

F0. Introduction

F0.1

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

Sappi is a global diversified woodfibre company with a direct and indirect customer base across more than 150 countries.

We create value through six streams:

- Forests: Our 100% Forest Stewardship Council® (FSC®)-certified plantations in South Africa give us a low-cost, high-quality woodfibre base on which our business depends and are thus a key pillar of competitive advantage. Our leading-edge tree improvement programmes aim to grow better trees faster, thereby ensuring this advantage is maintained and enhanced.
- Manufacturing excellence: We focus on enhancing machine efficiencies, digitising our processes to make the smart factory a reality, reducing variable costs through new practices in logistics and procurement, as well as implementing go-to-market strategies which lower the cost of serving our customers and increase customer satisfaction.
- 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 strengthening our core business model.

- Dissolving wood pulp: Dissolving wood pulp (DWP) is a truly sustainable raw material. Our customers transform our DWP into products which meet the needs of people around the globe every day. Products which enable fashion, household comfort, personal beauty and hygiene, as well as a healthy lifestyle.
- Specialities and packaging papers: Our customers use our specialities and packaging papers to add value to niche markets, enable product differentiation and offer environmentally conscious consumers an alternative to fossil-fuel based packaging. Our focus on innovation helps our customers to meet and anticipate the challenges of changing market dynamics.
- Printing and writing papers: While the digital age has impacted on the use of paper, our printing and writing papers continue to meet the needs of consumers and marketers around the world. They rely on paper for a tactile, emotional experience no other communication medium can replicate.

Manufacturing operations are located in North America, Europe and South Africa, where the company also owns and leases 387,291 hectares of 100% FSC-certified plantations with access to a further 129,000ha of plantations. Globally we have 12,645 employees.

In FY2018, production included:

- * 5.7 million tons of paper
- * 2.3 million tons of paper pulp
- * 1.4 million tons of dissolving wood pulp.

In FY2018, in terms of production of group sales, Europe accounted for 51%, North America for 25% and South Africa for 24%.

Sappi's dissolving wood pulp (specialised cellulose) products are used worldwide by converters to create viscose fibre for fashionable clothing and textiles, pharmaceutical products, as well as a wide range of consumer and household products. Quality specialities and packaging papers are used in the manufacture of such products as soup sachets, luxury carry bags, cosmetic and confectionery packaging, boxes for agricultural products for export, tissue wadding for household tissue products and casting and release papers used by suppliers to the fashion, textiles, automobile and household industries. 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.

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



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 2017	September 30 2018

F0.3

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

F0.4

(F0.4) Select the stage(s) of the value chain which best represents your organization's area of operation pertaining to forest risk commodities.

	Stage of the value chain
Timber	Production Processing Trading Manufacturing
Palm Oil	<Not Applicable>
Cattle Products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	Please select

F0.5

(F0.5) Do you produce, use, or sell materials or products that contain any of the forest risk commodities?

	Produce/use/sell	Disclosing	Explanation if produce/use/sell but not disclosing
Timber	Yes	Yes	<Not Applicable>
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle Products	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	No	<Not Applicable>	<Not Applicable>

F0.6

(F0.6) Are there any parts of your direct operations not included in your disclosure?
No

F0.7

(F0.7) Are there any parts of your supply chain 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)?

Forest risk commodity

Timber

Activity

Growing/production of raw materials

Form of commodity

Hardwood logs

Softwood logs

Sawn timber, veneer, chips

Unprocessed wood fiber

Pulp

Paper

Boards, plywood, engineered wood

Primary packaging

Secondary packaging

Tertiary packaging

Cellulose-based textile fiber

Wood-based bioenergy

Source

Owned/managed land

Smallholders

Multiple contracted producers

Trader/broker/commodity market

Country/Region of origin

Australia

Austria

Belarus

Belgium

Bosnia and Herzegovina

Brazil

Canada

Chile

Croatia

Czechia

Denmark

Estonia

Finland

France

Germany

Hungary

Ireland

Latvia

Lithuania

Luxembourg

Netherlands

New Zealand

Norway

Poland

Portugal

Romania

Russian Federation

Serbia

Slovakia

Slovenia

South Africa

Spain

Swaziland

Sweden

Switzerland

Ukraine

United Kingdom of Great Britain and Northern Ireland

United States of America

Uruguay

% of procurement spend

31-40%

Comment

Text field [maximum 2,400 characters] Sappi is a global diversified woodfibre company focused on providing dissolving wood pulp, specialities and packaging papers, printing and writing papers, as well as biomaterials and biochemicals to our direct and indirect customer base across more than 150 countries. We have pulp and paper manufacturing facilities in Austria, Belgium, Finland, Germany, Italy, the Netherlands, South Africa and the USA. We are vertically integrated into pulp, energy and forest products further up the value chain. Text field [maximum 2,400 characters]

F1.1a

(F1.1a) Indicate from which State/region(s) and municipality(ies) your disclosed commodity(ies) originate.

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region (Paper pulp for Sappi Europe mills in FY2018 came from: Rio Grande do Sul, Belmonte, Eunápolis, Guaratinga, Itabela, Itagimirim, Itapebi, Mascote, Porto Seguro, Santa Cruz Cabralia, Santa Luzia, South-West Bahia, Minas Gerais, Amapá.)

Municipality

Not disclosing

Please explain

Sappi Limited requires all woodfibre suppliers to disclose country of origin and species. All Brazilian suppliers are FSC Chain of Custody/Controlled Wood certified and PEFC Chain of Custody certified and, as set out in our Group Woodfibre Procurement Policy, the minimum requirement for Sappi is that the woodfibre meets the criteria of FSC Controlled Wood. (<https://cdn-s3.sappi.com/s3fs-public/Sappi-Group-Woodfibre-Procurement-Policy.pdf>) Four Sappi Europe mills used paper pulp from Brazil in FY2018. The amount of Brazilian woodfibre of the total amount consumed by the mills was as follows: Gratkorn Mill 0,004%; Stockstadt Mill 0,016%; Condino Mill 15%; Carmignano Mill 8%.

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region (In FY2018 Sappi North America received 15,154 admt from two Brazilian producers which originated from the following regions: Bahia, Minas, Gerais, Espírito Santo, Pará, Tocantins, and Maranhão.)

Municipality

Not disclosing

Please explain

Municipality origin is considered confidential

Forest risk commodity

Timber

Country/Region of origin

Brazil

State/Region

Specify state/region (Sappi SA has one Brazilian supplier, sources broken down as follows: Rio Grande do Sul State -Arroio dos Ratos, Arroio Grande, Bage, Barra do Ribeiro, Barrao do Triunfo, Butia, Cacapava do Sul, Cachoeira do Sul, Camaqua, others disclosed below)

Municipality

Not disclosing

Please explain

Sappi SA has one Brazilian supplier, sources broken down as follows: Rio Grande do Sul State -Arroio dos Ratos, Arroio Grande, Bage, Barra do Ribeiro, Barrao do Triunfo, Butia, Cacapava do Sul, Cachoeira do Sul, Camaqua, Candiota, Cristal, Dom Feliciano, Eldorado do Sul, Encruzilhada do Sul, Guaíba, Lavras do Sul, Mariana Pimentel, Minas do Leao, Pantano Grande, Pedras Altas, Pedro Osorio, Pinheiro Machado, Rio Grande, Rio Pardo, Santa Margarida Do Sul, Sao Gabriel, Sao Jeronimo, Sao Sepe, Tapes, Vila Nova do Sul.

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	91-99%	Virtually all our products (pulp, paper, board, dissolving wood pulp, bio-based products) are based on woodfibre. We do use bagasse (sugar cane waste residue) at Stanger Mill in South Africa, but in the overall context of revenue, this amount is very small.
Palm Oil	<Not Applicable>	<Not Applicable>
Cattle products	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>

F1.3

(F1.3) Do you own or manage land used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber

Own and/or manage land?

Owned and managed land

Type of control

Operational

Description of type of control

In Southern Africa, Sappi Forests has access to 516,000 ha plantations, of which approximately 387,000 ha are owned or leased, and 129,000 ha are contracted supply. All owned and leased plantations are FSC-certified.

Country/Region

South Africa

Land type

Land certified

Size (Hectares)

387291

Do you have a system in place to monitor forests-related risks?

Yes

Type of monitoring system

Geographic Information System (GIS)

Ground-based monitoring system

Aerial monitoring system

Description of monitoring system

In terms of ground-based monitoring, we have instituted Sentinel trials to understand the relative susceptibility of our growing stock to newly introduced pests or disease. Different genotype and different life stages of trees are represented. Our objective is to rapidly identify a new pest or disease, and immediately determine which genotypes are susceptible or tolerant, and also which life stage of the tree is impacted. This allows to react very quickly. We are also using automated change detection satellite imagery to rapidly detect and react to drought, pests, diseases, etc in our plantations. In 2018 Sappi Forests established long-term soil monitoring plots through a collaborative research project managed by the Institute for Commercial Forestry Research. These monitoring plots will form part of the current inventory plot network (permanent sample plots) and will be used to interpret and relate changes in soil quality parameters to stand productivity and site management.

