forestry South Africa, Packaging SA, Paper Manufacturers' Association of South Africa (PAMSA), Recycle Paper ZA, Printing Industries Federation SA (PIFSA), Institute for Commercial Forestry Research (ICFR), Tree Protection Co-operative Programme (TPCP), Biological Control of Eucalypt Pests (BiCEP), Eucalyptus Genome Network (EUCAGEN), CAMCORE.

F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
Timber products	Yes

F3.1a

(F3.1a) How does your organization define substantive financial or strategic impact on your business?

Sappi has a board-approved framework for risk appetite and tolerance. Risk appetite is the total quantum that Sappi wishes to be exposed to on the basis of risk/ return trade-offs for one or more desired and expected outcomes. This is the quantum of risk that the board believes will provide an adequate margin of safety within the group's risk capacity while enabling the achievement of strategic objectives. Risk tolerance is the amount of uncertainty Sappi is prepared to accept. This is the maximum level of loss or reduced earnings that can be absorbed without compromising key objectives, e.g. return on investment.

EBITDA (earnings before interest, taxes, depreciation, and amortization) is considered a key indicator of the underlying profit performance of the group, reflecting both revenues and costs and aligning closely with our strategic goals of achieving cost advantages and growth. We define a substantive financial impact as 20-25% of EBITDA, which, in FY2019, was US\$687 million. This definition applies to risks both within our direct operations and within our supply chain.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Timber products

Type of risk

Physical

Geographical scale

Country

Where in your value chain does the risk driver occur?

Direct operation

Primary risk driver

Forest fires

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

In South Africa Sappi owns and leases 390,000 hectares of land. Climate change exacerbates the likelihood of forest fires which in turn have the potential to impact the sustainability of this fibre base

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

15,909,000

Potential financial impact figure - maximum (currency)

66,300,000

Explanation of financial

The minimum figure (which is also the cost of response) represents insurance (US\$909,000 and firefighting costs (US\$15 million). The maximum figure is based on an estimated loss of 601,000 white wet tons and represents the replacement value of these tons over and above insurance cover.

Primary response to risk

Engagement in multi-stakeholder initiatives

Description of response

Sappi manages risks 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 fire protection associations ensuring better optimal integrated fire risk management, sharing technical knowledge, resources and skills with broader neighbouring communities, and reducing risk more holistically

Cost of response

15,900,000

Explanation of cost of response

Insurance costs were US\$909,090 and firefighting costs for the year were US\$15 million in FY2019

Forest risk commodity

Timber products

Type of risk

Physical

Geographical scale

Country

Where in your value chain does the risk driver occur?

Direct operation

Supply chain

Primary risk driver

Rising mean temperatures

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

In South Africa, drought and pest infestations have been exacerbated by climate change. Sappi continually monitors and reviews forest best practices in the light of changing environmental factors, thus helping to mitigate any increased threat from water shortages or drought. Our mitigation activities in this area include: maintaining wide genetic variability in planting material – this enables Sappi to breed trees for a wide range of conditions and the rate of change in conditions is probably slow enough for the company to respond in the breeding programme; measuring permanent sample plots measured annually (eucalypts) or bi-annually (pines) to determine the effect of drought on current annual increment as an input to long-term planning; implementing extensive planting of more drought-tolerant eucalypt hybrids; engaging in research and collaboration with industry and tertiary institutions to develop bio-control measures and breed genetically more resistant planting stock.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)
Potential financial impact figure - minimum (currency)

0

Potential financial impact figure - maximum (currency)

45,100,000

Explanation of financial

The minimum amount assumes our forest research keeps pace with climate change so that we manage to keep woodfibre supply to our operations constant, the maximum assumes we lose 10% of our growth. The fair value of our plantations is estimated at US\$451 million (less the estimated costs of delivery, including harvesting and transport costs). The maximum figure given here represents 10% of the fair value.

Primary response to risk

New product/technology development

Description of response

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.

Together with other forestry companies in South Africa and financial support from the Department of Science and Technology Forest Sector Innovation Fund, Sappi has initiated a project with the Global Change Institute (GCI) at the University of the Witwatersrand. 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, 2040 to 2100. The variables would include up to 20 important bioclimatic indicators. Phase 2: 2021 onward: A second iteration of the variables generated for the one-year product, refining the indicators or 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.

Cost of response

3,500,000

Explanation of cost of response

Cost of tree improvement programmes.

Forest risk commodity

Timber products

Type of risk

Physical

Geographical scale

Country

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Rising mean temperatures

Primary potential impact

Supply chain disruption

Company-specific description

If the outbreak of the spruce bark beetle (*Ips typographus*) within Sappi's key wood procurement areas in Europe continues, it could have profound impacts on forest ecosystems and forestry. Following a few years with exposure to drought and high seasonal temperatures the spruce trees' defence mechanisms to the pest have been depleted, and the thriving beetle population is attacking stressed, dying trees and healthy ones. In 2019 in Germany circa 68% of total harvested volumes were fellingings due to insect outbreaks and other climate change related impacts. Now, forest owners are considering converting spruce stands to other coniferous species or other broadleaves species which are more resilient than spruce to climate change related adverse impacts. As the spruce (*Picea abies*) is a strategically important species both for Sappi's own and our suppliers' mechanical and chemical pulp production, the possible long-term changes in availability will have strategic impact both in terms of production technologies and product portfolios. The bark beetle has a detrimental impact on the quality of the wood, too, and especially for the mechanical pulping process the freshness of pulp wood is important. The short term impact of climate change related damages are the abundance of wood in the market, which brings economic distress to forest owners. Sappi's sustainable wood supply is closely aligned the to the environmental, economic, and social viability of private forestry

Timeframe

4-6 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial

There was no major quantifiable direct financial impact of the outbreak on Sappi yet in 2019, although already there is a marginal impact on procurement cost with swings in supply balances. As the longer term impacts are multi-faceted, the financial impact costs – and a cost of response – cannot be quantified at a single number. Sappi's possible responses to this risk will be strategic by nature involving decisions that impact all levels of business from the supply chain to the product portfolio, and thus the related investment needs and indirect and direct costs incurred cannot be disclosed.

Primary response to risk

New product/technology development

Description of response

As a short-term response, there is an active undertaking ongoing throughout the region to remove infected trees from the forest and work to control the outbreak. For example, in Belgium the state obliges the private owners of bark beetle wood to organize the harvesting and the elimination of the contaminated wood from the forest, but the market is struggling to absorb the quantity of wood of inferior quality. The demand from Sappi's pulp- and paper mills and its wood procurement partners (Sapin in Belgium, proNARO in Germany and Papierholz Austria in Austria) play thus an active role in managing the situation and supporting the regional forest economies and forest owners so that they can cultivate the damaged forest stands again and plant new trees. An important measure to support the struggling forestry in the impacted regions is that Sappi's wood procurement companies are all engaged in long term relationships with forest owners, and thus build resilience and trust in sustainable forest management. As regards the longer term impact on Sappi, the highly likely scenario is that as a result of the spreading of the bark beetle calamity the spruce forests within Sappi's central European wood procurement area will diminish, and the availability of spruce pulp wood will thus be lower than today. This will call for more flexibility regarding the tree species, and will thus possibly impact both production technologies and product portfolios.

Cost of response

0

Explanation of cost of response

It is not possible at this stage to quantify the cost of response.

Forest risk commodity

Timber products

Type of risk

Reputational and markets

Geographical scale

Where in your value chain does the risk driver occur?

Supply chain

Other parts of the value chain

Primary risk driver

Availability of certified sustainable material

Primary potential impact

Supply chain disruption

Company-specific description

Sappi is committed to sourcing woodfibre certified by internationally accredited forest certification systems, including FSC and PEFC (incl. SFI) programmes. However, many landowners are finding the costs and administration involved in certification onerous and, particularly in North America, are choosing to not pursue certification. In the vast majority of cases private forestlands in North America are managed responsibly and sustainably regardless of the certification status thanks to the rigorous and well-established system of regulations/ policies/best management practices coupled with a strong conservation culture and land stewardship ethic exhibited by many multi-generational private landowners. The lack of third-party external validation /certification of the lands directly is compensated for by strong due diligence system practices and procedures implemented by North American paper /packaging /timber companies, the vast majority of which are third-party certified, to avoid controversial sources and to validate responsible forest management and harvesting approaches. In some cases, if landowners do not have access to markets, it can be difficult for landowners to find the financial means to properly manage their forestlands and/or pay ownership taxes. In some cases in certain geographic areas, private landowners may choose to find other means of obtaining revenue to pay taxes and maintain their property, such as conversion to non-forest uses.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial

It is anticipated that the certification systems have hit a plateau and will realize declines in certified acreage and certificate holders over the coming years due to a variety of complex factors. There is not yet data evidence enough to assess the financial impact of a decline in certificate holders (landowners and/or suppliers). The financial impact would depend on scope and scale of actual declines.

