

# Is Tissue Made From Trees Bad For The Environment?

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**Since the 2019 pandemic, our reliance on tissue products has never been more acute. We all remember the shortages, panic-buying and stock-piling of toilet roll, which left supermarket shelves empty for days on end, despite people being rationed. This reflects just how important these products are in our daily lives.**

This has been followed by an ever increasing consumer awareness of the environmental impacts of all products and how they might impact global warming, deforestation, water usage and pollution. This brings us to the question we are often asked;

## **Why doesn't the tissue industry use more recycled wood pulp or fibre sourced from plants such as bamboo?**

There are several myths about the health of our forests and commonly people confuse deforestation with managed forests. In Europe, forests are expanding and mostly controlled by strict certification programmes to ensure responsible harvesting, care for biodiversity and the investment in regenerative forestry and farming methods. Unlike Europe, the competition for land is driving global deforestation where vast areas are being cleared to give way for mining, construction, cattle rearing, soya, palm plantations etc.

Traditionally, wood pulp has been the favoured source of fibre because of its abundance and availability in the locations where tissue products are manufactured and distributed. Tissue is lightweight, bulky and therefore does not travel easily over long distances.

## **Tissue Demand On Trees**

The global demand for tissue is about 43 million tonnes (55% of which is toilet paper), which represents 10.8% of all paper and board products.<sup>1</sup> Paper, board and tissue products account for 10-15% of timber harvested so toilet tissue alone represents a global share of about 1.5%.<sup>2</sup>

Trees for making all paper products are replanted. For instance, in Europe, only two thirds of the annual growth of forests are harvested – so forests keep growing in area and in density. European forests actually grew between 2005 and 2015 by 58,390km<sup>2</sup> – an area bigger than Switzerland or the equivalent of 1,500 football pitches of growth every day.<sup>3</sup> 90% of paper and tissue products made in Europe are sourced from well-managed, strictly controlled forests with FSC or PEFC certification.<sup>1</sup>

Wood-fibre, is a natural and renewable material. As young trees grow, they absorb CO<sub>2</sub> from the atmosphere, whilst converting and storing carbon as biomass throughout its lifetime. European forests act as a carbon sink, creating biodiversity and protecting the soil from water and wind erosion. Between 2010 and 2020, the average annual sequestration of carbon in forests reached 155 million tonnes in Europe.<sup>4</sup>

In 2021, over 90% of water used in the European paper industry is returned to the environment (having been reused within the mill before being filtered and cleaned), with the remainder evaporated, staying within the product, or bound up in solid waste.<sup>5</sup>

## **Tissue Made From Recycled Wood Pulp & Alternative Fibres**

71% of paper in Europe is recycled.<sup>5</sup> For paper packaging alone this is 82%.<sup>6</sup> Recycled toilet tissue is one of the products that competes for valuable recycled fibre and plays an important part in the life-cycle of paper, but we do need to remember that, in order to have access to recycled fibres, it is necessary to grow new trees from sustainably managed, re-planted forests. Fibres degrade over time and lose their strength, resulting in paper being recycled on average 3.5 times, although this can increase using modern pulping, paper and board production technologies.

+44 (0)1327 262920

@TwoSidesUK

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Since the pandemic and increasing remote-working there has been a shortage of recycled fibre because of the decline in demand for office paper, newspaper and other paper-based graphic products. Our increasing media digitisation has also not helped.

This has led to some tissue manufacturers exploring the use of alternative fibres made from plants such as bamboo, bagasse (sugarcane waste), miscanthus (elephant grass) and other crops. The challenge with all of these alternative fibres is availability by location, consistency of supply and in some cases scalability.

Controlling ethical and environmentally responsible sources of alternative fibres which are certified can also be a challenge, as can the misuse of additives and contaminants more associated with the packaging industry where moisture and grease resistance might be required.

With regards to the sustainability of alternative fibres, and whether there are any benefits over products made from virgin or recycled wood fibre, it is important to consider whether there is reliable evidence to support any claims being made and, rather than focusing on one selective element, the full life-cycle should be considered. We need to be robust and call out any manufacturer or supplier who claims an advantage of one source of fibre over another. Each source of fibre must be sustainably produced, proving this is with a chain of custody or life-cycle analysis certification. However, statements on saving trees and reducing deforestation are misleading, not based on fact, and would contravene advertising regulations in most European Countries.

Tissue products made from cellulose fibre of any source are natural and renewable materials, and tissue products deliver huge value and benefits for society for health, sanitary and well-being.

## Sources

1. CEPI, 2021
2. Paper 360, Tissue: Trends That Will Shape the Next Five Years 2022
3. Two Sides Analysis of FAO data, 2005-2020
4. Forest Europe, State of Europe's Forests, 2020
5. CEPI Key Statistics, 2022
6. Eurostat Data Browser, Paper Packaging Recycling Rates

Written by Ian Bates, November 2023



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