Recent infraction(s)

No

Explanation of infraction

<Not Applicable>

F1.4

(F1.4) 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.

Timber

Do you collect data regarding compliance with the Brazilian Forest Code?

Yes, from suppliers

Please explain

Sappi Limited's Group Woodfibre Procurement Policy requires all woodfibre suppliers to meet, at a minimum, the FSC Controlled Wood (CW) criteria, in accordance with the Sappi Group Woodfibre Procurement Policy (<https://cdn-s3.sappi.com/s3fs-public/Sappi-Group-Woodfibre-Procurement-Policy.pdf>). Sappi only sources woodfibre that complies with all applicable legal and regulatory obligations in countries from which it originates; comes from forests where the customary, traditional or civil rights of people are upheld; is procured from forestry and manufacturing operations where health and safety legal requirements are upheld; where applicable, maintains critical, unique attributes within officially designated high conservation value areas; avoids areas knowingly converted from forests to non-forest uses; does not come from commercial timber plantations which have been converted from natural forests post 1994; and is not genetically modified. As spelled out in this policy, Sappi requires rigorous tracing practices and documentation of the origin of all woodfibre, and all suppliers of wood logs, chips and pulp shall 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 North America) risk-based due diligence system(s) (DDS). Sappi collects data, annually, on the origin of woodfibre and other information regarding suppliers' environmental performance through supplier surveys and declarations. Sappi also strives to increase our use of certified woodfibre and to promote the increase use of certified woodfibre throughout our supply chain. Where possible, Sappi procures Chain-of-Custody (CoC) certified woodfibre, especially from regions or countries where concerns exist regarding forestry or broader sustainability practices. As a requirement of CoC/CW Certification, suppliers are required to implement some standard/common due diligence system practices at both a geographic and supply-chain level to assess, disclose and minimize/mitigate risk and to ensure compliance with all applicable laws/regulations. Sappi does require compliance statements with the Brazilian Forest Code from its Brazilian paper pulp suppliers.

F1.4b

(F1.4b) 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

Please select

KPIs and performance

Other, please specify (FSC COC/CW)

Number of suppliers

4

Please explain

All Brazilian paper pulp suppliers are FSC Chain of Custody/Controlled Wood certified. The two Brazilian pulp suppliers to SEU and SSA are denoted here as A (both to Europe and South Africa) and B (only to Europe): 1. Compliance with the Rural Environmental Registry (CAR) and registration in the CAR - Supplier A: 100% of properties were registered on the CAR since May, 2016. - Supplier B: 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). 2. Deficit in the Legal Reserve (RL) and / or in the Permanent Protection Area (APP) - Supplier A: Does not have a deficit. 100% of the properties have the Legal Reserve - RL and the Permanent Preservation Areas - APP, provided for in Federal Law 12.651, dated 05.25.2012 - Supplier B: The registration includes the certification of the legal reserve (RL) and the location of the APP (Permanent Protection Area) that ensures the appropriate use of the land for plantations and protected areas 3. Signed Terms of Commitment of the Environmental Regularization Program (PRA) - Supplier A: Does not yet have PRA, because the local environmental agency did not establish the procedures, but in accordance to the certification rules, the company has a program for restoration in areas where the native vegetation needs some improvement. - Supplier B: Should there be any environmental liabilities in the area, these are detailed in the CAR which then generates the term of commitment and in the PRA (Environmental Regularization Programme) for the regularization of the natural area. 4. Operating without gross deforestation after July 2008 - Supplier A: No deforestation since 22 July 2008 on their farms, according to certification rules, which go beyond the national legal requirements. - Supplier B: The supplier provides 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. Related to the last question of operating without gross deforestation, a satellite image evaluation is performed to verify if there has been a conversion after 1994, in order to comply with FSC requirements and consequently after July 2008 to comply with the Forest Code.

F1.5

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

	Data availability/Disclosure
Timber	Production data available, disclosing
Palm Oil	<Not Applicable>
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F1.5a

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

Forest risk commodity

Timber

Data type

Consumption data

Volume

7985259

Metric

Other, please specify (Air dry metric tons)

Data coverage

Full commodity production/consumption

Please explain

In FY2018 we used 5,780,168 tons of logs, 1,030,577 tons of chips and 1,174,514 tons of market pulp to produce 6,366,500 tons of pulp.

F1.6

(F1.6) Have you identified sufficient sources of sustainable materials to meet your current operational needs? If yes, what are you doing to ensure the security/continuity of this supply?

Timber

Sustainable source identified

Yes

Primary action to ensure supply

Other, please specify (Expanding forest certification • Supplier improvement plans to increase capacity of supply • Engaging in)

Please explain

In 2018, 75.2% (EU 78%, NA 58%, SA 82%) of the woodfibre used by the Sappi mills originated in FSC or PEFC (incl. SFI) certified forests. Sappi strives to increase the use of certified woodfibre and to enhance forest certification in general. In 2018, Sappi's revised its Woodfibre Procurement Policy which describes the company's goals, principles and requirements for the procurement of wood based raw materials. The new Woodfibre Procurement Policy is incorporated in all our woodfibre contracts. In 2018 Sappi launched a new Supplier Code of Conduct which further emphasizes Sappi's commitment to responsible sourcing practices. In Europe, all woodlogs and chips are purchased through well-established wood sourcing enterprises (Sapin S.A, proNARO GmbH, Papierholz Austria GmbH, and Metsä Forest) which are all FSC and PEFC Chain of Custody certified. Sappi is a co-owner of proNARO and Papierholz Austria, and the sole owner of Sapin. They buy wood mainly from non-industrial private forests, municipalities and state-owned forests. All wood meets verifiably the FSC CW requirements at the minimum. Similarly, in Sappi North America, we rely on long- and short-term supply agreements, but also improve access to small woodholdings through the Sappi Maine Forestry Program and the Sappi Lake States Private Forestry Program. These two programmes, staffed by SNA foresters, offer a wide range of services to landowners. SNA staff monitor the implementation of best management practices on harvest sites to ensure adequate regeneration, conservation of soil and water resources, and adherence to the harvest plan(s). In South Africa, we recognised that we needed to obtain certification over and above the FSC Group Scheme certification, based on the difficulty of getting small growers certified and on customers' requests for PEFC labelled products. PEFC endorses national certification schemes, which meant South Africa had to develop a new certification scheme including a forest management standard. This is now known as the South African Forest Assurance Scheme (SAFAS) and has been fully endorsed by the PEFC. Certification bodies (CB) are currently in the process of being accredited to undertake audits and certify organisations to both SAFAS forest management and chain of custody certification.

F1.7

(F1.7) Has your organization experienced any detrimental forests-related impacts?

Yes

F1.7a

(F1.7a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Forest risk commodity

Timber

Impact driver type

Physical

Primary impact driver

Rising mean temperatures

Primary impact

Constraint to growth

Description of impact

In Southern Africa, Sappi Forests owns and leases 387,000 ha of land, with contracted supply covering a further 129,000 ha. Climate change has already impacted some of our plantations and has the potential to significantly impact our woodfibre base. Accordingly, we take concerted action to mitigate the risk, beginning with understanding where the largest risks of climate change will be to Sappi, how climate is likely to change further into the future and to formulate a multi-pronged response.

Primary response

New product/technology development

Total financial impact

3700000

Description of response

The amount given above represents Sappi Forest' research investment. Our response involves: • Climate change investigations — to determine which plantations are most at risk, and also to identify which climatic variables are likely to change, as well as the magnitude and direction of such change. The preliminary study showed that maximum temperatures are more likely to increase than minimum temperatures, especially during spring and summer. It is also likely that spring rainfall will decrease, with more high-intensity rainfall during summer. The combined effect of higher temperatures and lower rainfall in spring is likely to exacerbate tree stress, thereby increasing susceptibility to pests and diseases, as well as fire. • Replacing pure species with hybrids — on the Mpumalanga highveld, Sappi experienced the impact of the changes described above with Eucalyptus (E.) nitens becoming unsuitable due to pest and disease issues, on plantations with the highest risk of climate change. Subsequently, the decision was taken to replace E. nitens in KwaZulu-Natal by replacing it with E. grandis x E. nitens hybrid varieties. • Adjusting and directing our tree breeding strategy — through the use of modelled future climate data. 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 sites by 2025.

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

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

Six-monthly or more frequently

How far into the future are risks considered?

> 6 years

Tools and methods used to identify and assess risks

Internal company methods
External consultants
FSC Global Forest Registry
National specific tools and databases
Other, please specify (• Group Woodfibre Procurement Policy • 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

At a company (group) level, the Regional Risk Management Councils meet bi-annually to identify, assess and discuss risks. The top risks are then identified and plotted on a graph in terms of likelihood and severity. Risks, including forest risks, are monitored and publicly reported on annually. We currently have a general process for determining materiality and priorities of all Sappi's risks. Forest risks considered include regulatory, reputational, 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 EUTR/Lacey Act (origin of wood and supplier chains) are also in place. If sourcing from any regions where the FSC Controlled Wood Risk assessments show specified risk, we implement mitigation and monitoring measures to address specified risks. The Group Woodfibre Procurement Policy revised in 2018 and the new Supplier Code of Conduct launched in 2018 support the work. Regular internal and external third-party audits monitor the compliance with the requirements of Forest Certification FSC CoC/CW, PEFC CoC and SFI CoC and Fiber Sourcing systems. 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. The results of these reviews are used together with the internal survey results of the company's forestry assets, to buy insurance to mitigate risk as required. The principles of ISO 14000 and international forest certification systems (FSC®, PEFC™, SFI®,) are well entrenched across the group.