Primary response to risk

Promotion of sustainable forest management, including financial incentives

Description of response

Sappi North America has and will continue to encourage existing certified landowners to maintain and/or grow their certificate. Sappi continues to evaluate, promote and support smallholder certification options where feasible and value-add to both the landowner and marketplace. Sappi works directly with landowners, loggers and suppliers to encourage sustainable forest management and provide markets for wood fibre material from harvesting and stand improvement activities. Sappi supports innovative tools such as Forests in Focus to bring data to sourcing and customer purchasing decisions. Sappi North America's Maine Forestry Program assists woodlot owners in the State of Maine with developing, managing and harvesting their woodlands, while the Sappi North America's Lake States Forestry Program assists woodland owners in the Lake States with developing, managing and harvesting their woodlands.

Cost of response

0

Explanation of cost of response

Covered under Sappi North America's management costs which are considered confidential.

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Timber products	Yes

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Timber products

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased R&D and innovation opportunities

Company-specific description & strategy to realize opportunity

Sappi's aim is to extract more value from each tree and in doing so, move into adjacent markets in order to strengthen our core business model. 45% of each tree is cellulose which we use for dissolving pulp, packaging papers and board, printing and writing papers and tissue. 23% is lignin and 30% is hemicellulose, both of which we have targeted for our move into adjacent markets. Sappi is pursuing the following opportunities: In 2019, we commissioned the pre-hydrolysis liquor (PHL) evaporator at Ngodwana Mill, moving into the second phase of our sugar extraction project. This is to demonstrate industrial-scale operability of the technology to concentrate hemicellulose sugar streams, extracted from the wood, to levels required for downstream technologies. The work enables derisking the full-scale implementation of the sugar concentration technology, in turn opening up new revenue generation opportunities in the xylitol and furan chemistry value chains. We progressed the design of a furfural pilot plant to be established at Saiccor Mill. The plant will illustrate the technology, produce commercial samples and provide greater clarity on process economics. We anticipate beneficial operation in 2021. We are building on our established position in lignin markets to expand into high-value markets, including substitution for phenol which is widely used in household products and as intermediates for industrial synthesis, as well as replacement for petrochemicals in foams. Sappi is also diversifying into lignin as a replacement for starch in manufacturing recycled paper, as a fuel pellet binder and in

the area of animal health and nutrition.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

55,000,000

Potential financial impact figure – maximum (currency)

60,000,000

Explanation of financial impact figure

The xylose for xylitol and furfural opportunities both have approximately the same potential of adding US\$20 million each to EBITDA, subject to overcoming the remaining technical and commercial hurdles, and conditional on the capital being available to do both projects by 2025. We see the opportunity for lignin to add US\$15-20 million to EBITDA by 2025 via the higher value initiatives under development. The minimum figure assumes value add of US\$40 million from xylitol and furfural opportunities plus US\$15 million for lignin, the maximum figure assumes the same value add for xylitol and furfural, but a higher figure of US\$20 million for lignin.

Forest risk commodity

Timber products

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased availability of products with reduced environmental impact (other than certified products)

Company-specific description & strategy to realize opportunity

Sappi is expanding its presence in the specialities and packaging sector. Consumers, retailers and brand owners all over the world are looking for sustainable 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. We estimate the increasing need for more sustainable and environmentally friendly packaging solutions will lead to demand growth of 3% to 6% per year, globally, across the spectrum of our products.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

20,610,000

Potential financial impact figure – maximum (currency)

41,220,000

Explanation of financial impact figure

This range represents 3-6% of EBITDA of US\$687 million in 2019 and is in line with our expectation that demand will grow by 3-6% per annum.

Forest risk commodity

Timber products

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased security of production

Company-specific description & strategy to realize opportunity

In 2019, Sappi acquired Matane Mill in Canada. This acquisition supports our strategy and 2020 Vision through the achievement of cost advantages and growth in higher margin packaging and speciality paper. The mill produces high-yield pulp used in speciality papers. The move has established certainty of supply for Sappi's increasing need for high-yield pulp to support our recent investments in the packaging and specialities sector (completion of the PM1 at Somerset Mill and conversion of Maastricht Mill) and will enable supply to be increased over time to Sappi's mills in North America and Europe as demand increases and capacity expands in certain growth businesses.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

25,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The figure given represents an estimate of annual savings in terms of purchased pulp costs.

Forest risk commodity

Timber products

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Other parts of the value chain

Primary forests-related opportunity

Increased brand value

Company-specific description & strategy to realize opportunity

Sappi sees significant opportunity in the dissolving pulp market. As global textile demand grows, driven by population growth, fashion and rising wealth in developing economies, the need to develop more environmentally friendly solutions, derived from renewable materials that do not threaten food security or aquatic systems, will drive increasing market share for viscose, which is derived from dissolving pulp. Despite the challenges in 2019, demand for viscose still grew by 6%.

As we expand dissolving pulp capacity at our Cloquet and Saiccor Mills, we focus on further reducing environmental impact. The significant environmental benefits of the expansion project at Saiccor Mill (known as Vulindlela) include: coal consumption reducing by more than 130,000 tpa, which means fossil carbon emissions will be approximately half; gaseous emissions decreasing by about 40%; water consumption being reduced by around 5%; water use efficiency increasing by approximately 17%; energy efficiency being improved by about 10% and renewable-energy use increasing by around 20%; waste to landfill reducing by about 50%.

Estimated timeframe for realization

4-6 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

41,220,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The single figure estimate represents 6% of EBITDA of US\$687 million in 2019, aligned with our view that the dissolving pulp market will grow by 6 %.

F4. Governance

F4.1

(F4.1) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.1a

(F4.1a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.

Position of individual	Please explain
Board-level committee	The Sappi board of directors, together with the Audit and Risk Committee and the Social, Ethics, Transformation and Sustainability (SETS) Committee have responsibility for forests-related issues. The Sappi CEO is a member of the board. The SETS committee relies on international best practice as well as the laws and regulations under which Sappi's businesses operate to ensure that the group not only complies with, but also fully implements, all requirements. The committee addresses issues relating to corporate social investment, ethical conduct, diversity, transformation and empowerment initiatives and targets and ongoing sustainability practices to ensure that Sappi's business, our environment and our people can prosper on an ongoing basis. The responsibilities include monitoring the company's activities with regard to any relevant legislation, other legal requirements and prevailing codes of best practice.

F4.1b

(F4.1b) Provide further details on the board's oversight of forests-related issues.

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	<ul style="list-style-type: none"> Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets 	The Social, Ethics, Transformation and Sustainability (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. Given that Sappi's business is almost entirely dependent on woodfibre, forests-related issues are scheduled at all meetings. The Committee also receives regular updates on

	<p>Reviewing and guiding business plans</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Reviewing innovation / R&D priorities</p> <p>Setting performance objectives</p> <p>Other, please specify</p> <p>Reviewing public policy trends and developments</p>	<p>progress towards certification goals. Such issues also form part of the function of the Regional Sustainability Councils (RSC) in North America, Europe and South Africa. These RSCs feed into the Global Sustainable Development Council which in turn reports to the SETS Committee.</p> <p>In FY2019, amongst other things, the SETS Committee reviewed the effectiveness of the Code of Ethics and ethics programme as well as the recommendations of the working group established to prioritise the UN SDGs most relevant to Sappi's business and develop action plans. At global level, the group has prioritised SDGs 6,7,8,12,13,15 and 17. Sappi Southern Africa has two additional priority SDGs: SDG 1: No poverty and SDG 4; Quality education.</p>
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F4.2

(F4.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on forests-related issues	Please explain
Chief Sustainability Officer (CSO)	Both assessing and managing forests-related risks and opportunities	Quarterly	The CSO, who reports to the CEO, oversees all day-to-day forest issues relating to certification, procurement and sustainability-related target setting. While the CEO has ultimate responsibility for forests-related issues, the CSO is the principal liaison between the Group Sustainable Development Council and the Social, Ethics, Transformation and Sustainability (SETS) committee. Sustainability directors in Europe, North America and South Africa report to the CSO, with the Vice- President

			Forestry of Sappi Southern Africa (SSA) reporting to the SSA CEO.
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F4.3

(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

	Provide incentives for management of forests-related issues	Comment
Row 1	Yes	The financial reward is linked to the achievement of commitments and targets which aim to entrench sustainability issues, including forestry-related issues across the business.

