FUTURE OF PACKAGING

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Bending with the winds of policy change

The UK is in need of improved recycling systems, laws and infrastructure, and while change may be slow, companies must be prepared

The winds of change are blowing more than just a bit of plastic in the breeze: they’re now whistling through the halls of Westminster. The government has just wrapped up an ambitious consultation, the first in ten years, on reforming how we deal with waste packaging. Industry and consumers can expect a radical shake-up.

In a bid to breathe new life into a creaking system, significant intervention is expected in the form of policy changes and fiscal drivers, amid great expectations within the industry. Some are calling it a once-in-a-generation opportunity to revitalise recycling and use of resources, counter littering and give a significant push towards a circular economy.

“This comes after the UK parliament declared a climate emergency and the Committee on Climate Change recommended that the country aims for net-zero carbon emissions by 2050,” explains Ben Stansfield, partner at law firm Gowling WLG. “There is phenomenal momentum here. I think a lot of what’s being proposed by the government will be adopted.”

And there’s a need for change. Recycling rates have plateaued in the UK. We still have a system that favours exporting 50 per cent of our waste with limited incentives for domestic reprocessing. The system of collection is complicated, localised and fails to provide local authorities with enough financial support. At the same time, a lot of useable packaging and materials still end up in landfill. A lack of accountability and transparency is also apparent.

“The government feels the existing regulations do not deliver what we want them to do in the future and to help the UK meet more challenging targets for recycling, as well as increase the revenue that comes from the system,” says David Hoecoop, managing director of Clarity Environmental.

“The Resources and Waste Strategy is the 124-page blueprint from the Department for Environment, Food and Rural Affairs, which will evolve into new laws soon. In the process, everybody will be impacted in some way.”

At its core is the “polluter pays” principle. Businesses can expect so-called extended producer responsibilities for the packaging they churn out. UK companies currently experience lower costs for compliance compared with producers in many other European countries. It means that only 50 per cent of the costs for recycling schemes come from producers themselves through compliance systems, such as packaging recovery notes, or PRNs, which provide evidence waste packaging material has been recycled into a new product; the rest is funded by local authorities and central government.

“We have been calling for waste producers to pay for their recycling for many years now. What this should do is force manufacturers and retailers to ensure the packaging they put on the market is easily recyclable,” says Simon Ellin, chief executive of the Recycling Association.

“If we get the system right, consumers will have easy labelling that tells them the packaging is recyclable, what bin to put it in and then we will get much higher-quality recycled material to be used in new products.”

At present there are many variables involving a mind-boggling array of local authority collections and packaging with highly variable recycling qualities. Complexity hinders the system, but this could change. “A well-designed scheme needs to be simple for everyone to understand,” says Mr Ellin.

“The principle that local authorities will collect core packaging, such as plastic bottles and containers, paper and card, glass and cans, is a good one. Packaging manufacturers and retailers will need to match this list with the products they put on the market or face additional charges.”

The shake-up is likely to be rolled out within four years, with a revamped and simplified labelling system; none of the “check locally” labelling, which has been deemed a barrier to better recycling. A deposit return scheme for single-use drinks containers and a tax on plastic packaging with less than 30 per cent recycled content is also in the strategy.

UK reprocessors have long been lobbying for changes to the current PRN system, which they believe incentivises materials being sent abroad.

“One of the biggest risks in the redesign is that we see an increase in costs for producers and ultimately consumers, but a failure to improve our existing recycling system,” says Robbie Staniforth, head of policy at Ecosurety.

“A well-designed scheme will recoup the true costs of packaging, as well as the costs of a transparent, effective recycling system. We must create a level playing field for all involved, as well as provide extra funding to local authorities, which are a critical cog in the recycling machine.”

All of this is likely to require complicated manoeuvres in industry, including mechanisms that transfer the cost of recycling to those who produce packaging in the first place. Agreement from each link in the supply chain and co-ordination will be crucial to make a new, consistent system work.

“It is vital businesses start preparing now,” says Mr Hoocoop. We’ve already seen an increase in the cost of complying with packaging regulations over the last 12 months and, without changes in behaviour of how businesses view their packaging obligations, the new proposals could have huge implications.”

A year after BBC TV’s Blue Planet II, and the subsequent backlash against plastic, consumers are already aligning themselves with brands that take this issue seriously. “By embracing change, producers will be protecting the future of their business as well as the environment,” Mr Staniforth concludes.
With packaging now a vital part of the product proposition, innovative brands in the online direct-to-consumer (D2C) market are giving customers more than just a product, they’re using packaging to deliver an experience.
Protecting packaged food and drink products from damaging light is now a measurable science

Carcinogenic light damage to food and drink products is an all-too-frequent reality. Despite the overwhelming knowledge of consumers that light can damage their food, little evidence exists to date that regulated test standards require light protection for packaged goods.

The issue is not well understood by industry or the public, and statistics suggest that many consumers are unaware of this problem. This information gap needs to be addressed.

“Light damage is real,” says Dr Divya Chopra, of Noluma International, a state-of-the-art light protection technical services and certification startup.

“Relying on spilt milk is one thing, but you’re more likely to shed a tear over the packaging when you hear that most of what we use doesn’t stop milk degrading rapidly; the same is true of olive oil or plant-based drinks.”

“Illuminating a problem: most packaging isn’t light protected”

“Although people know of sunlight damage, a minimum number of consumers understand the damaging effect of indoor light on taste, quality and nutrients. At the same time, 90 per cent of UK dairy farmers polled are aware of this problem. This information gap needs to be addressed.”

“Light penetrates most packaging: in 15 minutes, while some vitamins degrade in half an hour. Although people know of sunlight damage, a minimum number of consumers understand the damaging effect of indoor light on taste, quality and nutrients. At the same time, 90 per cent of UK dairy farmers polled are aware of this problem.”

“Just because a bottle looks white and says light-protected doesn’t mean it is; like an SPF of 10, contents can still get damaged. Trust certification.”

“Understanding and acting on light damage to packaged goods has a lot faster than we realise.

Protein levels in milk can drop by up to 28% after just 20 minutes of light exposure.

Cornell University report

90% of farmers know that light damages milk

Once educated about the damaging effects of indoor light on dairy milk...

55% of consumers say supermarkets should proactively look to package milk produce in ‘light protected’ packaging

Noluma’s testing can definitely make a difference to our growing mountain of waste. It’s time for a change.”

For more information please go to www.lightdamageisreal.co.uk
Public attitudes to non-plastics still need work

Backlash against unrecyclables is pressing companies and consumers to search for alternatives. While card, glass and cotton packaging may be greener options, experts say a change in consumer understanding is still needed in order to be truly sustainable.

Oliver Balch

Cardboard should be the dream packaging product. And in many ways it is. It’s light while strong, easy to recycle and dependent on those great climate regulators: trees. It’s what happens before your boxed-up Amazon purchase lands on your doorstep that’s the problem. At the crux of the issue are commercial timber plantations, many of which are now located in the global south.

Plantations might be good for the climate, “carbon sinks” the scientists like to call them, but they aren’t nearly as great for the local habitat or, very often, for local communities. “Plantations are constantly expanding into new territories, where biodiversity is replaced with monocultures of trees,” says Maria Ehmström-Fuentes, a forestry specialist at the Hanken School of Economics in Finland.

The fast-growth tree species that go into pulp production, the base for cardboards, are very thirsty, resulting in water shortages, she adds. Smallholder farmers can also find themselves displaced by large-scale commercial forestation.

In response, the pulp and forestry industries have developed a vast array of sustainability certification schemes to demonstrate their efforts to mitigate such negative impacts.

The best-known certification is run by the Forest Stewardship Council. Certified producers are required to show they meet ten core rules, which cover everything from avoiding environmental damage to respect for indigenous lands.

Conservation charity WWF has gone one step further, developing a set of good management principles specifically for the pulp and paper industry. The New Generation Plantations (NGP) initiative pushes participating companies to learn from one another about how best to address challenging issues.

As a basic starting point, plantations should never replace natural forests, according to NGP. Ideally, they would also be established on degraded areas with low conservation value and would make a positive contribution to local people’s lives.

An illustrative example is the Brazilian pulp and paper firm Fibria, which works with local charities in the south of Brazil to help establish community-owned tree nurseries. Another is Finland’s Stora Enso, which has set aside more than 100,000 hectares of its concession in Brazil’s Atlantic rainforest for conservation.

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One of the beneficiaries of the backlash against plastic packaging is glass. This time-honoured alternative is seeing a steady demand growth in a range of sectors, from food and beverages to cosmetics, perfumery and pharmacy, according to the European Container Glass Federation (Feve).

As with cardboard, glass has the benefit of being highly recyclable. Furthermore, using existing glass in the manufacturing process allows for a lower melting temperature, which in turn leads to lower energy-related emissions.

Yet the carbon intensity of glass production still remains high. The container and flat glass industries, which account for 80 per cent of all glass, emit more than 60 million tonnes of carbon emissions a year, according to Global Efficiency Intelligence.

Energy efficiency measures are slowly helping bring this down over recent years. In Europe, for instance, almost all glass factories are now equipped with natural gas as opposed to more polluting fossil fuels such as diesel.

The European glass industry annually invests €610 million in waste heat recovery systems and other decarbonising measures, says Feve spokesperson Michael Delle Selve. The result has been a 5 per cent reduction in carbon emissions over the last decade.

For ethical water brand Belu, which gives 100 per cent of its profits to WaterAid, the focus should be on avoiding single-use packaging wherever possible. Be it glass or plastic; Belu uses both.

In a frank admission, Belu’s chief executive Karen Lynch says the best option for eco-conscious consumers is to drink tap or filtered water from a refillable, non-plastic bottle.

“You may give yourself a big high five for being plastic free, but you could triple or even quadruple the carbon emissions created if you opt for a switch to single-use glass,” she says.

Meanwhile, if there’s one single item that earns the universal ire of environmentalists, it is the single-use plastic bag. For many, cotton tote bags are seen as a more sustainable alternative. But are they?

Not if a recent study commissioned by the Danish government is to be believed. Cotton bags need to be used around seven thousand times to become a greener option than plastic, according to the study.

Why? Because cotton is a thirsty, land-hungry crop that typically requires large volumes of polluting fertilisers and pesticides. Infrastructure for recycling cotton is also scarce.

Leading the charge in making cotton more sustainable is the Better Cotton Initiative (BCI). This industry-backed group works with almost two million farmers around the world, encouraging them to adopt more sustainable practices, such as using less water and fewer chemicals.

Even so, less than 20 per cent of cotton is currently grown in a way that actively protects people and the planet, says BCI chief operating officer Lena Staalgaard. “BCI seeks to change this and is striving to transform cotton production from the ground up,” she says.

For now, however, even purveyors of tote bags are wary of overly endorsing them. Few companies are more eco-aware than Rotterdam-based Bio Futerra, a wholesale provider of plant-based packaging products. On its product list are Fairtrade-certified cotton bags made from at least 70 per cent organic cotton.

“Under no circumstances do we want to mitigate consumer concerns about the environmental footprint of cotton in general; we rather encourage our customers to ask critical questions about our products and their impact,” says Ekaterina Smid-Gankin, sustainability consultant for Bio Futerra.

Ms Smid-Gankin says finding zero-impact packaging solutions is, as yet, not possible. That’s as true for cardboard and glass as it is for cotton. Even so, anything is better than plastic, she maintains. Her core message: “Reuse, reuse and, where possible, reuse again.”

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Is this our chance to stop plastic becoming waste?

Combating packaging waste through a circular economy of reusing and recycling plastic must be a top priority for government and industry.

Mankind has a big challenge with plastic packaging. On one hand, too much ends up as litter, in landfills and in our oceans. Yet, on the other, plastic can be a highly sustainable and durable packaging material that’s easy to recycle and reuse. It also has a significantly lower carbon footprint than glass or aluminium.

The impact plastic waste is having on the environment and wildlife is now the hottest of topics, headlining the consumer and business agenda worldwide. Its effects can be damaging, at the same time it’s a lost resource. The challenge is how we move to a circular economy where every piece of packaging is designed to be reused and actually gets recycled.

It’s a challenge Coca-Cola isn’t shying away from. “We’ve made good progress, but a lot more needs to be done,” says Nick Brown, head of sustainability at Coca-Cola European Partners, the manufacturer of Coca-Cola drinks in Britain and western Europe.

Global, The Coca-Cola Company’s World Without Waste initiative includes an ambitious goal to recover and recycle a bottle for every one it sells by 2030. In Great Britain the packaging it uses is 100 per cent recyclable and its bottles contain up to 25 per cent recycled plastic or plant-based material, making it the largest user of recycled plastic in the food and drink industry. It has committed to get that to 50 per cent recycled plastic in all its plastic bottles by 2020.

“Ultimately, we don’t want any of our packaging to end up in hedgerows as litter, in our seas as plastic pollution or in landfill as a wasted resource. It’s unacceptable. It’s time we rethink plastics and packaging within society,” says Mr Brown.

According to the United Nations Environment Programme, global materials use is three times more than it was in 1970 and is expected to double by 2050. Therefore, there’s a growing need to keep plastic that’s currently in circulation in a closed-loop system, where recyclable products are used, collected, and used again and again. This is necessary to reduce the amount of new materials being used.

“A world without waste is possible. Having some of the most widely distributed and visible brands in the world means we have a responsibility to aim for this goal,” says Mr Brown. “A major opportunity is in better collection. Over the last 20 years, UK local authorities have done a fantastic job collecting recyclable materials from our households, but there’s a patchwork of systems, it’s not cohesive and we need to move it to the next level.”

In Britain, the company offers consumers more than 80 drinks across 20 different brands. “We use our brands to encourage more people to recycle with messages on bottles and encourage and incentivise people to do the right thing after they’ve enjoyed their drink. The next big challenge is to increase recovery rates, which is currently less than 60 per cent for plastic bottles,” says Mr Brown. “There’s a real opportunity here, especially beyond household collections, including those in our towns, cities, offices, transport hubs and in the community.”

One of the issues that Coca-Cola faces in the UK is sourcing more food-grade recycled plastic so it can increase the amount of recycled plastic in its bottles. “Moving towards a circular economy is the goal and we applaud the fact that the UK government is now reviewing its current strategy,” says Mr Brown.

Mid-May saw the end of the first consultation round for the Department for Environment, Food and Rural Affairs, and its resources and waste strategy. New interventions could come in three key areas: consistency of household recycling, extended producer responsibility, and a deposit return scheme for drinks containers. At the same time, a tax on single-use plastics packaging, with less than 30 per cent recycled content, is being considered.

“Any new schemes will need to be carefully thought through. We understand that packaging producers and industry will need to contribute more. We also want to see a step-change in the quality and quantity of recycled packaging material available to manufacturers like us,” says Mr Brown. Ideally Coca-Cola wants to see this material reprocessed here in Britain too.

“There is a lot of interest in a well-designed deposit return scheme for bottles where consumers pay a surcharge at the point of sale, which is then returned when the can or bottle is recovered,” he adds.

Around the world, Coca-Cola participates in more than 40 different deposit return schemes and has extensive experience in their set-up and operation, working with government and others in industry to recover more containers for recycling.

“The best schemes are in northern Europe, including Norway and Sweden, where they make it easy for consumers to recycle. There are plenty of return points in supermarkets, offices and transport hubs,” says Mr Brown.

“Any new scheme should be consistent across Britain and well communicated to the public. Retailers and supermarkets must be paid to run efficient collection points. The whole scheme should be well financed and managed by a not-for-profit organisation and owned and operated by industry. It should also be set clear collection targets by government to deliver the best possible environmental outcomes.”

There is certainly industry consensus for a more standardised and effective collection system across Britain. This will require a new model for local authorities to run kerbside recycling schemes. It will also mean significant change for businesses, retailers and the public.

“We’re very optimistic about the potential changes and welcome this once-in-a-generation opportunity to reform the current packaging recovery and recycling system,” Mr Brown concludes. “We want to work with others to achieve a thriving circular economy so we can make the most of our valuable resources. Policy changes will also drive investment in recycling infrastructure. The future looks bright.”

For more details please go to www.coca-cola.co.uk/sustainability
The race to sustainability starts in the supply chain

From wine through to the post to sports drinks in seaweed, packaging is visibly going green. However, there is a secondary sustainability story behind your sugarcane insect spray or bamboo toothbrush that too often goes untold.

Jim McClelland

Sustainable packaging talk tends to focus on the in-store retail experience and its impact on the more or less eco-conscious consumer. However, trade and wholesale supply chains also generate volumes of secondary packaging waste and recycling.

What happens upstream is vital and the significant percentage of UK packaging waste involved offers real business prospects, says David Wilson, UK managing director of Vanden Recycling.

"Back-of-store recyclates form a large part of packaging material collected and reprocessed, with advantages over post-consumer waste," he says. "These include concentrated tonnage in known locations, the opportunity to capture as a single stream, plus an interested party incentivised by rebate or reduced cost."

Furthermore, warehousing, storage, shipping and logistics can influence and even dictate the formats finding their way into consumer bags and hands or business offices and shops.

This supply chain hinterland also feeds the booming omnichannel retail and home-delivery markets, where consumers are receiving, sometimes returning, but not always reusing or recycling, industrial-grade packaging.

A seemingly simple solution to reduce both the amount of secondary packaging and number of associated vehicle movements is to maximise the load potential, by weight or volume. However, the biggest obstacle is the lack of a sector standard, says Stuart Milligan, doctoral researcher at the University of Bath School of Management.

"Smaller pallet loads tend to be produced as manufacturers and retailers are not joined up with regards to handling and storage," he says. "A standardised approach would result in greater synergies." Green strategies may also reap economic benefits. "There will be low-hanging fruit which will yield both a reduction in packaging and financial savings. The challenge will come when the quick wins have been realised and retailers then have to invest to redesign their processes," he adds.

While cost bumps might be a commercial reality, sadly good communication is not, notes Robert Lockyer, chief executive and founder of Delta Global, innovators in luxury packaging. "Retailers must be more open to options that may cost a little more, while prepared for consumer reaction to rising prices. If we accept a general rule that it will cost more to go green initially, but less in the long term, those who drive change will benefit from customer loyalty," he says.

"Ultimately, for change to happen, the retail industry must get better at informing customers." In the meantime, costs head upstream, says Seb Gauthier, founder and director of bamboo toothbrush subscription company BlueRock. "The average consumer still has little awareness of the early stages of the supply chain, so positive consumer behaviour cannot be relied on to absorb the cost. The initiation of greening early-door secondary supply chains will therefore likely come in the form of tax breaks and other incentives," he says.

The good news, though, is that innovation also flows upstream. Not content with pioneering an insect spray or bamboo toothbrush that too often goes untold, Lucozade Ribena Suntory invested some £70 million to bring bottle production onsite at Logoplate, at its Gloucestershire factory. This also completely removed the need for transportation, so reducing supply chain emissions.

So, as well as high-profile initiatives such as distributing 30,000 Lucozade Sport Ozo seaweed capsules at the London Marathon, much of the greening still goes on behind the scenes.

Lightweighting, for example, is a key part of the global brand’s journey towards ensuring 100 per cent of its plastic packaging is reusable, recyclable or compostable by 2025, says Michelle Norman, director of external affairs and sustainability. "In January, we lightweighted the best-selling 500ml Ribena bottle, which removed 325 tonnes of plastic from production every year." Now the business has undergone a redesign to ensure it is fully compatible with bottle-to-bottle recycling, she says.

Innovation comes in many shapes and sizes. Smartly, obviously, and the smallest change can have a big impact, explains Patrick Browne, director of global sustainability at UPS. "We encourage customers to focus on right-sizing, using the minimum amount of packaging to achieve maximum protection," he says. "There’s less cardboard, obviously, less plastic packaging material, which helps reduce waste. Right-sizing enables us to better optimise space in our trucks and deliver more each trip."

10 full-sized, flat wine bottles in a compact case, rather than just about four regular, round glass ones, means a loaded pallet could carry 340 bottles of wine, not just 456.

Sustainable packaging is simply the future, says Santiago Navarro, chief executive and co-founder of Garçon Wines. “The round wine bottles, we know and like, have been around since the 19th century, but are no longer fit for purpose. We offer a 100-year wine bottle which is spatially efficient, lightweight, durable and sustainable, he says.

“The strength and low weight of the bottle also mean the bottles need considerably less secondary packaging to move safely through the supply chain.”

Awarded the Waitrose Way Treading Lightly Award for green supply chain, anti-mosquito business incognito is another consumer-facing champion of upstream sustainability.

As well as researching renewable sugarcane alternatives to traditional plastic, the company ensures all back-end packaging is from sustainable cardboard, uses green bubble wrap and shreds its own paper for reuse as recyclable fill.

“We put in requests to fulfilment houses for green packaging and delivery,” explains managing director Howard Carter. “We also put pressure on third-party manufacturers.”

Greening can be about where, as well as what, though, Mr Carter adds. "Some companies may have a delivery that goes to the warehouse first and then to the fulfilment house. What we've done is to locate the warehouse in the fulfilment house. This closed loop means fewer journeys," he says.

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02

Ten full-sized, flat wine bottles from Garçon Wines take up the same space as four regular round bottles

01

Lucozade Ribena Suntory distributed 36,000 Lucozade Sport gels encased in Ozo’s edible seaweed packaging to runners at the London Marathon

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Switching to reusable transport packaging is an eco-friendly alternative to shipping with single-use cardboard boxes. Last year, for instance, TerraCycle worked with UPS to test a customised, durable and reusable tote for their groundbreaking Loop initiative, designed to reduce single-use packaging of everyday items, such as shampoo, detergent, even ice cream.

Shipping with reusables is already practised by several European hospitals and healthcare companies. It lowers costs over time, reduces waste and saves on recycling, so multiple benefits are possible, says Esther Van den Bossche, UPS territory manager.

“Large-volume shippers within a delivery on sustainability goals, in every sense,” she says. “These items can be used for shipping or for storage and transportation.”

Reusability sometimes trumps everything else, even reduction because, if we reduce packaging to the point where products are being damaged, we score an own goal, says Debbie Hitchen, director and circular economy lead at consultancy Anthesis.

“Some stores have started transporting fruit and veg in stackable plastic crates that go straight onto the shelf. You might think old cardboard boxes were better because they are easier to recycle, but it turns out that the plastic crates protect well and are returned to be reused over and over,” she points out.

The secondary success story is not always obvious, but it is essential for delivery on sustainability goals, in every sense. "We set out to become a net-positive food supply system that will nourish a growing global population while contributing more to society than we take out. We set out to become a net-positive company three years ago and we’ve already achieved some significant milestones on this journey in the way we source our raw materials, make our products and run our business.”

SIG now offers its customers a menu of features that they can use to improve the credentials of its packaging in the eyes of consumers. These range from the option to put the FSC® (Forest Stewardship Council®) label on any SIG pack to using polymers linked to 100 per cent forest-based materials.

"More and more of our customers are taking up solutions like combibloc EcoPlus and SIGNATURE PACK,” says Mr Herrenbrück. SIG’s combibloc EcoPlus is 82 per cent renewable and requires 28 per cent less CO₂ to produce than conventional cartons in the same format. Its innovative design eliminates the aluminium layer by using an ultra-thin polyamide layer to protect the flavour of the food or drinks that the packaging contains.

SIGNATURE PACK 100 is the world’s first aseptic carton linked to 100 per cent renewable plant-based materials, via an innovative mass-balance approach that supports the use of renewable feedstock in mainstream polymer production. It has up to 66 per cent lower life-cycle carbon footprint than the company’s standard packs. Meanwhile, combiblocRS, the new standard structure for SIG’s cartons, has saved more than 4,850 tonnes of polymer since it was introduced in 2016.

As consumers demand greater sustainability in packaging, a major beverage carton manufacturer is going “Way Beyond Good” with a bold ambition to put more into the environment and society than it takes out.

"Consumers increasingly want to feel good about the food and drink they buy, and that includes the way it’s packaged.”

SIG is also helping to tackle concerns about plastic straws with the world’s first market-ready alternative for use with aseptic carton packs. “Our paper straw solution is helping customers meet the urgent demand from stakeholders to cut out plastic straws amid growing concerns about their impact on the environment and particularly on the world’s oceans,” says Mr Herrenbrück.

"Consumers increasingly want to feel good about the food and drink they buy, and that includes the way it’s packaged.”

To find out more please visit www.sig.biz

**Percentages may not equal 100 due to rounding**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Paper/cardboard</th>
<th>Glass</th>
<th>Metal</th>
<th>Plastic</th>
<th>No preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighter weight</td>
<td>47%</td>
<td>9%</td>
<td>22%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Easier to recycle</td>
<td>41%</td>
<td>28%</td>
<td>14%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Better for the environment</td>
<td>38%</td>
<td>31%</td>
<td>10%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Easier to store</td>
<td>25%</td>
<td>22%</td>
<td>9%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Prefer the look and feel</td>
<td>25%</td>
<td>27%</td>
<td>11%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Reusable</td>
<td>21%</td>
<td>45%</td>
<td>8%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Stronger/more robust</td>
<td>12%</td>
<td>27%</td>
<td>31%</td>
<td>4%</td>
<td>22%</td>
</tr>
</tbody>
</table>
Brands are rushing to adapt their supply chains, packaging processes and materials to shifting consumer sentiment. But what progress is being made, and whose responsibility is it to drive change?

**SUPPORT NEEDED AT EACH STAGE OF THE RECYCLING JOURNEY**

A large portion of packaging can be lost at each stage of the recycling journey. The following diagram shows that in order to achieve a recycling rate of just 60 per cent, it requires high recycling standards by consumers, packaging collectors and sorters, and reprocessors combined. If standards slip at any point, a large proportion of potential recyclable material may be lost.

<table>
<thead>
<tr>
<th>Amount of packaging that gets recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If 90 per cent of people recycle their packaging</td>
</tr>
<tr>
<td>• ...and recycle 90 per cent correctly</td>
</tr>
<tr>
<td>• ...for 90 per cent of the time</td>
</tr>
<tr>
<td>• ...and collection and sorting losses are only 10 per cent</td>
</tr>
<tr>
<td>• ...and reprocessing losses are only 10 per cent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the public who chose the following as their top choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>91% of consumers say they try to recycle and dispose of items in the correct way as much as they can</td>
</tr>
<tr>
<td>83% say they feel confident that they recycle and dispose of their household waste in the correct way</td>
</tr>
<tr>
<td>56% say the environmental credentials of a product are important in their purchasing decision</td>
</tr>
</tbody>
</table>

Britain Thinks/Suez 2018
WHO SHOULD BEAR THE COST?
Percentage who strongly agree or tend to agree

<table>
<thead>
<tr>
<th>Who Has the Most Responsibility for Making Sustainability Improvements?</th>
<th>Percentage of the Public Who Chose the Following as Their Top Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers of the product/packaging</td>
<td>83%</td>
</tr>
<tr>
<td>Manufacturers and retailers who sell the products</td>
<td>62%</td>
</tr>
<tr>
<td>National government</td>
<td>55%</td>
</tr>
<tr>
<td>Local councils</td>
<td>4%</td>
</tr>
</tbody>
</table>

Supermarket Plastic Packaging Recycling Rates in the UK
Share of widely recyclable plastic packaging

- Morrisons: 81%
- Asda: 79%
- Marks & Spencer: 78%
- Tesco: 77%
- Aldi: 76%
- Waitrose: 75%
- Sainsbury’s: 75%
- Ocado: 74%
- Iceland: 73%
- Lidl: 71%

Manufacturers and retailers should cover at least some of the cost associated with collecting and treating waste from the products they sell.

Britain Thinks/Suez 2018
Which? 2018
Britain Thinks/Suez 2018
Emotive and transformative: why brands are rapidly choosing glass

Glass has been used for centuries as a high-quality, robust packaging material, but it is becoming increasingly relevant in shaping how brands make memorable moments and establish an environmentally friendly image.

Consumers constantly demand more from packaging. They want products to be environmentally friendly, and most are more likely to buy goods in packaging that represents them and their lifestyle. Glass gives brands endlessly recyclable and customisable packaging that empowers them to stand out even in the most fiercely competitive markets. It also allows them to preserve the subtle taste and texture of their products.

While glass, as with all packaging, had for some been viewed as a cost, the material is now increasingly viewed as a powerful brand asset. Euromonitor data shows a steady increase in glass usage since 2016. High glass-share segments, such as premium alcoholic beverages, are continually growing, and there is now increasing use of glass for packaging food and non-alcoholic drinks.

This shift has occurred because glass offers brands a powerful response to consumer demand for greater personalisation and “premiumisation”. “Changing preferences and desires from consumers are forcing food and drinks brands to think creatively how they can generate deep engagement, driving diversification and a redefined role for packaging,” explains Arnaud Aujouannet, chief sales and marketing officer at Owens Illinois (O-I), the world’s largest manufacturer of glass packaging products.

“Glass has a unique ability to bring real emotions to consumers by capturing a brand’s essence. With more than 70 per cent of purchasing decisions made in-store, packaging needs to tell a differentiated brand story at one glance, and glass delivers on that.”

High-end spirits makers often look to premiumise the experience with ultra-pure glass and intricate design. “Then there are beer companies that develop a few global brands, which they launch in new markets with a more premium positioning, leveraging glass to support the more sophisticated image,” says Mr Aujouannet.

Meanwhile, food manufacturers seeking to switch a product into glass containers might go for a simple design, with the view that simply the switch from plastic to glass is already creating the premium feel. This was recently exemplified by General Mills’ decision to house its Oui yoghurt product in the United States in glass, which is unusual in the market and gives it a premium edge.

Food and drinks brands find that consumers like the many shapes, colours, embossings and designs on offer, and this is visible in their purchasing. These options make a memorable consumption experience, with many people even collecting and displaying bottles. Customisation is now well understood to be a driver of consumer behaviour and purchasing decisions, which is why brands are urgently seeking ways to give them more of what they want, and with glass being so recyclable and reusable, it’s the obvious choice for a premium product that can generate deep engagement, we’re glad to see brands extensively using it to catch consumers’ interest on a big scale. They use glass to bring unique, brand-based or tailor-made products to market quickly, with unprecedented flexibility.”

“Considering the original quality of glass is as a premium product that generates real emotion, we’re glad to see brands extensively using it to catch consumers’ interest on a big scale. They use glass to bring unique, brand-based or tailor-made products to market quickly, with unprecedented flexibility.”

To find out more about using glass packaging as a premium, sustainable brand asset please visit o-i.com
WHEN PACKAGING REFLECTS BRAND ETHOS

Three food entrepreneurs share their packaging stories on their journey to becoming more sustainable and the challenges along the way.

When it comes to food, packaging needs to be fit for purpose. It has to be robust so it doesn’t split or burst and spoil the contents. It needs to look good, attract consumers’ attention and, in some cases, appear expensive. It must have the correct allergen labelling so consumers can buy with confidence. Perhaps just as important, it should be made from eco-friendly materials. According to a 2018 Nielsen report, sustainable shoppers buy the change they wish to see in the world. 49 per cent of global respondents surveyed indicated they would be willing to open their wallet and pay more for products that use sustainable materials.

Realising there’s a growing appetite among consumers for eco-friendly packaging, food businesses are embracing sustainability to boost brand perception and enhance the customer experience.

When Marieke Syed conducted market research for her new premium health snack for children’s brand Snackzilla, the first thing the majority of parents asked her about was the packaging. “Education on, and public perception of, single-use plastics has moved at such a pace over the last couple of years. Even kids are talking about plastic pollution,” says Ms Syed.

Snackzilla has developed a range of oat cookies that are high in fibre and contain 45 per cent less sugar than most sweet biscuits; comparisons were made with more than 100 other biscuits. But while the products, which will be made in a nut-free factory, have been ready for over a year, Ms Syed has been on a long journey to get the wrapper right.

Helenor Rogers, TrooFoods

Last year saw the launch of the UK’s first cereal brand to be packaged in plastic-free pouches. Troo is a range of granola that comes in paper bags developed by Sirane, the firm behind the compostable food packaging innovation Earthpouch.

“Going plastic free was a very deliberate move aimed at visibly demonstrating our brand values and living up to our brand name,” says gut health company TrooFoods’ co-founder Helenor Rogers. “It’s been well received by consumers. For some, it’s a reason to purchase and for others, it’s the icing on the cake.”

Troo’s biggest customer is currently the doorstep milk service Milk & More; its plastic-free granola fits perfectly with their milk in glass bottles and yogurt in glass jars. Troo is also stocked by Waitrose and was featured in the March edition of SuliBox, a sustainable subscription box. And while this has driven consumers to buy directly from Troo’s website in the weeks since, feedback received is helping to shape future customer experience.

“A customer got in touch the other weekend asking we consider replacing the tape we use for packing orders with paper tape. This is something we’d been looking at, but hadn’t implemented. The customer’s request was enough to push us to make a move on it straightaway,” says Ms Rogers.

Being plastic free is a crucial differentiator, she adds. From a consumer perspective, Troo is appealing to those who are actively doing something to reduce their carbon footprint. From the trade perspective, Troo is an example of consumers being happy to support brands that have made a choice to be more sustainable.

“It’s a definite win-win,” says Ms Rogers. “As a company aiming to leave a positive legacy, doing anything less just doesn’t feel right.”

Marieke Syed, Snackzilla

When Marieke Syed conducted market research for her new premium health snack for children’s brand Snackzilla, the first thing the majority of parents asked her about was the packaging.

“Sustainability is one of the key drivers for us and we want to demonstrate to our customers that we are a purpose-led brand: a better snack option for their kids’ health and a better packaging option for the planet and their kids’ future,” she says.

Being committed to eco-friendly packaging isn’t without its problems, especially in terms of shelf life and price point. “I’m going against what many of my competitors are doing and what makes sense financially, so it does feel like I’m taking a massive risk,” adds Ms Syed.

Final trials of the packaging are taking place and Snackzilla is currently in talks with national retailers.

Hannah Carter, OGGs

Hitting the shelves of Sainsbury’s and Waitrose from June will be OGGs’ (previously Alternative Foods) egg-free cake range, with flavours including chocolate fudge, salted caramel and lemon drizzle. The company has also created the world’s first liquid egg substitute, which will launch in September, made from the cooking liquid from chickpeas, aquafaba.

As a socially conscious, plant-based food manufacturer, one of OGGs’ fundamental aims is to help bring about the change required for a sustainable future. Developing egg-free cakes is only a small part of this; another is using environmentally friendly plastic packaging that is 100 per cent recyclable, biodegradable and compostable, founder Hannah Carter explains.

“Eco-friendly packaging is becoming a ticket to the game, rather than just being a game-changer,” she says. While it isn’t immediately obvious to anyone browsing supermarket aisles that a product is packaged in eco-friendly materials, consumers are increasingly buying products with a message behind the brand. They’ll often take their time to research products at home before making a purchase in-store.

“A brand, today, goes beyond the physical product. Consumers are interested in all aspects of the manufacturing process, and the ingredients and materials used. This includes how they’re sourced, the ethics in the supply chain and how it’s all packaged,” says Ms Carter.

“With this in mind, we attract and retain brand loyalty through adding value to our customer experience, not just in our end-product, but at every stage of the supply chain.”
Designing packaging that is easier to read, open and use for blind and disabled people ultimately improves everyone’s user experience.

Sarah Dawood

For a non-disabled person, opening a tightly wrapped cardboard box might require effort. For those with reduced dexterity, it’s more than a nuisance, it’s impossible.

Those who are fully sighted also take for granted the ability to distinguish between two identically shaped bottles that feature different labels, while those who are visually impaired will struggle.

Scope estimates that a fifth of the UK population, 13.9 million people, are disabled, while the World Bank reports that one billion worldwide have a disability. But despite the number of people requiring accessible packaging, most products rely on consumers having full sight and both hands. So why is this demographic being ignored?

Sean Thomas, executive creative director at design consultancy Jones Knowles Ritchie, thinks that marketing still caters for the masses, because it is so money driven. “Depressingly, people design for the majority because they want to reach scale and sell as much as possible,” he says.

Considerations such as sustainability receive more attention as they feel like universal issues, says industrial designer Solveiga Pakstaite. “Not everyone is disabled, whereas people feel sustainability is something they can relate to, so there are more people shouting about it,” she says. But those championing inclusive design believe it should be treated with the same importance.

Its ethos is that products, systems and environments should be designed to be used by as many people as possible, regardless of disability, age, gender or other demographic. The idea is, if you make things accessible for disabled people, you automatically make things easier for everyone.

Some projects have sprung up that include, rather than exclude, the disabled community. Microsoft’s Xbox Adaptive Controller, launched last year, is a handset aimed at disabled gamers with reduced fine motor skills and comes in easy-to-open packaging with hinges so it pops open.

The Microsoft Xbox Adaptive Controller is aimed at disabled gamers with reduced fine motor skills and comes in easy-to-open packaging with hinges so it pops open.

Sam Latif, company accessibility leader at P&G, who is blind herself, adds that there is “ignorance and a lack of awareness” in companies as often decision-makers do not experience the effects of disability first-hand.

To protect the product, cardboard air cells were fitted, which pop out when the box is opened, avoiding the need for non-recyclable, plastic bubble wrap.

Projects like this show how inclusive design and sustainability often go together. Another example is Mimica Touch, a tactile expiry date made of a biodegradable gel, which feels smooth to touch when food is fresh and bumpy when it is bad. The company has two purposes: to enable visually impaired people to know when food is out of date and limit food waste for everyone by providing more accurate predictions.

The gel is kept in a little pouch on packaging and is calibrated to go off at the same speed as different
Depressingly, people design for the majority because they want to reach scale and sell as much as possible

Many sight impaired people are not fully blind. Certain graphic design features can increase legibility, says Mr Thomas at Jones Knowles Ritchie, such as high-contrast colours, sans-serif typefaces in large font sizes, and shapes. This idea formed a food packaging concept, which the design studio has developed alongside Revolt Communications. Vision 20/20 is a set of packets, which are black and yellow, feature large Helvetica font and use shapes, such as circles and triangles, to indicate different foods. The shapes are easy to spot on the shelf or in a dark cupboard, says Mr Thomas, and could be used as “giant QR codes”, so they would be scanned into apps that would read out information.

Ms Pakstaite believes packaging will become more inclusive as it becomes more sustainable. “When it’s not seen as disposable, it will become more valuable,” she says. Microsoft's Mr Marshall thinks there will be better use of visual recognition software that uses artificial intelligence to narrate the world around us. While Ms Latif hopes to see simple changes made to physical packaging that could make a big difference to many people, including non-glossy packets, the ability to interact with things with very little force and using more images, which would help those with learning disabilities.

“A small picture of a shower could feature on a shampoo bottle,” she says. “We're an emoji culture now and feature on a shampoo bottle,” she says. “We're an emoji culture now and whether products relax, says the owner of Pro Carton. “Consumers care deeply about the impact of packaging on the goods they buy and are prepared to pay more for goods with sustainable packaging.”

Jon Clark, general manager of BPIF Cartons, agrees and says it should be a wake-up call for brands. “We see consumers are making buying decisions based on packaging. Using plastic could be costing you revenue,” he says.

“Every one of us has the power to make changes and to make them now.” The Pro Carton survey shows consumers will support brands that make the right choices.

The environmental case for cardboard and cartonboard has always existed. Now the commercial case is clear too.

77% of European consumers would pay more for a product if it means that the packaging has less impact on the environment.
Beauty brands pioneering sustainability

In a bid to reduce single-use plastics, there’s a growing trend for beauty brands to move towards recyclable and refillable packaging.

Giselle La Pompe-Moore

With extravagant packaging designed to draw in consumers, the beauty industry has long been reliant on the concept of conspicuous consumption. But times have changed, and brands are now being pressured to create innovative packaging solutions that are both luxurious and good for the environment.

According to a report by Zero Waste Week, 120 billion units of packaging are produced globally by the cosmetics industry each year. With engaged 25 to 34-year-old consumers pushing for beauty to become a circular economy, companies can no longer shy away from such statistics.

In the age of call-out culture, beauty brands that are not seen to be actively tackling the problem are at risk of damaging both their reputation and customer base. Aesthetically pleasing packaging is now a must if you want to ensure user-generated content online, but a major predicament continues to lie in the balance between sustainability and design.

“Brands are embracing the natural discolouration that comes with using PCR [post-consumer recycled] materials, by either using it as a marketing tool to show off their sustainable credentials or simply incorporating the discolouration into the design of the packaging,” says Simon Chidgey, sales and marketing director at RPC M&H Plastics.

At the luxury end of the market, refillable products are bridging this gap for brands that place greater emphasis on experiential packaging. Make-up brands such as Hourglass Cosmetics and Surratt Beauty offer refills at lower prices, with packaging that’s designed to be a keepsake. This model is commonly seen with liquid products, such as shampoo and shower gel, that have a higher repurchase rate. For example, natural beauty brand L’Occitane’s 500ml hair and body care refill pouches boast up to 90 per cent less packaging weight.

The uptake of refillable beauty products requires a shift in consumer behaviour and design. “Brands are embracing the natural discolouration that comes with using PCR materials, by either using it as a marketing tool to show off their sustainable credentials or simply incorporating the discolouration into the design of the packaging,” says Simon Chidgey, sales and marketing director at RPC M&H Plastics.

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The uptake of refillable beauty products requires a shift in consumer behaviour and design.

“In-store refillable stations for liquid products, however, requires a shift in consumer behaviour, which brands are taking into consideration before implementing these changes. “In-store refillable stations for liquid goods can often be quite messy, so many consumers won’t be prepared to go that extra step, especially if there’s extra waste created at the taps,” says Rachelle Strauss, founder of Zero Waste Week. As a result, there are brands creating alternative refill experiences for the consumer, such as By Kilian, the Éteé Lauder Companies-owned fragrance brand, which offers four-piece refill kits including a dropper and funnel.

Set to launch later this year, circular shopping platform Loop, created by TerraCycle in coalition with consumer goods companies including Unilever and Procter & Gamble, shows where refillable beauty products are headed. It also exemplifies the importance of experience for the end-user.

“Loop addresses one of the major reasons for disposability: convenience. Consumers can opt to receive auto-replenishments based on their rate of consumption, further improving the user experience,” explains Stephen Clarke, head of communications at TerraCycle Europe.

He says the beauty and personal care sector has an important role to play in building momentum towards a more circular economy for plastics. “Consumers connect with products that use recycled material or commit to being recyclable, reporting a willingness to pay more or switch brands for ones that do. This is important to note because brands stand to benefit from making these commitments,” says Mr Clarke.

As such, brands are challenging disposability and moving to PCR plastics. One such company is Aveda, with more than 85 per cent of its skincare and hair styling PET (polyethylene terephthalate) bottles and jars containing 100 per cent PCR materials.

“To fully eliminate the use of virgin plastic, we are exploring using other materials, including bioplastic made primarily from sugarcane, which we currently use in...
combination with PCR in some of our packaging, seaweed and cow waste, which will very soon provide viable alternatives to virgin petro-based plastics,” says Edmond Fitzarary, executive director of packaging development at Aveda.

Championing recyclable materials has become an integral part of brand DNA in almost every sector, not least cosmetics. Soaper Duper uses recyclable plastic for their entire range of naturally derived bath and body products, and has recently included the use of 100 per cent recyclable metal-free pumps. While natural and organic make-up brand Antonym use sustainable bamboo for its compacts and boxes printed on Forest Stewardship Council-certified paper.

These materials are leading the charge for a more sustainable future, as Georgia Barnes, business development manager for beauty and wellbeing at the Soil Association, attests. “Innovation in the industry is working, and more and more brands are making the switch to non-plastic options, such as bioplastics, sugar-cane derivatives, aluminium and glass,” she says.

The keyword is innovation. Mr Chidgey at RPC M&H Plastics explains the importance of the new packaging initiatives that enable more materials to be used. “Take, for instance, near-infrared black colourants, which allow sorting facilities to sort black coloured plastic instead of them previously passing by the sorting machines and ending up in a landfill,” he says.

Alongside reusable, refillable and recyclable packaging, efforts are also being made to reduce the amount of excess waste in online and in-store beauty purchases. “Beauty product packaging is often composed of a variety of types of material. For example, mirrored glass, cardboard sleeves, paper inserts, expanded plastic foam, and more, have been known to be used in cosmetics packaging,” says TerraCycle’s Mr Clarke. This makes it difficult to be adequately separated and recycled, so many brands are cutting down.

Sustainability stalwarts Lush have had notable success with their minimal-to-zero packaging options and others are following suit. Dior have removed cellophane and excessive product leaflets, as well as printing with naturally sourced ink. Direct-to-consumer brand Glossier recently pledged to introduce a limited packaging option for online orders as a result of customer backlash.

The future of sustainable packaging in beauty looks bright as it becomes a larger conversation in the industry, but brands must play their part in educating consumers alongside their packaging innovation.

“Statistics show that while people recycle really well in the kitchen, they don’t think to do that in the bathroom. The key thing to remember is that plastic beauty packaging is recyclable, it’s just that most consumers aren’t aware that they can,” Ms Strauss of Zero Waste Week concludes.

Kjaer Weis

Minimal beauty brand Kjaer Weis has managed to find the synergy between sustainability and design with their sleek and refillable metal packaging. Founder Kirsten Kjaer Weis explains that her goal was to have a luxury product, both inside and out, that was still ecologically sound.

“That proved to be a difficult mix, so I joined forces with [designer] Marc Atlan who came up with the metal packaging we currently have today. The metal isn’t recyclable, so we made it refillable. My goal was to have something that was like a piece of jewellery which you would cherish forever,” she says.

With a lower price for refills at around 30 per cent, consumers are incentivised for their inclusion in the brand’s sustainability efforts. This also follows through across the supply chain with their use of organic farmers to supply their certified natural or certified organic raw materials, reducing the company’s carbon footprint by only flying in products for emergencies, and minimising and using recycled packing materials.

STEEL FOR PACKAGING

Helping brands and retailers achieve their sustainability objectives. Offering consumers clarity and confidence in an environmentally positive choice

VISIT OUR NEW WEBSITE TO FIND OUT MORE

www.steelforpackaging.org
Five trends shaping packaging innovation

From elegant designs for cannabidiol oil cosmetics to compostable materials and plastic-free deliveries, innovation in packaging is almost as important as the products themselves.

**Plastic-free household deliveries**

Launching in London, Paris, New York and Toronto this year, Loop is a plastic-free refill service for everyday household products from companies such as Häagen Dazs, Crest, Ariel, Pantene and Dove. Taking inspiration from traditional milk bottle deliveries, Loop delivers essentials such as washing detergent, toothpaste and food stuffs in reusable custom-made stainless containers carrying its company’s branding. When a customer’s supply runs low they can simply arrange delivery of a refreshed container and collection of the empties, which are then cleaned and reused for the next delivery. The service addresses disposable culture at its source by dispensing with single-use plastic packaging entirely, some 90 per cent of which has either been incinerated, sent to landfill or discarded in the natural environment.

**Elegant CBD oil packaging**

The cannabidiol or CBD oil trend is spreading like a tidal wave through lifestyle and beauty markets. The cannabis by-product, which is legal in the UK if derived from EU-approved industrial hemp strains containing no more than 2 per cent THC, the psychotropic component that gets people high, has attracted 300,000 users. The CBD oil global market is expected to exceed $2.1 billion by the end of the decade. Still, brands have had to work hard to counter misnomers around the cannabis by-product and wrestle with whether to include the cannabis leaf on packaging or not. Luxury beauty brand Cannabliss features a marijuana leaf, albeit moonlighting as an elegant fan, while Vertly has camouflaged the iconic weed among other botanicals. US skincare brand Kiehl’s, on the other hand, has taken an understated approach, giving its classic American apothecary packaging a vibrant chlo-rophyllic makeover for its Sativa oil.

**Compostable water bottles**

The genesis of the bottled water brand Choose could be read as evidence of consumers’ desire for non-plastic packaging. Successfully crowd-funded in May 2018, Choose Water is the only fully compostable bottled water brand that is entirely sourced, produced and sold in the UK. The bottles, which are 100 per cent plastic free, take just a couple of months to degrade, compared with plastic that can take up to 450 years. Filled with Scottish water from the Cairngorms mountain range and made from sustainably sourced non-toxic natural materials, the bottles require no fossil fuels to produce. Even their outer materials, from the paper casing, which is made of 100 per cent recycled materials and natural dyes, to the alloy cap that rusts down into metal oxides, are entirely biodegradable and designed to have minimal environmental impact. According to a study by EcoFocus Trends, plant-based food and drink packaging is a concern for more than three quarters of consumers and over three fifths want to learn more.

**Low-impact packaging**

Returnity helps companies minimise waste packaging from e-commerce through the use of reusable and returnable delivery envelopes. Made from a durable, washable fabric, Returnity bags replace the excess layers of cardboard packaging that now accompany most deliveries. Some 30 per cent of products are returned, which can lead to double the amount of packaging waste from one purchase. Overall, the online retail sector uses $20-billion worth of corrugated materials a year and packaging is set to increase at an annual rate of 14.3 per cent through 2022, dwarfing a 2.9 per cent growth rate for the packaging industry as a whole. To date, companies have transferred responsibility to consumers to dispose of packaging, but Returnity helps brands close the loop. Its bags can be used for multiple deliveries. With an impressive roster of backers, including Starbucks and Walmart, Returnity is set to sign more partnerships in America this year.

**Waste tailored to local recycling**

Global coffee chain Starbucks is tailoring its procurement of takeaway cups to ensure they can be recycled by local facilities. A trial beginning this year in New York, San Francisco, Seattle, Vancouver and London will test a variety of recyclable and compostable cups made from materials and using technologies drawn from winners of Starbucks’ NextGen Cup Challenge. An estimated 2.5 billion cups are discarded every year, of which only 99.75 per cent can be recycled, owing to the expense associated with recycling plastic lined paper cups and the lack of such facilities in most countries. With 30,000 outlets worldwide, small tweaks to Starbucks’ immense supply chain could have a significant impact. The company has already committed to double the recycled content, recyclability and reusability of its cups by 2022.
lastic pollution has been in the spotlight since Sir David Attenborough’s shocking revelations in the final episode of his Blue Planet II series, aired in December 2017. It was impossible not to be moved by the images showing the damage plastic is doing to nature. Around the same time China, where the UK sent an estimated 55 per cent of paper and more than 25 per cent of plastic waste, banned the import of “foreign garbage”.

Humans produced an estimated 320 million tonnes of plastic in 2016, according to Surfers Against Sewage, and WWF says eight million tonnes of it is dumped into the oceans each year. With the prospect of mountains of plastic gathering in the UK and the emotive evidence of the terrible impact on the natural world that plastic has been having, it was unsurprising a strong movement to drive down the use of plastics developed. This prompted prime minister Theresa May to announce a “war on plastic” in her 25-year environmental plan, pledging to abolish waste such as carrier bags, food packaging and disposable plastic straws.

Eighteen months on from the Blue Planet effect and we are in the middle of government consultations on four key areas: extended producer responsibility, essentially focused on passing the cost of waste management of packaging to the producers of it; deposit return schemes for drinks containers; improving the consistency of recycling for households and businesses; and a plastic packaging tax. Change is afoot.

But policymaking does not always follow logic and its tendency towards fashionable issues, headlines and seemingly swift, decisive action has been known to result in unintentionally negative consequences. Think back to the government’s incentives to move towards diesel as a way to reduce CO2 emissions, inadvertently resulting in an increase in nitrogen oxide emissions.

So, is change happening for the right reasons? Not according to some. Plastic, it turns out, is not evil. In fact, it has many positive social and environmental impacts on our lives. It extends the shelf life of food. It keeps transport costs down. David Bucknall, head of materials chemistry at Heriot-Watt University, warns that banning plastic would lead to much higher carbon emissions, the driver of climate change. And if there’s one issue that is hotter and more contentious than plastic, it’s climate change.

Take the humble plastic shopping bag. The UK has reportedly seen an 80 per cent reduction in single-use carrier bags since the introduction of the 5p charge. It’s a great figure. But an environmental impact study by the Environment Agency, published in 2015, concluded that a cotton shopping bag would have to be used 173 times before its carbon emissions were lower than using new shopping bags. That level of reuse was described as ambitious by the report. And it highlights just one example where less plastic could mean higher carbon emissions.

So this is not a simple problem with a simple solution. Deciding which sustainability measure to use in policymaking is extremely difficult. Plastic use is top of the agenda at the moment and is currently a bigger consideration than carbon footprint. But there are other measures and, if we only consider food products, we could just as easily focus on food waste, food miles and water usage, to name just three. Focus too much on cutting any one of these measures and the others could shoot up.

It’s complicated. It’s challenging. It requires the whole supply chain to work together and focus on delivering solutions for the right reasons. Here’s hoping the current consultations will do just that.

James Drake-Brockman
Divisional director, packaging
Easyfairs

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