

# PAPER PERSPECTIVES

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MANUFACTURERS ASSOCIATION  
OF SOUTH AFRICA (PAMSA)

*Fascinating facts and useful information about  
the South African paper industry.*

## Planting trees. Reducing emissions. Making a difference.



*Forestry is the most sustainable of all the primary industries that provide us with energy and materials. To address climate change, we must use more wood, not less. Using wood sends signals to the marketplace to grow more trees.*

**Dr Patrick Moore, Greenpeace co-founder**

- Plantations are atmospheric carbon sinks which mitigate greenhouse gas emissions by absorbing carbon dioxide (CO<sub>2</sub>) and releasing oxygen through the natural process of photosynthesis.
- Some 20 million tonnes of carbon dioxide and greenhouse gases are absorbed by SA's commercial timber plantations annually while 15 million tonnes of oxygen is released into the atmosphere. (Based on an average absorption rate of 27 tonnes of CO<sub>2</sub> per hectare per year, using the Forest Industries Carbon Assessment Tool (FICAT). PAMSA is currently exploring the use of a local factor to attain a more exact figure.)
- Only 10% of mature trees is harvested annually which means that carbon absorption continues. Young trees are able to absorb carbon more rapidly than the older trees. These trees, and thus paper products, are a renewable resource.
- If it were not for the pulp and paper industry operating world-wide for the last 150 years the CO<sub>2</sub> levels in the atmosphere would be 5% higher (about half a degree in Celsius) than they are at present. (National Council for Air and Stream Improvement, Special Report No 07-02. The greenhouse gas and carbon profile of the global

**PAPER IS  
TANGIBLE  
AND VERSATILE.**

**IT STIMULATES  
OUR SENSES  
AND PRESERVES  
OUR MEMORIES.**

**IT PACKAGES  
AND PROTECTS.**



## Farming trees. Making paper. Growing the economy.

- All paper made in South Africa is produced from plantation-grown trees, recycled paper or bagasse (sugar cane fibre). Plantation-grown trees are farmed for paper, just as maize is planted for cereals and wheat for bread.
- Our fibre is not sourced from the wood of rainforests, indigenous or boreal trees.
- In South Africa, 600 million trees across 762,000 hectares are specifically grown for use in pulp and paper manufacture and the industry plants in excess of 260,000 trees every single day.
- Close to 150,000 people are employed because we grow trees and conduct all the downstream activities. Roads are developed in deep rural areas, and clinics, hospitals, schools and communities are sustained. (Forestry South Africa)
- The industry also contributes to foreign exchange earnings and GDP growth.

## PAPER RECYCLED. PAPER RENEWED.

Around 64% of recyclable paper is currently recovered for recycling however a considerable amount still goes to landfill.



- One tonne of recovered paper saves three cubic metres of landfill space.
- By recycling paper, the carbon (originally stored by trees in the wood fibre) remains 'locked up' – and out of the atmosphere – for longer thus reducing greenhouse gas emissions.
- Some 65% of the country's paper mills depend on recycled fibre and a number of them use it as their only fibre source.
- Without new fibres, from new trees, the paper cycle cannot begin. Recycled fibres degrade after six to seven times and new fibres are always needed. Two Sides UK.
- Recycling plays a vital role in job creation and poverty alleviation.

**From the grocery cupboard and from your favourite online shop to your front door,  
paper and packaging is an important part of daily life.**





## LONG LIVE THE PRINTED WORD.

Paper is the most successful communications innovation of the last 2000 years, the one that has lasted the longest and had the profoundest effect on civilisation. William Powers, 'Hamlet's BlackBerry: Why Paper Is Eternal'.

The printed book continues to remain more accessible on any income level, than any other form of information. Allan Kornblum, publisher, Coffee House Press

Reading on paper has proven to be 10-30% faster than reading online. 'Reading online or on paper: Which is faster?', Kurniawan and Zaphiris, Wayne State University

Deeper learning takes place through paper, compared to superficial processing of information online. Jakob Nielsen, web-usability expert

Turning the pages of a paper book is like leaving one footprint after another on the trail - there's a rhythm to it and a visible record of how far one has traveled. 'The Reading Brain in the Digital Age: The Science of Paper versus Screens', *Scientific American*

## Sustainable. Renewable. Responsible.

- The use of renewable biomass-based energy has enabled paper mills to avoid the use of 1,3 million tonnes of fossil fuels such as coal, oil and gas annually and therefore the associated carbon emissions.
- Plantations don't require irrigation or regular fertilising. The water requirement for timber plantations was calculated to be approximately 3% of South Africa's total annual water usage. By comparison, water used for irrigating crops is 60%. (Strategic Overview of the Water Sector in South Africa 2010, Dept of Water Affairs)
- Much investment has gone into research and technology to drive water efficiency and recycling and to reduce the water footprint of the paper value chain.
- Plantation areas have been voluntarily reduced by 80,000 hectares in riverine and other ecologically sensitive areas.

## BE A RESPONSIBLE PAPER USER.

- Over 80% of land reserved for plantation forestry is certified by the Forest Stewardship Council (FSC®) – the highest in the world. Some 25% of this land is not planted to trees. Instead it is conserved for biodiversity in the form of grasslands, wetlands, indigenous forests and savannah.
- The FSC® Chain of Custody tracks certified material through the production process – from the forest to the consumer.

## Paper versus digital. The great [green] debate.

'Go paperless'. 'Go green and keep it on screen'. 'Consider the environment before you print this email'.

- While online communication and electronic document storage have numerous benefits, such technologies should not be touted as more environmentally friendly than paper and print. For example, e-billing may reduce costs for the service provider and improve customer convenience but is it greener?
- With data centres consuming considerable amounts of seemingly 'invisible' energy to maintain uptime, back-up power and temperature control, it is only recently that environmental impacts of our digital world are being studied.
- If the cloud was a country, its collective electricity demand would rank in the top six. This demand is expected to increase by 60% or more by 2020. Greenpeace, Clicking Clean report, April 2014.
- Greenpeace has identified electronic waste as the fastest growing component of the municipal waste stream. Greenpeace, The E-waste Problem 2009.

Paper and digital are part of our world. Consider the life cycle and disposal of your digital devices compared to the recyclability and renewability of paper.

Look for FSC® mark of certification when buying paper and wood products.