F4.3a

(F4.3a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive?	Performance indicator	Please explain
Monetary reward	Chief Sustainability Officer (CSO)	Achievement of commitments and targets	The financial reward is linked to the achievement of commitments and targets which aim to entrench sustainability issues, including forestry-related issues across the business.
Non-monetary reward			

F4.4

(F4.4) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

Yes (you may attach the report – this is optional)

 sappi 2019 annual integrated report.pdf

F4.5

(F4.5) Does your organization have a policy that includes forests-related issues?

Yes, we have a documented forests policy that is publicly available

F4.5a

(F4.5a) Select the options to describe the scope and content of your policy.

	Scope	Content	Please explain
Row 1	Company-wide	<p>Commitment to eliminate conversion of natural ecosystems</p> <p>Commitment to eliminate deforestation</p> <p>Commitment to protect rights and livelihoods of local communities</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to transparency</p> <p>Commitment to stakeholder awareness and engagement</p> <p>Recognition of the overall importance of forests and other natural ecosystems</p> <p>Description of business dependency on forests</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>List of timebound milestones and targets</p> <p>Description of forests-related performance standards for direct operations</p> <p>Description of forests-related standards for procurement</p>	<p>Sappi’s Group Sustainability Charter commits Sappi to: “mitigating our impact on biodiversity and promoting sustainable forestry through internationally accredited, independent environmental management and forest certification systems”. Sappi’s Group Environmental Policy acknowledges that “we do have an environmental footprint, but are committed to managing and mitigating the environmental, climate and biodiversity impacts of our operations.” Sappi’s Group Woodfibre Procurement policy contains the elements and commitments listed alongside. Sappi has timebound forest and woodfibre related targets and commitments as part of its 2020-targets, which have now been reviewed and will be released as 2025 targets. All production sites are Chain of Custody certified and there’s a target to increase the use of certified wood. Sappi does not use wood originating from tropical natural forests.</p> <p>Sappi’s Woodfibre Procurement Policy covers the entire value chain and is supported by the Group Supplier Code of Conduct which states that, amongst other things, we expect our suppliers to: monitor impact on the environment with particular emphasis on biodiversity and pollution and take actions for improvement; provide environmental training specific to environmental risks identified through a risk assessment process and/or in accordance with an environmental management plan; upon request, provide information on the country of origin for raw materials in order for Sappi to conduct a risk assessment of the raw materials’ source and chain of custody. The Group Woodfibre Procurement Policy reflects the fact that woodfibre is the basis of Sappi’s business and that it is in our best interests to manage its responsibly in line with third party verified forest certification systems and acknowledges the importance of encouraging smallholders to become certified. The policy reflects Sappi’s inclusive approach to support the leading international forest certification systems, namely the FSC and PEFC (incl. SFI) programmes. The Group Policy outlines a balance of environmental, social and economic values in a manner that promotes forest health and supports community well-being. All policies are reviewed on a regular basis.</p>

F4.5b

(F4.5b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber products	Yes	Company-wide	Commitment to eliminate conversion of natural ecosystems Commitment to eliminate deforestation Commitment to protect rights and livelihoods of local communities Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement Description of business dependency on forests Recognition of potential business impact on forests and other natural ecosystems Description of forest risk commodities, parts of the business, and stages of value-	The Group Woodfibre Procurement policy covers the entire value chain (including business segments and Sappi operations) and is supported by the Group Supplier Code of Conduct. The Group Woodfibre Procurement Policy reflects the fact that woodfibre is the basis of our business and that it is in our best interests to manage it responsibly in line with internationally recognised, third party certification and the importance of encouraging smallholders to become certified. The policy states, that Sappi's wood sourcing shall comply with all applicable legal and regulatory obligations in the countries from which it originates; come from forests where the customary, traditional or civil rights of people are upheld, be procured from forestry and manufacturing operations where health and safety legal requirements are upheld; and where applicable, maintain critical, unique attributes within officially designated high conservation value areas, avoid areas knowingly converted from forests to non-forest uses; do not come from commercial timber plantations which have been converted from natural forests post 1994, and is not genetically modified. The Group Woodfibre Procurement Policy is constantly evaluated against emerging developments and revised

			chain covered by the policy Description of forests-related standards for procurement Other, please specify Support innovative initiatives for smallholder certification	when needed. Sappi North America revised and expanded its Sustainable Forestry Policy in April 2020, expanding its scope to include the expanded scope of the PEFC controversial sources definition. Sappi Southern Africa has a region-specific Wood, Pulp and Reclaimed Material Sourcing Policy.
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F4.6

(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Yes

F4.6a

(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

Other, please specify

Business for Nature; own public commitments

F4.6b

(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Forest risk commodity

Timber products

Criteria

- No conversion of natural ecosystems
- Zero gross deforestation/ no deforestation
- Zero net deforestation
- Avoidance of negative impacts on threatened and protected species and habitats
- No trade of CITES listed species
- No land clearance by burning or clearcutting
- No conversion of High Conservation Value areas
- No conversion of High Carbon Stock forests

Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities
Operations are in accordance with the UN Declaration on the Rights of Indigenous Peoples
Promotion of gender equality and women's empowerment
Adoption of the UN International Labour Organization principles
Resolution of complaints and conflicts through an open, transparent and consultative process
Facilitate the inclusion of smallholders into the supply chain
No sourcing of illegally produced and/or traded forest risk commodities
No sourcing of forest risk commodities from unknown/controversial sources
Restricting the sourcing and/or trade of forest risk commodities to credible certified sources
Recognition of legal and customary land tenure rights

Operational coverage

Direct operations and supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

2008

Commitment target date

2020

Please explain

Sappi neither harvests nor buys woodfibre which originates from tropical natural forests and our wood sourcing causes zero deforestation. Sappi's commitment to zero deforestation means knowing the source of woodfibre; ensuring that suppliers implement practices to promptly regenerate forests post-harvest, which is required under the global forest certification standards (FSC and PEFC) that Sappi is committed to upholding. It also means implementing our Supplier Code of Conduct to continually assess supply-chain, ethical and legal risk; and not sourcing from suppliers associated with deforestation. We work to build transparent supply chains and maintain close relationships with our suppliers. The Group Woodfibre Procurement Policy states, that Sappi's wood sourcing shall comply with all applicable legal and regulatory obligations in the countries from which it originates; come from forests where the customary, traditional or civil rights of people are upheld, be procured from forestry and manufacturing operations where health and safety legal requirements are upheld; and where applicable, maintain critical, unique attributes within officially designated high conservation value areas, avoid areas knowingly converted from forests to non-forest uses; do not come from commercial timber plantations which have been converted from natural forests post 1994, and is not genetically modified.

Sappi's mills have been FSC Chain of Custody certified since 2008. Given the forest certification and due diligence systems implemented, we are confident that our

woodfibre is legally sourced, avoids rare and endangered species and habitats, and does not compromise, but rather supports, the high conservation values in forests. Where forests are identified as having a unique combination of high conservation values, in line with forest certification systems, woodfibre is procured in a way that maintains or restores the ecological, economic, cultural and social condition of these forests. In addition, the forest certification systems Sappi subscribes to align with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which specifically prohibits trade of certain tree – and other – species.

F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	21-30	Sappi's long-term strategic business objectives are based on woodfibre. In the light of global megatrends, such as the growing global population and subsequent pressure on natural resource, we focus on the need to produce more with less and to: increase long-term shareholder value by extracting more value from each tree and in doing so, move into adjacent markets (biomaterials) to strengthen our core business model; capitalise on the move away from fossil-fuel based packaging by continuing to expand and grow packaging and speciality papers in all regions; leverage the opportunities inherent in the fact that our products are based on renewable resource grown in sustainably managed forests which play an important role in mitigating climate change; increase the productivity of our plantations in South Africa through tree improvement programmes – a key pillar of competitive advantage; capacity in the supply chain to promote sustainable forest management; increase certification of the woodfibre supplied to our operations; contribute to the growth of forest certification world-wide and collaborate with diverse stakeholders. For example, In South Africa, Sappi worked closely with PEFC™ to develop a forestry assurance standard for smallholders to reflect local

			conditions, now known as the South African Forestry Assurance Standard (SAFAS) [Subsequently: Sustainable African Forestry Assurance Scheme]
Strategy for long-term objectives	Yes, forests-related issues are integrated	21-30	<p>Sappi reviews strategy at least every five years to keep pace with rapidly changing global trends and developments. Sappi's 2020Vision strategy was based on four key pillars: achieve cost advantages; rationalise declining businesses; maintain a healthy balance sheet and accelerate growth in higher margin growth segments by: growing dissolving pulp capacity (DP). As global textile demand grows, driven by population growth, fashion and rising wealth in developing economies, the need to develop more environmentally friendly solutions, derived from renewable materials that do not threaten food security or aquatic systems, will drive increasing market share for viscose, which is derived from DP. Despite the challenges in 2019, VSF demand still grew by 6%. We have invested to grow DP capacity at Cloquet, Ngodwana and Saiccor Mills. In terms of our 2020Vision, we have also initiated speciality conversions in Europe and North America which are now completed and in FY2019, achieved 18.3% of EBITDA, compared with our 2020 target of 25%; we are growing lignin sales and advancing other biotech opportunities (furfural, xylitose/xylitol) to commercialisation and we are accessing high-yield pulp: Our packaging and speciality operations in the United States and Europe typically use less integrated pulp than our graphic paper business, and this brings higher pulp cost and volatility in earnings through a pulp cycle. Additionally, paperboard machines benefit from using high-yield pulp, where supply is more constrained than for kraft hardwood or softwood pulps. Matane Mill in Canada is a major supplier of high-yield pulp. We purchased the mill in 2019 and believe the acquisition will benefit our growing packaging and speciality business. Our internal consumption of pulp from the mill will increase as we ramp up paperboard production at both Somerset and Maastricht Mills in coming years.</p> <p>We will be launching our Thrive2025 strategy in 2020.</p>

Financial planning	Yes, forests-related issues are integrated	21-30	Our ability to deliver sustained value depends on the successful execution of our 2020 Vision and strategy: Through intentional evolution to continue to grow Sappi into a profitable and cash generative, diversified woodfibre group—focused on dissolving wood pulp, paper and products in adjacent fields. Underpinning this is a strong focus on innovation. In FY2019, we invested US\$42 million in R&D, representing 10.45% of operating profit (excluding special items) of US\$402 million. R&D is focused on realising our strategy – in other words, woodfibre is at the core of all research and disruptive technology development. Achieving optimum working capital levels in the business requires efficient use of resources (sustainable woodfibre, energy, chemicals) throughout the supply chain and influences cash management, a key pillar of our strategy.
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F6. Implementation

F6.1

(F6.1) Did you have any timebound and quantifiable targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.1a

(F6.1a) Provide details of your timebound and quantifiable target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.

Target reference number

Target 1

Forest risk commodity

Timber products

Type of target

Third-party certification

Description of target

Sappi's target is to continuously increase the use of certified woodfibre. The amount of certified woodfibre used at the mills is one of our key sustainability targets, and the global target is broken down to region-specific targets. Sappi works with credible, internationally recognised PEFC (incl. SFI) and FSC forest certification systems, which are based on internationally agreed principles of sustainable forest management. Both FSC and PEFC operate robust Chain of Custody schemes that track wood and wood fibre through every step of the supply chain, from the forest to the end user, and are committed to achieving the same objectives: the certification of forests to credible, independently verified standards of responsible forest management, and focus on conserving the natural habitats of plants and animals and respecting the rights of forestry workers and local communities.

Linked commitment

Zero net/gross deforestation

Traceability point

Third-party certification scheme

- FSC Forest Management certification
- FSC Chain of Custody
- FSC Controlled Wood
- FSC Forest Management Group certification
- FSC Recycled
- PEFC Sustainable Forest Management certification
- PEFC Chain of Custody
- SFI Forest Management standard
- SFI Chain of Custody
- SFI Fiber Sourcing certification

Start year

2014

Target year

2020

Quantitative metric

Target (number)

Target (%)

79

% of target achieved

95

Please explain

In 2019, almost 75% of woodfibre supplied to Sappi's mills originated from certified (FSC, PEFC, SFI) forests. In Europe, North America and South Africa, the share of certified woodfibre supplied in 2019 was respectively: 77%, 81% and 53%. Tracking and recording of the certified inputs and outputs are conducted on a monthly basis, and the target is monitored on a quarterly basis. In 2019 Sappi was slightly behind its global target (79%) which was due to the availability of certified wood in Sappi's wood procurement area. The use of local raw material makes both ecological and economic sense, but many of Sappi's mills are located in countries where the forests are largely owned by non-industrial small-scale private forest owners, and all of these forests are not yet certified. Sappi does not have separate targets for FSC and PEFC, as much of the wood is double certified, and, altogether we strive to enhance both FSC and PEFC and to offer a wide basket of certified products, and therein drive responsible production and consumption patterns and demand for wood-based products originating from certified forests. All Sappi's timber plantations in South Africa are FSC-certified. Sappi also has a Group Scheme which offers FSC certification. The group scheme has 44 private members with 59,144 ha of land being certified. Furthermore, by the end of 2020 Sappi's tree plantations will also become certified against SAFAS (South African Forestry Assurance Scheme) certified, which was endorsed by PEFC International in 2019. Sappi's forest experts have been actively contributing to SAFAS's Value-Based Platform for sustainable forest management and certification, and SAFAS intends to offer access to feasible, attainable and especially affordable forest certification solutions and thus market access especially for the country's smallholders. In South Africa and in Africa altogether, the amount of certified forests is still very low (less than 2%), so this type of work is groundbreaking, and can really make a difference in enhancing sustainable forest management in Africa and thus improve both the level of forestry but also the level of livelihoods.

Target reference number

Target 2

Forest risk commodity

Timber products

Type of target

Traceability

Description of target

Sappi's ongoing target is that all Sappi's manufacturing sites where wood-based raw material (logs, chips, pulp, paper) is being processed, are FSC and/or PEFC Chain of Custody (CoC) certified, and in the United States also SFI certified. Chain of Custody (CoC) certification is a mechanism for tracing certified woodfibre from the forest to the final product to provide certainty that the product or product line about which a claim is being made, is linked to a certified forest and thus the origin of the wood is always traceable to its source. The 100% coverage of the FSC and PEFC (incl. SFI) Chain of Custody systems is important to ensure that all wood purchased and processed by

Sappi is always traceable to its origin and that all wood verifiably originates from legal, controlled and non-controversial sources.

Linked commitment

Zero net/gross deforestation

Traceability point

Forest management unit

Third-party certification scheme

Start year

2014

Target year

2020

Quantitative metric

Target (number)

Target (%)

100

% of target achieved

100

Please explain

All Sappi's manufacturing sites in Europe, United States and Canada are both FSC and PEFC Chain of Custody (CoC) and in South Africa FSC CoC certified ensuring full traceability of the purchased wood-based raw material (logs, chips, pulp, paper, recovered paper). In FY 2019 the three purchased mills became FSC and PEFC Chain of Custody certified (Carmignano, Condino, Rockwell Solutions), and the Matane pulp mill, which was acquired in autumn 2019, was already FSC and PEFC Chain of Custody certified. Moreover, all Sappi's own forests in South Africa are FSC-certified, and preparations started in 2019 to certify them against the PEFC endorsed SAFAS (South African Forestry Assurance Scheme) -system, too, and thus all the four pulp and paper mills and sawmill in South Africa, which so far only have been FSC CoC certified will acquire the PEFC CoC certification in 2020. Knowing the origin of wood is a fundamental prerequisite to ensure responsible woodfibre sourcing. Sappi strongly supports 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. Sappi requires from all its wood and pulp suppliers rigorous tracing practices and documentation of the origin of the wood in line with its Woodfibre

Procurement Policy. Sappi's minimum requirement for all purchased wood raw material is that it is purchased at least as meeting the requirements of FSC Controlled Wood standard. Annual external audits conducted by Certification Bodies (SGS (Europe), BV (United States), Soil Association (South Africa), NEPCo (Canada) ensure that Sappi's CoC-processes and procedures are in line with the FSC and PEFC (incl. SFI) global standards' requirements. Furthermore, Sappi Group Internal Audit conducts regular audits on company's Chain of Custody management processes and procedures, and in 2019 the internal fibre certification control risk register was reworked and extended. The Group Internal Audit also conducts regular audits over e.g. the wood procurement companies Sappi partners with in Europe.