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

Text field [maximum 2,400 characters] 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, insect or disease. Accordingly, availability is assessed as part of an ongoing risk management process. . In Europe, we mitigate fibre supply risk through shareholdings in wood sourcing companies (proNARO GmbH, Sapin S.A, Papierholz Austria GmbH) and cooperation (Metsä Forest) and in South Africa and North America through a combination of approaches which include both short- and long-term wood supply agreements. In South Africa, we limit risk in terms of availability of supply by owning and leasing 387,000 hectares(ha) of 100% FSC-certified plantations with access to a further 129,000ha of contracted supply. 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. For example, in SA, 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.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

As our business is dependent on woodfibre, this is an ongoing, current issue. In general terms, forests and plantations are managed for regeneration and healthy regrowth, thereby contributing to more resilient landscapes and quality of woodfibre. For purchased fibre, quality risks are assessed at an operational level as part of the fibre procurement process by assessing fibre sources, silviculture and harvesting techniques etc In South Africa, Sappi Forests' planning section documents, monitors and models its woodfibre resources to ensure that a continuous and sustainable supply of timber is available as required by different markets. Planning incorporates planting permits and water licences as well as information for non-plantation areas. Growing stock data is used for determination of the value of forestry assets. 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. 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 low-cost 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

An ongoing issue for Sappi is that thriving forests and landscapes are key to meeting the global drive for sustainability and forests are linked to almost all of the SDG goals. Recognising 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. It also makes sound business sense, given that we depend on natural resources such as water and woodfibre for our ongoing viability as a business. Sappi's Group Woodfibre Procurement Policy, revised in 2018, describes the company's goals, principles and requirements for the procurement of wood based raw materials. The policy defines Sappi's commitment to sourcing woodfibre from forests in a manner that promotes their health and supports community wellbeing. The revised policy acknowledges the wider impacts procurement practices have on sustainable development. Furthermore, the impact of our woodfibre sourcing activities on ecosystems and habitats is monitored in terms of the internationally recognised, third-party certification systems we use. Given that impacts of our activities to the ecosystems and habitats are pivotal for raw material availability, related risk management is integrated to all decision-making levels. The

Regulation

Relevance & inclusion

Relevant, always included

Please explain

Regulations related to forestry risk are monitored by the regional sustainability managers, discussed at regional sustainability council and also at the Group Sustainability Council, as well as being monitored through the enterprise-wide risk management process. In addition, we and comply its demands for the due diligence system. 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. Sappi complies with EU Timber Regulations, the US Lacey Act, and Australian Illegal Logging Prohibition Regulation 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 have been approached by a large number of land-reform beneficiaries to assist with the management of timber on their properties, post settlement. As at the end of September 2018, Sappi was involved in 60 land reform projects, helping beneficiaries to manage approximately 19,000 hectares of land. Many of these properties previously belonged to commercial farmers who had supply agreements with Sappi. For many of the land claims in which we have been involved, and where there has been a change in ownership, we continue to buy the timber and help to manage those plantations. .

Climate change

Relevance & inclusion

Relevant, always included

Please explain

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. Given that woodfibre is a key input to our manufacturing operations, helping to mitigate climate change, thereby maintaining continuity of supply and containing costs is integral to our sustainability as a business. In SA, we mitigate risk to our plantations by:

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

Impact on water security

Relevance & inclusion

Relevant, always included

Please explain

In South Africa, where water security is an issue, 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 polluted 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.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

Our 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 our 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.

Brand damage related to forest risk commodities

Relevance & inclusion

Relevant, sometimes included

Please explain

Many consumers erroneously equate deforestation with pulp and paper companies although agricultural expansion for the production of commodities like soy, beef, palm oil, coffee and cocoa drive about 80% of all deforestation specially in tropical countries, and mining, urbanization and infrastructure have adverse impacts, too. Credible, internationally recognised, robust forest certification systems like FSC and PEFC (incl. SFI) are fundamental tools for ensuring and giving assurance to our value chain of the origin of our woodfibre and responsible forest management practices. In 2018, the percentage of certified fibre procured for Sappi's mills was 75%. In South Africa, 100% of Sappi's owned and leased plantations are FSC-certified. Woodfibre is a renewable natural raw material and when sourced from responsibly-managed forests and tree plantations it offers a multitude of sustainable solutions for a society looking for alternatives to fossil-fuel based packaging. For example, the growing concern about single-use plastic offers Sappi an opportunity in that we are able to provide alternative packaging solutions that are recyclable and biodegradable. This in turn has positive implications for growth in the specialities and packaging papers sector in which we are active.

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 2018 launched new Supplier Code of Conduct commits suppliers to responsible, transparent sourcing of woodfibre and is a strong tool against corruption along with Sappi's Code of Ethics. Our

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

The impact of our woodfibre sourcing activities in terms of social impacts is monitored in terms of the internationally recognised, third-party certification systems we use. 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 Forests 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. Approximately 4,000 farmers are currently managing 27,080 ha, not only generating income, but also creating rural employment. In 2018, under the programme 483,359 (2017: 448,221 tons) was delivered to our operations. Since 1995, a total volume 3,796,940 tons has been purchased from small growers in terms of this programme. In addition, the Abashintshi (isiZulu for 'change agents') programme which was first established in KwaZulu-Natal in 2015, includes life skills training for the youth, the Ifa Lethu programme for the elderly (protecting cultural heritage), holiday programmes for school children and Asset Based Community Development (ABCD). The latter is based on the premise that communities can drive the development process themselves by identifying and mobilising existing, but often unrecognised, assets. The programme has been expanded to 65 Sappi communities across the KwaZulu-Natal and Mpumalanga provinces, with 117 Abashintshi now involved. They are generating an income for themselves through their own businesses and they are helping community members to improve their own businesses. During 2018, 190 micro- and small businesses were started or rejuvenated, earning an income for 268 people.

Other, please specify

Relevance & inclusion

Relevant, always included

Please explain

As an example of our due diligence systems, SNA takes the following steps: Sappi North America meets annually with each pulp supplier. Suppliers are required to complete the following documents as part of Sappi North America's due diligence system process. * Pulp Supplier Safety Survey * Supply Chain Risk Assessment and Lacey Act Compliance Form. * Current links to sustainability reports are also requested from the supplier, with an updated Safety Data Sheet and any ISO certifications. Additionally, suppliers are given a copy of the current Sappi Group Woodfibre Procurement Policy and Sappi's Group Supplier Code of Conduct (beginning 2019). Annual Supplier Safety Survey forms are sent by the Fiber Procurement and Planning Group to the Manager of Packaging Product Stewardship and the Manager of Corporate Safety Systems. If any concerns are raised during this review, the aforementioned managers will deal with the concern directly and notify/coordinate with the Pulp Procurement Group as necessary. Annual Supply Chain Risk Assessments and Lacey Act Compliance Forms are reviewed. If there is any non-compliant information (responses that do not fall within acceptable parameters), the response is forwarded to Sappi North America's Forestry Certification Manager with a copy to the Pulp Procurement Manager for additional review and follow-up action. Additional questions and or documents may be requested from the supplier. Depending on the magnitude of concerns/questions raised during this review, additional negotiations or actions may be taken related to the specific suppliers in question. This will be decided on a case-by-case basis and clearly documented.

(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

Text field [maximum 2,400 characters] We adopt a partnership approach, whereby we develop long-term relationships with customers. We also accommodate more transactional customers. Where relevant, we will conduct R&D and develop products to suit customers' specific needs in terms of e.g. recyclability, biodegradability, etc., Globally, a series of technical brochures is available on our website www.sappi.com Market demands are constantly changing and we continue to offer new or enhanced products to meet these demands. 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, DWP 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 (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 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 Sappi North America's website and in printed/mailed brochures, some owned and produced exclusively by Sappi and others by regional/statewide/state-wide collaboratives in which Sappi participates. SNA engages 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.

Employees**Relevance & inclusion**

Relevant, always included

Please explain

Our employees are our brand ambassadors. We keep them updated about our activities by through induction training and targeted internal publications. Sappi's high premium on adherence to ethical behaviour is entrenched in our Code of Ethics (Code). In addition to training all new employees during induction, we conduct ongoing awareness training. In the past year this included online or in-person awareness training on various topics covered in the Code. These ranged from dawn raid awareness to the protection of personal information. In addition, all relevant new employees in all regions were trained on anti-fraud and corruption as well as Competition Law.

