

PULP AND PAPER PRODUCTION REPORT

Economic contribution

Sector contribution to GDP

The pulp and paper* sector contributed 0.76% to South Africa's GDP in 2023, a slight increase from 0.74% in the previous year. Within the manufacturing GDP, the sector accounted for 6.7% in 2023, up from 6.5% in 2022. As for its contribution to agricultural GDP, it reached 30%, up from 25.5% in 2022.

*Includes paper, packaging papers, and tissue.
Sources: StatsSA and pulp and paper manufacturers



149,271 people

Approximate number of people employed forestry and forest products sector – from planting trees to recycling.

Source: StatsSA

Balance of Trade

The industry exported R19.3 billion of pulp and paper products; partially offset by R8.5 billion in paper imports, resulting in a net contribution of R10.8 billion.



R19.3 billion

PULP EXPORTS



R8.5 billion

PAPER AND BOARD IMPORTS



R10.8 billion

CONTRIBUTION TO BALANCE OF TRADE

BALANCE OF TRADE EXPLAINED

Balance of trade is calculated by subtracting Rand value of products imported from Rand value of products exported. A negative amount, in the case of paper and board, indicates that more product was imported, thus more money exited South Africa while a positive amount indicates that more was exported than imported, representing earnings for the country.



Overall production

The value of domestic pulp and paper production came in at R50 billion; this is some R5 billion higher than 2022, primarily due to changes in sector prices rather than volumes.



R50 billion

VALUE OF PULP AND PAPER PRODUCTS MANUFACTURED



3.82 million

PRODUCTION TONNES TOTAL PULP AND PAPER



921 133

IMPORT TONNES TOTAL PULP AND PAPER



1.77 million

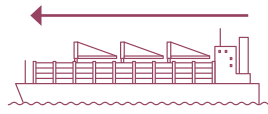
EXPORT TONNES TOTAL PULP AND PAPER

Production and apparent consumption by grade

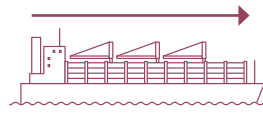
PULP



1.77 million
PRODUCTION TONNES



168 831
IMPORT TONNES



1.27 million
EXPORT TONNES



669 160
APPARENT CONSUMPTION

Dissolving pulp production rose by 11%, all of which is exported. All other domestic pulp production fell by 2%. Imported pulps were also off past highs with domestic pulps still meeting most local paper grade demands. Total pulp production rose by 5%, where a 4% decline in domestic consumption resulted in the swing tonnage being exported.

Over the longer term, post Covid, total pulp production continued to rise from its production lows of the past few years. However, exports of dissolving wood pulp were slightly lower than 2022 due to mill shutdowns in the latter part of 2023.

Domestic pulp consumption was down 4%, mirroring paper consumption by grade. The decline in domestic office paper consumption has led to more hardwood pulp and office papers being exported. Meanwhile, pulp used for tissue production increased, matching consumption growth and an increase in exports. As domestic demand for newsprint and office paper declines, more pulp is being exported into competitive global markets.



MECHANICAL PULP

2022	2023
66 000 TONNES	59 000 TONNES

Mechanical pulp is largely used in newsprint, tissue and paperboard, as there are no coated grades made locally.



CHEMICAL PULP

2022	2023
653 000 TONNES	657 000 TONNES

Chemical pulp is used in white paper grades such as A4 copy paper and whitetop liner (the white printable layer on paper packaging).



SEMI-CHEMICAL PULP

2022	2023
70 000 TONNES	58 000 TONNES

Semi-chemical pulp is used to make corrugated paperboard, cardboard roll cores, and containers



DISSOLVING WOOD PULP

2022	2023
894 000 TONNES	995 000 TONNES

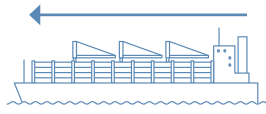
Dissolving wood pulp is used to make man-made cellulosic textile fibres (viscose), additives in food, cosmetics and chemicals, sponges etc.

PRINTING AND WRITING GRADES

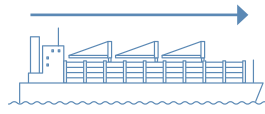
Newsprint, office papers and coated grades (used for magazines, brochures, and marketing materials)



380 384
PRODUCTION TONNES



414 132
IMPORT TONNES



129 608
EXPORT TONNES



664 908
APPARENT CONSUMPTION

The production volumes of printing and writing papers increased by 12% in 2023. Newsprint production fell by a further 10%, office paper production rose by 18%.

Consumption of printing and writing papers, including office and glossy grades, has fallen from a stable 823,000 tonnes to 664,908 tonnes per year, representing a 19% decline. This can be attributed to the continued adoption of online communication, automation of administrative processes and document sharing which are all in line with global trends. Many employees have adapted to a digital substitution and have not returned to pre-Covid levels of paper usage.

Newsprint consumption continued its decline, stabilising at a lower limit of 75,000 tonnes per annum, down from more than 120,000 tonnes. This drop is largely due to the continued shift towards electronic news consumption, leaving a few daily and weekly newspapers as well as community newspapers and advert inserts to sustain demand.



Credit: Mondi SA

THINK BEFORE YOU DON'T PRINT

In an era of many things digital, there's a common misconception that paper and print have become obsolete, and that paper is not environmentally friendly.



While the demand for traditional printing of newspapers, magazines and brochures has declined, paper and print in their entirety are certainly not dead and probably never will be.

The term "paperless" is often misunderstood as being inherently greener or as a way to save trees. Interestingly, while "paperless" typically refers to reducing office paper use, switching to paper-based packaging is now considered the greener choice. However, both office paper and packaging paper come from the same source: wood fibre.

The production of paper is often pegged as a cause of deforestation. On the contrary, the trees used for paper making are cultivated, like agricultural crops, in rotations of planting, growing, harvesting, and replanting on state-regulated land. The trees absorb carbon dioxide, release oxygen, and then harvested wood products – including paper – store carbon.

Is it more green on screen?

More research is being done to assess the carbon footprint of our digital lives. According to The Guardian, "It is a lot of data, and a lot of energy is required to serve that data to us, plus a lot of water to keep all those servers cool. In fact, Ireland, the Netherlands and Singapore are so worried about the energy impact of datacentres that they have imposed moratoria on new developments."

Powering our phone, computers and screens, to the transfer and storage of data, and resources require to make and manage electronic equipment are just some examples that add to our carbon footprint.

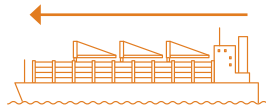
Printing a document to read it or keep as reference, as well as recycling the paper, uses far less carbon, and the paper itself is a carbon storage mechanism.

PACKAGING PAPER GRADES

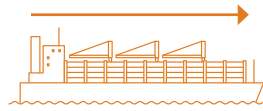
Corrugated case material, white top liner and smaller volume kraft grades



1.39 million
PRODUCTION TONNES



299 684
IMPORT TONNES



323 371
EXPORT TONNES



1.36 million
APPARENT CONSUMPTION

In 2023, paper-based packaging production decreased by 4%. Late 2023 was particularly weak, with multiple production shutdowns. However, exports increased by 4%, indicating a shift toward international markets to offset weak domestic demand.

Packaging paper consumption declined 14% to 1.36 million tonnes in 2023. The trend of “light-weighting,” or using less material without sacrificing strength, means fewer tonnes are used even as product volume increases. Economic recovery could quickly boost consumption supported by plastic substitution and online shopping trends.

TRACKING TRENDS IN PAPER PACKAGING

The Paper Manufacturers Association of South Africa (PAMSA) enlisted South Africa as one of the 16 countries that participated in this year’s global ‘Trend Tracker Survey’.

The biennial consumer research study, driven by Two Sides, seeks to understand consumer perceptions towards print and paper products, looking specifically at environmental awareness, reading habits, and packaging preferences. Two Sides advocates for the sustainability of the packaging, paper, and print supply chain, addressing common environmental misconceptions by offering verified information. It highlights why print and paper remain an appealing, practical, and sustainable communication medium

The shift to online shopping has accelerated dramatically in recent years. At the touch of a screen, consumers can search for a product, order and have it delivered to their door, on the same day. Consumers have come to appreciate the safety, speed and convenience of buying products online, however many are increasingly concerned about how their goods are packaged and delivered, and how easy it is to recycle materials used.

Paper and cardboard stood out as top-performing materials, scoring highest in 10 of 15 attributes. Consumer preferences reflect this sustainability trend: 58% favour paper packaging for online orders and 77% of South Africans would support retailers with a packaging return system.



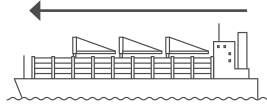
Credit: Checkers Sixty60

TISSUE GRADES



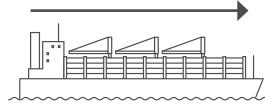
281 286

PRODUCTION TONNES



29 486

IMPORT TONNES



48 831

EXPORT TONNES



261 941

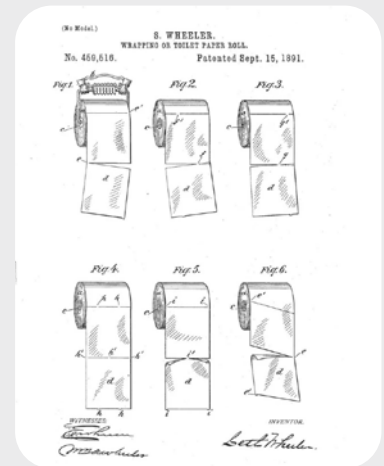
APPARENT CONSUMPTION

Tissue production increased by 4%. Exports performed well, growing by 8% from 2022 to 2023 while apparent consumption rose 6% to 261,941 tonnes, driven mostly by middle-class growth.

OVER OR UNDER?

The debate over how to hang a toilet paper roll—“over” or “under”—continues to spark discussions both online and at home.

A few years ago, enthusiasts sought evidence to prove their preferred method was the correct one. Their search led them to the original toilet paper patent, which, interestingly, illustrates the roll hanging “over” rather than “under.”



INTERESTING FACTS ABOUT TOILET PAPER



The first recorded use of toilet paper was in 6th Century China. By the 14th Century, the Chinese government was mass-producing it. It wasn't until 1935 that a manufacturer was able to promise Splinter-Free Toilet Paper.



The first toilet paper was developed in England in 1880 and sold not on a roll but as individual sheets in a box. The average roll now has 333 sheets.



In 1973 Johnny Carson caused a toilet paper shortage. He said as a joke that there was a shortage, which there wasn't, until everyone believed him and ran out to buy up the supply. It took three weeks for some stores to get more stock.

Recycling

The recovery of recyclable paper grades continues to recover from the impacts of Covid. However, the recycled fibre content used in South African papers declined due to reduced demand for packaging paper, the largest consumer of recycled paper.

The rise in tissue consumption, considered an unrecoverable paper grade due to the nature of its use and disposal, further affected the volumes of paper products available in the market for recycling.

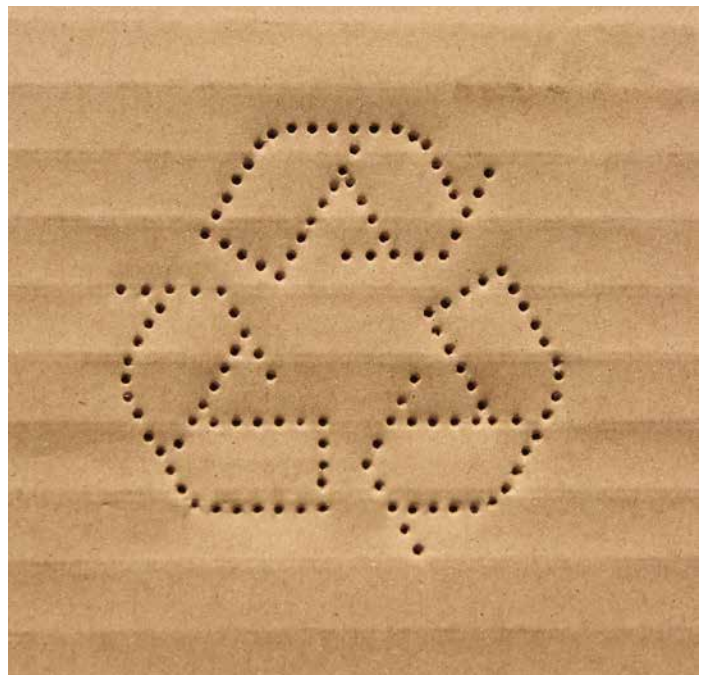
The export of waste paper continued to increase – this was driven by low domestic demand and favourable export exchange rates.

The industry diverted from landfill 1.2 million tonnes of paper and paper packaging, broadly in line with the five-year average of 1.2 million tonnes.

One million tonnes of recovered paper fibre was converted into new paper products in 2023.

Paper not collected and recycled is often archived, stored in homes, or used in long-life products. Unfortunately, some paper is lost to the environment through littering, illegal dumping, or poor waste management.

The industry continues to emphasise the importance of separating recyclable materials at source (e.g. homes, offices, schools) and keeping paper products clean and dry for effective recycling. The entire paper recycling chain is closely tied to GDP growth, slowing down when the economy slows.



CALCULATING SOUTH AFRICA'S PAPER RECYCLING RATE

The paper recycling rate in South Africa reflects the percentage of waste paper collected and diverted from landfills, compared to the total volume available for collection and recycling:

- **Apparent Consumption** is adjusted for **Unrecoverable Paper Types** (e.g., toilet paper, cigarette papers).
- We also exclude exports of corrugated boxes used in transporting goods like fruit, wine and finished goods.
- The recycling rate is further adjusted to account for secondary imports and exports of corrugated boxes to determine the final volume available for collection.

1.2 MILLION TONNES COLLECTED IN 2023 WOULD:



Cover

211 football fields
149 rugby fields



Equal the weight of

193,100
mature African elephants

(average weight of 6 tonnes)



Fill

1,390
Olympic-sized swimming pools



PRODUCTION AND CONSUMPTION

(All values in metric tonnes)

	Production	Imports	Exports	Consumption
Newsprint	67 588	16 251	9 264	74 575
Printing/writing	312 796	397 881	120 344	590 333
Corrugated materials/container board	1 314 321	282 221	314 043	1 282 499
Tissue	281 286	29 486	48 831	261 941
Other paper and board	74 101	17 463	9 327	82 237
Total	2 050 092	743 302	501 809	2 291 585



WASTE PAPER AVAILABLE FOR COLLECTION AND RECYCLING

Consumption of paper, packaging and tissue in SA	2 291 585
Adjusted for net trade of secondary corrugated packaging (imports minus exports)	-112 369
Less paper that cannot be collected ⁽¹⁾	-261 941
Waste paper available for collection and recycling	1 917 275

DIVERTED FROM LANDFILL

Paper received by recycling mills Waste paper imports Waste paper exports Used in new packaging paper & tissue

Newspapers	53 714	357	38 203	15 868
Magazines & coated papers	28 051	73	7 824	20 300
Corrugated, solid cases, kraft papers	901 551	30 850	106 025	826 376
Office papers, graphic papers	159 711	3 664	6 137	157 238
Mixed and other papers	15 575	5 228	7 585	13 218
Total	1 158 602	40 172	165 774	1 033 000

RECYCLING RATES

	2021	2022	2023
Paper recycling rate (paper diverted from landfill as a % of available paper)	63.8%	60.7%	60.4%
% of recycled paper fibre used to make packaging paper and tissue in SA	53.0%	58.4%	50.4%

EXPLANATORY NOTES

¹ Papers unsuitable for collection and recycling include tissue products (such as toilet paper) and cigarette papers due to their function. Tissue paper dissolves and degrades, and cigarette paper is incinerated on consumption making them unavailable for collection and recycling.



Watch how paper is sorted and baled



**“Rags are as beauties, which concealed lie,
But when in paper, how it charms the eye.
Pray save your rags, new beauties to discover,
For paper truly, every one’s a lover;
By the pen and press such knowledge is displayed
As wouldn’t exist if paper was not made.
Wisdom of things, mysterious, divine,
Illustriously doth on paper shine.”**

*- The Boston News-Letter, a public plea for rags,
March 6 and 23, 1769*

About PAMSA

The Paper Manufacturers Association of South Africa (PAMSA) lives and breathes all things paper. We look after the education, environment, research and recycling interests of the pulp and paper sector in South Africa.

Watch our video



www.thepaperstory.co.za

 @paperrocksza

PAPER
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