F6.2

(F6.2) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?	Description of traceability system	Exclusions
Timber products	Yes	Traceability and availability of reliable data are core elements of Sappi's Due Diligence systems (DDS) and key tools to combat global problems like illegal logging. All Sappi's mills are FSC and/or PEFC and in the United States also SFI Chain of Custody (CoC) certified ensuring full traceability of the purchased wood to its source. Information on the origin and tree species of any delivery within the CoC is accessible at any point along the supply chain. Sappi requires from all its suppliers to provide evidence that all woodfibre is sourced from controlled, non-controversial sources in accordance with the FSC Controlled Wood (CW) standard, as well as PEFC (incl. SFI) risk-based DDS. 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. Based on this supplier data Sappi prepares Wood Origin Declarations which are available for all interested stakeholders. Sappi's own wood procurement teams in North America and South Africa, and the wood procurement partners in Europe (Metsä Forest in Finland, proNARO in Germany, Sapin in Belgium and Papierholz in Austria) can track down the wood deliveries to the harvesting site. They apply due diligence systems, conduct risk assessments, prepare harvest plans, and oversee the loggers to ascertain that Sappi's requirements to only source FSC CW standard compliant wood are met. Pulp is only purchased from suppliers which are at least FSC CoC certified. External audits conducted by	Not applicable

		<p>Certification Bodies (SGS, BV, Soil Association, NEPCo) ascertain that Sappi's CoC-processes and procedures are in line with the FSC's and PEFC's requirements, and that the amounts of certified inputs and outputs are duly tracked and recorded. Sappi North America conducts supplier site inspections on all stumpage sales, and a sampling of such inspections on open-market/gate wood purchases. Sappi's DDS comply with the requirements of the EU Timber Regulation, the US Lacey Act and other regional jurisdictions. In 2019 the Sappi co-owned proNARO acquired the ISO 38200 standard qualification, and wood-based products) standard qualification, and Sappi ran a pilot with Blockchain technology to explore how relevant this technology could be in the context of ensuring traceability.</p>	
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F6.2a

(F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	% of total production/consumption volume traceable
Timber products	Forest management unit	100

F6.3

(F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)? Indicate the volume and percentage of your certified production and/or consumption.

Forest risk commodity

Timber products

Third-party certification scheme

FSC Forest Management certification

Certification coverage

Consumption volume

% of total production/consumption volume certified

75

Form of commodity

Hardwood logs

Softwood logs

Unprocessed wood fiber

Pulp

Paper
Cellulose-based textile fiber
Other, please specify
Recovered paper

Volume of production/ consumption certified

3,248,471

Metric

Other, please specify
Pulp equivalents metric tons

Please explain

In addition to the FSC Forest Management certification described in the response box above, Sappi also uses FSC Forest Management Group certification, PEFC Sustainable Forest Management certification, PEFC National forest certification system and the SFI Forest Management standard. In 2019, 75% of woodfibre supplied to Sappi's mills originated from certified (FSC, PEFC, SFI) forests. In Europe, North America and South Africa, the share of certified woodfibre supplied in 2019 was respectively: 77%, 81% and 53%. Forest certification and the amount of certified wood is one of the core sustainability targets of Sappi, and the aim is to continuously increase the use of certified woodfibre and thereby also create demand for wood-based products originating from forests, which are certified against internationally acknowledged forest management standards, and the system integrity is overseen by third parties. Sappi is a member of both FSC and PEFC International and SFI, and participates actively in the work of promoting forest certification among especially private landowners in the United States and South Africa. In South Africa, Sappi has established a FSC group certification scheme, and is also paying small growers a premium for certified timber. In South Africa and in Africa altogether, the amount of certified forests is still very low (less than 2%), and therefore the pioneering work of the PEFC-endorsed SAFAS (South African Forestry Assurance Scheme) is important because it intends to offer access to feasible, attainable and especially affordable forest certification solution and thus market access especially for the country's smallholders. Sappi has played a pivotal role in introducing PEFC to South Africa, and sees it as a strategically important step to enhance sustainable forest management practices in the country and the entire continent of Africa. Sappi's mills in the United States are also certified under the SFI Fiber Sourcing Standard for wood procurement operations.

Forest risk commodity

Timber products

Third-party certification scheme

FSC Chain of Custody

Certification coverage

Consumption volume

% of total production/consumption volume certified

100

Form of commodity

- Hardwood logs
- Softwood logs
- Sawn timber, veneer, chips
- Unprocessed wood fiber
- Pulp
- Paper
- Other, please specify
Recovered paper

Volume of production/ consumption certified

4,331,295

Metric

- Other, please specify
Pulp equivalents metric tons

Please explain

In addition to the FSC Chain of Custody supplied in the box above, Sappi also makes use of FSC Controlled Wood; PEFC Chain of Custody and SFI Chain of Custody. All Sappi's manufacturing sites are FSC and/or PEFC and in the United States also SFI Chain of Custody (CoC) certified covering all the purchased woodfibre-based raw material (logs, chips, pulp, paper, recovered paper). Sappi mills in the United States are also certified under the SFI Fiber Sourcing Standard for wood procurement operations. The 100% coverage of the FSC and PEFC (incl. SFI) CoC systems is important to ascertain that all wood purchased and processed by Sappi is always traceable to its origin. Furthermore, Sappi requires from all its suppliers to provide evidence that all woodfibre is sourced from controlled, non-controversial sources in accordance with the FSC Controlled Wood (CW) standard, as well as PEFC (incl. SFI) risk-based DDS. Regular internal and external third-party (SGS, Soil Association, BV, NEPCo) audits monitor the compliance with the standards and requirements of FSC CoC/CW, PEFC CoC and SFI CoC and Fiber Sourcing systems.

F6.4

(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?

A system to control, monitor or verify compliance	
Timber products	Yes, we have a system in place for our no conversion and/or deforestation commitments

F6.4a

(F6.4a) Provide details on the system, the approaches used to monitor compliance, the quantitative progress, and the non-compliance protocols, to implement your no conversion and/or deforestation commitment(s).

Forest risk commodity

Timber products

Operational coverage

Direct operations

Supply chain

Description of control systems

The 100% coverage of the FSC and PEFC (incl. SFI) Chain of Custody systems ascertains that all woodfibre purchased and processed by Sappi is traceable to its origin, and is sourced from legal, controlled, non-controversial sources in accordance with the FSC Controlled Wood Standard. The Group Woodfibre Procurement Policy allows only the use of woodfibre that does not come from areas knowingly converted from forests to non-forest uses or from commercial timber plantations which have been converted from natural forests post 1994. All suppliers are requested to provide information on the country of harvest and where applicable sub-national region and/or concession of harvest, and a list of tree species. Country risk and supplier qualification assessments, supplier visits and audits are key risk management tools, as well as unambiguous procedures at the mills to ascertain that any material, where the FSC CW and PEFC DDS compliance is not absolutely clear may not be used.

Monitoring and verification approach

Third-party verification

% of total volume in compliance

100%

% of total suppliers in compliance

100%

Response to supplier non-compliance

Suspend & engage

Exclude

Procedures to address and resolve non-compliance with suppliers

Developing time-bound targets and milestones to bring suppliers back into compliance

Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities

Please explain

Compliance risk management is an integral part of Sappi's business operations. Sappi's Due Diligence Systems (DDS) include measures which ascertain the compliance of the

wood material at its source, and the DDS (comprising of gathering of information, risk assessment and risk mitigation) assessment is carried out for all suppliers before any wood deliveries are allowed. The validity of FSC certificates is monitored by using an online tool FSC Certificate Status Watch which alerts immediately if, for example, a supplier’s certificate was suspended. The suppliers are obliged to notify Sappi of any changes that may affect a risk designation or the mitigation of risk, such as changes in origin, tree species, or supply chain. In case any wood-based raw material purchased by Sappi would turn out as non-conforming with the requirements of Sappi, FSC or PEFC (incl. SFI) standards, Sappi has clear, FSC and PEFC CoC standard-compliant procedures in place at each mill sites with clear, time-bound steps on how to act, and any non-conforming material would immediately be blocked from the production. The Woodfibre Procurement Policy accompany all written wood supply agreements to ensure absolute clarity over the requirements. The actions towards suppliers depends on the severity of the issue, and can vary from terminating the contract immediately to suspending the supplies temporarily.

F6.5

(F6.5) For your disclosed commodity(ies), indicate if you collect data regarding your own compliance and/or the compliance of your suppliers with the Brazilian Forest Code.

	Do you collect data regarding compliance with the Brazilian Forest Code?	Please explain
Timber products	Yes, from suppliers	Sappi neither owns nor manages land in Brazil, nor do we have manufacturing facilities. In 2019 Sappi purchased chemical pulp from Brazil from five suppliers, and the amount was less than one percentage of the total purchased woodfibre volume. Sappi buys all paper pulp from Brazil as certified. A Due Diligence assessment is carried out for all suppliers of wood prior any wood deliveries are allowed. All Brazilian suppliers are both FSC and PEFC Chain of Custody certified. Along with all other Sappi’s wood-based raw material suppliers, the pulp suppliers are requested to provide annually or upon request the wood origin information (country of harvest and where applicable sub-national region and/or concession of harvest) and a list of tree species included in the deliveries to Sappi. In addition to the data on the origin of wood and tree species and environmental performance data regarding the pulp production, Sappi requires the Brazilian pulp suppliers to provide in writing their status reports on implementing the Brazilian Forest Code in their operations especially with the view of their compliance with the main components of the Forest Code: 1) Registration on the Rural Environmental Registry (CAR) database, with active status; 2)

		<p>Legal Reserve (RL) and / or in the Permanent Protection Area (APP) deficit; 3) Signed Terms of Commitment of the Environmental Regularization Program (PRA); and 4) Operating without gross deforestation after July 2008. Additionally, the suppliers are asked to specify any other measures and commitments they have taken. The suppliers are obliged to notify Sappi of any changes that may affect Sappi’s risk designation or the mitigation of risk, such as changes in origin, tree species, or supply chain. This information is collected annually and analysed as part of Sappi’s fibre risk management measures.</p>
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F6.5b

(F6.5b) For your disclosed commodity(ies), indicate which Key Performance Indicators (KPIs) you use to measure the compliance of your suppliers with the Brazilian Forest Code and their performance against these indicator(s).

Forest risk commodity

Timber products

KPIs

% of suppliers registered on the Rural Environmental Registry (CAR) database, with active status

Performance against indicators

91-99%

Please explain

In FY 2019 Sappi purchased chemical paper pulp from five chemical pulp producers. Four suppliers reported 100%, but one reported 99% of own areas and 97% of leased areas. When new properties or new leases are acquired, the registration of those is always performed on CAR (Rural Environmental Registry – a national system for rural areas registers). Suppliers provide Sappi with size, certification coverage, location and details of local landscapes and protected areas related to the forests and plantations owned, leased and/or managed by them

Forest risk commodity

Timber products

KPIs

% of suppliers with Legal Reserve (RL) and/or Permanent Protected Area (APP) deficit

Performance against indicators

<10%

Please explain

No deficit on Legal Reserve (RL) or in the Permanent Protection Area (PPA) were reported. The CAR registration includes the certification of the RL and the location of the APP that ensures the appropriate use of the land for plantations and protected areas. All deficit in RL must be solved on the CAR.

Forest risk commodity

Timber products

KPIs

% of suppliers with signed Terms of Commitment of the Environmental Regularization Program (PRA)

Performance against indicators

71-80%

Please explain

The PRA is run differently in each state: In Bahia, Santa Catarina, and Sao Paulo states all the properties are either adherent or in progress, but there are other states which do not institute the PRA law. One supplier thus reported that they do not yet have PRA because the local environmental agency has not yet established the procedures.

Forest risk commodity

Timber products

KPIs

% of suppliers with no gross deforestation after July 2008

Performance against indicators

100%

Please explain

All Brazilian suppliers are FSC and PEFC CoC certified and fulfil FSC's 1994-rule, which goes beyond the national legal requirement. Suppliers report to apply satellite image evaluation to verify that no conversion after 1994.

Forest risk commodity

Timber products

KPIs

Other, please specify
FSC and PEFC Chain of Custody certified

Performance against indicators

100%

Please explain

All Brazilian suppliers are both FSC and PEFC Chain of Custody certified, and Sappi buys all paper pulp from Brazil as certified.

F6.6

(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.

	Assess legal compliance with forest regulations
Timber products	Yes, from suppliers

F6.6a

(F6.6a) For you disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.

Timber products

Procedure to ensure legal compliance

All the Sappi mills which use wood-based raw material, are certified against FSC and PEFC Chain of Custody standards (CoC), and in South Africa FSC CoC certified. Sappi exclusively procures woodfibre raw material which meets at least the requirements of FSC Controlled Wood as well as PEFC and SFI (where applicable) Due Diligence System (DDS) requirements. Third-party verified FSC and PEFC CoC systems go beyond legal requirements, and as a baseline categorically exclude illegally harvested wood, and activities not complying with applicable local, national or international legislation on forest management, including but not limited to forest management practices; nature and environmental protection; protected and endangered species; property, tenure and land-use rights for indigenous peoples, local communities or other affected stakeholders; health, labour and safety issues; anticorruption and the payment of applicable royalties and taxes. Sappi’s Due Diligence System complies with the requirements of the EU Timber Regulation (EUTR-Regulation (EU) No 995/2010), the US Lacey Act and Australian Illegal Logging Prohibition Regulation. All wood and pulp suppliers are required to adhere to the commitments and ambitions stated in the Sappi Group Woodfibre Procurement Policy: All woodfibre must comply with all applicable legal and regulatory obligations in the countries from which it originates, come from forests where the customary, traditional or civil rights of people are upheld, and be procured from forestry and manufacturing operations where health and safety legal requirements are upheld. Sappi neither harvests nor buys woodfibre which originates from tropical natural forests. Tree species identified as endangered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are neither utilized nor imported. The aforementioned requirements apply to all the suppliers of wood-based raw material.

Country/Area of origin

Brazil

Law and/or mandatory standard(s)

- General assessment of legal compliance
- Australia Illegal Logging Prohibition Act
- Brazilian Forest Code
- EU Timber Regulation
- USA Lacey Act
- CITES

Comment

F6.7

(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Timber products	Yes, working with smallholders	Supply chain mapping Capacity building Financial and commercial incentives	Supplier audits Offering on-site technical assistance and extension services Providing agricultural inputs Disseminating technical materials	4,500	Sappi's tree grower enterprise development initiative, Sappi Khulisa, evolved from Project Grow a few years ago. Whereas Project Grow focused solely on the growers, Sappi Khulisa focuses on the whole value chain including growers and the contractors who service them. Since inception in 1983, the programme has benefitted more than 10,000 growers. The total area currently managed under this programme amounts to 34,139 hectares. In 2019, under the programme 425,001 tons worth approximately

					<p>US\$2,7 million was delivered to our operations. Since 1995, a total volume of 4,221,941 tons to the value of US\$30 million has been purchased from small growers in terms of this programme.</p> <p>Growers make their land available for planting eucalyptus trees. Sappi provides growers with: sponsored seedlings; an interest-free loan; technical advice, and a guaranteed future market.</p> <p>In North America (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.</p>
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F6.8

(F6.8) Are you working with your direct suppliers to support and improve their capacity to comply with your forests-related policies, commitments, and other requirements?

Are you working	Type of direct supplier	Direct supplier engagement approach	% of suppliers engaged	Please explain
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	with direct suppliers?	engagement approach			
Timber products	Yes, working with direct suppliers	Supply chain mapping Capacity building Financial and commercial incentives	Supplier questionnaires on environmental and social indicators Supplier audits Offering on-site training and technical assistance Disseminating technical materials Organizing capacity building events Financial incentives for certified products Other, please specify Long-term contracts linked to forest related commitments; Encouraging forest certification	100%	Sappi's business depends on trusted relationships and active engagement with wood suppliers and forest owners. Sappi's own forests are in South Africa, and thus in all other regions our wood procurement is dependent on external wood suppliers. In Europe, Sappi's wood sourcing partners (Sapin, proNARO, Papierholz Austria and Metsä Forest) buy wood mainly from non-industrial private forests, municipalities and state-owned forests. Joint capacity building sessions especially in matters forest certification on the development on standards' requirements are frequent, and Sappi ensures that Sappi's Woodfibre Procurement Policy is known and applied. The Woodfibre Procurement Policy accompany all written wood supply agreements to ensure absolute clarity over the requirements. Sappi gathers detailed information on the origin of wood, and from paper pulp suppliers additionally extensive environmental performance data. In the United States, Sappi supports financially numerous state/regional/national associations, NGOs and collaboratives that provide assistance to private landowners while also assessing forest risks, trends,

					<p>opportunities, etc. Sappi has supported shared biologist positions within NGOs committed to forest health, conservation, private landowner outreach, etc. In South Africa, Sappi has established 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. Over 550 people were trained in 2019. The Sappi team is partnering with other institutions such as Cedara Agricultural College, to provide the growers with the tools to expand their farming activities so that they can have additional sources of income. This is crucial for timber farmers who must wait years between timber harvests for a return on their investment. During 2019, Sappi Khulisa developed a grower mobile app to assist Khulisa growers in accessing their plantation information, financial statements and training material. Growers can also send Sappi requests or submit documents through the app. Sappi pays small growers in its FSC group certification scheme a premium for certified timber.</p>
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F6.9

(F6.9) Are you working beyond your first-tier supplier(s) to manage and mitigate deforestation risks?

	Are you working beyond first tier?	Type of engagement approach with indirect suppliers	Indirect supplier engagement approach	Please explain
Timber products	Yes, working beyond first tier	Supply chain mapping Capacity building	Supplier questionnaires on environmental and social indicators On-site meetings with indirect suppliers Supplier audits Disseminating technical materials Participating in workshops Other, please specify Work with industry, work with Fire Protection Associations	Sappi sees that creating value in standing forests is one of the best ways to combat deforestation in the long-term. Through trade organizations and many other multi-stakeholder processes Sappi advocates for sustainable forest management practices. Engagement with customers is active, and Sappi trains customers about the importance of forest certification as assurance of the supply chain integrity. Sappi requires rigorous tracing practices and documentation of the origin of all woodfibre from all its wood suppliers, and within a certified Chain of Custody (CoC) supply chain this means that Sappi's requirements have an impact way beyond its direct, first-tier suppliers. The power of FSC and PEFC systems lies therein that they not only impact the level of forest practices in certified forests but also impose tough requirements on the non-certified wood which is being mixed with the certified material, and thus the impact extends far beyond the certified forests. 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 risk-based due diligence systems. Sappi's Woodfibre Procurement Policy is part of all woodfibre contracts to ensure that Sappi's requirements are known. Sappi's direct wood suppliers (Sapin, proNARO, Metsä Forest, Papierholz

				<p>Austria) in Europe conduct regular risk-based supplier audits on-site to document and assess the wood origin and exclude risk of mixing. Sappi is a member of 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. In South Africa, where fires are a risk, Sappi has introduced aerial fire-fighting to the South African forest industry in 1981. The Fire Protection Associations have contributed greatly to changing South African legislation about the prevention and protection against wildfire, and even though the frequency of fires, their impact has decreased as a result of the various control measures put in place by Sappi.</p>
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F6.10

(F6.10) Do you participate in external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?

Forest risk commodity

Timber products

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

UN Global Compact

Forest Stewardship Council (FSC)

Programme for the Endorsement of Forest Certification (PEFC)

Sustainable Forestry Initiative (SFI)

Other, please specify

Confederation of European Paper Industries (CEPI); Sustainable Apparel Coalition (SAC)

Jurisdictional approaches

Please explain

Sappi works with a wide range of partners to advance sustainable forest management practices and transparent, responsible supply chains. Sappi is an active member of PEFC International, FSC's economic chambers North and South, and SFI, and engages with them through a variety of working groups and committee activities. Close engagement is maintained directly and through the industry organizations CEPI (Confederation of European Paper Industries) and AF&PA. Sappi belongs to the Forest Resources Association (FRA), the American Forest Foundation (AFF) and the Society of American Foresters (SAF). In South Africa, Sappi is a member of the local WWF organisation. Through our involvement in The Forests Dialogue steering committee we actively collaborate with multiple stakeholder groups, and work to build agreement on forest and landuse challenges. Sappi is a founding partner 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. Sappi is a member of the South African Institute for Commercial Forestry Research (ICFR) and is a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute (FABI) at the University of Pretoria. Through the TPCP we also belong to the internationally collaborative programme BiCEP (Biological Control of Eucalyptus Pests). 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. As a follow up to the work within Trado, a consortium that was testing blockchain technologies, in 2019 Sappi continued this work with a project reviewing blockchain and its possibilities within Chain of Custody. Sappi's dissolving pulp business is involved in a blockchain "forest to garment" traceability initiative with a customer, and also in a multi-stakeholder textile value chain initiative with the Textile Exchange, focussed on biodiversity. In South Africa, carbon tax was introduced on 01 June 2019. Sappi, together with other industry members, is working with consultants appointed by the Department of Environmental Affairs on the rules for recognition of carbon in harvested wood products.

F6.11

(F6.11) Is your organization supporting or implementing project(s) focused on ecosystem restoration and protection?

Yes

F6.11a

(F6.11a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Set aside land

Primary motivation

Voluntary

Description of project

In South Africa, Sappi owns and leases 390,000 ha of land, of which 135,000 ha are maintained by Sappi Forests to conserve the natural habitat and biodiversity found there. Of this permanently unplanted land, the majority consists of open areas with natural vegetation cover which are managed for conservation purposes. Our strategies for managing biodiversity include: managing natural vegetation according to best practice in terms of burning, grazing and weed control to ensure health habitats; ongoing assessment and monitoring of veld condition; protection of sites from poaching, illegal medicinal plant collection and overgrazing; as well as long-term integrated weed management plans on all our plantations.

Invasive alien plants (IAPs) are widely considered as a major threat to biodiversity, human livelihoods and economic development. Currently, there are 379 species of plants listed as IAPs in South Africa. As a result of their high diversity and far-reaching distribution, they are extremely difficult to control. We combat weeds by implementing weed control programmes, managing natural areas to maintain healthy vegetation (weeds generally spread into disturbed poorly managed areas) and reducing sources and avenues of seed dispersal.

Start year

1936

Target year

Indefinitely

Project area to date (Hectares)

135,000

Project area in the target year (Hectares)

135,000

Country/Area

South Africa

Latitude

Longitude

Monitoring frequency

Six-monthly or more frequently

Measured outcomes to date

Biodiversity

Please explain

Sappi participates in the national stewardship programme through which we have seven declared nature reserves and we have identified 166 Important Conservation Areas (ICAs) on our land.

F7. Verification

F7.1

(F7.1) Do you verify any forests information reported in your CDP disclosure?

In progress

F8. Barriers and challenges

F8.1

(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.

Forest risk commodity

Timber products

Coverage

Supply chain

Primary barrier/challenge type

Complexity of certification requirements

Comment

Our wood sourcing causes zero deforestation so this is not a challenge that needs to be eliminated. Rather, our challenge is that our robust policies and practices rely on forest certification systems and in some contexts where the uptake of certification is low, this is

a potential barrier. Sappi neither harvests nor buys woodfibre which originates from tropical natural forests and our wood sourcing causes zero deforestation. Our commitment to zero deforestation means knowing the source of woodfibre; ensuring that suppliers implement practices to promptly regenerate forests post-harvest, which is required under the global forest certification standards (FSC and PEFC) that Sappi is committed to upholding. It also means implementing our Supplier Code of Conduct to continually assess supply-chain, ethical and legal risk, and not sourcing from suppliers associated with deforestation.

In this regard, we continually work to ensure certification is accessible and widespread and that it does not become a market barrier.

Sappi has participated in projects reviewing the blockchain technology and its possibilities within Chain of Custody, and whether this technology would provide further evidence of responsibly sourced timber and act as a powerful tool to ascertain the sustainable origin of the woodfibre.