Investors**Relevance & inclusion**

Relevant, always included

Please explain

There is broad consensus that the private sector must incorporate ESG objectives in business operations and that the management of forests has moved beyond being about just forests to being about a range of sustainable development issues. We also engage with various ratings agencies such as MSCI and Oekom, particularly in terms of ESG performance. Sappi North America recently 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. We make sure investors are fully informed about our focus on the issues through our annual integrated report, group sustainability reports and through roadshows and one-on-one meetings with investors.

Local communities**Relevance & inclusion**

Relevant, always included

Please explain

Having a mutually respectful relationship with the communities in which our business is situated is critical to our success. We work to incorporate the communities close to our operations into our 2020Vision, which recognises the importance of conserving natural resources, uplifting people so that they are able to develop and create opportunities in their immediate environment as well as thrive in our increasingly inter-connected world and also through sharing value. Social projects are reviewed on a case-by-case basis and we encourage projects which facilitate partnerships and collaboration between communities, government and the private sector.

NGOs**Relevance & inclusion**

Relevant, sometimes included

Please explain

We engage with civil society organisations on issues of mutual interest and belong to key organisations relevant to our operations. We engage with various civil society groups 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, where we can engage with many stakeholders including NGOs on important international forest issues. 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. Sappi North America 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

1. In Sappi North America, 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. Across the group, we participated in industry associations and collaborations. For example, in North America these include: Minnesota Forest Industries - Forest Resources Association - Federal Forest Resources Coalition - Federal Timber Purchasers Committee - SFI Implementation Committees - Minnesota Forest Resources Coalition - Maine TREE Foundation2.

Regulators

Relevance & inclusion

Relevant, always included

Please explain

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

Suppliers

Relevance & inclusion

Relevant, always included

Please explain

In Europe, we work closely with our wood sourcing partners: • Sapin S.A, a Sappi-owned company located in Belgium for the buying and selling of wood and wood chips to Sappi and other companies; • proNARO, a joint venture with Essity for the sourcing of woodfibre for Sappi's German mills; • Metsä Forest, belonging to Metsä Group in Finland supplying the Kirkniemi mill; and • Papierholz Austria GmbH, specialized in purchasing wood to Sappi's Austrian mill and to its other shareholders.

Other stakeholders, please specify

Relevance & inclusion

Relevant, always included

Please explain

NGOs, industry bodies and business: In Europe and North America, close engagement is maintained directly and through the respective industry bodies CEPI (Confederation of European Paper Industries) and AF&PA .PA. Sappi is an International Stakeholder Member of PEFC. In North America, Sappi is a member of the economic chamber of both FSC US and SFI® and actively engages with these organisations through a variety of working groups and committee activities. In South Africa, Sappi is a member of the local WWF organisation as well as FSC. In 2018, we: • Became a founding partner of the University of Cambridge Institute for Sustainability Leadership's (CISL) Prince of Wales Global Sustainability Fellowship Programme. Work here will include examining drivers including the rise of artificial intelligence and the need to bring carbon emissions to net zero • Sappi Europe: – Continued to actively contribute to the development of an industry standard for delivery of chemical information through the paper and pulp supply chain by chairing the consortium's working group – Continued to participate in work related to deep eutectic solvents/solvents within the Biobased Industries Initiative, with the goal of significantly reducing CO2 emissions in pulp and papermaking -Actively participated in many committees and the Board of CEPI – Confederation of European Paper Industries • Sappi North America: – Joined the Recycling Partnership as a funding partner – Active board-level participant in the Paper and Packaging Board

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	Yes
Palm Oil	<Not Applicable>
Cattle Products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F3.1a

F3.1a) How does your organization define substantive impact on your business?

We consider the following areas of risk as likely to have a substantive financial impact on our business: financial, customers, operations, reputation and legal.

The likelihood of occurrence of all identified key risks is indicated as one of the following:

- o Remote - Could happen once in 10 to 50 years (1)
- o Unlikely - Could happen once in 2 to 10 years (2)
- o Possible - Could happen once in 2 years (3)
- o Likely - Could happen once in 6 months (4)
- o Almost certain - Could happen once or more a month (5)

We estimate the potential monetary value of all identified key risks as one of the following:

- o Very Low - US\$1 to US\$10m (1)
- o Low - US\$11m to US\$20m (2)
- o Medium - US\$21m to US\$50m (3)
- o High - US\$51m to US\$100m (4)
- o Very High - US\$100m to US\$200m (5)

Sappi's risk exposure is calculated by multiplying the weighting (in brackets) of the likelihood of occurrence (as set out above) by the weighting (in brackets) of the potential monetary impact (as set out above). This multiplication gives an indication of the risk level as follows:

- o Level 1 (high - red) - Multiplication result between 20 and 25,
- o Level 2 (high - red) - Multiplication result between 15 and 19,
- o Level 3 (medium - yellow) - Multiplication result between 8 and 14,
- o Level 4 (low - green) - Multiplication result between 4 and 7,
- o Level 5 (low - green) - Multiplication result between 1 and 3.

This result is then displayed on a heatmap

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

Type of risk

Physical

Geographical scale

Global

Where in your value chain does the risk driver occur?

Direct operation
Supply chain

Primary risk driver

Increased severity of extreme weather events

Primary potential impact

Constraint to growth

Company-specific description

There is a risk that climate change could impact ecosystems and biodiversity services in the forest and plantations from which Sappi sources woodfibre. Biodiversity is particularly important for Sappi as neither its own plantations in South Africa nor the managed natural forests in Europe and North America from which the group sources woodfibre would be productive without biotic processes taking place. Biodiversity contributes to the provision of a number of products and services in the following ways: • Ecosystem services: – Protection of water resources – Soils formation and protection – Nutrient storage and recycling – Pollution breakdown and absorption – Contribution to climate stability – Maintenance of ecosystems – Recovery from unpredictable events. • Biological resources: – Food – Medicinal resources and pharmaceutical drugs – Wood products – Ornamental plants – Breeding stocks, population reservoirs – Future resources – Diversity in genes, species and ecosystems. • Social benefits: – Opportunities for research and education – Recreation and tourism – Cultural values. To mitigate risk, we measure our biodiversity management standards against the internationally accredited forest certification systems we use. These systems incorporate detailed criteria for biodiversity management.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure**Primary response to risk**

Promotion of best practice and awareness

Description of response

As ecosystem processes and services play a vital role in ensuring the health and vitality of trees in terms of decomposition, soil rejuvenation and pest control, both Sappi's own plantations and the third-party forests from which the group sources woodfibre are actively managed to enhance these beneficial biotic processes and restrict harmful processes like pests and disease. For example, in South Africa approximately one-third of Sappi's land is set aside for biodiversity. About 73% of the land managed for biodiversity conservation comprises riparian zones, firebreaks, cliffs, rocky outcrops, dams and small wetlands. The remaining 27% comprises larger areas classified as Important Conservation Areas (ICAs) which receive special management according to specially developed management plans. ICAs conserve representative examples of grassland, forest or woodland and many of them are home to rare or threatened species. We participate in a national stewardship programme through which we have declared six nature reserves on our land. Sappi Europe Sappi sources some of its pulp from pulp mills in Latin America, where the suppliers own and manage large eucalyptus and pine plantations. The land is divided into sections of intensively managed plantation areas and indigenous forest that is fostered to recover and achieve a higher level of biodiversity. The natural ecosystem that is maintained in turn protects the forest stands.

Cost of response**Explanation of cost of response**

Not possible to separate out and quantify

Forest risk commodity

Timber

Type of risk

Regulatory

Geographical scale

Country

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Uncertainty and/or conflicts involving land ownership and occupancy rights

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Maintaining continuity of supply from plantations owned by land reform beneficiaries in South Africa is a challenge. Poor post-settlement support is one of the key reasons cited by experts.

Timeframe

1-3 years

Magnitude of potential impact

Medium-low

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure**Primary response to risk**

Engagement in multi-stakeholder initiatives

Description of response

As at the end of September 2018, Sappi was involved in 60 land reform projects. Many of these properties previously belonged to commercial farmers who had supply agreements with Sappi. To ensure sustainable production from these properties, we have entered into supply agreements with the new beneficiaries and have also

provided assistance. This depends on the requirements of the project, but ranges from a pure supply agreement to a comprehensive Forestry Enterprise Development Agreement (FEDA). The latter is a supply agreement but also incorporates development objectives whereby Sappi provides technical and business training as well as administrative support. In addition, to further assist with the development of small growers and other forestry value chain participants, We have established the Khulisa Ulwazi ('Growing knowledge') training programme and developed training material in conjunction with the Institute of Natural Resources. Training is offered to all value chain participants including small growers, contractors and land reform beneficiaries and covers all aspects of forestry, including the core operational skills as well as safety, legal compliance and running a business. In addition to these one-day courses, Sappi organises a number of accredited training courses from chainsaw training to safety and first aid training. Since the Ulwazi Training Programme started in 2015, over 2 000 people have attended training courses.

Cost of response

0.72

Explanation of cost of response

Between 2016 – 2018, the fixed cost of training amounted to approximately US\$750 000

Forest risk commodity

Timber

Type of risk

Regulatory

Geographical scale

Region

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Other regulatory driver, please specify (Diversion of wood for energy combustion)

Primary potential impact

Constraint to growth

Company-specific description

The global demand for woodfibre is expected to increase for the foreseeable future, driven partly by the trend to use renewable resources like woodfibre, rather than for energy generation. Since 2009, the 28 nations of the European Union have embarked on a dramatic switch to generating power from biomass-based fuels including wood-residues from production and harvesting. This could potentially cause a shortage.

Timeframe

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Primary response to risk

Other, please specify (Engagement with industry bodies)

Description of response

Sappi lobbies through its membership of industry bodies such as the Confederation of European Paper Industries (CEPI).

Cost of response

Explanation of cost of response

Included in overall management costs and memberships of industry associations.

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	Yes
Palm Oil	<Not Applicable>
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

(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

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Expansion into new markets

Financial incentives

<Not Applicable>

Company-specific description & strategy to realize opportunity

The bulk of our dissolving wood pulp (DWP) is used for viscose staple fibre (VSF). The textile market is increasingly becoming aware of the importance of sustainability in the value chain. The Chinese viscose industry (a major market for Sappi) has adopted a road map towards a better environmental footprint, and our strong certified timber base, including FSCTM, PEFC™ and SFI® are key differentiators which not all DWP suppliers can emulate. Consumer environmental concerns and the facts that our woodfibre is a renewable resource sourced woodfibre from responsibly managed forests and plantations, are opportunities for our DWP business. 2018 was a year of large-scale capital investment in our DWP business. We completed debottlenecking projects at both Southern African mills, adding approximately 50,000 tons of capacity towards the end of the year. Sales volumes for the year were 1% higher than the prior year. We have a further debottlenecking project planned for our Cloquet Mill in 2019 to increase our capacity by 30,000 tons. During 2018, we also announced an expansion plan (Project Vulindlela) to increase our capacity at our Saiccor Mill by 110,000 tons to meet strong projected demand growth. The construction work for this project at our Saiccor Mill has started, and the planned startup is in the last quarter of 2020.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

High

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

160000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

This figure includes expansions in 2018 and 2019 (including Project Vulindlela) and our base case selling price for dissolving wood pulp.

Forest risk commodity

Timber

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased brand value

Financial incentives

<Not Applicable>

Company-specific description & strategy to realize opportunity

The key components of woodfibre include cellulose, hemicellulose, lignin and extractives. Both cellulose and hemicellulose are polysaccharides containing many different sugar monomers which can be extracted from pulping streams. New revenue opportunities include possibilities to extract biobased materials from the pre-hydrolysate kraft stream, such as hemicellulose sugars and lignin, for beneficiation to higher-value biochemicals. 2017, in partnership with Valmet, we commissioned a hemicellulose sugar extraction demonstration plant at Ngodwana Mill. After operating for 12 months to demonstrate the extraction of C5 sugars from DWP production, the plant exceeded all efficiency targets for cost, cycle time and yield. We are now further progressing the development of our biorefinery capacity with the construction of a demonstration plant to further scale up our novel Xylex technology—acquired in 2017—for the clean-up of the extracted sugars stream, to allow production of xylose, xylitol and furfural. A low-calorie sweetener, xylitol has positive dental properties and produces no insulin response, so is suitable for diabetics. Furfural is a versatile green industrial chemical derived from C5 sugars with a diverse range of derivatives. The Xylex demonstration plant will be located adjacent to the existing sugars extraction plant at Ngodwana Mill, and will be commissioned in 2019. Pending successful results, we may construct commercial xylose, xylitol and furfural plants adjacent to our mills in SNA and SSA. The combination of Sappi's operational excellence and the proposed co-location of the commercial plants at existing mill sites delivers strong integration synergies. In addition, the cost advantages offered by Sappi's scale and the Xylex technology give us a globally competitive cost base for C5 sugar extraction and beneficiation to xylose, xylitol and furfural. Going forward, our strategic intent is to enter the xylitol value chain with a world-scale production plant. Furan markets are showing strong market pull for new investments due to growth as well as the phasing out of older and smaller unviable assets. Against this backdrop, sugars extraction from our DWP assets combined with our Xylex capabilities will allow us to pursue various partnerships in either the xylitol or furan chemistry value chains.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium-low

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Forest risk commodity

Timber

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Expansion into new markets

Financial incentives

<Not Applicable>

Company-specific description & strategy to realize opportunity

Growing concerns about the negative impacts of fossil-fuel based packaging, in particular its impact on the world's oceans, have resulted in bans on single-use plastics in many countries around the world. This represents an opportunity for paper packaging. Against this backdrop, we acquired the speciality paper business of Cham Paper Group Holding AG. The transaction included all brands and know-how, the Carmignano and Condino Mills (Italy), as well as their digital imaging business and facility situated in Cham (Switzerland). The acquisition increases Sappi's relevance in specialities and packaging papers, opening up new customers and markets to Sappi's existing products and generating economies of scale and synergies.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

235000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The acquisition of the speciality paper business of Cham Paper Group Holding AG will add approximately US\$212 million of annual sales and approximately US\$23 million of annual EBITDA before taking synergies into account. The development and potential market impact financials for Seal have not been included here.

F4. Governance

F4.1

(F4.1) Does your organization have a policy that includes forests-related issues?

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

F4.1a

(F4.1a) Select the options to describe the scope and content of your policy.

	Scope	Content	Please explain
Row 1	Company-wide	Please select	Our 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". Our 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/ commitments listed alongside. The Woodfibre policy covers the entire value chain and is supported by the new Group Supplier Code of Conduct launched in 2018 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 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 reflects Sappi's inclusive approach to support the leading international forest certification systems, namely the FSC and PEFC (incl. SFI) programs. The amended Group Policy achieves a balance of environmental, social and economic values in a manner that promotes forest health and supports community well-being. The Group Woodfibre Procurement Policy was revised in 2018. Policies are generally reviewed every three years.

F4.1b

(F4.1b) 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

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber	Yes	Company-wide	<p>Commitment to eliminate deforestation and/or conversion</p> <p>Commitment to eliminate forests degradation</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 education</p> <p>Commitment to innovation</p> <p>Commitment to align with public policy initiatives, e.g. SDGs</p> <p>Recognition of the overall importance of forests and other natural habitats</p> <p>Description of business dependency on forests</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound commitments and targets</p> <p>Description of forests-related performance standards for direct operations</p> <p>Description of forests-related standards for procurement</p> <p>Reference to international standards and widely-recognized forests-related initiatives</p> <p>Other, please specify (Support innovative initiatives for smallholder certification)</p>	<p>The Group 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 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 Group Woodfibre Procurement policy was revised in 2018. North America revised and expanded its Sustainable Forestry Policy in May 2019. Policy, signed in May 2019.</p>
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Cattle Products	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

F4.2

(F4.2) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.2a

(F4.2a) 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 chairman of Social, Ethics, Transformation and Sustainability (SETS) Committee, a statutory board committee, has final responsibility for forests-related issues. The SETS committee has an independent role with accountability to the Board and is comprised of a majority of independent non-executive members, whose duties are delegated to them by the board of directors in compliance with a board-approved terms of reference. The role of the SETS Committee is to assist the Board with the oversight of sustainability issues within the company and to provide guidance to management's work in respect of its duties in the fields of social, ethics, sustainability and transformation. Forests-related issues form part of the function of the Regional Sustainability Councils (RSC) in North America, Europe and South Africa. These RSCs feed into the Global Sustainability Council which in turn reports to the SETS Committee.

F4.2b

(F4.2b) 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	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding corporate responsibility strategy Reviewing and guiding strategy Reviewing innovation / R&D priorities Other, please specify (Reviewing public policy trends and developments)	Given that forests-related issues are the core of Sappi's business, these issues are raised at every SETS Committee meeting, for example, on regional and global targets related to procurement of certified fibre.: These targets are reported on at the quarterly Regional Sustainable Development Council meetings, following which to the Group Sustainable Development Council, following which to the SETS Committee at every meeting. In July 2018, SNA established an internal Forestry Certification Council. As other examples – our plantation assets in South Africa are a core pillar of competitive advantage, amplified by our leading-edge tree improvement programmes. The SETS committee regularly reviews progress in this field.

