



BOXED-UP
PACKAGING



April 2022

Eco Friendly Packaging & Sustainability

Saving the world one box at a time

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BOXED-UP
PACKAGING



Why Sustainable Packaging is Important: The Bigger Picture



Why Sustainable Packaging is Important: The Bigger Picture

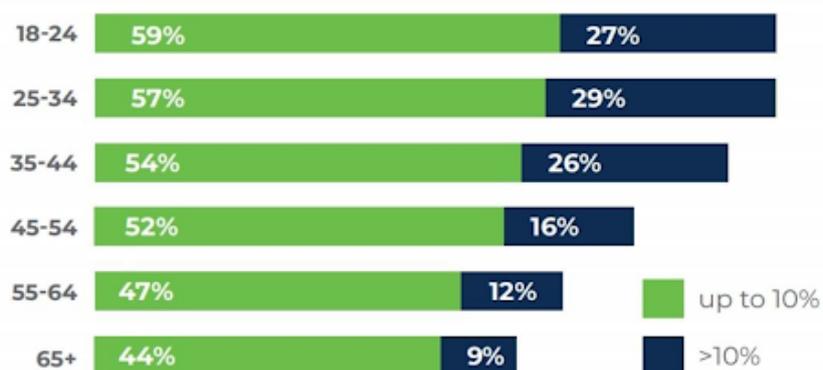
Sustainable packaging helps both businesses and consumers reduce the impact they have on the environment, lower their carbon footprint, and play their part in protecting the planet.

The impact of humankind on the natural world is one of the greatest challenges we all face today and in the decades to come.

The packaging industry has been pushed to the forefront of sustainability discussions, not necessarily because it is the worst offender, but because from a customer's perspective, it is one of the most visible.

The 2021 Global Buying Green Report discovered that 67% of consumers say it's important that products they purchase is packaged in recyclable material, and 67% consider themselves environmentally aware.

Willingness to Pay by Age



This report also showed that those in the age 18-24 bracket are 59% likely to be willing to pay up to 10% more for eco-friendly packaging.

Packaging manufacturers are now coming under pressure to ensure that they are addressing the demand for sustainable packaging, supplying sustainable packaging options, and focusing on the impact the production of certain packaging materials such as plastic has on the environment.

Plastic Waste and its Impact on the Environment.



Plastic Waste and its Impact on the Environment.

We should all now be aware of some of the harmful effects plastic waste is having on our environment. The worrying numbers and statistics are growing day by day, and every single year eight million metric tons of plastic are dumped into our oceans.

Plastic packaging waste often does not decompose and can last centuries in landfills, or else end up as litter in the natural environment, which in turn can pollute soils, rivers, and oceans and harm the creatures that inhabit it.

Out of the 5 million tonnes of plastic which is used in the UK every year, 50% of this comes from packaging. By 2025, the United Nations predicts that there will be more plastic waste in the ocean than fish!

What are the environmental costs?

Reducing overall plastic packaging is imperative to mitigating further environmental damage for numerous reasons:

Reduce Waste

Conserve energy

Conserve resources

Decrease Pollution

Reduce GHG emissions



Plastic vs Paper Waste.



Plastic vs Paper Waste

Recently, for brand owners and retailers, the main focus of their business strategy has been sustainability and how to reduce the number of packaging materials they use.

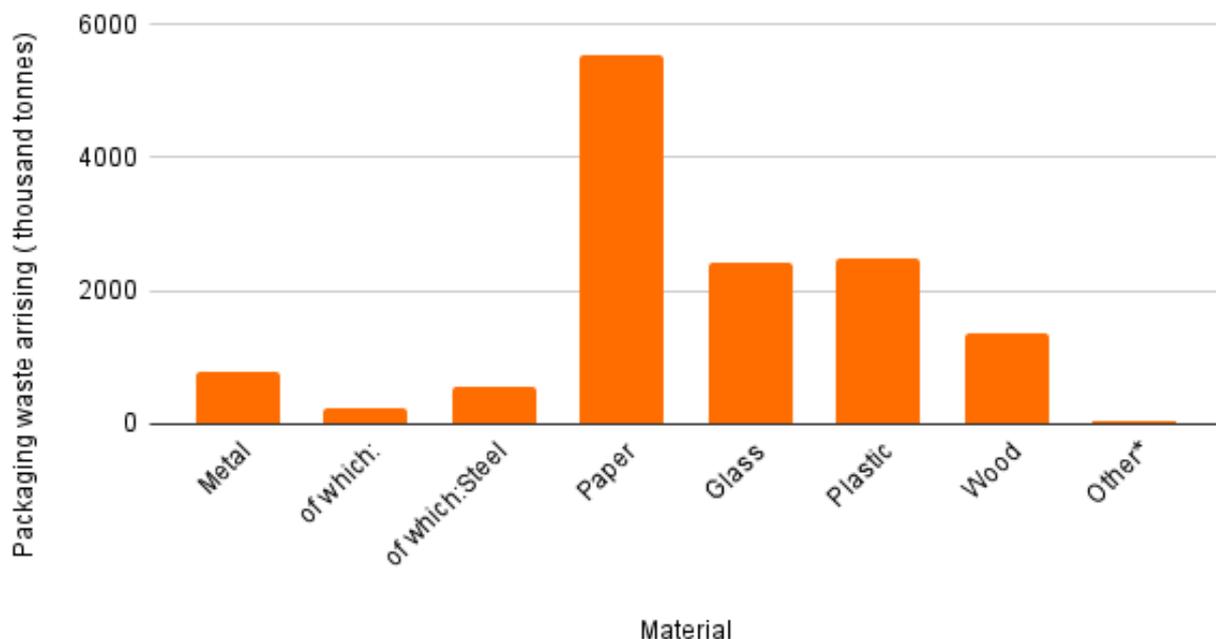
However, a more holistic approach is now emerging which clarifies that it's not the number of packaging materials used, but the life cycle of those materials that matters.

- Where have they come from?
- How have they been made?
- And how valuable are they to be recovered at the end of their life?

A major consumer issue that companies are facing currently is the amount of packaging waste they produce that ends up in the world's oceans.

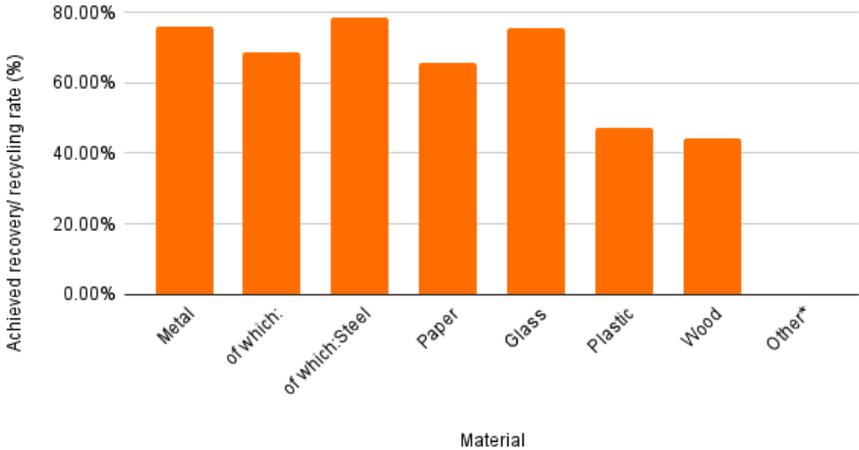
This is one of the prominent issues driving interest in circular economy and sustainable packaging.

Packaging waste arising (thousand tonnes) vs Material

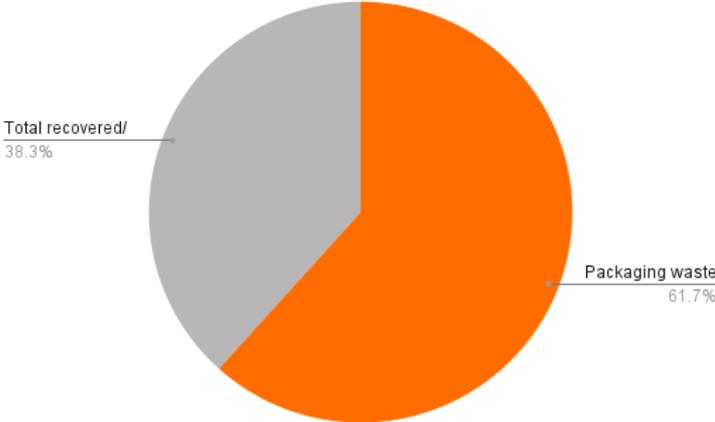
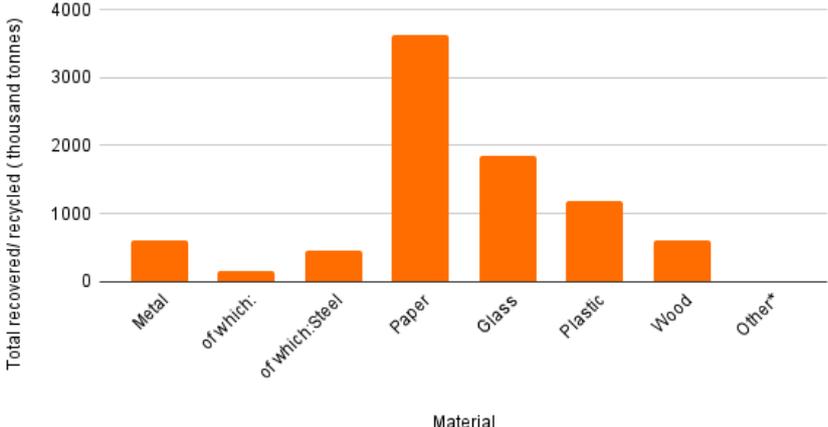


Plastic vs Paper Waste

Achieved recovery/ recycling rate (%) vs Material



Total recovered/ recycled (thousand tonnes) vs Material



Plastic vs Paper Waste

The choice of packaging materials depends on many factors - functional, economic, marketing, and environmental drivers all play a part. Some packaging materials have particular properties, such as durability, impermeability, flexibility, or transparency that may be essential for some applications and specific sectors.

Others may appeal more because of their sustainability credentials, for example using renewable raw materials or being easy for consumers to recycle.

It is important to look at how this packaging waste has been treated. While 34.6 million tonnes of paper and cardboard packaging waste was generated across the EU28 in 2015, over 90% of it was recovered in some way (including recycling).

Wrap recycling tracker 2021 Spring report revealed that 55% of UK households put one or more items in the general rubbish that is collected for recycling kerbside (1.6 items on average).

The sheer volume of plastic waste generated each year vastly exceeds the UK's capacity to recycle it. The British Plastics Federation (BPF) estimates that 46% of the UK's plastic waste is incinerated, 19% is exported and 17% goes to landfill. Yet the government and companies continue to emphasise recycling as the way to deal with plastic waste.

The situation is particularly serious when it comes to household plastic packaging. Local authorities collect an estimated 2.3 to 2.4 million tonnes of plastic packaging every year, largely from households.

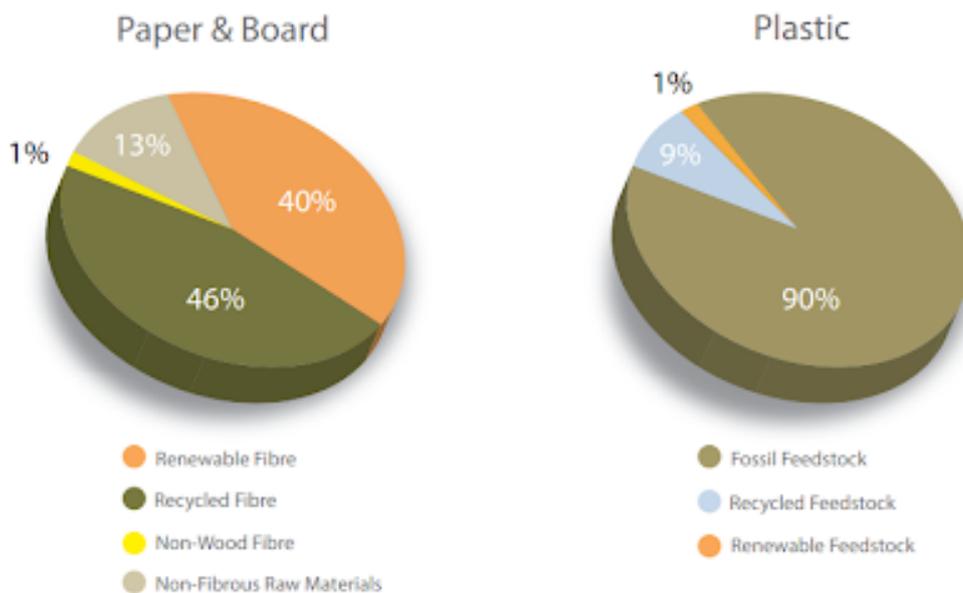
Yet analysis by RECOUP, an industry body established to promote recycling, indicates that the UK recycles just 230,000 tonnes of household plastic packaging waste each year. This suggests that less than 10% of household plastic packaging is actually recycled in the UK.

Less than 10% of household plastic packaging gets recycled

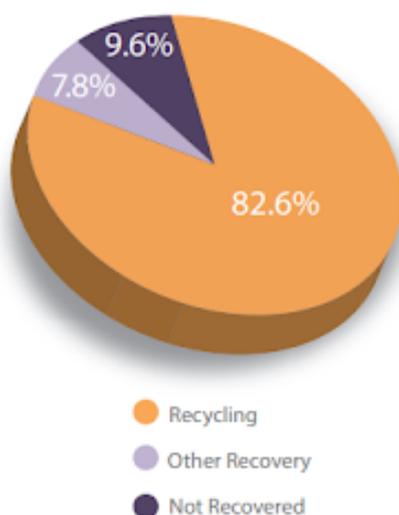
Plastic vs Paper Waste

By comparison, 15.8 million tonnes of plastic packaging waste was generated, with a recovery rate of 71%.

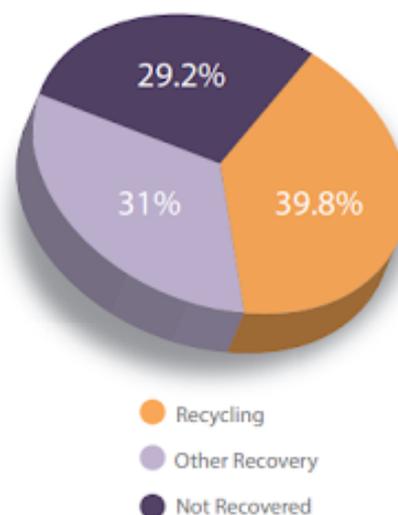
Therefore, the quantity of packaging waste that was not recovered, and could potentially have gone to landfill, was 3.3 million tonnes for paper and cardboard and 4.6 million tonnes for plastic.



Paper & Cardboard Packaging



Plastic Packaging



Packaging Life Cycle

Packaging in a circular economy means that all wastefulness is eliminated from the packaging chain and that no raw materials are lost therefore helping to protect the environment and eliminate waste.

Packaging in a circular economy means:

1. minimising the use of raw materials by using fewer materials for the development of packaging materials but also wasting less product.
2. ensuring that the raw materials used for packaging materials come from renewable sources whenever possible.
3. Designing product- packaging combinations in such a way that all negative aspects are eliminated and that raw materials continue to cycle



Packaging Life Cycle

The image below shows a simplified life cycle of plastic packaging materials and the second image compares this to the circular life cycle of paper packaging.

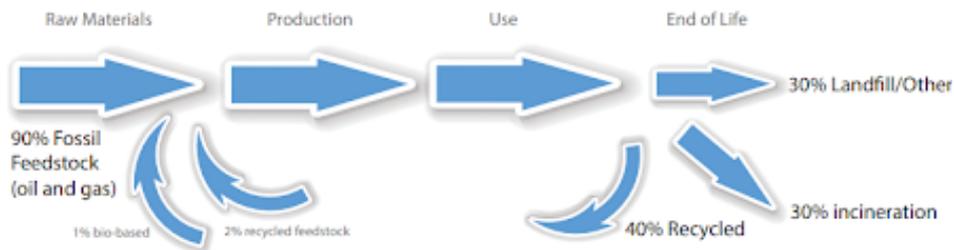
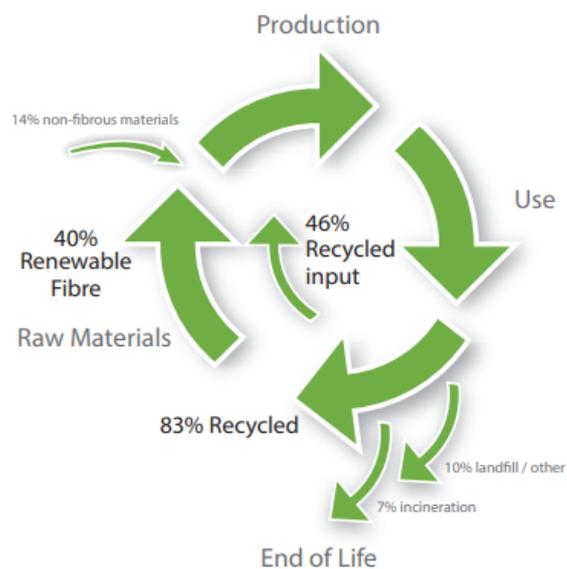


Figure 1: Simplified life cycle overview of plastic packaging materials.

A circular economy (as shown below) is an economic system in which the reusability of products and raw materials is maximised and wastefulness is minimised.





Do you know the full history of where your packaging materials have come from?



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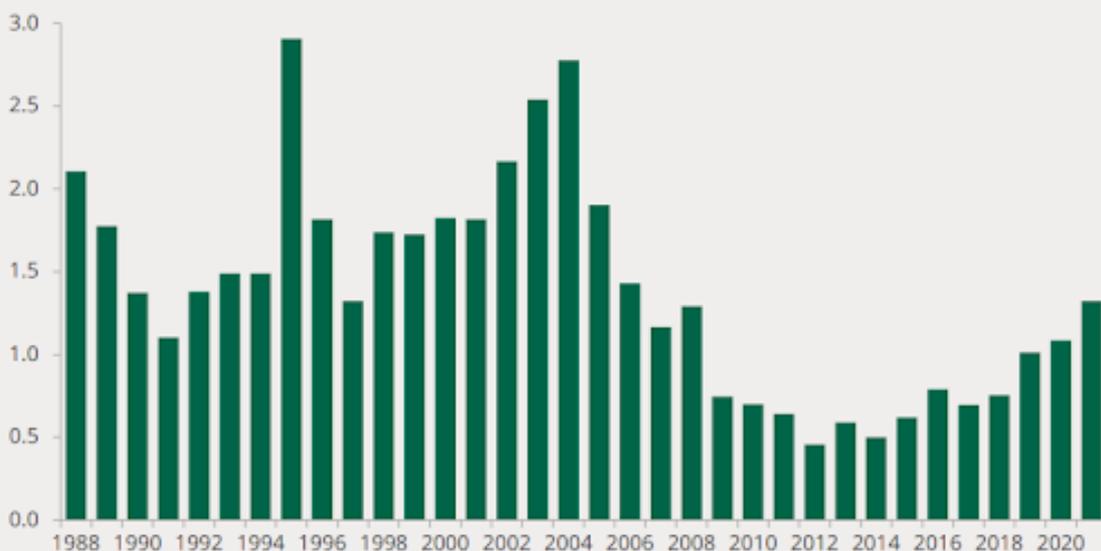
The emerging digital economy may have decreased the demand for printing and newsprint, but it continues to increase the demand for paper-based packaging which currently represents around 55% of the total consumption of paper and pulp. In fact, more than two billion trees are now logged every year for packaging alone which has led to an increasing rate of deforestation.

Deforestation directly affects and reduces the forest's natural resources and ecosystem. It can cause damage to wildlife and 100,000 species become extinct each year due to it. The rates in 2021 increased to the highest annual level seen in a decade. The rainforest is a key natural resource containing 1 in 10 known species on earth and is half of the planet's remaining tropical rainforests.

More than 70% of the deforestation of the Amazon turns to waste.

Deforestation in the Amazon in 2021 was the highest for 15 years

Million ha., Amazônia Legal area, based on areas of deforestation >6.25 ha.



Do you know the full history of where your packaging materials have come from?



However, that doesn't mean businesses should not produce and sell paper and cardboard packaging. It means that it is important that companies choose sustainably managed forests, and customers choose companies who are FSC accredited.

Sustainable forestry balances the needs of the environment, wildlife, and forest communities—supporting and conserving our forests for future generations. It practices and mimics natural patterns of disturbance and balances the needs of the environment, wildlife, and conserves the forests.

Sustainable forest management means that forests are not used excessively, new trees are planted to replace harvested timber and the forests are ecologically maintained and managed for their long-term health.

In sustainably managed forests for each felled tree, three new trees are planted. We can not survive on this earth without forests, they absorb carbon dioxide and produce oxygen that we all require in return.

They provide livelihoods, clean air, and water, maintain biodiversity, and mitigate climate change. Hence, why it is important to protect them with sustainable forestry.

Around 30% of the world's land surface is covered with forests.



How do you know if your packaging supplier uses sustainable forests?



At Boxed-Up we source virgin fibre from certified forests, as it ensures that all our wood fibre supply is responsible and sustainably produced. We know this because we choose sustainably managed forests with an FSC certification.

The FSC certification addresses a wide range of economic, social, environmental and technical aspects of forest management such as forest conversion, forest plantations, reforestation, pest management, forest management plans, health, safety and working conditions.

As part of our FSC certification, the cardboard we use to manufacture our Boxed-Up boxes are guaranteed to be made from a minimum of 70% recycled materials, plus we source all of our materials from sustainable, ethical, and responsible suppliers.

Plus, we also sell our cardboard waste back to our suppliers to be reproduced into usable cardboard materials. We also offer a wide range of box sizes so that you can find the best fitting box for your products to reduce waste or the need for packaging fillers.

We're passionate about sustainability and our FSC certification is evidence of this. As an FSC certified manufacturer, it means you can know you are doing your part by buying boxes that have been responsibly produced to ensure a greener future.



Sustainable Packaging: Saving the World one Box at a Time.



What does the future look like?



The Amazon basin could be less than 30 years from a catastrophic collapse that would turn it into a dry savanna, according to a study published in the journal *One Earth*.

Early estimates suggested that this “tipping point” might lie at around 40% deforestation. But in 2018, noted Amazon climatologist Carlos Nobre and conservation biologist Thomas Lovejoy revised this estimate, warning that the synergistic effects of climate change, drought, and wildfires could bring the tipping point much closer — between 20 and 25% deforestation.

How Do We Change This?

Businesses need to review how through poor supplier choices, they may be unwittingly securing packaging unethically. Building a more secure business relationship with an FSC certified means you can make sustainable packaging improvements for your business.

Sustainable packaging manufacturers like Boxed-Up use recycled content in the materials purchased, so you can cut costs and save money.

Large companies often have thousands of suppliers from various sectors and countries, which proposes a major challenge when implementing effective sustainability practices.

This abundance of suppliers is most often the primary cause of a company’s carbon footprint. Focus on suppliers that largely contribute to your company’s carbon footprint and see if you can make any alternate arrangements to effectively reduce greenhouse gas emissions.

Also, consider reducing the number of suppliers used and where possible choose packaging suppliers that demonstrate certified production and that are close to your factories or warehouses to minimise transportation. Finally, choose sustainable packaging alternatives that have a longer life span and do not harm the environment.

Sustainable Packaging



Corrugated cardboard packaging is the perfect sustainable packaging solution, it is made from birch or fine pulp which contains a high percentage of recycled content.

Corrugated cardboard is one of the most highly recycled materials on earth because it can be made without the use of any dyes or bleaches, its recyclability is further enhanced and its environmental footprint is reduced.

It is a strong and sturdy packaging solution that can be used again and again. It can be sourced locally, minimising environmental damage caused by transposition.

You may have specific requirements when it comes to cardboard boxes, such as different sizes, and cardboard thickness. Boxed-Up has an easy-to-use box finder that allows you to find the right size for your packages. Simply enter the length, width, and height of your items and the best size will be found for you.

[View our full range of sustainable packaging solutions](#)





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