The cost of certifying timber is an issue for small growers. In South Africa Sappi has overcome this barrier through a group certification scheme. In FY2019 there were 44 members in the scheme with plantations ranging from less than a hundred hectares to several thousand hectares. Moreover, Sappi has been actively contributing to SAFAS's (South African Forestry Assurance Scheme) Value-Based Platform for sustainable forest management and certification, and the PEFC-endorsed SAFAS intends to offer access to feasible, attainable and especially affordable forest certification solutions and thus market access especially for the country's smallholders. In South Africa and in Africa altogether, the amount of certified forests is still very low (less than 2%), so this type of work is groundbreaking, and can really make a difference in enhancing sustainable forest management in Africa and thus improve both the level of forestry but also the level of livelihoods.

F8.2

(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.

Forest risk commodity

Timber products

Coverage

Main measure

Increased knowledge on commodity driven deforestation and forest degradation

Comment

Deforestation does not predominantly originate from the timber sector and certainly not from our supply chains. Regardless, we are working in various forums to share our experience and knowledge on sustainable, transparent supply chains in the hopes that this will support other commodities which are driving deforestation. One example of this is the UK's Global Resource Initiative (GRI) where Sappi participated as a TaskForce member contributing to the development of the UK's Strategic Sustainable Commodity Action Plan.

F17 Signoff

F-FI

(F-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

F17.1

(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1	Group Head: investor Relations and Sustainability	Chief Sustainability Officer (CSO)

SF. Supply chain module

SF0.1

(SF0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	5,746,000,000

SF0.2

(SF0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Yes

SF0.2a

(SF0.2a) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	ZA	E000006284

SF1.1

(SF1.1) In F6.3 you were asked “Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)? Indicate the volume and percentage of your certified production and/or consumption”. Can you also indicate, for each of your disclosed commodity(ies), the percentage of certified volume sold to each requesting CDP supply chain member?

Yes

SF1.1a

(SF1.1a) For each of your requesting CDP supply chain members, indicate the percentage of certified volume sold per disclosed commodity(ies).

Requesting member

Philip Morris International

Forest risk commodity

Timber products

Form of commodity

Paper

Third-party certification scheme

FSC Chain of Custody

Total volume of commodity sold to member

24,500

Metric

Metric tons

What % of the volume reported in column 5 is certified?

<10%

Comment

The CDP supply chain member in question purchased speciality paper products from Sappi's European mills which all are both PEFC and FSC Chain of Custody certified and can thus offer certified paper products to customers upon request. Sappi applies so called credit-system for managing PEFC and FSC certified fibre inputs and outputs, and if a customer orders PEFC or FSC certified products, they are sold as 100% PEFC certified or FSC Mix credit, respectively. In the case in question the customer only ordered a small portion as certified.

Requesting member

L'Oréal

Forest risk commodity

Timber products

Form of commodity

Paper

Third-party certification scheme

Other, please specify

Both FSC Chain of Custody and PEFC Chain of Custody

Total volume of commodity sold to member

4,726

Metric

Metric tons

What % of the volume reported in column 5 is certified?

91-99%

Comment

The CDP supply chain member in question purchased speciality paper products from Sappi's European mills which all are both PEFC and FSC Chain of Custody certified and can thus offer certified paper products to customers upon request. Sappi applies so called credit-system for managing PEFC and FSC certified fibre inputs and outputs, and if a customer orders PEFC or FSC certified products, they are sold as 100% PEFC certified or FSC Mix credit, respectively. In the case in question the customer ordered almost all as certified.

SF2.1

(SF2.1) Please propose any mutually beneficial forests-related projects you could collaborate on with specific CDP supply chain members.

Requesting member

Philip Morris International

Commodity related to the project

Timber products

Category of project

Innovation

Type of project

Implementation of new techniques/technologies to ensure sustainable production

Estimated timeframe for realization of benefits to customer

1-3 years

Details of project

Through Sappi's continued focus on innovating paper and packaging solutions, we remain committed to partnerships with customers; embracing the circular economy using sustainable materials based on certified wood and replacing fossil-based chemistry and working on new technologies that support transformation in Sappi and across our value chain partners to reduce CO2 emissions and contribute to the Sustainable Development Goals.

Projected outcome

Sappi is continuously launching new products which meet customer and market expectations for functionality, recyclability and sustainability.

Requesting member

L'Oréal

Commodity related to the project

Timber products

Category of project

Innovation

Type of project

Implementation of new techniques/technologies to ensure sustainable production

Estimated timeframe for realization of benefits to customer

1-3 years

Details of project

Through Sappi's continued focus on innovating paper and packaging solutions, we remain committed to partnership with customers; embracing the circular economy using sustainable materials based on certified wood and replacing fossil-based chemistry and working on new technologies that support transformation in Sappi and across our value chain partners to reduce CO2 emissions and contribute to the Sustainable Development Goals.

Projected outcome

Sappi is continuously launching new products which meet customer and market expectations for functionality, recyclability and sustainability.

New

Requesting member

L'Oréal

Commodity related to the project

Timber products

Category of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers' targets and ambitions

Estimated timeframe for realization of benefits to customer

1-3 years

Details of project

Given South Africa's significant development needs, Sappi supports a range of community and environmental projects. Support covers education, environment and socio-economic development, based on helping communities help themselves. Initiatives include the Sappi Khulisa enterprise development programme which encompasses community tree farming. The total area managed is currently 34,139 hectares and the initiative currently reaches approximately 4,000 growers. The African Honey Bee project, partly funded by Sappi focuses on encouraging rural entrepreneurship, alleviating poverty, curbing fires and providing additional financial resources for local timber farmers. Within the project we make certain plantations available for bee-keeping and we sponsor training and equipment. A new project we have recently launched is focused on landscape restoration within KwaZulu-Natal province. Together with an NGO partner, we work with local communities to reduce degradation of grasslands and improve the management of their cattle ranching to more sustainable & productive practices. Working together we are improving the biodiversity in this ecologically important area, while supporting rural economic development and poverty reduction. Sappi is open to discussing collaboration to enable the scaling up of existing long-standing projects or other emergent projects looking at other priority topics like water stewardship and landscape restoration. We are committed to SDG 17 and invite partnerships where it enables us to expand our positive contribution to sustainable development.

Projected outcome

Sappi's community projects deliver environmental and socio-economic impacts to the people we work with. Since 1995, Sappi Khulisa has purchased wood from small growers at a volume of 4,221,941 tons and value of US\$30 million. Sappi's initiatives are entrepreneurial in spirit, so the impacts and outcomes are self-sustaining.

SF2.2

(SF2.2) Have requests or initiatives by CDP supply chain members prompted your organization to take organizational-level action to reduce or remove deforestation/forest degradation from your operations or your supply chain?

No

SF3.1

(SF3.1) For your disclosed commodity(ies), do you estimate the GHG emission reductions and/or removals from land use and land use change that have occurred in your direct operations and/or supply chain?

Timber products

Estimate GHG emissions and removals from land use and land use change

No, but plan to do so in the next two years

Please explain

Within Sappi's direct operations in South Africa, land use change is minimal. We are exploring methodologies to enable our reporting on this variable also within the context of the emerging requirements for the South Africa Carbon Tax. To maintain a National Greenhouse Gas Inventory in order to fulfil reporting obligations under the United Nations Framework Convention on Climate Change, the Department of Environmental Affairs has introduced mandatory reporting. Sappi annually calculates GHG emissions for Sappi's forest land holdings, starting in 2016 and a predictive analysis was done until 2023. The stock-difference method (carbon stock change as an annual average difference between estimates at two points in time) was used to calculate 2019 GHG emissions. The annual carbon stock change was calculated using Equation 2.5 (IPCC 2006, Volume 4, Chapter 2, P2.9) by subtracting the total carbon stocks in 2018 from the stocks in 2019. In total, Sappi can report 376 000 tons CO₂ emissions for the 2019 calendar year from managed forest (above and below ground biomass). There are plans to include emissions from burning of harvest residue as well as other carbon pools in future and to include land use change (natural vegetation restoration), but these are very small areas and very low carbon numbers. These emissions have not been included in the total externally assured Scope 1 numbers as the method to calculate carbon sequestration by forests has not been finalised by local government in South Africa.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms