

# ENVIRONMENTAL IMPACT OF PACKAGING

Elena Rotzokou, Global EPR Researcher at Ecoveritas, looks at the need for environmental data specialists to improve the printing industry's impact on sustainability in packaging



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While packaging and printing are separate entities, the former can have a serious impact on the latter. Both are so intricately linked, that trends and legislation affecting one industry will always have a profound effect on the other. Images of plastic packaging piled high in landfills and floating in the oceans have spurred reforms. These include plastic packaging taxes, extended producer responsibility (EPR) and various single-use plastic (SUP) bans. These reforms are not always explicitly targeted at the print industry. However, packaging and label printers should certainly take heed.

Even though 2023 is arguably the most significant year yet for businesses preparing for incoming environmental legislation, it will likely soon be surpassed. These laws include the introduction of EPR in the UK and the Corporate Sustainability Reporting Directive (CSRD) in the EU (European Union). Consumers, law makers and businesses are all finally heading in the same direction. Progress will only speed up as companies falling behind either start to pull their weight or fall away.

## TRANSPARENCY IS PRICELESS

Improved transparency of sustainability measures is key to the industry. Sustainability is a complex topic that is all too often boiled down to the removal of plastic from products. For example, a printer might decide to swap out an acrylic screen-printing ink for a more sustainable formulation and see that as their job done. The reality is often more complex.

That ink, depending on how it is produced, might contain PFAS (polyfluoroalkyl

substances), which are ubiquitous, persistent chemicals now banned in several markets. These chemicals are so widespread that a poor quality-control process could see unacceptable amounts appear in what is sold as water-based ink. Without transparency, this challenge may be unavoidable.

**“Improved transparency of sustainability measures is key to the industry”**

Additionally, inks themselves are not the answer to every problem. They work well on paperboard packaging, for instance, but deliver less-than-satisfactory results on less absorbent substrates. If the end result is unacceptable, this just creates more waste to add to the landfill. No matter how sustainable the materials used, wasting them is still a net negative for our planet.

The packaging industry is under pressure from consumers and legislators for its historic take-make-waste approach to resources. Therefore, print businesses are going to find packaging customers placing every link in their supply chain under the microscope.

## CRACKDOWN ON GREEN CLAIMS

By collecting granular data on every aspect of the packaging supply chain, it is possible to gain unparalleled insights that can drive the print industry to greater heights.

One of the key roles of EPR reform is to make producers responsible for the costs

of recycling packaging waste. Eventually, a modulated fee system will become the standard, where companies that produce easily-recyclable packaging are subject to discounted fees. For example, in the UK, the plan is to make this modulated fee system fully operational in 2025. Packaging customers will increasingly look to the print industry to provide labels and inks that easily wash away during the recycling process. In addition, label substrates that can be composted at home, will be a priority.

Carbon neutrality can be a great differentiator in a crowded marketplace, where circularity is the goal. However, without the data to peel back the veil, printers will not be able to clearly see this aspect of their supply chains. Separating genuine improvements to process and product development from dishonest greenwashing claims can hamper progress. Print-service providers are often sceptical about many environmental claims, but without data – and the management system in place to parse and analyse it – an informed decision cannot be made.

## MAKING THE MOST OF AN OPPORTUNITY

Many sustainable printing processes can improve product quality and optimise print runs when correctly employed. Rather than being seen as unnecessary red tape that binds productivity, the print industry needs to embrace the changes.

For example, a UV-LED press running the

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Transparency will be the cornerstone of future successful sustainability policies

right UV-LED curing ink will result in a rapid and more energy-efficient curing time. At a time of – at best – unpredictable energy costs, this has the potential to keep margins healthy when the competition is finding theirs squeezed. Refining colour management, by using a digital system, can reduce errors and inconsistencies between print runs. In turn, this cuts the amount of materials and energy consumed in wasted runs that end up outside production tolerances.

**“Carbon neutrality can be a great differentiator in a crowded marketplace”**

These are things that can be quantified and tracked throughout the packaging supply chain. Insight can thus be provided that can, and will, sway decisions made by procurement teams and compliance officers in the future. Ecoveritas has this information due to its Ecoview platform. This platform is growing by millions of data points per year and the company can see the total amount and quality of data per user is increasing.

**NOT JUST NUMBERS**

The data provides actionable insights that key stakeholders in the packaging industry are using to identify weak links in their



Experts estimate there are around 5.25 trillion pieces of plastic in the ocean

sustainable supply chains. Printers can do the same to identify areas for improvement and develop products that are better and more sustainable throughout their life cycle. Information including that of active suppliers, product lines, recycled content coverage, components, materials and weight source, is all here at Ecoveritas's fingertips. It is up to the printing industry to take this data and use it wisely.

**CONCLUSION**

Instead of trying to hold back the tide, the print industry can put itself in control of its own destiny by wholly embracing change.

One individual or one business will not be able to fix the planet's sustainability issues on its own. Instead, by all pulling in the same direction, through millions of collective small operational efficiencies and innovations, progress can be made. ■

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