F4.3

(F4.3) 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 oversees all forest issues relating to certification, procurement and sustainability-related target setting (for example, our group certification target). The Global Forest Certification Manager also reports to the CSO. The latter individual 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 Chief Sustainability Officer

F4.4

(F4.4) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

No, and we do not plan to introduce them in the next two years

F4.5

(F4.5) 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)
2018-Sappi-Group-Sustainability-Report.pdf

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	5-10	Text field [maximum 2,400 characters] Our 2020 Vision, Mission and Strategy are set out below: Our mission: Through the power of One Sappi—committed to collaborating and partnering with stakeholders—we aim to be a trusted and sustainable organisation with an exciting future in woodfibre. Our 2020Vision Sappi will be a diversified woodfibre group targeting a substantial increase in EBITDA through an expanded product portfolio with increased margins, providing enhanced rewards to all its stakeholders. Our strategy Through intentional evolution we will continue to grow Sappi into a profitable and cash generative, diversified woodfibre group— focused on dissolving wood pulp, paper and products in adjacent fields. We are currently formulating our 2025 strategy which will emphasise the integration of sustainability into overall business strategy.
Strategy for long-term objectives	Yes, forests-related issues are integrated	5-10	The pillars of our financial strategy are: 1. Achieve cost advantages. [In 2018, we made ongoing variable cost savings year-on-year; made investments in infrastructure and energy projects at core mills and invested in ongoing research to deliver cost improvements]. 2. Rationalise declining businesses [in 2018 we balanced printing and writing papers supply and demand by converting capacity to specialities and packaging papers] 3. Maintain a healthy balance sheet [In 2018, we maintained target of net debt/EBITDA of ~2x and also maintained strong cash generation; continued to monitor bond markets for opportunities to refinance at lower cost; renewed our revolving credit facility and achieved multiple price increases to offset rising costs. 4. Accelerate growth in higher margin segments [In 2018 we continued to make investments in existing and adjacent areas with strong potential growth; advanced the expansion of higher margin and growing specialities and packaging papers in Europe and North America through conversions; maintained investments made in speciality packaging, including Rockwell Solutions and Cham Paper Group; established a strong pipeline of biotech business opportunities; maintained our global leadership position in dissolving wood pulp; identified various growth opportunities in dissolving wood pulp and specialities and packaging papers; completed the construction of the nanocellulose pilot plant and commissioned the construction of a sugars extraction plant .]
Financial planning	Yes, forests-related issues are integrated	5-10	We allocate capital and resources for our expansion into new and adjacent markets. Technology is a cornerstone of our business and is supported by technology centres in each region, covering every section of the value chain. Our research and development (R&D) initiatives focus on: * Consolidating and growing our position in our targeted markets segments by developing and commercialising packaging and speciality paper products as well as enhancing our dissolving wood pulp (DWP) business * Energy opportunities from sustainable renewable resources * Developing new products and markets from wood chemistry by exploring the micro- and nanoscale potential of woodfibre and biorefining – extracting biochemicals locked up in wood * Driving cost competitiveness and cost reduction, and * Optimising our equipment and forestry assets.

F6. Implementation

F6.1

(F6.1) 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

F6.1a

(F6.1a) 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 (Forests Dialogue)

F6.1b

(F6.1b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Commodity coverage

Timber

Criteria

Zero net deforestation

No forest degradation

Forest landscape restoration

No trade of CITES listed species

Adoption of UN Global Compact principles

Recognition and endorsement of the Universal Declaration of Human Rights

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 forest risk commodities from unknown/controversial sources

Restricting the sourcing and/or trade of forest risk commodities to credible certified sources

Other, please specify (• No sourcing of illegally produced and/or traded forest risk commodities • Restricting the sourcing and/or trade of forest risk commodities to credible certified sources)

Operational coverage

Direct operations and supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

2014

Commitment timeframe

2020

Please explain

In 2015, we established global financial (Prosperity), social (People) and environmental (Planet) 2020 targets with 2014 as a baseline. Regional targets are aligned to these goals. In terms of certified fibre, our 2020 target is to achieve 79% certified fibre supplied to our mills. We did not achieve this in 2018, with our percentage of 75.2% certified fibre supplied to our mills representing a decline of 4.81% compared with the 2014 baseline. The fact that only 11% of the world's forests are certified, is a challenge. In South Africa, to help remediate the situation, Sappi Forests is paying small growers a premium for certified timber. In addition, in South Africa, we recognised that we needed to obtain certification over and above the FSC Group Scheme certification, based on the difficulty of getting small growers certified and on customers' requests for PEFC labelled products. PEFC endorses national certification schemes, which meant South Africa had to develop a new certification scheme including a forest management standard. This is now known as the South African Forest Assurance Scheme (SAFAS). The scheme has been fully endorsed by the PEFC (November 2018) and certification bodies are now in the process of being accredited by national accreditation schemes to undertake forest management and chain of custody audits.

F6.2

(F6.2) Did you have any quantified targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.2a

(F6.2a) Provide details of your 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

Form of commodity covered

All forms of timber

Type of target

Third-party certification scheme

Coverage

Direct operations and supply chain

Traceability point

<Not Applicable>

Third-party certification scheme

- FSC Forest Management certification
- FSC Chain of Custody
- FSC Controlled Wood
- FSC Group certification
- FSC SMLIF (small or low-intensity managed forest)
- FSC Recycled
- PEFC Sustainable Forest Management certification
- PEFC Chain of Custody
- PEFC Project Chain of Custody
- PEFC Group certification
- SFI Forest Management certification
- SFI Chain of Custody
- SFI Fiber Sourcing certification
- Canadian Standards Association (CSA) Z809
- American Forest Foundation Tree Farm System

Start year

2014

Start figure

71-80%

Target year

2020

Target

71-80%

% achieved

71-80%

Please explain

Regional targets to increase levels of certified fibre to our mills are underpinned by a global target to maintain or improve our 2014 percentage of 79% fibre supplied to our mills. We did not achieve this in FY 2018, with certified fibre showing a 4.81% decline over the 2014 base.

F6.3

(F6.3) 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?
Timber	Yes
Palm Oil	<Not Applicable>
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F6.3a

(F6.3a) Provide details on the level of traceability your organization has for your disclosed commodity(ies).

Timber

% of total production/consumption volume traceable

100%

Point to which commodity is traceable

Forest management unit

Description of traceability system

Sappi mills have the monitoring tools in place to fulfil the requirements of the EU Timber Regulation (EU No 995/2010) and Lacey Act. Sappi Europe and Sappi North America can provide mill-specific information including product specific information on product composition, tree species, and the origin of woodfibre. All purchased woodfibre is at least FSCTM Controlled Wood and all mills are both FSC Chain of Custody and PEFC Chain of Custody certified. In North America all mills are also SFI CoC Certified and all woodfibre must meet the SFI Fiber Sourcing standard. Sappi North America (SNA) records the town and state or province of origin of each load of wood received at the mills. Representative samples of the deliveries to the mills are subsequently traced backward to confirm the accuracy of the information provided. Through a separate effort, the State of Maine requires that all timber harvests must be registered with the Maine Forest Service, which periodically inspects the operation for environmental compliance. The State of Maine also requires the use of a "trip ticket" to accompany any wood transported to market. The trip ticket identifies the owner, the place of origin and the destination of the wood. A trip ticket system is also utilized in Minnesota, supported by a random sampling process which is incorporated into SNA's certified sourcing procedures. Sappi Southern Africa (SSA) operates according to FSC chain of custody requirements which stipulate reporting on species and countries forest origin.

Exclusions

<Not Applicable>

Description of exclusion

<Not Applicable>

F6.4

(F6.4) Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered.

Forest risk commodity

Timber

Do you specify any certification scheme?

Yes

Certification coverage

Consumption volume

Third-party certification scheme

FSC Forest Management certification
FSC Chain of Custody
FSC Controlled Wood
FSC Group certification
PEFC Sustainable Forest Management certification
PEFC Chain of Custody
PEFC Group certification
SFI Forest Management certification
SFI Chain of Custody
SFI Fiber Sourcing certification
American Forest Foundation Tree Farm System

% of total production/consumption volume certified

100

Form of commodity

Hardwood logs
Softwood logs
Unprocessed wood fiber
Pulp
Cellulose-based textile fiber

Volume of production/ consumption certified

6004914

Metric

Round wood equivalent (RWE)

Please explain

In South Africa, to help remediate the situation, Sappi Forests is paying small growers a premium for certified timber. In addition, in South Africa, we recognised that we needed to obtain certification over and above the FSC Group Scheme certification, based on the difficulty of getting small growers certified and on customers' requests for PEFC labelled products. PEFC endorses national certification schemes, which meant South Africa had to develop a new certification scheme including a forest management standard. This is now known as the South African Forest Assurance Scheme (SAFAS). Sappi North America recently transitioned to a multi-site Chain of Custody certificate as a result of a successful audit under the FSC, PEFC and SFI programmes. The audit, conducted by Bureau Veritas, noted several exceptional practices including: • Somerset wood procurement: Excellent culture of training and mentoring new foresters, yielding outstanding results on the ground and retention of the highest calibre foresters • Culture of teamwork: Successful transition to a multi-site certificate indicative of effective teamwork and robust internal auditing protocols, and • Robust forestry certification training programme: Impressive training plan, scope, execution and reach across organisation. Overall, this transition will reduce complexity and increase transparency for all parties, including Sappi customers, and over time provide increased flexibility to deploy certification credits across Somerset, Cloquet and Westbrook Mills.

F6.5

(F6.5) Do you specify any sustainable production/procurement standards for your disclosed commodity(ies), other than third-party certification? Indicate the percentage of production/consumption covered and if you monitor supplier compliance with these standards.

Forest risk commodity

Timber

Do you specify any sustainability standards?

Yes

Type of standard

Production

Description of standard

Global: ISO 9001, ISO 14001, OHSAS 18001 and, in Europe: EMAS (Eco- Management and Audit Scheme) and ISO 50001 in Europe and South Africa. In terms of internal standards, we monitor environmental performance and legal compliance at each mill, by constantly assessing our performance in terms of energy dashboards, integrated water and waste management plans, air emissions, and effluent. We also ensure that we keep up with environmental best practice through an internal environmental 'cluster' comprised of experts in various fields. In addition, we have targets in place including a global 2020 target in place related to energy efficiency. There are also regional 2020 targets (2014 base year) in place related to sustainable consumption and production. In Europe, we have a target to reduce specific direct fossil CO2 emissions including purchased power emissions (calculated at 400g/KWh) by 5% by 2017 (base year 2012, saleable production). We also have a target to reduce energy intensity GJ/adt. SEU did not achieve either of these targets in FY2017. In North America, one target is to reduce the amount of total energy expended in making each ton of product by 5% by 2020. We achieved a 2% reduction in FY2017. A further target is to reduce pulp mill raw material waste by 10% by 2020. We reduced pulp mill raw material waste by 17% in FY2017. In South Africa, we have a target in place to achieve 10% reduction in specific purchased fossil energy by 2020. We achieved this in 2017, with an 8.2% reduction. Another target is to achieve a 10% reduction in total specific fresh water usage by 2020. We exceeded this in FY2017, achieving a reduction of 21%. We did not achieve our target of a 10% reduction in specific solid waste landfilled by 2020. Specific solid waste landfilled increased by 20%. However, we do have interventions in place that will help us to achieve this goal going forward.

% of total commodity volume covered by standard

100%

Do you have a system in place to monitor compliance with this standard?

Yes

Type(s) of monitoring system

First-party auditing

% of suppliers in compliance with standards

<Not Applicable>

Please explain

In FY2018, we rolled out our Supplier Code of Conduct, and informed a significant proportion of our suppliers that we expect them to comply with our requirements. We are now in the process to develop the methodology for confirming supplier compliance, and undertaking periodic supplier assessments & evaluations.

F6.6

(F6.6) Are you working with smallholders to encourage and support best practices that aim to reduce or remove deforestation/forest degradation?

	Are you working with smallholders?	Smallholders engagement approach	Please explain
Timber	Yes, working with smallholders	Please select	In North America, 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, providing plans for harvesting activities and regeneration post-harvest and forest health, as well as advice in complying with town, state and federal regulations. Additionally, SNA actively participates in federal, regional, state and local industry associations, university research consortiums and multi-stakeholder collaboratives that monitor and influence forest management funding, policies, trends and activities within SNA woodbaskets. SNA staff monitor the implementation of best management practices on harvest sites to ensure adequate regeneration, conservation of soil and water resources, and adherence to the harvest plan(s). SNA operates within woodbaskets that are influenced by and benefit from the support of proactive federal and state natural resource management agencies and natural resource colleges, which sets a high standard and expectation of commitment to holistic conservation. In Sappi SA, qualified extension officers provide growers in our Sappi Khulisa enterprise development scheme with ongoing growing advice and practical assistance. Recognising that Sappi Khulisa labour is characterised by poor efficiencies and a large turnover, we have established a training centre, Khulisa Ulwazi, to address this need. The objective of training is to develop growers' and contractors' skills so that they can conduct silviculture operations economically and to a good standard. Training material has been developed in conjunction with the Institute of Natural Resources and covers area like entrepreneurship, fire management, harvesting planning, leadership and management development, as well as safety. In addition, as at the end of September 2018, Sappi was involved in 60 land reform projects, helping beneficiaries to manage approximately 19,000 hectares of land. Many of these properties previously belonged to commercial farmers who had supply agreements with Sappi. For many of the land claims in which we have been involved, and where there has been a change in ownership, we continue to buy the timber and help to manage those plantations. Sappi Forests pays small growers a premium for certified timber.
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle Products	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>

F6.7

(F6.7) Are you working with your direct suppliers to support and improve their capacity to supply sustainable raw materials?

	Are you working with direct suppliers?	Supplier engagement approach	Please explain
Timber	Yes, working with direct suppliers	Encouraging certification Encouraging work with multi-stakeholder groups Supplier questionnaires on environmental and social indicators Workshops and training Supplier audits Supplier charters Joint projects Financial support Technical support	Sappi Europe works closely with the four companies (Sapin S.A, proNARO GmbH, Papierholz Austria GmbH, and Metsä Forest) supplying wood logs and chips to the mills in Finland, Germany, Austria, and Belgium. All companies are both FSC and PEFC Chain of Custody certified. Moreover, the cooperation with external pulp suppliers is good, and Sappi gathers extensive environmental performance data from all suppliers including detailed information on the origin of wood. In North America, 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. Additionally, Sappi North America (SNA) financially supports numerous state/regional/national associations, NGOs and collaboratives that provide assistance to private landowners while also assessing forest risks, trends, opportunities, etc. SNA has also supported shared biologist positions within NGOs committed to forest health, conservation, private landowner outreach, etc. In terms of Sappi Khulisa, our enterprise development scheme in South Africa: Growers make their land available for planting eucalyptus trees. We provide growers with: • Sponsored seedlings • An interest-free loan • Technical advice, and • A guaranteed future market. We arrange an interest-free loan that is sufficient to cover all farming input costs, including annual maintenance of the plantations until they are harvested. Advances are paid to growers for work carried out throughout the generally 8-10 year growing cycle. In addition, a small portion of the anticipated after-harvest profit is paid annually to overcome cash flow constraints associated with the long growing cycle. At harvesting time we buy the timber from the growers and pay them a market-related price less the advance payments they have received in preceding years. Sappi Khulisa helps small farmers overcome the entry barriers associated with tree farming which include: • The significant expense of purchasing seedlings and fertiliser and harvesting and transport, and • The long growing cycle before trees are ready for harvesting. In South Africa, Sappi Forests pays small growers in its group certification scheme a premium for certified timber.
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle products	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>

F6.8

(F6.8) Are you working beyond your first-tier supplier(s) to manage and mitigate forests-related risks?

	Are you working beyond first tier?	Please explain
Timber	Yes, working beyond first tier	• Sappi North America is a member of the Cooperative Forest Research Unit based at the University of Maine. Scientists in this unit 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. • We work with the European industry on issues related to the Green Growth Platform. These include the development of a new low carbon pulp technology (deep eutectic solvents), exploring financing options to support industry's transformation and investigating block chain technology for timber certification. • In South Africa, fires are a risk on our plantations. Two innovative projects highlight how we are working beyond first-tier supplier to manage risk: - The African Honey Bee (AHB) project is positively impacting on communities in KwaZulu-Natal (KZN) province. The AHB project is a social enterprise enabling families from disadvantaged rural communities to build sustainable micro-beekeeping businesses. Over the past two years, AHB has trained over 1,700 people. In addition to empowering people, the project is helping to reduce fires from honey hunting on our plantations. - Fires started by disenfranchised communities living close to our plantations are an ongoing risk. There has been a significant decrease in fires since we started our Abashintshi (the 'changers' in isiZulu) programme: Established in 2015, in conjunction with development agency, Devcom, the programme has expanded from 18 Abashintshi in nine communities to 117 Abashintshi across 65 Sappi communities in KZN and Mpumalanga. These young people transfer skills to their communities and helping Sappi engage with the communities. The programme is not only contributing to socio-economic development, it is also helping to boost morale and empower people.
Palm Oil	<Not Applicable>	<Not Applicable>
Cattle products	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>

F6.9

(F6.9) Do you participate in external initiatives or activities to further the implementation of your policies concerning the sustainability of your disclosed commodity(ies)?

Forest risk commodity

Timber

Do you participate in activities/initiatives?

Yes

Activities

Involved in industry platforms

Initiatives

<Not Applicable>

Please explain

In Europe and North America, close engagement is maintained directly and through the respective industry bodies CEPI and AF&PA. Sappi is a member of the PEFC International Stakeholder forum. In North America, Sappi is a member of the economic chamber of both FSC US and SFI® and actively engages with these organisations through a variety of working groups and committee activities. SNA also belongs to the Forest Resources Association (FRA), the American Forest Foundation (AFF) and the Society of American Foresters (SAF), among others. In South Africa, Sappi is a member of the local WWF organisation as well as FSC. The Confederation of European Paper Industries (CEPI), of which Sappi Europe is a member, participates in actions supporting and promoting the development of sustainable forestry management tools—including forest certification—all over the world, particularly in less developed countries. Sappi North America is a funding partner of the Recycling Partnership and an active board-level participant in the Paper and Packaging Board. Sappi Forests is a member of the South African Institute for Commercial Forestry Research (ICFR) and is a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute (FABI) (<http://www.fabinet.up.ac.za>) at the University of Pretoria. Through the TPCP we also belong to the internationally collaborative programme BiCEP (Biological Control of Eucalyptus Pests) (<http://bicep.net.au>) at the Australian Centre for Industrial and Agricultural Research (ACIAR). In addition, we belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria and to CAMCORE, an international, non-profit organisation dedicated to the conservation and utilisation of subtropical and tropical tree species

Forest risk commodity

Timber

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

UN Global Compact

FSC

PEFC

Sustainable Forestry Initiative (SFI)

Other, please specify (Sustainable Development Goals)

Please explain

In Europe and North America, close engagement is maintained directly and through the respective industry bodies CEPI and AF&PA, with the FSC® and WWF International. In Europe also with the Programme for the Endorsement of Forest Certification (PEFC™). In North America, Sappi is a member of the economic chamber of both FSC US and SFI® and actively engages with these organisations through a variety of working groups and committee activities. In South Africa, Sappi is a member of the local WWF organisation as well as FSC. Sappi has been a signatory to the UN Global Compact since 2008. Sappi's commitment to Principle 7: Support a precautionary approach to environmental challenges; Principle 8: Undertake initiatives to promote greater environmental responsibility and Principle 9: Encourage the development and diffusion of environmentally friendly technologies are detailed in Sappi's 2017 Group Sustainability Report, pages 115 - 117. Our performance against the relevant SDGs is detailed on pages 110 -111 of the same report, available on www.sappi.com

F-PF6.10

(F-PF6.10) Does your organization have any project(s) focused on reforestation, habitat restoration, or habitat protection that are not part of your production cycle?

Yes

F-PF6.10a

(F-PF6.10a) 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

Sappi owns and lease 387,000 hectares of plantations in South Africa. Of this, approximately 60% is plantable (planted and temporarily unplanted) and one third is permanently planted under natural vegetation. Of the 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 *Participation in the national stewardship programme through which we have six declared nature reserves. * 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

Projected area to date (Hectares)

125000

Project area in the target year (Hectares)

125000

Latitude

Longitude

Monitoring frequency

Six-monthly or more frequently

Measured outcomes to date

Biodiversity
Carbon sequestration
Soil
Water
Climate regulation

Please explain

About 73% of the land managed for biodiversity conservation comprises riparian zones, firebreaks, cliffs, rocky outcrops, dams and small wetlands. The remaining 27% comprises larger areas classified as Important Conservation Areas (ICAs) which receive special management according to specially developed management plans. The sites, which include important grassland, wetland, forest and woodland habitats, are managed with the aim of enhancing their specific values. All sites are in good condition and make a valuable contribution to habitat and species conservation. Many important (rare and threatened species) are protected on the sites. We participate in a national stewardship programme through which we have declared six nature reserves on our land. We monitor biodiversity on an ongoing basis. Approximately 455 bird species have been recorded on our plantations, more than half of all South Africa's bird species. A total of 15 faunal red data species have been recorded on our land, with endangered mammal species including Oribi and the Samango Monkey. Near threatened species include Serval and Honey Badger. We provide feedback on numbers and location of specific priority species on our lands to the Endangered Wildlife Trust every year.

Project reference

Project 2

Project type

Habitat restoration

Primary motivation

Voluntary

Description of project

Sappi North America supports Living Lands & Waters through a corporate partnership where our employees participate as volunteers at river clean-ups.

Start year

2013

Target year

Indefinitely

Projected area to date (Hectares)

Project area in the target year (Hectares)

Latitude

Longitude

Monitoring frequency

Six-monthly or more frequently

Measured outcomes to date

Biodiversity
Water

Please explain

Living Lands & Waters, an Illinois-based environmental organization that was established in 1998 to clean trash and debris from America's rivers. It has since grown to be the only "industrial strength" river cleanup organization of its kind in the world. Spending up to nine months a year living and traveling on a barge, the Living Lands & Waters crew hosts river cleanups, watershed conservation initiatives, workshops, tree plantings and other key conservation efforts. As the organization celebrates its 20th anniversary, they are reaching a milestone—having pulled nearly 4.5 million kilograms of trash from US waterways along 24 rivers in 21 states

Project reference

Project 3

Project type

Other, please specify (Propagation of endangered trees)

Primary motivation

Voluntary

Description of project

Warburgia Salutaris, the Pepper Bark Tree, was once widespread in Southern Africa and has long been one of the most sought-after commodities in the Southern African traditional healthcare sector. However, the tree is now categorised as 'endangered' on both the International Conservation Union (IUCN) and South African National Biodiversity (SANBI) red species list. In South Africa, in the Kruger National Park area, the trees have been unsustainably harvested, mainly by illegal harvesters. The switch from sustainable collection to commercial gathering has meant that this tree in its natural habitat is now on the brink of extinction. To re-introduce the tree in KwaZulu-Natal, the Sappi Forests research facility has established mini-hedges of Warburgia Salutaris, from which we produce cuttings. This project has been a major success, with over 30 000 pepper-bark seedlings and cuttings distributed by the end of 2018. Traditional healers and community representatives have attended workshops on planting, tending and sustainable harvesting of muti from the trees. A working group has been set up to co-ordinate and drive the Warburgia salutaris conservation project going forward. Gene banks and seed orchards have been established within this working group partnership, and assistance has been extended to Swazi and Zimbabwean conservation authorities to help them increase the number of trees growing in their countries. The Sappi Shaw Research Centre has been working on seed propagation and the production of cuttings.

Start year

2014

Target year

2020

Projected area to date (Hectares)

Project area in the target year (Hectares)

Latitude

Longitude

Monitoring frequency

Annually

Measured outcomes to date

Biodiversity

Please explain

The re-establishment of the tree has both social and environmental implications, because 27 million people in South Africa rely on traditional medicine.

F7. Linkages and trade-offs

F7.1

(F7.1) Has your organization identified any linkages or trade-offs between forests and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

F7.1a

(F7.1a) Describe the linkages or trade-offs and the related management policy or action.

Linkage/tradeoff

Linkage

Type of linkage/tradeoff

Other linkage, please specify (Impact on small growers)

Description of linkage/tradeoff

While certification undoubtedly adds value, the drive for certification can negatively impact on small growers in that it adds costs and reduces the profitability of timber growing.

Policy or action

In South Africa we pay small growers in our group certification scheme a premium for certified timber.

F8. Verification

F8.1

(F8.1) Do you verify any forests information reported in your CDP disclosure?

Yes

F8.1a

(F8.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module

F6. Implementation

Data points verified

Certification

Verification standard

Forest Stewardship Council, the Programme for the Endorsement of Forest Certification, the Sustainable Forestry initiative and other PEFC-endorsed systems.

Please explain

Verified by internal and external auditors

F9. Barriers and challenges

F9.1

(F9.1) Describe the key barriers or challenges to avoiding forests-related risks in your direct operations or in other parts of your value chain.

Forest risk commodity

Timber

Coverage

Supply chain

Primary barrier/challenge type

Cost and/or complexity of certification requirements

Comment

The Cambridge Institute for Sustainability Leadership is supporting our work with the European industry in issues related to the Green Growth Platform, including the development of block chain technology for timber certification. This technology would provide further evidence of responsibly sourced timber and could be a powerful marketing tool in light of growing global concern about deforestation. The cost of certified timber is an issue for small growers. In South Africa we overcome this barrier through a group certification scheme. In FY2018, this scheme had 42 members with the area certified under a plantation management plan amounting to 71,685 hectares.

F9.2

(F9.2) Describe the main measures that would improve your organization's ability to manage forests-related risks.

Forest risk commodity

Timber

Coverage

Supply chain

Main measure

Other, please specify (Trees that are resistant to climate change, pests and disease.)

Comment

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

F18. 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.

F18.1

(F18.1) 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	5806000000

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) On F6.4 you were asked "Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered". 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

L'Oréal

Forest risk commodity

Timber

Form of commodity

Primary packaging

Third-party certification scheme

PEFC Chain of Custody

Total volume of commodity sold to member

Metric

Please select

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

100%

Comment

Sappi applies FSC and/or PEFC (including SFI) third-party verified Chain of Custody systems at all mills. In FY 2018, 78% of the woodfibre used in the European mills originated from certified forests, 82% in South Africa , and 58% in North America, totalling 75% for the group. All mills can offer FSC or PEFC (incl. SFI) certified woodfibre-based products to customers upon the request. If our customers decide to buy certified material, in terms of FSC it would be classified as FSC Mix Credit and for PEFC as 100% PEFC certified.

Requesting member

Please select

Forest risk commodity

Timber

Form of commodity

Primary packaging

Third-party certification scheme

PEFC Chain of Custody

Total volume of commodity sold to member

Metric

Please select

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

Please select

Comment

Sappi applies FSC and/or PEFC (including SFI) third-party verified Chain of Custody systems at all mills. In FY 2018, 78% of the woodfibre used in the European mills originated from certified forests, 82% in South Africa , and 58% in North America, totalling 75% for the group. All mills can offer FSC or PEFC (incl. SFI) certified woodfibre-based products to customers upon the request. If our customers decide to buy certified material, in terms of FSC it would be classified as FSC Mix Credit and for PEFC as 100% PEFC 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

Please select

Commodity related to the project

Please select

Category of project

Please select

Type of project

<Not Applicable>

Estimated timeframe for realization of benefits to customer

Please select

Details of project

Projected outcome

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

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms