



**PACKAGING
INNOVATION**

BRIEFING REPORT
SEPTEMBER 2022



Welcome

Welcome to ThePackHub's Packaging Innovation Briefing Report for September 2022.

We hope you enjoy this comprehensive and unique monthly review of all things packaging innovation.

This briefing of the month's global packaging innovations and industry news ensures that you are kept up to speed and fully informed of the latest packaging innovations.

We have 140 pages of content and have collated 110 new packaging innovations for the month.

The innovations featured track ThePackHub's nine trend areas:

[Naturally Done](#)

[Everyday Engagement](#)

[The Online Surge](#)

[Making Life Easy](#)

[Materially Changed](#)

[Protect and Preserve](#)

[Recycling Resurgence](#)

[Getting Noticed](#)

[Refill Revolution](#)





Naturally done

Naturally done

This trend area continues to be active with 12 new bio-based initiatives this month. Compostable and biodegradable packaging continues to be developed. We also continue to track several new bio-based material alternatives to plastic. There is a significant amount of compostable, biodegradable and bio-based examples both in development and coming to market.

Without established industrial composting systems in place in most markets, the compostable sector is at a turning point. Mass adoption will only really occur when the infrastructure to deal with the packaging is in place. Home composability is still relatively niche with most consumers not having the space or the will to participate. There are also concerns about compostable and biodegradable packaging contaminating existing recycling waste streams. Cost is also a significant barrier with the packaging sometimes costing brands and retailers three to four times the price of conventional plastic-based products. That is a substantial investment for a brand or retailer when compostable packaging's full benefits are still to be fully understood. We have yet to see many big brand examples introduced with the majority being small challenger brands looking for a sustainable point of difference. The bio-based packaging sector continues to expand at pace. Many of the initiatives listed are still in development and not yet on supermarket shelves.

Naturally Done

[Coffee roaster moves to 100% compostable packaging](#)

[Japanese companies producing more sustainable products](#)

[Fast food giant to use packaging that will turn into agricultural fertiliser](#)

[US company launches foldable 100% biodegradable cups](#)

[German cinema introduces compostable nacho bowl](#)

[Biodegradable packaging introduced at Euro 2022 final](#)

[Researchers develop functional paper from pine needle waste](#)

[Onion producer brings paper and bamboo bag to market](#)

[Bag closure made from plant-based materials](#)

[Recognition for fungi-based packaging alternative](#)

[University develops enzyme that digests PET](#)

[Supramolecular technology produces plastic that is degradable and recyclable](#)

Coffee roaster moves to 100% compostable packaging

Yorkshire-based speciality coffee roaster Dark Woods Coffee has announced that it has moved to 100% home-compostable packaging for its hospitality and B2B supplied coffee beans. The packaging is supplied by Parkside Flexibles and is a bag made from Parkside's Park2Nature range, along with an industrially compostable valve. Park2Nature is derived from a range of natural products such as paper, eucalyptus fibre, cassava and corn starch. The company says that for home composting, it will break down in less than 26 weeks at ambient temperatures (< 30°C), while for industrial composting it takes less than 12 weeks at 60°C. The new packaging is said to have the same oxygen barrier as the previous line, which was a PET/PE (polyethylene terephthalate/polyethylene) laminate. Parkside also says that other formats are available where gas flushing is required, for products such as fresh or cooked meat and fresh produce packaging.



[Back to trend contents](#)

Japanese companies producing more sustainable products

With concern about the amount of plastic waste on the country's beaches, Japanese companies are looking to biodegradable materials. Kaneka Corp. is expanding production of Green Planet, its fully plant-derived and marine-biodegradable polymer used to make items such as cutlery and shopping bags. Its Green Planet-made straws have been available at 7-Eleven stores since 2019. In April, Tokyu Hotels became the first chain in Japan to stock Green Planet-made toothbrushes. Another is Osaka-based Daicel Corp.'s Cafblo, a constituent of eyeglass frames, protective LCD films and cosmetics made from plant-derived cellulose and naturally occurring acetic acid. Cafblo needs just 25 days to be broken down by 98% in the right conditions. Tokyo's Asahi Kasei, obtained the certification for Bemliese, a nonwoven fabric used in facial masks and disinfectant wipes. At the same time, Aichi Prefecture's Fukusuke Kogyo Co. was granted the label for a shopping bag made from corn-derived resin capable of holding up to 8 kilograms.



[Back to trend contents](#)

Fast food giant to use packaging that will turn into agricultural fertiliser

KFC Singapore has announced that in response to the growing amount of waste in urban areas, it has started a six-month pilot programme in which all biodegradable fast food packaging and food scraps will be converted into plant fertiliser. The programme began at Northpoint City, a suburban shopping mall in Yishun, Singapore in June. One of KFC's Singaporean outlets has introduced biodegradable packaging made of a mixture of paper and corn or sugarcane fibres. For the next six months, all such food boxes and food scraps will go to the facility for recycling. KFC says that a composter can contain both packaging and food remnants that do not require segregation, and within 24 hours, will be transformed into plant fertiliser. KFC states that from one tonne of waste it is possible to obtain from 200 to 300 kg of fertiliser. The product is also to be used as support for domestic agriculture.



US company launches foldable 100% biodegradable cups

Miami-based SOFi Paper Products has announced the launch of what it says is the first foldable plastic-free and bioplastic-free cup that is 100% biodegradable. The company says that the SOFi Cold Cup will naturally decompose within 180 days in landfill, soil or marine environments, whereas even those cups currently available that claim to be compostable, need to be sent for composting industrially or recycled, something that rarely occurs. Cups that end up in landfill can take decades to biodegrade, whereas the SOFi Cold Cup Will be gone in under 180 days and requires no special facilities. The SOFi Cold Cup features four flaps that fold together to form a spill-proof lid and accommodate any of SOFi's paper straws. This design eliminates the need for a separate lid, saving operators money on additional inventory as well as freight costs.



[Back to trend contents](#)

German cinema introduces compostable nacho bowl

The Cinedom cinema, based in Cologne, Germany, has announced that they have introduced a compostable nacho bowl, replacing the previous plastic tray. The tray, made from renewable raw materials, was developed together with its partner Papacks, who are also based in the city. By moving to a compostable tray, Cinedom expects to reduce its consumption of plastic by over 1.25 tons a year. The nacho bowl, which is optimally developed for cinema operations, was created with the expertise for the somewhat unique cosmos in cinema operations. The nacho bowl was specially designed so that the ratio of nachos and sauce is optimally balanced, helping to prevent food wastage and ensuring a better balance between the individual components of the cinema snack. Although the patented tray was a joint development, it is available to other potential customers, and can also be supplied with advertising or branding labels.



[Back to trend contents](#)

Biodegradable packaging introduced at Euro 2022 final

Netherlands-based Just Eat, the online food order and delivery service, has partnered with European football association UEFA to provide biodegradable food packaging at the recent Euro 2022 final. The introduction of biodegradable food packaging is claimed to be a first at a major football match. Just Eat said that the seaweed-coated packs are both recyclable and home-compostable and that they will biodegrade within four to six weeks. Just Eat is working with waste experts Veolia on the trial and aims to ensure that the biodegradable packaging will be separated from other waste and recycling. The biodegradable packs will be sent to an anaerobic digestion plant. UEFA said that they are developing a practical guide to help them achieve zero plastic waste and food waste – within UEFA, across UEFA events and collaboratively across European football.



[Back to trend contents](#)

Researchers develop functional paper from pine needle waste

Researchers at the Indian Institute of Technology Roorkee have developed functional paper from pine needle waste, which could lead to sustainable food packaging in the future. Pine needles are said to be ideal for this research as they contain 41% cellulose, making them ideal for transformation into paper, but with an added function. This paper-based product has the ability to scavenge ethylene gas, due to an active compound incorporated in the paper. The researchers believe that by scavenging ethylene gas, this paper-based packaging can help extend the shelf life of fresh fruits and vegetables for at least an extra week. The net annual pine needle waste yield in the northern state of Uttarakhand is nearly 1.3 million tonnes. On the forest floor, the deep layer of dry pine needles is the leading cause of forest fires yearly in India, so this could be an ideal opportunity to transform them into a sustainable packaging material.



[Back to trend contents](#)

Onion producer brings paper and bamboo bag to market

Nevada-based onion producer Peri & Sons Farms is rolling out its paper and bamboo Earthpack bag to grocery shelves across the United States. Earthpack is certified home and industrially compostable, and biodegradable, meeting the ultimate aerobic biodegradability in compost. The bag is a combination of paper and bamboo mesh, giving the customer a large window that offers ample product visibility. Peri & Sons is using the Earthpack to pack all varieties of its USDA Certified onions, introducing it to major retailers around the nation. The bag displays well in store, and its functional, light-weight design enhances freshness, shelf-life, and safety, all while reducing the impact on the planet. The company goes on to say that this pack runs well on automatic equipment at speeds comparable to other packages, and other packers are testing this solution for different commodities.



Bag closure made from plant-based materials

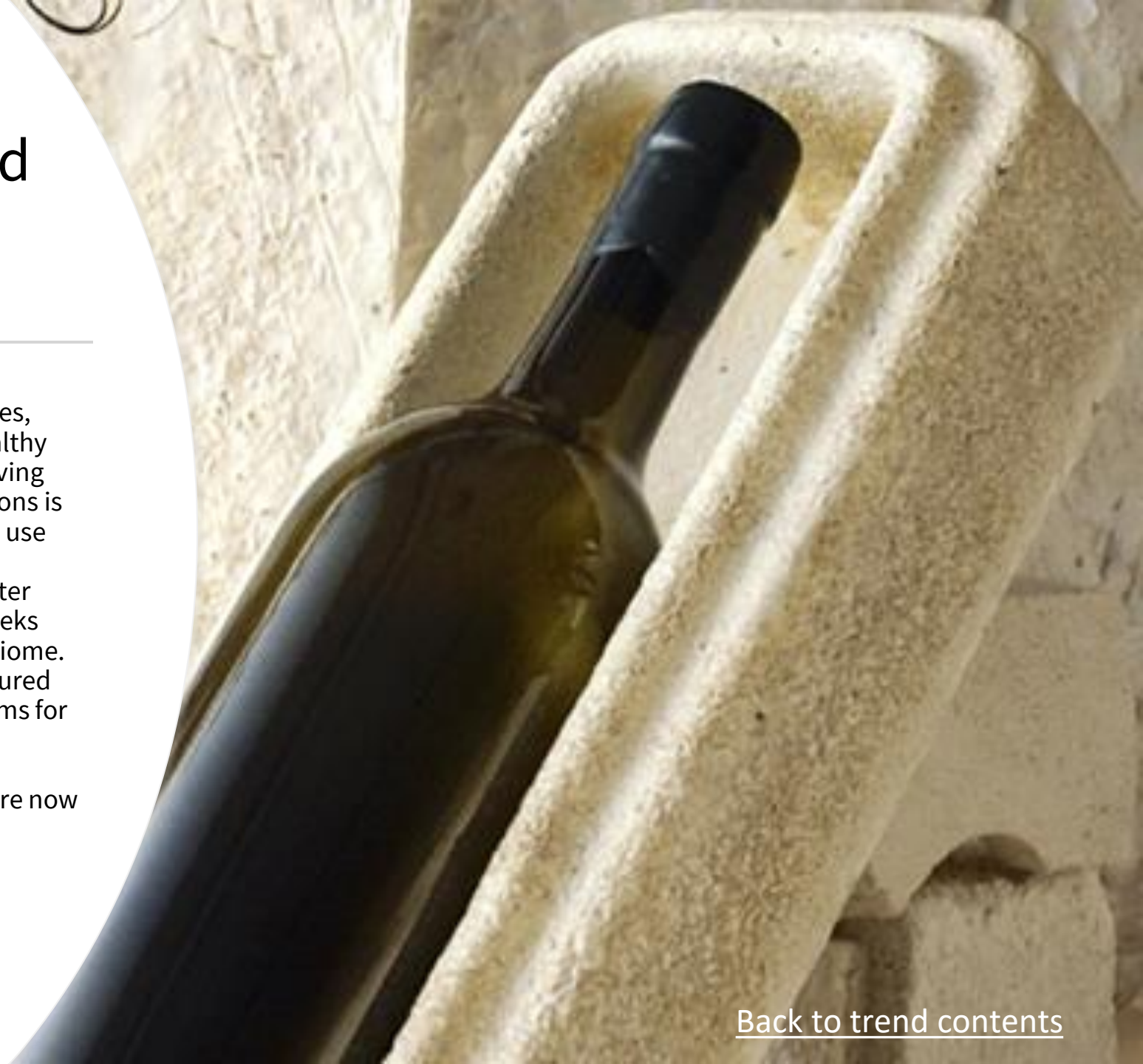
Washington-based Kwik Lok, the originators of the first bag closure some 60 years ago, has announced the introduction of the Eco-Lok, a reported more sustainable version of their closure. The solution uses proprietary technology from Indiana-based BioLogiQ. This technology utilises plant-based carbohydrates, such as corn and potatoes, in the NuPlastiQ material that is manufactured into the Eco-Lok bag closures. Using a 100% natural, renewably sourced plant-based resin that requires less fuel to manufacture, it is claimed that NuPlastiQ requires up to 20% fewer greenhouse gas emissions to produce Eco-Lok closures than standard plastic bag closures. BioLogiQ says that NuPlastiQ must be blended with other plastic resins, including both fossil-fuel and bio-based materials. Kwik Lok says that Eco-Lok bag closures are completely interchangeable with previous conventional plastic Kwik Lok closures and are compatible with existing Kwik Lok machinery.

[Back to trend contents](#)

Recognition for fungi-based packaging alternative

The Premier's Sustainability Awards comprises six categories, including Circular Economy Innovation, Future Energy, Healthy and Fair Society, Sustainable Places and Destinations, Thriving Environment, and Waste and Litter Reduction. Fungi Solutions is a finalist in the Circular Economy Innovation category, who use fungi to recycle and transform organic waste into home compostable products and packaging. It is reported that after use, the products can be returned to the earth in just 12 weeks and will enrich the soil and improve the natural soil microbiome. So far, the company has rescued 888kg of local waste, captured 2,250kg of carbon, and generated additional revenue streams for local producers. Fungi Solutions also connects local waste producers with local businesses looking for sustainable packaging solutions. The Premier's Sustainability Awards are now in their 20th year.

[Back to trend contents](#)



University develops enzyme that digests PET

Researchers at the University of Leipzig have announced that, through a process called biological recycling, they have discovered an enzyme that can degrade PET in record time. In around 16 hours, the researchers say that the enzyme manages to digest PET by 90%. Enzymes are biocatalysts, so they can lower the activation energy, becoming an alternative to break down PET into its monomers under mild reaction conditions. There are limitations however, as the enzyme can only degrade aPET (amorphous polyester terephthalate) but not biaxially stretched PET, commonly used for carbonated drinks bottles, and other more difficult plastics such as polyethylene or polystyrene, all of which form a considerable part of the world's plastic waste. The scientists say that Biocatalytic post-consumer PET recycling may well find applications for the recycling of 'difficult' plastic waste, for example, multi-layer food packaging that cannot be processed by other methods.

[Back to trend contents](#)

Supramolecular technology produces plastic that is degradable and recyclable

The Jianwei Li research group at the University of Turku, Finland, has been researching a new type of material called supramolecular plastics, that could substitute conventional polymeric plastics with a more environmentally friendly material promoting sustainable development. The mechanical properties of the supramolecular plastic created by the researchers using liquid-liquid phase separation (LLPS) were comparable to conventional polymers. Traditional plastics are formed as a result of the inherent strong force of covalent bonds that link monomers for the formation of polymers, however for the creation of supramolecular plastics the polymers are connected by non-covalent bonds that are not as powerful as covalent bonds. LLPS technology however sequesters and concentrates solutes, strengthening the bonding force between molecules and driving the formation of macroscopic materials, meaning the resulting material is comparable with conventional polymers. Thanks to the dynamic and reversible nature of the non-covalent interactions, the material is degradable and highly recyclable.

[Back to trend contents](#)





Everyday Engagement

Everyday Engagement

Packaging that engages consumers and end users has an important role to play in the market and we continue to track some great examples. Many use smart and intelligent technology to reach their goals whilst others use pack shape and distinctive pack graphics to get the conversation going.

The ability to operate an ongoing dialogue with consumers is an important brand-building tool. Smart and intelligent technology such as RFID, NFC and QR codes are increasingly used for these purposes. The costs of the capability is coming down, opening up more opportunities for more everyday usage. Inevitably, the drive to deliver sustainable products influences the decision to use many of the technology-based examples as they often do not have an acceptable end of life plan. However, we are seeing more solutions that are easier to recycle and that is opening up the sector. The use of technology to engage with consumers also generates vital data insight opportunities for brands.

[Back to Start](#)

Everyday Engagement

[Tequila company to digitise its product with NFC](#)

[Next Trend →](#)



Tequila company to digitise its product with NFC

California-based tequila brand OTACA has announced that it has completed a smart packaging pilot trial on more than 5,000 of its tequila bottles. The trial was conducted in collaboration with US-based Identiv, a developer of identity management and radio frequency identification systems. The tequila bottles carried an NFC (near field communication) tag designed to improve the validity of a product's origins when used in combination with blockchain technology. OTACA says each purchased bottle maps a journey, inviting a digital touchpoint with product provenance and authentication upon every consumer NFC tag tap. The smart packaging solution attached to the top of the bottles is powered by high-performing NTAG 210u NFC tags. Following the successful pilot launch, OTACA plans to increase its production with Identiv to an additional 50,000 bottles of Reposado tequila in the first quarter of 2023.



[Back to trend contents](#)



The Online Surge

The Online Surge

The e-commerce market has demonstrated strong growth in recent years and its increasing prevalence is shaping packaging innovation. The COVID-19 pandemic has given the channel a significant boost with the demand for online specific packaging continuing to be important.

The growth of e-commerce is significant. It received a significant shot in the arm due to the COVID-19 pandemic as swathes of consumers worldwide were compelled to switch from their local bricks and mortar stores to buying directly from their mobile, computer or tablet screens. It has been reported that a notable number of consumers were online shopping for the first time, and it's fair to say that many won't go back to the same physical shopping frequency again. Shopping and packaging's role has changed forever. As the market begins to scale, there are increasing opportunities for brands and retailers to offer packaging solutions tailored first and foremost for this channel rather than being replications of the packs bought physically in-store. Packaging designed for the e-commerce channel does not need to have the same security measures. The purchase decision is on a screen so bright on pack messaging is not necessary, and packs do not need to be explicitly designed to be attractive for the supermarket shelf.

[Back to Start](#)

The Online Surge

[Shipping box has inflatable air cushion](#)

[Chocolate wrappers can be personalised](#)

[Home delivery service aims to reduce plastic waste](#)

[Next Trend →](#)



Shipping box has inflatable air cushion

The Fraunhofer Institute for Structural Durability and System Reliability LBF, a research company based in Darmstadt, Germany has developed a reusable, recyclable monomaterial shipping container that features patented inflatable air cushions to provide product protection. The container offers an alternative solution to single-use packaging and the ongoing consumption of resources. In terms of the circular plastics economy, the transport box and an integrated functional film are made of the same plastic, and can therefore be recycled together. While the reusable box reduces carbon footprint and saves energy, it also meets special needs for safely transporting delicate and sensitive products, such as electronic components, works of art, or high-quality food specialties. After use, the container can be folded flat after the air has been deflated from the cushion. The container and the internal air cushion can either be permanently attached or designed to be separated and is also stackable.

[Back to trend contents](#)

Chocolate wrappers can be personalised

German chocolate manufacturers Alfred Ritter GmbH & Co. KG now has a dedicated website where customers can create personalised Ritter Sport wrappers. On myrittersport.com, customers will find an intuitive configurator. This can be used to add photos, graphics and text. There is also a diverse selection of design templates which includes emojis and clip art. For corporate orders, company logos can also be uploaded. Two sizes are available, the standard 100g bar, which costs €5.99 plus shipping, or the smaller, Ritter Sport mini, which the company says is ideal for corporate events, weddings, christenings and other family celebrations, or for placing on hotel pillows. A conventional 100g Ritter bar is about €1.99. The minis are priced at €1.49, though there are reductions for larger quantities. For delivery during the summer months, the chocolate is sent in refrigerated envelopes.



[Back to trend contents](#)

Home delivery service aims to reduce plastic waste

A start-up in Israel called WeFill is helping customers to reduce the amount of plastic waste they generate. Subscribers to WeFill can receive, on a scheduled basis, a selection of products such as grains, pasta, tehina (tahini), candy, dried fruit, among others. They are supplied in either glass jars or cloth bags, which are collected on the next delivery, cleaned and sterilised to be used for further shipments. This reusable container-based model can offer two main benefits: somewhat lower prices for the end consumer and a huge amount of reduced waste due to the elimination of single-use packaging for frequently-used grocery staples. WeFill supplies zero-waste goods to customers in the centre of Israel within four days of delivery and to customers in Jerusalem and the northern region every month.



[Back to trend contents](#)



Making Life Easy

Making Life Easy

Packaging that is easy to use will always have a place in the packaging innovation schedule. With the focus very much on sustainable solutions, it is important that packaging still delivers the necessary functional requirements and packaging. Easier to use packaging will always create a point of difference in the market and often meets the needs of a growing senior consumer segment.

Packaging that has added functionality, that is easy to use and makes life easier for consumers continues to be popular. We will continue to see many new examples come through the innovation funnel. With most of the development focus on sustainability, it is essential that brands and retailers can still deliver pack formats and solutions that meet an unmet functional need to make the consumer experience easier and more pleasurable. Plastic reduction is a primary focus for the majority of brands and retailers and there are signs this is having an impact on pack functionality in the market. We have tracked a couple of recent examples in the cheese sector where the resealable functionality has been removed to achieve packaging reduction targets. These isolated examples might just be a sign of things to come. However, the worldwide ageing marketplace means an increasing need for packaging that is easy to open and close.

Making Life Easy

[Integrated and resealable twist-off closure for small dose tubes](#)

[Spanish vegetable packer moves to easy-open cap](#)

[Patented design allows adhesive-free corrugated box to erect in a matter of seconds](#)

[Dispenser has built-in chamber for controlled dosing](#)



Integrated and resealable twist-off closure for small dose tubes

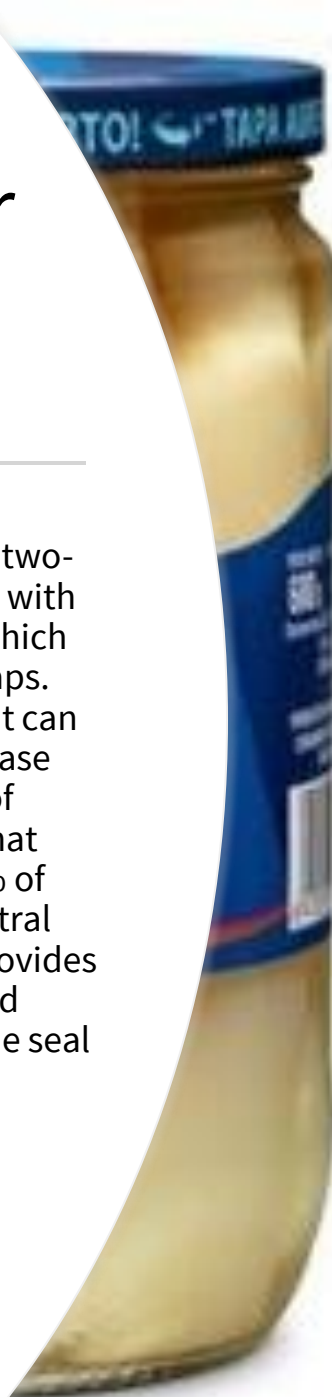
Swedish packaging solutions provider Emballator Tectubes, has introduced a new small dose tube with an integrated and resealable twist-off closure. The company says that the solution ensures the product remains fresh after opening and provides a safety seal before use. The closure, called the Twist off Reseal, is said to be integrated, resealable, and suitable for both multi and single-dose use. The company says that the significant advantage of this resealable tube is that it is travel-safe when unbroken but still allows the user to reseal the tube to maintain content freshness. Emballator says that the new tube is suitable for a vast range of cosmetic and personal care products. The Twist off Reseal closure is part of Emballator's Small Dose range of tubes. It is made in mono-material, easy to fully empty, and easy to recycle.



[Back to trend contents](#)

Spanish vegetable packer moves to easy-open cap

A Spanish producer of packaged vegetables has moved to a two-piece cap for its products in glass jars. Cidacos have worked with Crown Food Europe to move to their Crown Orbit closure, which is said to make jars twice as easy to open as conventional caps. With traditional caps, the filling of jars creates a vacuum that can make opening difficult due to the pressures required to release the lid. This makes it difficult for some older people, many of whom have less dexterity. In Europe, it has been reported that consumers over 60 years of age are expected to reach 34.1% of the population by 2060. The Orbit closure has a floating central panel vacuum-sealed to the bottle and an outer ring that provides greater protection to the product and acts as an opening and closing device. A simple twist loosens the ring and breaks the seal of the lining compound without resistance.



[Back to trend contents](#)

Patented design allows adhesive-free corrugated box to erect in a matter of seconds

US pulp and paper company International Paper has announced the development of a new, unique packaging innovation, the Bow Tie Shipper. This space-saving, patented design is intended to replace small, glued corrugated shipping boxes. International Paper says that the Bow Tie Shipper is an ideal solution for many hand-assembly applications in e-commerce and pick and pack distribution segments. It was designed to meet the functional and sustainability needs of customers seeking resource-friendly packaging with no glue joints. The company also says that the Bow Tie Shipper flips and folds in a matter of seconds, making construction quick and easy, ideal for a fast-paced packaging environment. The design of the Bow Tie Box allows for new, smaller sized solutions and provides an alternative design for mini flexo boxes, and even as a replacement for padded envelopes.



[Back to trend contents](#)

Dispenser has built-in chamber for controlled dosing

American manufacturer of triggers, pumps, and sprayers, Silgan Dispensing, has announced the launch of a new closure with built-in chamber for controlled dosing. The company says that, when inverted, the MeaSURE closure dispenses the exact amount needed for the intended application with the customisable dosages available ranging from 5 to 40 ml. They also say that the solution offers convenient, controlled and reliable dosing with the use of one hand and reloads within seconds. Silgan says that MeaSURE was designed with the e-commerce sector in mind, and meets the Amazon developed ISTA-6A (International Safe Transit Association) standard, which means it showed no signs of damage or leaking during the testing process. The company says that expected uses are for products that require controlled and reliable dosing, such as laundry, cleaning, automotive, and personal care products.



[Back to trend contents](#)

Materially Changed

The packaging continues to see a lot of change of materials driven largely by sustainability objectives. Plastic replacement is still top of the agenda for many brands and retailers as they look to switch out of the material to solutions that may offer a better environment footprint or at least be better received by anti-plastic focused consumers. We have 21 initiatives this month.

ThePackHub continues to report many instances of brands and retailers switching primarily from plastic to other often paper-based alternatives. Some, but not all, support the move with positive evidence of these changes' environmental impact. The reality is that we are experiencing a cycle of high change where, in some cases, recyclable plastic is being replaced with other materials because consumers believe this as the right thing to do from an environmental perspective. However, not all examples stand up to stringent environmental scrutiny. Most of the material changes have often come about following significant investment in machinery and new processes. These switches are for the longer term, and any reversals are a long way off.



Materially Changed

[Back to Start](#)

[Fruit producer launches sustainable packaging for apples](#)

[Film embossing technology results in 30% weight reduction](#)

[Plastic cap removed for iconic snack pack format](#)

[Plastic-free pack for premium rice product](#)

[Sliced meats move to recyclable mono material](#)

[Coca-Cola moves green bottles to clear plastic to improve recyclate quality](#)

[Razor manufacturer moves to plant-based fibre tray](#)

[Online retailer revamps sandwich platter packaging](#)

[Frozen seafood range moves to paper-based pack](#)

[Revolutionary plastic spring enhances sustainability of trigger sprays](#)

[Companies jointly abolish plastic handles on beverage multipacks](#)

[Hexagonal paper structure is sustainable void fill alternative](#)

[French start-up launches alternative to disposable cups](#)

[Frozen seafood company replaces plastic packaging](#)

[Paper-based alternative to plastic void fill](#)

[Paper-based pregnancy test developed to tackle plastic waste](#)

[UK premium crisp brand announces 25% plastic reduction](#)

[Machinery manufacturer announces labelling solutions for fresh produce trays](#)

[French salad producer moves to 60% paper bag](#)

[Brazilian mineral water brand moves to aluminium cans](#)

[Gin producer moves to paper bottles](#)

[Next Trend →](#)

Fruit producer launches sustainable packaging for apples

Stemilt is a family-owned fruit grower, packer, and shipper of fruit based in Washington state, USA. They have announced that they are launching the EZ Band, a sustainable two-piece 4 pack of apples that is made of 100% paperboard. The EZ Band will be used for its larger-sized Rave and Sweetango apples this autumn. It has been designated suitable for recycling at home by How2Recycle. The two-piece package consists of a tray that holds the apples and a paper band that is machine-tightened around the tray to hold the apples. The company says that the EZ Band was created in response to the high demand for grab-and-go items in grocery stores that arose during the Covid-19 pandemic. Stemilt knows that consumers and today's Gen Z shoppers gravitate toward convenience but wants to meet their needs from a sustainable standpoint better.



[Back to trend contents](#)

Film embossing technology results in 30% weight reduction

Austria-based Constantia Flexibles has launched CompresSeal – micro-embossing of PE or PP sealing layer allows to increase sealing and productivity performance significantly. Its innovative embossing pattern reduces the grammage of polyolefinic sealant films by up to 30% while still having the same thickness as standard packaging. This means that the carbon footprint of a given packaging specification can be reduced. The technology reduces issues associated with migrating slip agents usually used in the PE and PP film industry. Thus, fewer additives can be used, and the coefficient of friction on the packaging line remains constant, independent of environmental conditions, such as temperature and humidity, and results in higher production speeds. The company says that CompresSeal is particularly suitable for use in flow packs for washing detergents, dry pet food, coffee, nuts, and savoury foods, as well as stand-up pouches for liquids. It will be available to selected customers from August 2022 onwards.



[Back to trend contents](#)

Plastic cap removed for iconic snack pack format

Pringles Australia is removing the plastic cap from its 53g packs. A new seal lid, supplied by Sonoco, is a multi-layer laminate structure, which is comprised of PET, paper, LDPE, MPET and PE (polyethylene terephthalate, paper, low density polyethylene, metalised polyethylene terephthalate and polyethylene). Although this material is not recyclable, removing the plastic lid will mean a 48% reduction in plastic on each 53g can, saving an estimated 26 tonnes of plastic waste per year in Australia. Kellogg's says that the new and improved seal was tested extensively to ensure its strength and improved durability. Retailer Coles has started stocking the lidless Pringles 53g Sour Cream and Onion variety, with the lidless 53g Original variety available from August. The 134g Pringles cans will remain untouched, although the change may be rolled out to more Pringles packaging in the future, presumably pending consumers' reaction.



Plastic-free pack for premium rice product

British multinational paper packaging company DS Smith has collaborated with Veetee, one of the UK's largest rice companies, to bring to market a fully recyclable paper-based rice box with a unique portion measure. The carton is a complex double-skinned construction that creates a collar for the lid that can be removed, used as a measure, and then reseals the pack for ease of storage. The new pack design, is a fully recyclable fibre-based box, and aims to remove more than 50 tonnes of plastic from the market. When developing this premium dry rice pack, Veetee sought to introduce several new features to their packaging design; most importantly for them was removing plastic with a carton board pack, while also ensuring the carton was leak-proof and stable when being filled on its automated packing lines. The one-piece design features a high-quality print on the inside and outside of the carton, creating an enhanced customer opening experience.



[Back to trend contents](#)

Sliced meats move to recyclable mono material

GEA, German supplier of systems and components to the food industry, has announced the launch of their new energy-efficient thermoformers. The new heating systems PowerHeat Z and PowerHeat M for the GEA PowerPak series thermoforming machines allow mono materials to be used for sliced meats and sausage packaging. The systems in the GEA Thermoformer were developed in close cooperation with technology partner Watttron and tested with the Wolf business group, a food manufacturer and pilot customer of GEA, before being launched on the market. The new heating system allows these materials to be used more simply and without any impairments to their functionality. GEA says that product safety, stability and transparency stay the same, but these new packs are 100% recyclable and consume 35% less material. Either PP (polypropylene) or PE (polyethylene) mono material can be used.



Coca-Cola moves green bottles to clear plastic to improve recyclate quality

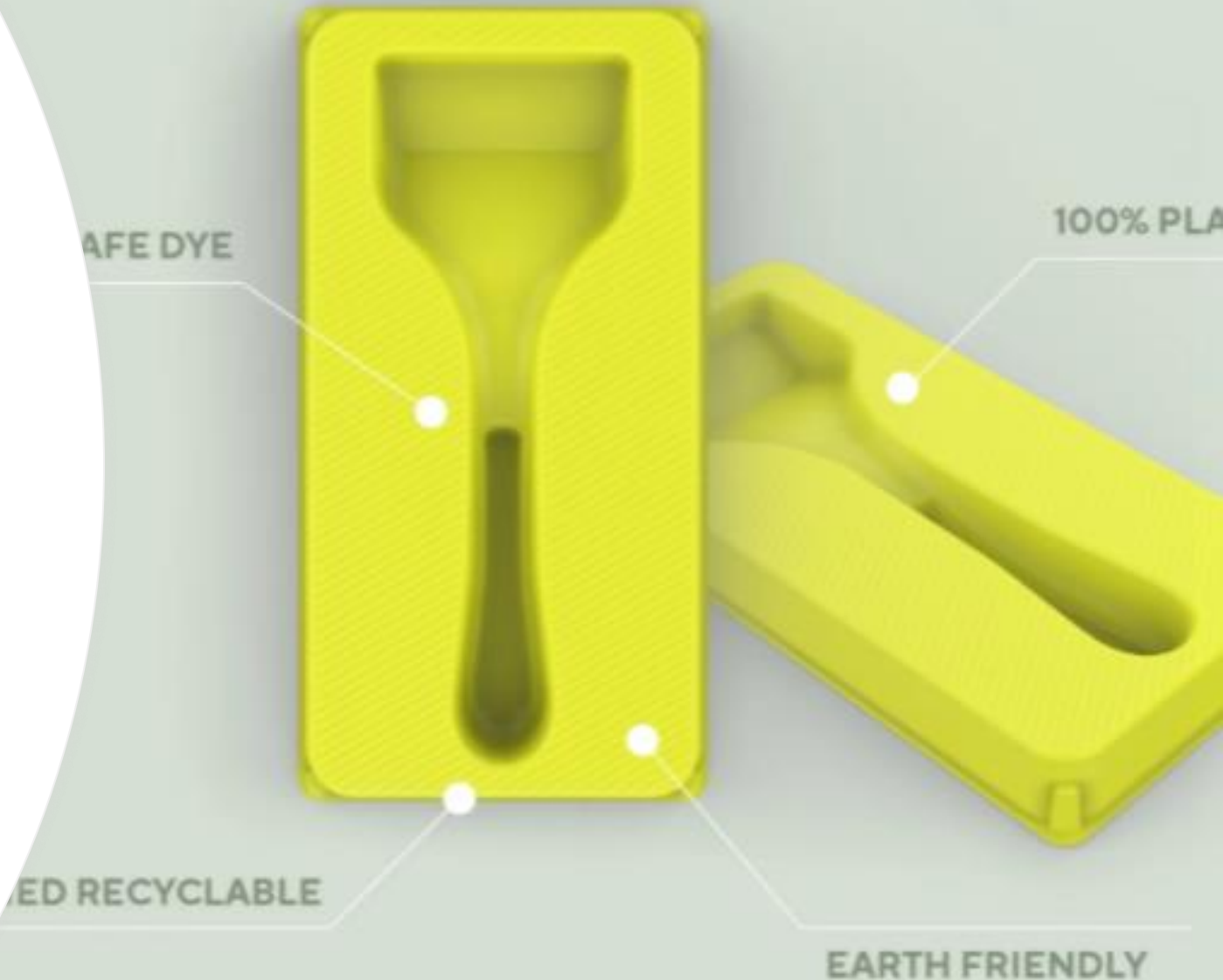
The North American arm of Coca Cola is moving away from green PET (polyethylene terephthalate) bottles and into clear versions instead. They have already started moving the Sprite brand into clear PET, which will be followed by the rest of the range currently in green, including Fresca, Seagram's and Mello Yello. Removing the colour from PET bottles improves the quality of the recycled material. This will help increase the availability of food-grade recycled PET (rPET). When recycled, clear PET bottles can be remade into bottles, helping drive a circular economy for plastic. During the sorting process, green and other coloured PET is separated from clear material to avoid discolouring the recyclate required to make new PET bottles. Because of this, the coloured recyclate is often converted into single-use but longer lasting items like clothes and carpets that cannot be recycled into new PET bottles.



[Back to trend contents](#)

Razor manufacturer moves to plant-based fibre tray

Procter & Gamble (P&G) brand Gillette has become the first company to introduce at scale a recyclable, plant-based inner tray. P&G wanted to avoid the typical plastic material often used for similar products. The tray, manufactured by Gilbert, Arizona-headquartered Footprint, is made from bamboo and bagasse, which were chosen because the materials are local to the facility in Asia where the packaging is being made. The tray is to be used on the launch of a new product, the Gillette Labs with Exfoliating Bar razor. Until the Gillette tray, applications using Footprint's technology have been a kraft-like colour or white. This project was unique for Footprint in that it was the first dyed product, a neon green Pantone, to match the rest of the new products' branding. To be produced in high volume, a wet-end process to support the colour and achieve consistent colour from part to part was required to be developed.



[Back to trend contents](#)

Online retailer revamps sandwich platter packaging

The world's largest dedicated online supermarket, Ocado, has announced that it has revamped its packaging for its sandwich platters. The move is designed to limit waste and prevent damage. Ocado says that the new, fully recyclable design improves efficiency, enhances product protection and helps maintain their market-leading level of food waste at just 0.6%. The format consists of a tray and lid in 100% post-consumer recycled PET (polyethylene terephthalate) and an FSC (Forestry Stewardship Council) approved board sleeve. Ocado says that all components are recyclable. Following extensive trials, the number of lids and trays has been rationalised to minimise cost and maximum flexibility and efficiency. The range uses two bases and two lids to accommodate all seven products in the range from classic to finger sandwiches and wraps. The tight fit of the base and lid eliminates the need for tamper evident labels, while also reducing the chances of the product drying out.



Frozen seafood range moves to paper-based pack

Yorkshire-based Parkside Flexibles has collaborated with UK supermarket chain Iceland to bring new paper-based packs to market for its Northcoast range of frozen seafood. The move is claimed to be one of the first successful applications for frozen food products. The 100% recyclable, heat-sealable paper solution was developed to withstand the rigours of frost and moisture in a freezer environment for prolonged periods. The paper-based, heat sealable pack incorporates a range of water-based coatings with high barrier performance and is designed to break down when re-pulped in the paper recycling process. One of the biggest challenges the companies encountered was the sealing of the new material, another was managing to achieve the required barrier properties. The previous pack was made of LDPE (low density polyethylene), and a lot of time was spent on artwork and repro to match the quality of the PE bag.



[Back to trend contents](#)

Revolutionary plastic spring enhances sustainability of trigger sprays

Silgan Dispensing is an American designer and manufacturer of household dispensing systems. They have announced the launch of a more sustainable trigger spray, known as the SP05™ R, which utilises their LifeCycle Technology, a patented revolutionary plastic spring portfolio. The removal of non-recyclable materials and metals means that trigger sprays can be manufactured almost entirely from one plastic, increasing recyclability and improving sustainability. The SP05™ R trigger sprayer combines impressive performance and ultimate versatility in a pleasing and ergonomic design. This new trigger spray is highly compatible with a broad array of formulas and can be made with a child resistant feature if desired. It is available with either a spray or foaming nozzle, and is a highly customisable dispensing solution making it suitable for uses around the home, garden, auto, laundry, and air care.



[Back to trend contents](#)

Companies jointly abolish plastic handles on beverage multipacks

Several companies in The Netherlands have jointly decided to remove the plastic handles on all multipacks of soft drinks and water. Supermarkets Albert Heijn and Jumbo, along with beverage manufacturers Coca-Cola and Vrumona, have jointly decided to abolish the handles. The reason for the move is that due to the different types of plastic used, recycling of the multipacks is hindered. Multipack packaging is made from LDPE (low density polyethylene), whereas the handle is made from PET (polyethylene terephthalate), and the two cannot be successfully recycled together. Removing the handles will also save up to 40,000 kgs of plastic annually. Customer feedback has shown that consumers can still grip the packaging well when carrying and opening the packaging. Multipack packaging without handles will be rolled out in supermarkets in the Netherlands in the coming months, though this differs per supplier and brand.



[Back to trend contents](#)

Hexagonal paper structure is sustainable void fill alternative

Kite packaging, based in the UK, have announced the launch of Hivefill. This hexagonal paper-based void fill product is touted as more sustainable than EPS (expanded polystyrene) chips or bubble wrap due to its recyclability. A dispenser encourages the paper to expand, forming the strong hexagonal structures that create protective resistance to knocks and bumps. The paper wrap is simultaneously packed together when pulled through the dispenser to form the durable cushioning layer. This expansion makes the most out of the material and gives a considerable reported cost saving using Hivefill over other paper-fill products. The paper itself is sustainably sourced and can be responsibly disposed of after use. Hivefill is biodegradable and recyclable, meaning that consumers can confidently put it out for local collection. Hivefill is available as either a natural brown colour or pure white and is supplied in sizes of 400mm x 250m or 500mm x 250m.



[Back to trend contents](#)

French start-up launches alternative to disposable cups

AUUM is a French start-up with a patented technology that is being offered as an alternative to single-use beverage cups. Their solution is a compact machine that can clean, disinfect and dry a glass in 10 seconds using only 2cl of water and no chemicals. The glass cups are supplied by Bodum glass. The patented machine uses dry steam at 140°C to eliminate up to 99.999% of microorganisms. It uses 76 times less water than a dishwasher and generates 58 times less CO2 than a paper cup. ISS Facility Services in the Netherlands will be the first commercial partner in the Netherlands to offer the AUUM solution. It is currently being tested by several customers of ISS Netherlands who want to quickly deploy the concept with their customers before the ban on paper cups comes into effect. From 2024, all coffee cups in the Netherlands must be washable or largely recycled.



[Back to trend contents](#)

Frozen seafood company replaces plastic packaging

Strasbourg-based frozen seafood specialist Escal has announced that it is moving to a more sustainable material for its seafood packaging. The new material will be a mono-material PE (polyethylene) which contains 45% renewable materials, such as sugar cane or plant waste, which the company says makes the packaging completely recyclable. The company also says that the CO2 footprint of the products will be improved by up to 60%. Also, bag sizes have been made smaller for some products, for example, white tiger shrimp, which will also contribute to reducing plastic use. So far, mussels, Frutti di Mare, cocktail shrimp and other gourmet shrimp products are already available in the new packaging. The company announced that the rest of the range would also be gradually converted to this new material.



Paper-based alternative to plastic void fill

HexcelPack is an American cushioning paper company that uses slit paper technology for its products. It has now launched a void-fill product designed to replace plastic products such as bubblewrap. Called HexaFil, it uses the same three-dimensional hexagon design and proprietary slit paper technology as its signature cushioning product, HexcelWrap. This method makes the paper “flex,” expanding its volume while maximising the strength and stiffness of its fibres. When HexaFil is dispensed either automatically or manually, it spirals like a helix. The company says that HexaFil provides superior block and bracing, cushioning and product protection needed for shipping fragile items and reduces product damage. It is also completely paper-based, and made of 100% Program for the Endorsement of Forest Certification (PEFC) Canadian paper. It is also claimed to be cost-effective, the company says that in most instances, the operation can reduce the amount of void fill used.



[Back to trend contents](#)

Paper-based pregnancy test developed to tackle plastic waste

An Australian start-up has developed a pregnancy test made from 99% paper. The Hoopsy “eco pregnancy test” is made almost entirely from paper and board, and after use can be recycled in domestic paper recycling. Only the protective pouch the test comes in is made of soft plastic, which can be recycled through supermarket in-store collection. To use Hoopsy, the user holds the end of the test with the Hoopsy logo while placing the other end in their urine stream for three to five seconds. They then place the test on a flat surface and wait for 5 to 10 minutes to read the result. Afterwards, the paper test can be cut in half so the part that’s been urinated on can be put in the bin while the clean portion goes in paper recycling. Hoopsy has hopes to replace plastic home pregnancy tests, 12.5 million of which are used in the UK annually.



[Back to trend contents](#)

UK premium crisp brand announces 25% plastic reduction

Herefordshire-based Tyrrells Crisps, part of KP Snacks, has announced that they are reducing the plastic of their range of premium crisps by 25%. The brand has a 13.5% share of the premium crisp segment, and they say that across the range, the move will save 113 tonnes of plastic per annum. The new Tyrrells packs will feature a design flash on the pack that features the message, “We’re taking action with 25% less packaging”. The company says that Tyrrells consumers apparently identified plastic waste as their top environmental concern. KP Snacks says that the move reflects its broader commitment to sustainable packaging, outlined in its ‘Taste for Good’ responsible business plan. The company reportedly made a 410-tonne plastic packaging reduction across KP Snacks brands in 2021. The new packaging will come into effect from August 2022.



Machinery manufacturer announces labelling solutions for fresh produce trays

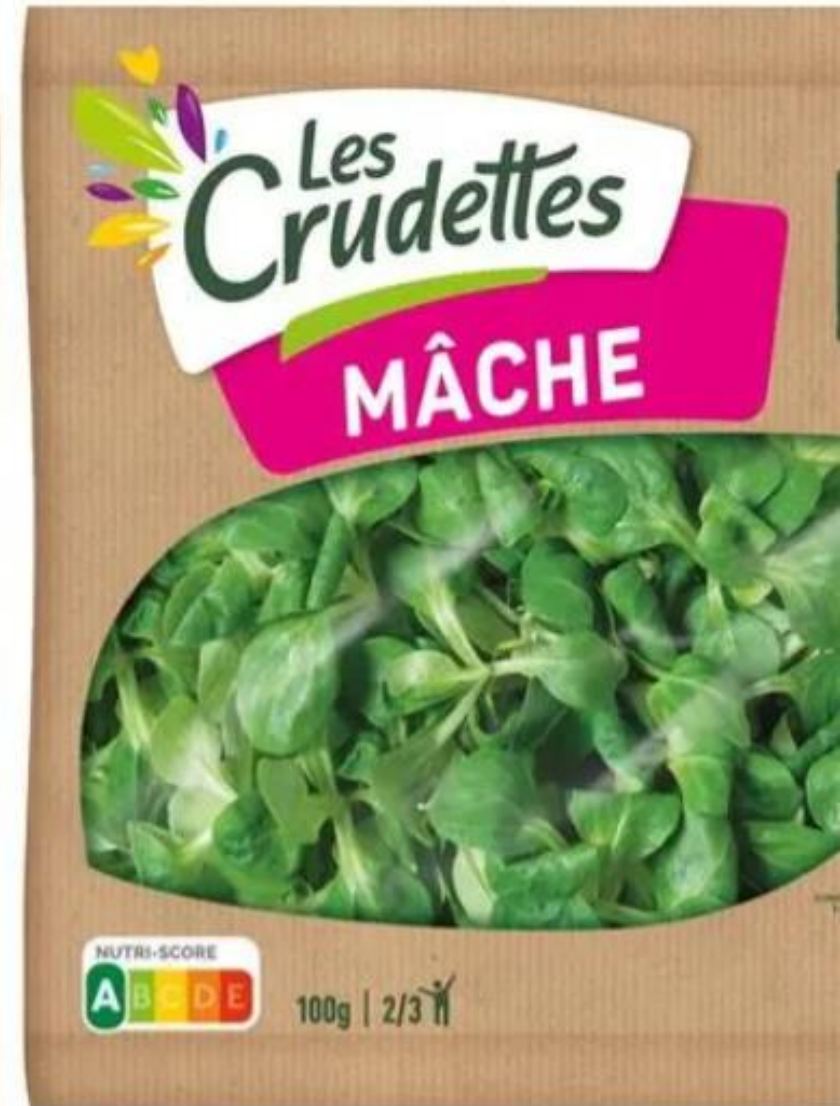
German packaging machinery manufacturer Multivac has launched two recyclable paper-based labelling solutions for fresh produce trays – Top Wrap and Top Close – to cater to consumer demands for environmentally sustainable and secure packaging for fruits and vegetables. Multivac says that Top Close seals the tray closed with a label from above, as opposed to Top Wrap, which includes putting a label on the top and both sides of the tray. Because both solutions do not require the label to wrap around the entire pack, material usage is reduced. Transparent PP film labels can also be utilised with Top Wrap. The proportion of plastic in such a pack is under 10%. According to the company, around 60% of fresh fruit and vegetables in Germany are sold pre-packed in retail outlets. Two-thirds of the packs are based on plastic, and the remaining one-third are on cardboard or other paper fibre materials.



[Back to trend contents](#)

French salad producer moves to 60% paper bag

French salad producer Les Crudettes, who are part of the LSDH Group, have moved to a new paper-based bag for its salad products. The new bag is made from 60% kraft paper with a large transparent window to enable customers to see the product inside, which is said to be an essential element for purchase demanded by customers. The move follows the previous incarnation, which was a 95% paper bag (without a window) that was launched in September 2021. The new packaging was introduced in June 2022, across six products, mâche 100g, Maxi mâche 175g, young shoots 100g, mâche-roquette 100g, rocket 100g and mesclun 100g. Aside from producing fresh salad products, as a group, LSDH also produces aseptic and refrigerated liquids, raw vegetables, and soft drinks.



Brazilian mineral water brand moves to aluminium cans

Brazilian beverage producer Socorro Bebidas has partnered with Crown Embalagens Metálicas da Amazônia S.A., a subsidiary of Crown Holdings, to move its Acquiíssima mineral water brand into 100% recyclable aluminium cans. The cans feature a matte varnish, which was applied to the full body of the can to help boost a premium look and feel, intended to attract shopper attention. Aluminium cans are said to have multiple inherent environmental sustainability benefits, including providing a powerful barrier against light and oxygen, which will keep the water in the same fresh condition as when it was canned. According to Crown, over the last decade, still packaged water consumption in Brazil has increased by 105% per capita and continues to take market share from tap and bulk water. Acquiíssima is currently available in supermarkets across Brazil in two stock keeping units: personnalité (natural mineral water) and passion (carbonated mineral water).



[Back to trend contents](#)

Gin producer moves to paper bottles

Greenall's, producers of the original London gin, has announced that it is moving to a paper-based bottle. The pack, supplied by Ipswich-based paper bottle experts Frugalpac, is made from 94% recycled paperboard with a food grade pouch to contain the gin. The paper bottle is reportedly five times lighter than a normal glass bottle, while its carbon footprint is six times lower and its water footprint is four times lower, according to Frugalpac. Greenall's is one of the first major gin brands in the UK to launch in the paper bottle format, reducing its carbon footprint by a reported 84%. The new paper bottle is also fully recyclable, with the outer paper casing and cap suitable for recycling on the kerbside and the soft plastic liner at major supermarkets and recycling centers. The new paper bottle format (70 cl) is now available to order for UK customers, and will appear on retailer Sainsbury's shelves nationwide in October.



[Back to trend contents](#)



Protect and Preserve

Protect and Preserve

Solutions that help to extend shelf life, reduce food waste and protect contents have environmental as well as cost-saving implications. We continue to track many new initiatives in this area. The COVID-19 pandemic has seen a rise in supply chain-based examples that aim to improve the safe distribution of vaccines.

The prevention of food waste continues to be a priority, and we are tracking many examples of packaging formats that have been designed to reduce the wasting of product. There are widely reported statements that between 33-50% of all food produced globally is never eaten, and the value of this wasted food is valued at over \$1 trillion. Technology is playing its part with many recent developments using technological know-how to help detect and communicate changes in the state of food. Packaging has a key role to play in ensuring that produce and food waste is minimised. In this section, we focus on examples that improve the environment by increasing shelf life or reduce waste. The section also includes examples of packaging that protects the product through improved secondary packaging solutions that take on board environmental or cost concerns.

Protect and Preserve



[Mozzarella shelf life extended with biodegradable packaging](#)

[Label manufacturer launches adhesive aimed at wine and spirits](#)

[“Most sustainable” laundry pack launched to date](#)

[New temperature labels offer food safety and profitability](#)

[PE resin replaces metalisation of packaging and facilitates recycling](#)

[Researchers develop biopolymer nanocomposite that detects food freshness](#)

[PS material is customised for electronics packaging](#)

[UK brewery moves to frustration-free packaging solution for e-commerce](#)

[Corrugated solution developed for door and frame packaging](#)

[Next generation, BPA-free beverage can coating launched](#)

[Smart label technology for products that are temperature and time sensitive](#)

[Plant-based sachet controls ripening and microbial growth of fresh produce](#)

[Antimicrobial film extends shelf life of fresh salmon](#)

[German company launches anti-counterfeiting authentication solution](#)

[Thermal performance of home delivery recipe boxes improved](#)

[German design studio develops double wall wine bottle](#)

[Australian company launches thermochromic bottle caps](#)

Mozzarella shelf life extended with biodegradable packaging

Brazilian and French scientists have combined to develop a biodegradable gelatin-based film that has been used to extend the shelf life of mozzarella successfully. The researchers incorporated cellulose nanocrystals (CNCs), modified with pine resin, to the fragile structure of gelatin to strengthen it and produce film by the continuous casting process, a technique with low cost and high productivity. The films produced had a transparent and colourless format, important characteristics because they allow the consumer to gauge the quality of the product. The films showed optical and mechanical properties similar to conventional plastics, but with the advantage of having natural sources as raw material and therefore biodegradable. Another advantage is that the film is antimicrobial, inhibiting the growth of *Staphylococcus aureus* and *Escherichacoli* bacteria in accelerated laboratory tests. This can extend the shelf life in mozzarella cheese by up to one month.

[Back to trend contents](#)



Label manufacturer launches adhesive aimed at wine and spirits

Multinational label manufacturer Avery Dennison has announced the launch of a new adhesive. The solution, called Z2010, is designed to support premium style labels with heavier facestocks, embossments, textured materials, and foils. The company says that it will not lift or float from bottles for up to eight hours while submerged in ice or cold boxes. Avery Dennison also says that using Z2010 makes it easier to apply labels when they are cooler than their surroundings and covered in surface condensation. Due to its aggressive initial tack, the adhesive ensures that heavier, embellished labels stay firmly adhered. The company says that Z2010 also offers improved mandrel performance of up to 95% when using this adhesive for neck labels or other tight mandrel applications. The adhesive performs at a temperature range of -30-300°F (-34-149°C). This new adhesive will be showcased at Labelexpo Americas 2022.



[Back to trend contents](#)

“Most sustainable” laundry pack launched to date

Multinational consumer goods company Unilever has announced the launch of what it says is its most sustainable laundry capsule pack to date. In a collaboration with board packaging specialists Graphic Packaging International, the new board pack has been designed to lock out moisture better than current plastic packaging and prevent capsules from sticking together. The board for the new pack is made from FSC-certified (Forestry Stewardship Council) material. Unilever says that the new capsules will prevent over 6,000 tonnes of plastic entering the waste stream every year. A new formula contains biodegradable active ingredients that are 65% derived from plant sources and when used in cold, short cycles, consumers can save up to 60% energy per use. The new childproof packs will be used across Unilever’s laundry brand Dirt is Good, also known as Persil, Skip, OMO and Surf Excel. The packs will launch first in France before rolling out to other markets.



New temperature labels offer food safety and profitability

Barcelona-based LabelFood is a reported leader in the design of solutions that ensure food safety and traceability processes in the HORECA (hotels, restaurants, catering) sector. They have now launched temperature-sensitive adhesive labels designed to protect food safety and operators' profitability. The labels are visually activated when the programmed temperature is exceeded or lowered, and this can be either reversible or irreversible. The labels give a visual indication that shows if the recommended temperature of a product has been broken. Being self-adhesive, operatives just have to remove the protective film on the glued back side and adhere them to the surface. The irreversible labels contain an ink that does not return to its initial cycle once the colour change is activated upon reaching the defined temperature, whereas the reversible labels return to their original colour. Although aimed primarily at the food sector, LabelFood say that the labels could also have uses for pharmaceuticals.



[Back to trend contents](#)

PE resin replaces metalisation of packaging and facilitates recycling

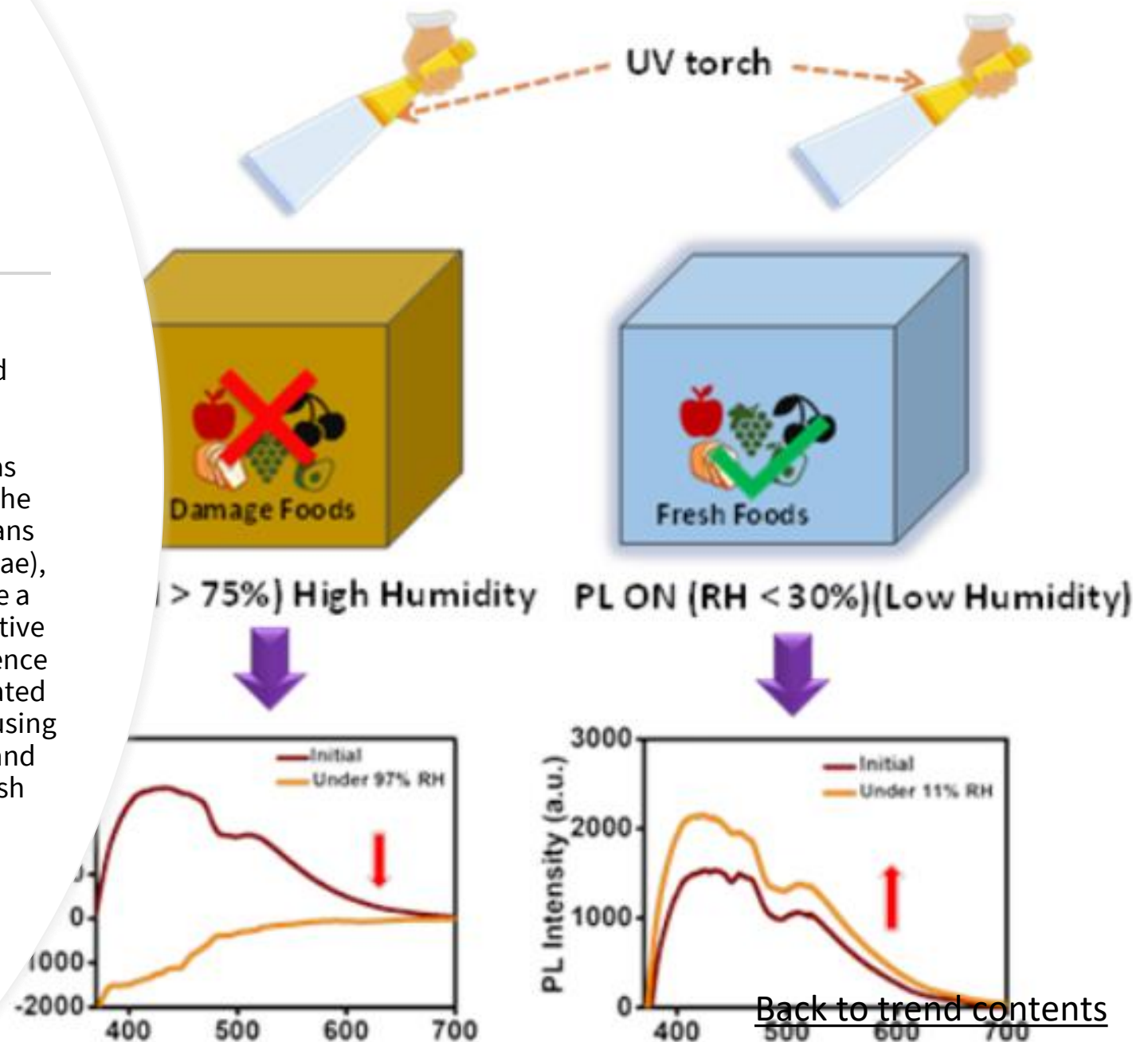
American multinational chemical corporation Dow Chemical has launched a new high density polyethylene (HDPE) resin that allows the design of flexible packaging without metalisation that can be 100% recyclable. The new high-density resin, called ELITE AT 6900, when combined with other premium resins in Dow's portfolio, enables the development of recyclable polyethylene packaging with maximum performance. ELITE AT 6900 also reportedly prevents deformation or perforations, maintains the original shape of the packaging, preserving the freshness and characteristics of foods such as coffee, milk and chocolate powder, pet foods and many other products. The resin offers maximum performance in terms of moisture, rigidity and grease barrier and thus offers more sustainable packaging to brands in line with consumer demands, along with excellent processing capabilities. This innovation integrates Dow's broad portfolio to drive the recycling project, and it directly contributes to facilitating the transition to a circular economy.



[Back to trend contents](#)

Researchers develop biopolymer nanocomposite that detects food freshness

Researchers at the Institute of Advanced Study in Science and Technology (IASST) in Assam, India have developed a biodegradable, biopolymer nanocomposite that can detect relative humidity, which they hope may have an application as smart packaging materials, especially for the food industry. The researchers used two biopolymers, guar gum (a variety of beans obtained from plants) and Alginate (obtained from brown algae), which were blended with carbon dots (nanomaterial) to make a nanocomposite film that was successfully used to detect relative humidity. The nanocomposite film shows change in fluorescence in presence of high humidity. Due to this property, the fabricated nanocomposite film can monitor the packed food freshness using just a UV light source. One of the research team said, 'Smart and active packaging such as this can help consumers select a fresh product without breaking into the pack'.



PS material is customised for electronics packaging

Swedish plastic component manufacturer Scanfill AB has announced the development of a customised PS (polystyrene) material for packing electronic items. Scanfoil PS ESD (Polystyrene Electrostatic Discharge) is suitable for thermoformed packaging in the electronics industry because, thanks to its surface resistivity, it protects advanced technical applications from static discharge. In a press release, Scanfill says that it now offers materials with a surface resistivity between $10^2 - 10^9 \Omega$ (Ohm). Within this area, smaller areas can be defined and thus offer materials with more precisely specified surface resistivities, for example $10^2 - 10^4$, $10^3 - 10^6$, and $10^5 - 10^9 \Omega$. They add that with PS ESD they can control the conductivity according to the customer's wishes. The company states it will be launching Scanfoil PP ESD (Polypropylene Electrostatic Discharge), which has an even lower reported environmental impact than PS and is highly sought after in the recycling market.



UK brewery moves to frustration-free packaging solution for e-commerce

Smurfit Kappa Gosport, who specialises in direct-to-consumer packaging, has partnered with Cotswold Brew Co to produce Amazon-certified FFP (Frustration-Free Packaging) for its Hawkstone beer brand. Cotswold Brew approached Smurfit Kappa as they needed delivery boxes which could withstand the rigours of the national courier network and protect the Hawkstone lager during its journey to the customer. The new packaging was tested at their UK ISTA (International Safe Transit Association) lab in Smurfit Kappa Northampton, which is fully equipped to test any ISTA procedure standard. Hawkstone's original packaging was an outer box with assembled dividers, unsuitable for Amazon sales. The new solution was made up of two inserts, which suspended the beer bottles away from each other and the outer packaging while in transit. Previously, many boxes were being damaged in transit, and replacement orders and repeat courier fees were costing the brewery over £20,000 a month.



[Back to trend contents](#)

Corrugated solution developed for door and frame packaging

Leicestershire-based corrugated packaging manufacturer Colton Packaging has announced that they have replaced the expanded polystyrene (EPS) packaging a client was using for door and frame protection and replaced it with a flat pack corrugated solution. Colton says that the move has reduced cost by 30% and takes up 25% less space. They say that the polystyrene pieces were bulky to store and cannot be recycled. Using their background and experience in corrugated, Colton were able to create a solution made from recycled material that was also fully recyclable. Where the polystyrene sections were taking up a full load, they now only need two pallet spaces for storage in the warehouse. Clients received two dedicated lorry load deliveries per week from full 18 tonne trucks. They still have two drops per week, but now they can be fitted into other delivery schedules, therefore reducing mileage and, subsequently fuel consumption.



[Back to trend contents](#)

Next generation, BPA-free beverage can coating launched

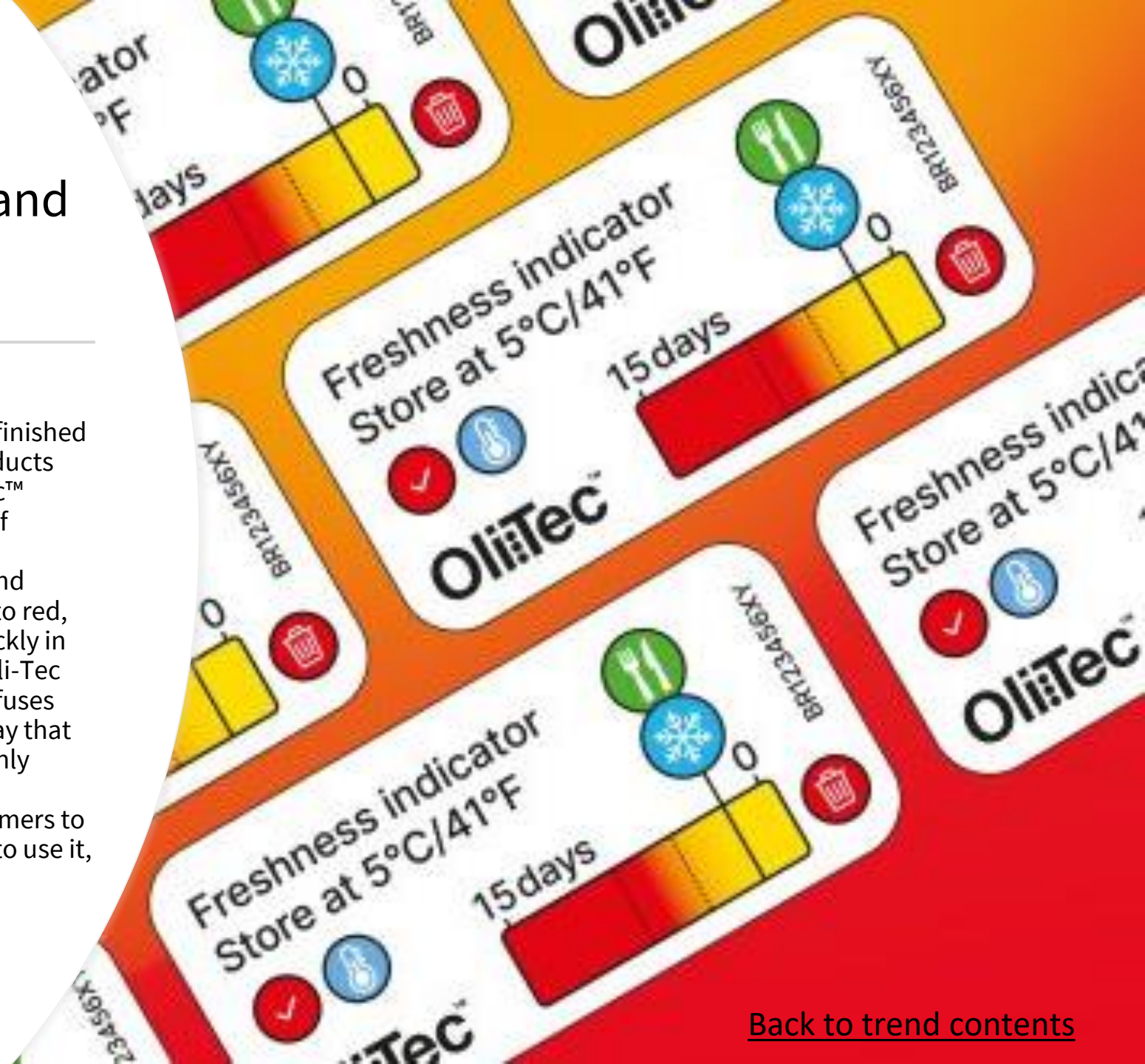
Pittsburgh-based PPG Industries is a global supplier of paints, coatings and specialty materials. They have now announced the launch of their next generation acrylic internal spray coating for aluminium beverage cans. Innovel PRO uses no bisphenol-A (BPA) or bisphenol starting substances and reportedly offers enhanced application properties. The coating apparently features a lower migration profile than standard epoxy and epoxy-mimic coatings. The PPG Innovel PRO coating complies with all global food contact standards for consumer safety and is validated with the PPG SAFEASSURE protocol for safe food-contact coating development. The company also says that PPG Innovel PRO's improved application properties provide operational efficiency benefits for plants using the coating. It is reported that the use of BPA may be more tightly regulated in Europe in the coming years, with the European Food Safety Authority (EFSA) currently re-evaluating the tolerable daily intake value.



[Back to trend contents](#)

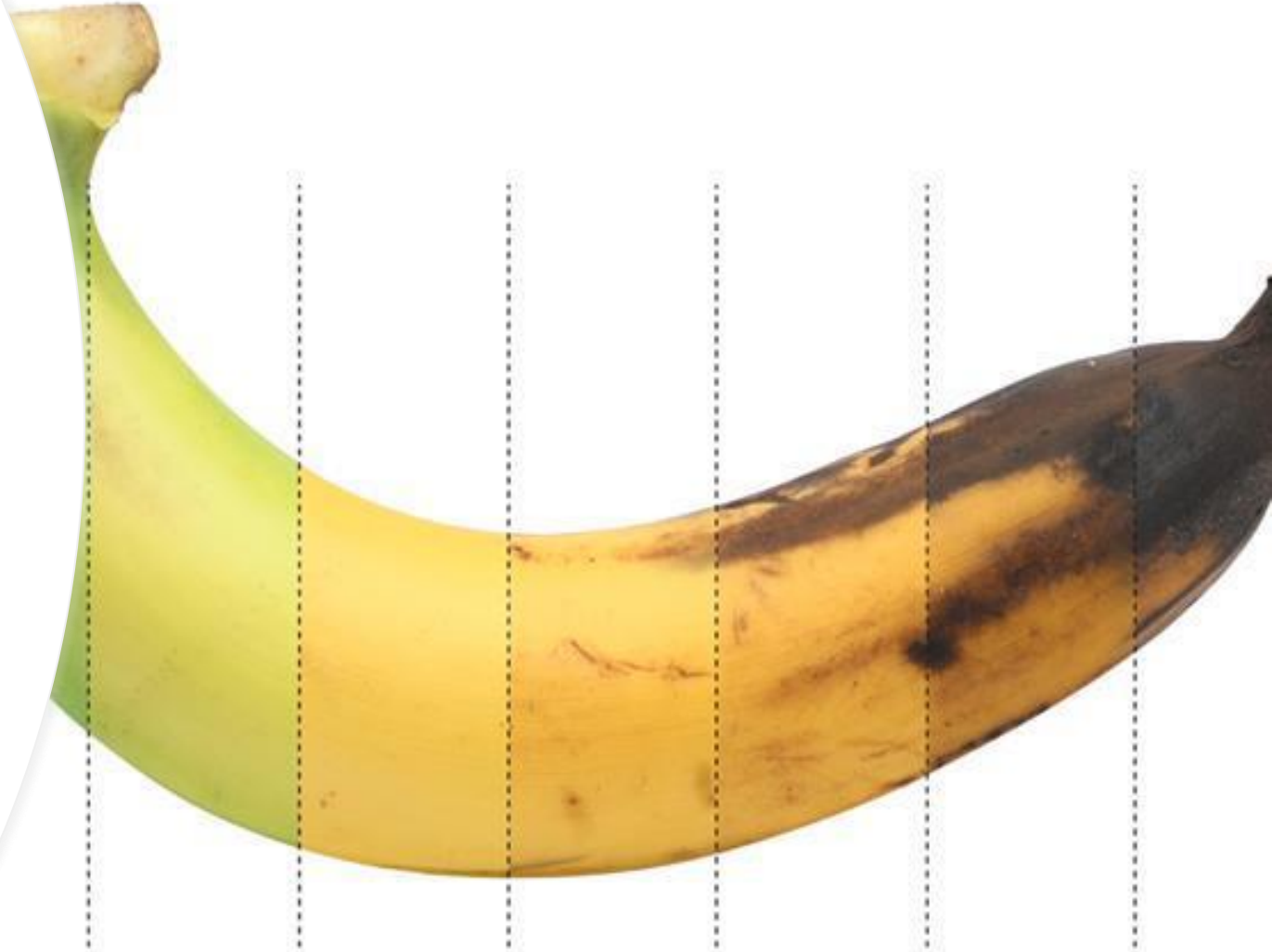
Smart label technology for products that are temperature and time sensitive

Manchester-based Oli-Tec has announced that they have finished the development of a new smart label technology for products that are temperature as well as time-sensitive. The Oli-Tec™ smart labels are suitable for any product with a shelf life of between five and 15 days. The labels feature an easily understandable visual indicator that is sensitive to time and temperature. The label gradually transitions from yellow to red, changing more slowly in cool temperatures and more quickly in warm conditions, both at predictable, repeatable rates. Oli-Tec says that 'Sell By', 'Best Before' and 'Use By' labelling confuses consumers and doesn't reflect storage conditions. They say that their simple colour-changing indicator provides clear, highly visible information that both retailers and consumers can understand at a glance. Their visual indicator helps consumers to see when food is going off, they can then decide whether to use it, freeze it or cook it.



Plant-based sachet controls ripening and microbial growth of fresh produce

GreenPod Labs is a new biotech start-up company based in India. The business says that they have developed a product that can help to extend the shelf life of fruit and vegetables, while being safe and cost-effective. The solution is a small sachet containing powerful plant-based ingredients that it claims also prevents microbial growth, as well as extending the shelf life of fresh produce. The sachets, which resemble traditional silica packets, contain a mixture of plant-based edible products such as extracts from corn and potato, along with Indian spices too. Compounds are also extracted from plants, leaves, etc. When fruit and vegetables are stored in a crate after harvesting, the sachet is dropped in to retain quality throughout the supply chain and increase its shelf life. If it is introduced at a later stage, then it controls the ripening rate.



[Back to trend contents](#)

Antimicrobial film extends shelf life of fresh salmon

Researchers from Laben Chile and Co-Inventa, both institutions at the University of Santiago, Chile, have developed an antimicrobial film which extends the shelf life of fresh salmon. Their solution is a natural coating methodology that is applied to commercial plastic films intended for packaging salmon, in this case, LDPE (low density polyethylene). The researchers say that the new packaging allows the shelf life of the packaged product to be increased by up to 30%, also increasing its safety. They say that the film could also be used on other products, such as meat products like turkey and pork. Incorporating this type of technology requires specific studies in which compounds approved by the FDA for direct contact with food are added. Minimum concentrations required for these products to exert their antimicrobial action without causing adverse reactions are investigated.



[Back to trend contents](#)

German company launches anti-counterfeiting authentication solution

Giesecke + Devrient (G+D) are a German company that develops security technologies, including for banknotes. They have now launched a new authentication product called SIGN, designed to tackle counterfeiting and product and brand piracy for the packaging industry. SIGN aims for simple and rapid product authentication by utilising micro-optics technology. The company says that products should then be verifiable with the naked eye, as, unlike other verification systems that require apps or specialised equipment, SIGN does not require an additional device for confirmation. The solution is applied directly to packaging using high-precision embossing tools, meaning specially printed labels are unnecessary. SIGN embosses three-dimensional elements onto a product's packaging, from height and depth effects to information that changes based on the angle the product is viewed from. G+D also says that SIGN features easy integration with other security printing technologies and easy implementation into standard packaging printing processes.



[Back to trend contents](#)

Thermal performance of home delivery recipe boxes improved

German home delivery recipe box company HelloFresh has developed what it calls the Systematic Cooling Concept (SCC). It was designed in-house to optimise the efficiency and thermal performance of its recipe boxes. The company says that by looking at four different parameters, they can customise the quantity of ice per box. These include taking into account the daily outside temperature as well as the customer destination, which allows them to predict the exact amount of ice needed. HelloFresh conducted a pilot scheme in the UK, which was deemed to be a great success, and they say that In the second half of 2021, they saved almost six million ice packs. HelloFresh is exploring possibilities to integrate reusable and returnable packaging in their products and currently testing reusable boxes within a pilot project.



German design studio develops double wall wine bottle

German design company, Our Wonderful World, has launched what it says is the first double-layered wine bottle with a vacuum that helps to keep its contents chilled. Called Cooleo, it was designed and engineered in Germany, and they say that it is beautiful to behold, shows the wine at its best, and keeps it chilled in a natural, clean and sustainable way. The bottles are hand crafted from strong, thin, high-tech Borosilicate glass, which has outstanding clarity and scratch-resistant durability. Cooleo is sealed with a glass Vinolok closure meaning that the bottle can be up-cycled and reused. According to the company, Cooleo must be chilled in the fridge until it achieves the desired temperature. After that time, it stays cooler for much longer than a normal bottle. The bottles are available via a kickstarter programme, starting at £22.

[Back to trend contents](#)



Australian company launches thermochromic bottle caps

Australian packaging company Caps and Closures, has announced the launch of ThermoShield, a range of customisable thermochromic caps. Thermochromic materials change their colour with temperature change, and the company believes that this technology could play a part in any packaging where product quality or consumption experience is dependent on temperature. Brand owners can specify precisely what temperature they want to trigger the colour change, and whether they want the change to be permanent, which would indicate that the product had exceeded its recommended limits and is spoiled or reversible, where the product has reverted to indicate safe-to-use. The company also says that the colour-changing ability of the caps doesn't wear out in normal use. Temperature switch points between -20C and +70C, and a considerable colour transition range is available. The company says that typical applications include perishable goods, cool and cold-chain logistics, food, pharma, health, wellness, beauty, paints and coatings.





Recycling Resurgence



[Next Page →](#)

Recycling Resurgence

Recycling initiatives continue to be one of the most active sustainability areas driven by challenging Plastic Pacts around the world that are part of a three-pronged objective to deliver 100% recyclable packaging by 2025. Packaging taxes that require 30% recycled content is influencing change as well as the focus on stretching recycling targets. We are seeing more chemical recycling initiatives as well as recycled PS and PP developments coming to our attention.

This large section includes recycling initiatives as well as packaging that now incorporates (more) recycled content. We can report many examples of mono-material developments and other measures to improve recycling rates. The introduction of Packaging Taxes is also having an impact on developments. The UK's sees a levy on plastic packaging with less than 30% recycled content. This activity inevitably influences the demand for packaging reduction activities. There is still a long way to go in terms of consumer education and essential infrastructural and capability changes to improve recycling rates. We can report on an increase in the number of chemical recycling initiatives coming to our attention although still modest at this stage. Mechanical recycling processes is still the dominant way to deliver recycled packaging and this looks set to continue.



Recycling Resurgence

[Back to Start](#)

[Brewing giant to introduce 'green' PET into Brazil](#)

[Chinese brand launches sustainable cosmetic packaging made with 50% recycled content](#)

[Australian trial to assess feasibility of recycling cosmetics packaging](#)

[Fully recyclable paper packaging for Italian premium pasta](#)

[Project seeks to recycle whey into cheese packaging](#)

[German collaboration results in sustainable packaging concept](#)

[Partnership launches first carbon neutral cartonboard](#)

[Adhesive specialist launches chemical-free thermal paper for direct food contact](#)

[Dairy manufacturer incorporates recycled PE in bottles](#)

[Companies collaborate on PVDC replacement](#)

[100% recyclable paper pouch offers green alternative](#)

[German carton manufacturer develops board box for waste toner cartridges](#)

[Research programme tests NIR tech for sorting multi-layered flexible packaging](#)

[Feminine care range made from post-consumer recycled and biomass balanced materials](#)

[High barrier paper pouch launched for nutritional powders](#)

[Cosmetics packaging features 100% recycled aluminium alloy](#)

[German organic tea will be packaged in mono-material](#)

[British restaurant moves to cPET bowls for home delivery](#)

[Tape manufacturer launches recycled PET packaging tape](#)

[Consortium to develop high-barrier mono-material film](#)

[New technology will allow lidding film to be recycled with household collections](#)

[New technology converts waste into virgin quality plastic](#)

[Traditional Swiss confectioner uses sustainable barrier paper for chocolate](#)

[Move to 50% PCR bottles for leading bleach brand](#)

[Packaging giant trialling alternative fibres for papermaking](#)

[Recyclable aluminium cup to launch at iconic UK venues](#)

[Next Trend →](#)

Brewing giant to introduce 'green' PET into Brazil

Brazilian brewers Ambev, who are part of Anheuser-Busch, has formed a partnership with Dutch chemical and renewable technology company Avantium. The companies have agreed to use PEF (polyethylene furanoate), which is a 100% vegetable and 100% recyclable alternative to PET (also known as "green PET"), to be used on Ambev's range of soft drink bottles. The two companies have worked together to develop, from this biomaterial, bottles with multilayers that also have functional advantages to maximize the flavour and effervescence of the soft drink. According to Avantium, PEF is 10 times better at retaining oxygen, and 16 times better as a barrier to CO₂. Avantium is building the world's first commercial plant to produce FDCA (furandicarboxylic acid) from plant-based sugars, which is a building block of PEF. The inauguration of the factory is scheduled for the end of 2023, with the commercial launch of PEF from 2024.



[Back to trend contents](#)

Chinese brand launches sustainable cosmetic packaging made with 50% recycled content

OnTop cosmetics has become the first Chinese beauty brand to launch sustainable cosmetic packaging made with Eastman Cristal™ Renew copolyester. OnTop will launch its Renewal Oil Cream with packaging made with the copolyester, which features 50% certified recycled content. Eastman says that the process used to create Cristal Renew reduces the use of fossil resources and results in 20-30% lower greenhouse gas emissions than traditional manufacturing. Cristal Renew utilises Eastman's molecular recycling technologies to break down hard-to-recycle plastic waste into building blocks used to create new materials that are reportedly comparable to traditional materials in clarity, lustre and mechanical properties. The technology employed to make Eastman Cristal Renew diverts plastic waste from landfills, incinerators and the environment. OnTop collaborated with New Jersey-based WWP Beauty, suppliers of sustainable packaging solutions to the beauty sector, to create the primary packaging for the second version of their Renewal Oil Cream.



[Back to trend contents](#)

Australian trial to assess feasibility of recycling cosmetics packaging

Australian department store Myer is conducting an eight week trial in conjunction with take-back provider Close the Loop to assess the feasibility of recycling cosmetics packaging. The trial, which will continue until mid-September, will research ways of recycling cosmetic packaging to reduce the estimated 5000-11,500 tonnes of packaging currently being sent to landfill in the country each year. The trial is being supported by the Australian government's National Product Stewardship Investment Fund. Hard and soft plastics will be shredded and used in Close the Loop's TonerPlas asphalt additive, as well as in the company's Resin8 concrete additive. Metals will be separated and sent to a metals recycling facility, and glass will be crushed for use as a sand replacement in building materials for the construction industry. Materials that cannot be processed will be used to fire a low-carbon emissions cement kiln, ensuring that no products collected will be sent to landfill.



[Back to trend contents](#)

Fully recyclable paper packaging for Italian premium pasta

Global packaging manufacturer Mondi has collaborated with Italian converter and packaging producer Fiorini to develop a new paper packaging solution for Antico Pastificio Umbro, an Italian manufacturer of premium pasta products. The new paper-based packaging is 100% recyclable and features a large biodegradable cellulose window that allows the customer to see the contents. Once the new packaging has been rolled out across the full range of pasta products, it has been estimated that it will remove 20 tonnes of plastic annually. The paper chosen by Mondi and Fiorini International for the new bag is fully recyclable, while still offering the same protective properties as the previous plastic packaging. The pasta has the same shelf life and no issues have been identified through the supply chain. A new closure system sealed with a special food contact hot-melt glue, together with a reinforced patch on the bottom, improves hygiene and ensures easy opening.



[Back to trend contents](#)

Project seeks to recycle whey into cheese packaging

The Go Orleans Project is a group of Spanish research facilities, cheesemakers, and FEDACOVA (Agri-Food Business Federation of the Valencian Community) who are looking to reuse leftover whey from the cheese industry in new ingredients for the packaging industry. The Food and Agriculture Organisation of the United Nations (FAO) warns that 180 million litres of whey is generated from over 18 million tonnes of cheese produced worldwide annually. Major companies can recover the valuable properties of whey by implementing recovery processes, but small artisanal cheese factories, which represent a significant part of the industry, cannot afford this equipment and their whey ends up as waste that is hazardous if disposed of in the environment. The aim of the project is to create natural ingredients derived from whey that will be transformed into antimicrobial coatings that could extend the shelf life of cheese by 25-50%, with probiotic ingredients going towards improving the health of livestock.

[Back to trend contents](#)



German collaboration results in sustainable packaging concept

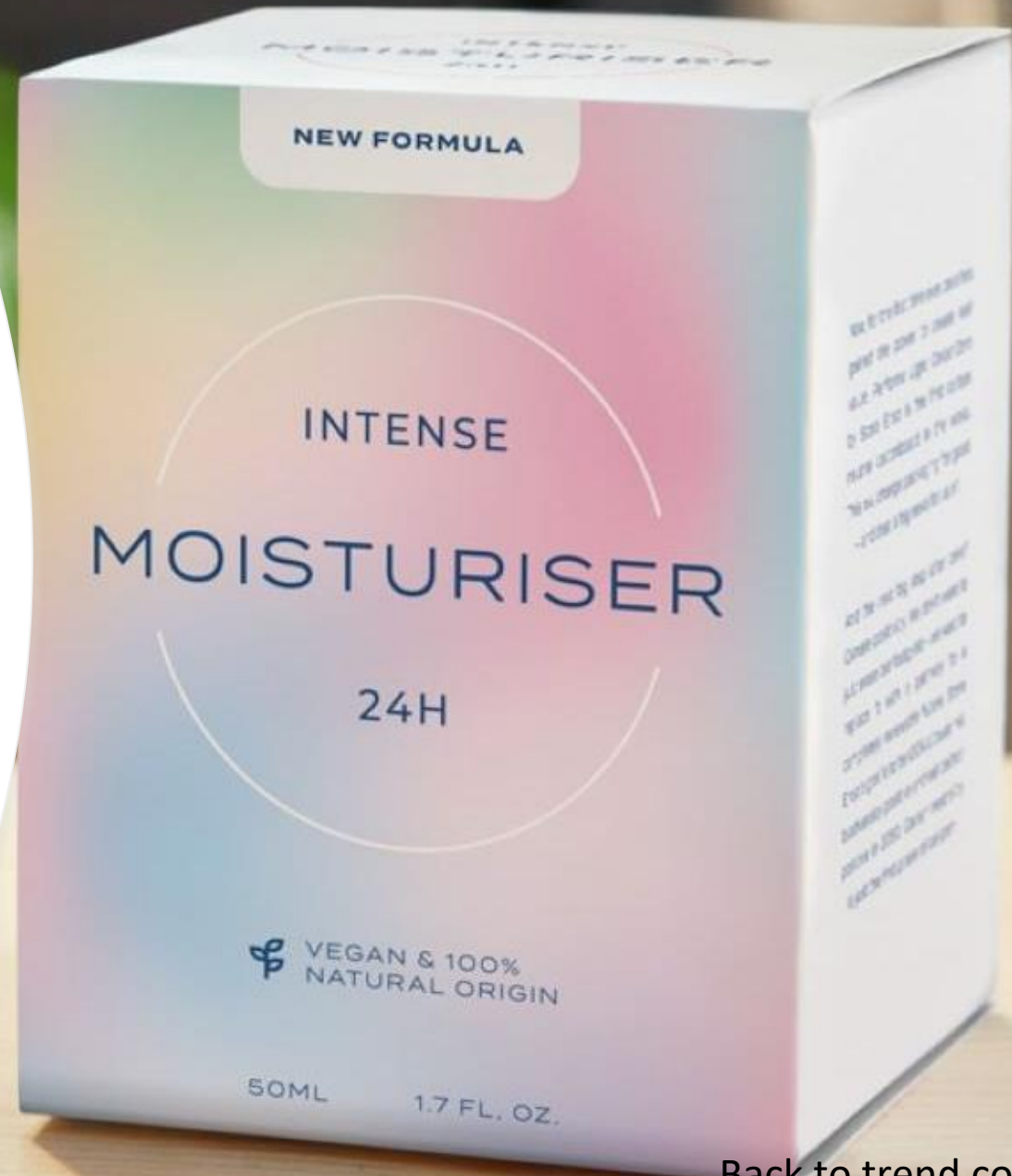
Two German companies have collaborated to present a sustainable mono material packaging concept for vertical and horizontal form fill and seal (VFFS/HFFS) packaging formats. Film manufacturer SÜDPACK and machinery manufacturer SN Maschinenbau are offering the Pure-Line portfolio, based on either PP (polypropylene) or PE (polyethylene) mono material structures. It is reported that both film structures offer the properties that are necessary for efficient and safe packaging, particularly of food products in doypacks. The spectrum of applications ranges from grated cheese to air-dried sausages and jerky, to nuts, dried fruit and snacks and right through to coffee, tea, herbs and spices. Depending on the products to be packaged, high-performance films can be equipped with different barrier properties. The materials also have excellent machinability due to their broad sealing range. SÜDPACK and SN Maschinenbau will present the Pure-Line portfolio together at Fachpack 2022 in Nuremberg.



[Back to trend contents](#)

Partnership launches first carbon neutral cartonboard

A partnership between paper and board distributor Antalis and paper and board maker Stora Enso launches the 'market first' carbon neutral cartonboard. The cartonboard is manufactured at Stora Enso's Fors Mill in Sweden, which is carbon emission-free in its electricity, steam production and internal logistics. Stora Enso says that Performa Light CarbonZero has "exceptionally" low greenhouse gas emissions, and any emissions that are currently unavoidable are offset via a verified carbon offsetting scheme to reach net-zero emissions. Fiberlight Tec, a patented fibre treatment technology by Stora Enso, enables the product to be lightweight without compromising on strength or performance. The cartonboard is said to be suitable for a wide range of applications, including cosmetics, beauty, healthcare and graphical applications. Performa Light CarbonZero is also food contact approved and taste and odour-neutral, making it a suitable choice for packaging items such as chocolate, snacks and confectionery.



[Back to trend contents](#)

Adhesive specialist launches chemical-free thermal paper for direct food contact

German self-adhesive materials specialist VPF has added a new chemical-free thermal paper to its portfolio. The product, called 1470579 blue clean 70 g/m², is suitable as an adhesive material for direct food contact. The new material can be used on common direct thermal printers and, unlike typical thermal papers, is free of chemical developers. It is reported that consumers are becoming familiar with bluish thermal paper from retailers. In supermarkets, for example, the blue 'eco-receipts' are increasingly replacing the previous white receipts. The paper has a four-layer structure and consists of plain paper, a black pigment layer, an opaque functional layer that creates the paper's blue colouring, and a protective layer against mechanical damage. The printed image is created physically while the opaque layer becomes transparent when exposed to heat, making the underlying black layer visible. The paper is available from VPF with various permanent and removable adhesives.



[Back to trend contents](#)

Dairy manufacturer incorporates recycled PE in bottles

Lactalis Nestlé has collaborated with Spanish petrochemical company Repsol to introduce recycled PE (polyethylene) to its chilled dairy bottles. The Repsol Reciclex range uses cutting-edge technologies to recycle plastic waste that cannot be mechanically recycled for use in food containers. Repsol's circular materials have the ISCC PLUS certification that ensures their traceability. The contents are certified according to the ISCC Plus mass balance approach. Since June, Lactalis Nestlé, the yoghurt and dairy dessert division of the Lactalis Group, has been using recycled plastic in their PE bottles. The Nestlé Kefir range's bottles for Spain and Portugal and the Yoggi brand's drinking yoghurt bottles – marketed in Portugal and produced in Guadalajara, Spain – contain 30% and 10% recycled material, respectively. Lactalis Nestlé says that being able to use recycled plastic to manufacture their bottles represents an important step on the way to achieving circularity.



Companies collaborate on PVDC replacement

Israel-based manufacturer of biodegradable plastic packaging TIPA, has announced that they are to collaborate with Birmingham-based Aquapak, developers of Hydropol, a water-soluble, biodegradable biopolymer alternative to PVOH (polyvinyl alcohol). The two companies have announced that they intend to create new material packaging solutions 'fit for the circular economy'. Their first objective is to find a high barrier and PVDC-free (polyvinylidene chloride) compostable film for packaging. PVDC is an excellent gas barrier but can contaminate recycling streams, as it is not recyclable. Many companies have already eliminated or are planning to phase out PVDC materials from their portfolio by 2025. As well as developing a PVDC alternative, the two companies are working on future development that will increase the functionality of paper-based packaging, which will be organically recyclable. TIPA has developed a range of high-end compostable films and laminates as reported in the Innovation Zone including its recent release of T.LAM 608, a home-compostable transparent solution for food packaging.



[Back to trend contents](#)

100% recyclable paper pouch offers green alternative

Orlando-based Sundance USA has announced the launch of new paper pouch packaging that it says is 100% recyclable, biodegradable and compostable. Sundance says that their new paper pouch combines superior fibre strength with a super-green profile and consumer-friendly features, such as fibre or paper mesh windows to allow the customer to see the product, as well as providing ventilation, should the product require it. The seams of the paper pouch are secured with a unique heat-sealable adhesive that is also both recyclable and compostable. Sundance also says that their new pouch provides a sustainable alternative to packages that are subject to the new Extended Producer Responsibility (EPR) laws, which are being enacted by a growing number of US states to reduce the use of plastics, cellophanes, and other packaging materials. The company says that the paper pouch can be digitally printed to enable vibrant colours, customised, and short production runs can be accommodated.



[Back to trend contents](#)

German carton manufacturer develops board box for waste toner cartridges

German carton manufacturer Dörr Kartonagen has developed an innovative, more environmentally friendly solution for waste toner cartridges. Until now, only plastic containers which were dust-tight were available for this purpose due to the nature of the hazardous waste contained in the cartridges. Dörr says that they have developed a recyclable solution for this, the first waste toner box made of cardboard. Stability, resistance to breakage and tearing is provided by a 300gsm strong chromo sulphate cardboard which, due to a very high proportion of fresh fibres, has the necessary rigidity like a plastic waste toner box. The boxes, which are delivered flat to save space, are simple to erect, and after use, the cardboard boxes can be properly recycled by the manufacturer and fed into an almost closed recycling loop and life cycle. Instructions printed on the box illustrate how this process works.



Research programme tests NIR tech for sorting multi-layered flexible packaging

CEFLEX is a collaborative initiative of a European consortium of companies and associations representing the entire value chain of flexible packaging to enhance the performance of flexible packaging in the circular economy. They are now conducting a research program on Near Infrared (NIR) technology's ability to sort multi-layered flexible packaging for the recycling sector. The study is being conducted in collaboration with a network of leading laboratories, universities and industry experts. CEFLEX's work to apply this technology to packaging is part of a major partnership with UK Research and Innovation to co-fund investigations into how flexible packaging can be designed for existing sorting and recycling infrastructure across Europe. The programme specifically aims to understand how NIR classifications are affected by film thickness, different shares of materials in an MMML (multi-material-multi-layer) structure; differences in layer sequence for transparent and opaque structures; and differences in surface reflectivity of packaging films.



[Back to trend contents](#)

Feminine care range made from post-consumer recycled and biomass balanced materials

Global packaging manufacturer Mondi has partnered with Swedish personal care company Essity to launch packaging for its feminine care range made from post-consumer recycled and biomass balanced materials. Essity's feminine care towels were previously packed in bags that already used 50% renewable materials. The new packaging uses renewable material and a by-product from paper making as well as post-consumer recycled content supporting Essity's sustainability targets. It also helps to work towards 100% recyclability and to use up to 85% biomass, renewable or recycled material in all bags where up to 25% are recycled plastics. The new mono-material solution prevents moisture and light damaging the feminine care range, has strong sealing properties and delivers outstanding print quality to maintain on-shelf appeal for Essity's European recognised brands, such as Bodyform, Libresse, Nana and Nuvenia.



[Back to trend contents](#)

High barrier paper pouch launched for nutritional powders

Cincinnati-based ProAmpac, a leading global flexible packaging company, has partnered with Purition, a UK-based powdered meal replacement manufacturer, to provide them with a recyclable packaging solution for its nutritional powders. The solution is a fully recyclable, high-barrier paper pouch to replace the non-recyclable, multi-layered plastic packaging originally used by Purition. The new material developed is called ProActive Recyclable, and while minimising the overall amount of materials used, they did so without compromising the protective characteristics of the product. Also, the ProActive Recyclable paper bag can easily be recycled into normal paper recycling streams. The company says that the unique paper-based technology provides the high oxygen and moisture barrier needed to protect dry powders. The product also benefits from optimal rigidity, ensuring shelf-appearance quality. The pouches are digitally printed, maintaining Purition's earthy, minimalist colour palette, ensuring clear and accurate labelling for consumers.



[Back to trend contents](#)

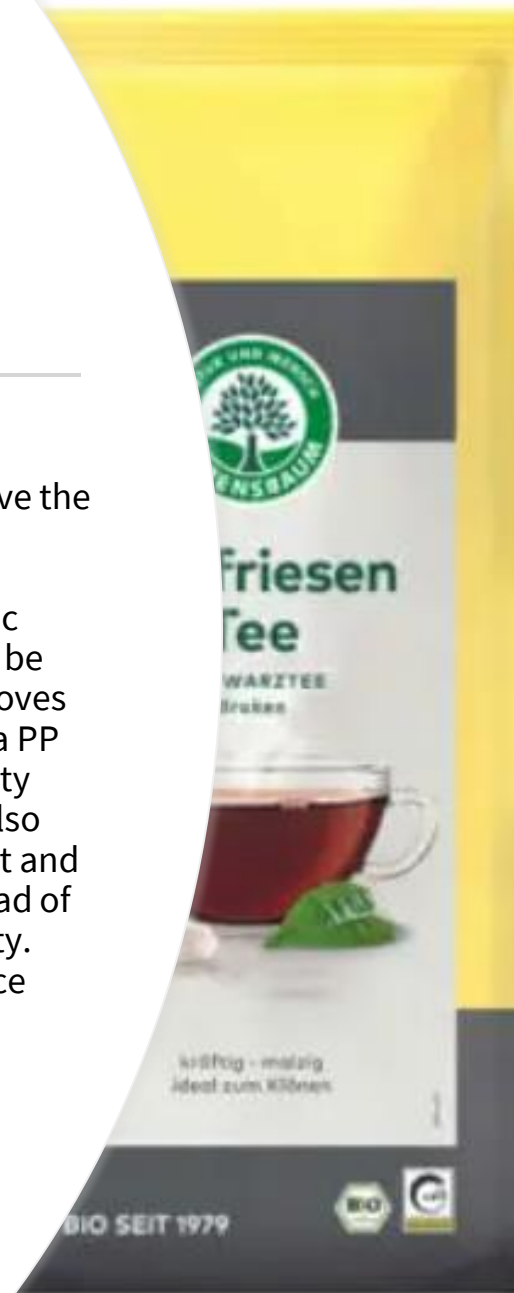
Cosmetics packaging features 100% recycled aluminium alloy

Two American companies have formed a partnership to introduce a new alloy that contains 100% recycled aluminium for packaging for the cosmetics market. Anomatic is a manufacturer of large-quantity aluminium parts for cosmetic companies' packaging, including Revlon, Maybelline, Estee Lauder and Mary Kay. Novelis is a leading producer of rolled aluminium and the global leader in aluminium recycling. Together they have launched evercycle Cosmetics, a new alloy certified by SCS Global Services to contain 100% recycled aluminium. The companies say that their long standing partnership enabled them to develop evercycle while reducing the carbon footprint, helping to benefit brands and consumers alike who are seeking more sustainable solutions. The new alloy comes as consumer-packaged goods brands face new legislation to enhance and standardize climate-related disclosures, including greenhouse gas emissions, product life cycle analysis, and future targets and goals.



German organic tea will be packaged in mono-material

German organic food producer Ulrich Walter GmbH is to move the packaging for its Lebensbaum range of loose teas to mono-material bags made of PP (polypropylene). Previously, the company's loose tea was packed in a paper bag with a plastic inner bag and a paper label. Both the bag and label will now be made of a PP mono-material, with a viewing window that moves to the side of the pack. The company says that switching to a PP bag reduces material consumption and improves recyclability while maintaining good product protection. The company also says that PP is a sustainable choice as it protects the product and its aroma. As it is now made entirely of mono-material instead of a composite of paper and plastic, recyclability is now a reality. The conversion to the new material and design will take place gradually from the end of the year.



[Back to trend contents](#)

British restaurant moves to cPET bowls for home delivery

British restaurant chain Wagamama has announced that it is moving its delivery bowls to cPET (crystalised polyethylene terephthalate). The company says that the action will remove 330 tonnes of virgin plastic from its annual supply chain as the new trays will contain 70% recycled material. cPET is more commonly used for supermarket-ready meals due to its high-temperature resistance. Wagamama's containers are made from a lighter colour enabling them to be detected by Near Infra-Red scanners at recycling plants. Wagamama has, for now, opted for an easily recyclable PP (polypropylene) lid and says that it is committed to moving to a fully cPET solution within 18 months. The company also runs the 'Bowl Bank' scheme, which encourages customers to return their packaging to their local restaurant. Customers will then be rewarded with a free side dish, and the trays will be commercially recycled.



[Back to trend contents](#)

Tape manufacturer launches recycled PET packaging tape

German tape manufacturer tesa has announced the launch of an rPET (recycled polyethylene terephthalate) packaging tape. The new solution, called 60412, is said to have comparable properties to PVC (polyvinyl chloride) or BOPP (biaxially oriented polypropylene) tapes. Its abrasion-resistant backing and pressure-sensitive acrylic adhesive are said to be compatible with recycled cardboard and results in low noise unwind. The new tape is suitable for both manual and automatic dispensers, and is designed for packages that weigh up to 30kgs. As 70% of the rPET is said to have come from PCR (post-consumer recycled) sources, tesa hopes that the tape will become a sustainable replacement, and it is hoped that it will contribute to the circular economy. 60412 Recycled PET is compatible with most types of ink systems, meaning that companies can print logos and advertising onto the tape itself.



[Back to trend contents](#)

Consortium to develop high-barrier mono-material film

A consortium of companies that includes Yorkshire-based Parkside Flexibles has formed intending to develop a high-barrier food contact mono-material. The HiBarFilm2 project is an Innovate UK-funded consortium. Along with Parkside, the consortium includes Bangor University, Recycling Technologies, Wells Plastics, Dunbia, Cambridge Nanomaterials Technology, Fre-Energy, Haydale Composite Solutions, and BASF. The consortium hopes that HiBarFilm2 will be made by mixing a plasma functionalised nanomaterial into a polyolefin before film production. The nanomaterials will also be dispersed into a barrier coating and applied to the polyolefin substrate, creating a high barrier, high-performance mono-material film. Parkside say that the project is an obvious fit for them as they thrive on developing innovative products and are confident that they can be part of creating a sustainable, high-performance film technology.

[Back to trend content](#)

New technology will allow lidding film to be recycled with household collections

A Glasgow-based company has received £80,000 of funding in the latest Scottish EDGE Awards. The funding will allow ReCover Packaging to take its sustainable lidding film to the wider market. The new film developed by the company is a custom made split laminate of PET (polyethylene terephthalate). The mono layers are bonded by a FDA approved adhesive. The bottom layer is designed to maximise the opening within the inner profile of the tray, this layer is permanently welded to thermoformed- mono-aPET or a pre-formed aPET or cPET tray. On opening the pack the top layer will separate from the bottom layer. As the lidding film is made of a PET mono-material, it can remain on trays made from PET, and therefore be recycled with household collections. The company says that the solution is both sustainable and convenient, and when compared to existing re-closure solutions, has also been shown to be cost neutral.



[Back to trend contents](#)

New technology converts waste into virgin quality plastic

The VTT Technical Research Centre of Finland has announced plans to launch a spin off company, Olefy Technologies, which it claims can convert most of the world's waste plastics back into virgin-grade materials an infinite number of times. They claim that the thermal conversion technology they have developed can affordably convert most of the world's waste plastic – even low-quality plastic waste – back into usable virgin-grade materials. Olefy's technology is based on gasification, a technique which breaks plastic waste into olefins and other valuable hydrocarbons. The molecules created are equal to oil-based virgin olefins, meaning they are both of pharmaceutical and food-grade quality. One of the difficulties with current recycling methods is that the quality degrades every time plastic is recycled. In contrast, with the Olefy recycling process, the quality of the plastic is equal to virgin grade, so it can be recycled indefinitely.



[Back to trend contents](#)

Traditional Swiss confectioner uses sustainable barrier paper for chocolate

Richner is a traditional confectioner and baker, based in Veltheim, Switzerland. They have announced that they are to use NexPlus® Advanced, from Koehler Paper for its Schoggistängeli, their praline filled chocolate sticks. Koehler NexPlus® Advanced is a barrier paper made of virgin fibre pulp with an oxygen, fat and mineral oil barrier. This sustainable barrier paper is suitable for the application of cold seal adhesives. Koehler NexPlus® Advanced is made from 100% virgin fibre pulp, and is suitable for direct food contact. It also has excellent running properties, and is recyclable in the paper waste stream. The paper is available in 75 gsm and gives very good printability in gravure, flexo and digital printing. It is said to be ideally suited as primary and secondary packaging mainly for confectionery, chocolate bars and various snack bars. This new paper packaging with high aroma protection and a grease barrier replaces the previous aluminum foil wrapping.



Move to 50% PCR bottles for leading bleach brand

British multinational consumer goods company Unilever has announced that its UK 750ml bleach range Domestos is being re-launched in new bottles made with 50% post-consumer recycled plastic (PCR). The move across its bleach range is expected to save 1,505 tonnes of virgin plastic per annum. The change is being communicated with new front-of-pack labelling. The Domestos liquid bottles range is fully recyclable, and all products include an On-Pack Recycling Label (ORPL) logo to encourage more consumers to recycle bleach bottles. With plastic waste being a key environmental concern for shoppers, Unilever confirmed that they are already working towards bottles made with 100% recycled plastic. The new 750ml bottles are available in Original, Citrus and Pink across all UK channels with a RRP of £1.25. The move is part of Unilever's global packaging commitment, which includes reducing its absolute use of plastic packaging by more than 100,000 tonnes by 2025.



[Back to trend contents](#)

Packaging giant trialling alternative fibres for papermaking

Sustainable packaging manufacturer DS Smith, has announced that it is trialling a range of alternative materials for its paper and packaging-making process. The range of alternative fibres includes straw, daisies, hemp, cocoa shells, and seaweed. The move is part of DS Smith's £100m R&D and Innovation plan to accelerate its work in the circular economy. The company is exploring using annual plants such as daisies and agricultural waste for their fibre properties and potential paper performance. The DS Smith Innovation Team is also experimenting with cocoa shells for carton boards in chocolate packaging and is looking at other materials with a good environmental reputation. DS Smith has been trialling novel materials with research partners, The Research Institutes of Sweden (RISE), to explore how the properties of straw and seaweed could potentially work as a packaging material.



[Back to trend contents](#)

Recyclable aluminium cup to launch at iconic UK venues

Colorado-based Ball Corporation has announced that its Ball Aluminium Cup is set to launch in the UK this autumn as an alternative to single-use plastic and paper cups. The move follows a successful launch earlier this year at three editions of the Super Bowl and Coldplay's Music of the Spheres US Tour. Ball has partnered with Re:Water as the Cup's exclusive distributor in the UK. Re:Water previously distributed the world's first 100% recycled aluminium Spring Water bottle, which was the bottled water of choice at the COP26 climate change conference, last year's G7 summit. The companies say that they hope that the Ball Aluminium Cup will become a mainstay at some of the UK's most iconic venues in 2023. While Ball expects sports and entertainment venues to offer consumers easy access to return the cups, they can also be disposed of in bins and will be recycled just like cans.



[Back to trend contents](#)



Getting Noticed

Getting Noticed

Despite the growth of online, the importance of creating impactful and noticeable packaging continues to create a point of difference. The packs have a role to get noticed on shelf as well as engage and delight in the consumer's hand and again this month we have some great examples. Despite the shift to online purchases, packaging that can get noticed continues to come to our attention. The importance of standing out on supermarket shelves or even in kitchen cupboards cannot be understated.

A pack's first impression can be the difference between success and failure in an ever-increasing competitive marketplace. We have tracked several examples that do just this. Also creating an impact in the hands of consumers is also important. A challenge for brands and retailers is to deliver pack finishes and decorations that meet the need to be sustainable.



[Back to Start](#)

Getting Noticed

[Car manufacturer to release limited edition single malt whisky in luxury packaging](#)

[Whisky bottle for luxury car brand has futuristic design](#)

[Striking artwork designed for sparkling alcohol-free drink launch](#)

[Brewer launches personalised trainers with beer in soles](#)

[Researchers develop new holographic technique](#)

[Sustainable wine labels inspired by old blueprint templates](#)

[Craft beer can label utilises blacklight UV ink on label](#)

[Rebrand for customisable canned drinks company](#)

[Airline's restaurants launch innovative on-the-go packaging](#)

[Next Trend →](#)

Car manufacturer to release limited edition single malt whisky in luxury packaging

Luxury car manufacturer Bentley Motors has collaborated with Scottish distillery The Macallan to produce a limited edition single malt whisky in luxury packaging, called “The Macallan Horizon”. The materials used for the packaging includes recycled copper from the small disused stills that existed in the old distillery of The Macallan, the aluminium recovered from the Bentley Motors manufacturing process, and the recyclable carbon neutral wood, glass and leather, which are part of the newly launched Bentley Mulliner Grand Tourer. The design also features a glass bottle that rotates 180 degrees: it is said to represent the “mastery of space and time” achieved in this collaboration when creating the prototype, which does not have a vertical base. The Macallan and Bentley Motors launched their global partnership in July 2021. Information on the price and availability of The Macallan Horizon whiskey will be made available closer to its release.



[Back to trend contents](#)

Whisky bottle for luxury car brand has futuristic design

Scottish whisky makers Bowmore have partnered with luxury car maker Aston Martin to produce a stunning limited edition bottle. The futuristic design, which is said to 'harness heritage and innovation' was the result of collaboration between Aston Martin engineers and Bowmore designers. The bottle balances at two points, making it appear suspended in mid-air. The organic curved shape was achieved through asymmetrical glass blowing by Waltersperger, France, and is crafted from cosmetic-grade flint glass, along with multiple moulded parts. The inscriptions on the packaging are sandblasted. The 750 ml bottle is closed with a nickel-plated aluminium cap with a patented magnetic locking system, which is unlocked with a custom-made magnetic key. The cap is decorated with an individually numbered Aston Martin logo. The bottle is packaged in a blue box covered in calfskin, produced in Florence. Only 100 bottles will be available for purchase from late summer 2022, priced at \$125,000.



Striking artwork designed for sparkling alcohol-free drink launch

Two Finnish companies have collaborated to produce a striking board-based pack as part of a launch of a new alcohol-free sparkling drink. The packaging was produced by Orapac, and the board was supplied by Metsä Board. Its microflute structure has MetsäBoard Pro FBB Bright folding boxboard on its surface. The reverse liner and fluting are MetsäBoard Natural WKL Bright white kraftliner. After use, the packaging is easy to recycle in the paper and board recycling bins. The beverage is called Ruusunen, and the artwork for both the bottle and carton are based on a painting by six-time world boxing champion and artist Eva Wahlström. For every product sold, 50 cents (£0.42) will be donated to the Finnish Cancer Foundation. The packaging is open on both the front and the back, forming a frame around the bottle. This also minimises the amount of material needed for the packaging.



[Back to trend contents](#)

Brewer launches personalised trainers with beer in soles

Global beer brand Heineken has announced the launch of limited edition sneakers where the shoe's sole is filled with beer. Called 'Heinekicks', the personalised sneakers were produced by the beer brand in collaboration with well-known designer, Dominic Ciambrone, widely known as the shoe surgeon. The limited edition shoe features the brand's colours, with a white body and green and red lining. The beer is injected into the sole using a specialised surgical injection. There will be a total of only 25 pairs available in Vietnam, Korea, Taiwan, India, and China. The concept for the sneakers was formed by Heineken with creative agency Bartle Bogle Hegarty (BBH) Singapore. Ciambrone said that partnering with the brewer to launch their new beer, Heineken Silver, was a fun challenge as they both shared a passion for innovation, pushing boundaries, and created a design to reflect that.



[Back to trend contents](#)

Researchers develop new holographic technique

Researchers at the MIT (Massachusetts Institute of Technology) have figured out a way to repurpose hologram technology to make stretchy, colour-changing holographic film that could be used in various applications, from fashion to medical to commercial packaging. Holography is a process that creates 3D images by “superimposing two light beams onto a physical material.” The team at MIT had been studying things in nature, such as mollusc shells and butterfly wings, which seem to shimmer, which can be explained by microscopic surface structures called Bragg reflectors. These are angled and layered to reflect light; MIT likens them to tiny coloured mirrors. The team experimented with exposing holographic film using nothing more than off-the-shelf projectors, creating images in just a few minutes with vivid colour reproduction that, when stretched, change hues. The reduced exposure time of these modern-day holographies may be key to making the process viable on a large scale.



[Back to trend contents](#)

Sustainable wine labels inspired by old blueprint templates

Three Austrian companies have collaborated to bring unique, sustainable labels for wine bottles based on blueprint templates. The labels are to go on Blaufränkisch 2019, a red wine from the Dürrau vineyard, which comes from the renowned David Kerschbaum red wine estate in central Burgenland. The design for the labels was inspired by the Original Indigo Blaudruckerei Koó, who were added to the UNESCO register of intangible cultural heritage in Austria in 2010. They are one of the last companies in Europe to use this old technique to print and dye fabrics with indigo. Six different designs were created especially for the project by Joseph and Miriam Koó, owners of Original Indigo Blaudruckerei Koó, Marzek Labels+Packaging was hired to produce the unique wine labels, which were printed on sustainably-sourced paper.

[Back to trend contents](#)



Craft beer can label utililises blacklight UV ink on label

Craft brewers, Mirror Twin Brewery, and Turner Labels, both based in Kentucky USA, have announced a collaboration in which they have developed a beer can label that utilises blacklight UV ink. Turner labels collaborated with the brewery to design a blacklight label that not only revealed hidden images, but also the added benefit of humorous secret messages to create action for customer entertainment. A small blacklight was included with every brewery pack purchase for the consumer to explore the label and share. The labels were printed on an HP Indigo 6900 digital press, using HP Indigo UV Inks which were received by Turner Labels in Q2 of 2022. Following trials the exclusive UV ink was confirmed in the label design of a new craft beer named Turnin' Heads for Mirror Twin Brewery, to elevate the user experience during Lexington Craft Brew Week.



Rebrand for customisable canned drinks company

ELIQS is a California-based customisable canned drinks company. They offer customers the opportunity to design personalised cans for events such as birthdays, weddings, parties and corporate events, including photographs and portraits. They have now announced a rebrand, with what it says is a lighter, brighter digital-first identity, along with an overhauled website. The company says that as designing customised cans is not straightforward, and requires some work from the customer, the idea behind the website redesign was to make navigation as easy as possible. The main navigation has now been “stripped down” to two options which are templated designs and 100% custom designs. The company offers a range of beverages, including craft beer, canned wine, hard seltzer, and non-alcoholic water. As well as the website relaunch, the new branding will also roll out across the company’s Instagram, communications and ads and, eventually, TikTok.



[Back to trend contents](#)

Airline's restaurants launch innovative on-the-go packaging

AirAsia has several restaurants called Santan that serve its popular in-flight dishes for on-the-go consumption. One of their most popular is the Pak Nasser Nasi Lemak. Nasi Lemak is a Malaysian dish consisting of coconut milk rice, served with sambal (chilli paste), fried crispy anchovies, toasted peanuts, cucumber, and a hard-boiled egg. Santan's signature dish, is now available in a creative pyramid-shaped paper box. Designed specially with busy foodies in mind, fans can enjoy the brand's signature dish for just RM4.90 (£0.92) without the hassle of dining in. The shape and design of the packaging resembles how nasi lemak is traditionally served, which is wrapped in banana leaf and brown paper wrapper. This takeaway version is made of cardboard and lined with a plastic sheet inside. A video shared on @santan_asean's TikTok page teaching viewers how they can use the packaging has gained more than 300k views.



[Back to trend contents](#)



Refill Revolution

Refill Revolution

Refillable and reusable packaging continues to come through the innovation funnel. The growth is in part driven by the Plastic Pact aim to deliver reusable packaging by 2025. Many of the initiatives are from start-up and challenger brands with multinational brand owners also getting in on the act with small scale trials and pilots. The dry food, household and health and beauty sectors are the most active.

Reusable and refillable packaging examples have increased in occurrence as brands, retailers and suppliers look at ways of tackling single-use and difficult to recycle packaging. A change in consumer attitude is emerging with resistance to single-use packaging. The innovations collated can be segmented into the Ellen MacArthur Foundation's four reuse models – Refill at home, Return from home, Refill on the go and return on the go. Dry food, household and personal care sectors are the ones that are making the most ground. Many of the in-store examples listed are small trials and pilots as major retail chains test the water with a small number of initiatives in outlets. Their next moves will be eagerly anticipated.

Refill Revolution

[Dutch scheme delivers food in returnable glass jars](#)

[UK stationery retailer launches reusable plant-based bottles](#)

[Pet food manufacturer moves to reusable packaging](#)

[Brazilian cosmetics company to trial refilling in stores](#)

[Lightweight rPP cosmetic jar with refill system unveiled](#)

[Californian company supplies reusable shipping boxes](#)

[Technology at heart of new reuse system](#)

[US supermarket partners with reusable packaging programme Loop](#)

[Olive oil producer introduces refillable option in US](#)

[Vodka brand launches empty refillable can](#)

[Launch of market's smallest deposit and return machine](#)

[Reclosable packaging solution for large PP bags](#)

[UK sports nutrition company launches energy gel refill bottle](#)

[Returnable, refillable initiative for milk bottles in New Zealand](#)

[Parcel delivery service introduces reusable packaging](#)

[Start-up aims to supply online retailers with used boxes](#)

[World's first reusable coffee cup exchange programme](#)



Dutch scheme delivers food in returnable glass jars

Pieter Pot is a Dutch initiative that supplies a large range of food products in returnable glass jars and bottles. When a customer orders, they pay a small deposit. On their next order, they will take the empty jars back, so that they can wash and reuse the jars, after which they get their deposit back. Research carried out by the company revealed that delivering one reusable jar emits less CO₂ than delivering a pack of muesli (+20% CO₂), a plastic bottle of ketchup (+157% CO₂) and a disposable jar of mayonnaise (+32% CO₂). The company says that they use each jar or bottle at least 40 times. Since they began, Pieter Pot claims to have replaced more than 3 million disposable packaging items, and presently have over 70,000 customers. It has been calculated that the Netherlands buys 26 billion items of plastic food packaging per year, almost 3,300 per household.



[Back to trend contents](#)

UK stationery retailer launches reusable plant-based bottles

UK stationery retailer W H Smith has partnered with Dutch-based brand Bottle Up to sell their pre-filled, reusable, BPA free, plant-based water bottles. The sugar cane-based bottles are made in Wolverhampton, and filled with English spring water, provided by Elmhurst spring in Staffordshire. Bottle Up collaborated with the Dutch arm of petrochemicals giant Braskem on the concept, using their 'I'm green'™ bio-based polyethylene. Bottle Up was founded by three Amsterdam-based friends and aims to mitigate the international single-use plastic problem by stocking Bottle Up in popular destinations across Europe. In the UK alone it has been reported that over 7.7 billion single-use plastic water bottles are consumed every year, with such water bottles making up over half of the plastic waste found in the River Thames. The bottles will be sold in 438 WHSmith locations across the UK including train stations and airport locations.



[Back to trend contents](#)

Pet food manufacturer moves to reusable packaging

French pet food company Royal Canin has partnered with Finnish reusable packaging company RePack. A pilot launch has now been successfully carried out in France. Instead of customers receiving their pet food orders in a large cardboard box, they will now receive it in a returnable, reusable bag. The bags are available in three sizes, to cover the different sizes of pet, from a small cat to a large dog. Feedback from the trial was reported to be good, with customers praising the ease of use, the sustainability of the format, and being a good solution for e-commerce. The first test was considered very successful and received average customer feedback of 4.8/5. After use, the customer folds the pouch and puts it in the mailbox so that it returns to RePack who inspects it, repair it if necessary, and put it back in the circuit.



Brazilian cosmetics company to trial refilling in stores

O Boticário, the second biggest Brazilian cosmetic company, has announced that it is carrying out a pilot project of refilling directly in stores. The initial duration will be twelve months and will feature the bulk sale of products from two lines of Match, a hair care brand, in selected stores. The scheme is already in operation at two stores, one in Rio de Janeiro and another in São Paulo. The products chosen for the trial are shampoo and conditioner, which will be available in 250g and 400g options with savings of 16 to 23%, compared to the brand's conventional formats. The product will be packaged in a 100% recyclable bottle. The last step of this cycle is the recycling of used packaging, which needs to be replaced by a new one because according to local legislation it is not allowed to use the same packaging brought by the consumer to refill the contents.



[Back to trend contents](#)

Lightweight rPP cosmetic jar with refill system unveiled

Dutch beauty packaging manufacturer Fasten has launched their Refill Reuse Repeat cosmetic jar system. The company says the lightweight rPP cosmetic jar is made from 100% recycled polypropylene (PP) and features an ultra-light, thermoformed refill cup. Fasten, who are part of the Innovative Beauty Group company, says that the monomaterial rPP jar is fully recyclable. The company adds that the concept replaces ink with debossing, eliminating the use of glue. The company also says that the outer jar base is used in conjunction with an ultra-light, thermoformed refill cup that can be inserted inside the base with one click. To distinguish between cosmetic creams, different colours can be used for the refill cup. The jar is said to be suitable for cream skincare and makeup products, and is available in a standard 50ml cream jar size, and can reportedly save up to 80% on material usage compared to conventional 50ml jars.



[Back to trend contents](#)

Californian company supplies reusable shipping boxes

Boox is a Californian start-up that supplies customisable and reusable shipping boxes. Their patented, award-winning Boox Box requires no adhesive tape to keep it closed, it uses a combination of industrial strength Velcro tape and a closure tab that is designed to receive a 4×6” shipping label to act as tamper evidence for the shipment. The box itself is made of polypropylene (PP) and can be supplied in a variety of colours and also individually branded. Each Boox Box is expected to last at least ten times before it is then recycled. Boox says that they refurbish and disinfect every returned Boox to a “like new” state before reuse. Booxes may be returned via a network of return places throughout the U.S. A recent Life Cycle Analysis (LCA) demonstrated that using Boox boxes reduces environmental impact by 70% when fully utilised.



[Back to trend contents](#)

Technology at heart of new reuse system

A startup from Portugal, The Loop Co, has partnered with bulk products retailer Loja do Zero with the introduction of Zero Cups. The smart packaging initiative seeks to shake up and transform the bulk food retail sector. The Zero Cups are designed for reuse and store tracking data and useful information about the product including the expiration date, where the cups originated from and the number of times they have been reused. It is claimed that the Zero Cups can deliver a fully circular packaging system that solves the issues of bulk operations for consumers and retailers. After use, the packs are sent for cleaning so that they can be reused and the consumer receives a different Zero Cup. The product won the Novo Verde / Expresso Packaging Enterprise Award for minimizing the environmental impact of single-use packaging. Brands can utilise ready-filled Zero Cups or a Smart Bulk System automation line to incorporate into their operations.



[Back to trend contents](#)

US supermarket partners with reusable packaging programme Loop

US supermarket chain Giant Food has announced that it has entered into a partnership with reusable packaging programme Loop. Ten stores in the Washington DC area will start to offer Loop's reusable packaging later this year. Loop allows customers to buy products in reusable and refillable containers that they can return when empty to a Loop Return Point at participating retailers. Once sanitised, the containers are then refilled with products and head back to retail partners' shelves. As part of the programme, customers will be able to buy household branded products such as shampoo, soap and disinfecting wipes, and also food items like sauces, granola and snack mixes. The announcement also noted that Loop works with Minnesota-based Ecolab on its "advanced cleaning and sanitization" process for the containers. The partnership comes at a time when many retailers seek more reusable options for customers to cut down on waste.



[Back to trend contents](#)

Olive oil producer introduces refillable option in US

Italian premium olive oil producer Certified Origins has partnered with Loop, the global reuse platform. As part of the scheme, their Bellucci Extra Virgin Olive Oil (EVOO) line will soon be available as a refillable option for customers in multiple leading USA retail stores. Loop partners with brands and retailers to shift from a disposable to durable supply chain which enables consumers to responsibly shop for a wide variety of commonly used products. The move by Certified Origins is just another part of their sustainability and traceability goals, with other initiatives implemented across their various global facilities. These include zero-waste policies and solar panels for renewable energy. They use recycled raw materials and continuously invest in research and alternative packaging solutions. Also, every bottle of EVOO they produce is traceable from plant to bottle thanks to a combination of technology, with a BlockChain platform built by software giants Oracle.



[Back to trend contents](#)

Vodka brand launches empty refillable can

Tito's, an American vodka brand, has launched 'Tito's in a Can', a limited edition empty refillable can to allow consumers to make their own canned cocktails and flavoured hard seltzers (soda waters). The 16oz (473ml), double-steel-walled, insulated, refillable can comes with a spill-proof, screw-on lid. A selection of recipes for consumers to try is printed on the reverse of the can. Tito's says that they developed Tito's in a Can so that consumers can make their own, better-quality seltzers, fresh ones, that are as strong or carbonated or citrusy as they want. A 30-second campaign video has been released to accompany the launch. Tito's in a Can can be purchased online at www.titosinacan.com or at their retail store in Austin, Texas. Each can retails for US\$20 (£16.55) with all net proceeds going to the customer's choice of a non-profit that the brand has teamed up with.



[Back to trend contents](#)

Launch of market's smallest deposit and return machine

Tomra, a Norwegian recycling specialist, has announced the launch of what it says is the market's smallest deposit and return machine. The apparatus, which takes up a floor area of only 0.62 square meters, called the Tomra M1, is powered by a single-phase current and is classed as 'plug and play'. Thanks to its reported lightning-fast Tomra Flow technology, it can quickly recognize and distinguish beverage packaging in three different materials; glass, plastic and aluminium. Tomra states that the size of the machine is only 98cm wide, 63cm deep and 165cm high. It can store up to 270 PET (polyethylene terephthalate) bottles, 550 cans and 80 (unbroken) glass bottles. It is designed for convenience stores and other small shops that are part of deposit return systems that cover multiple materials and types of beverage containers.



[Back to trend contents](#)

Reclosable packaging solution for large PP bags

Fresh-Lock is a US-based manufacturer of reclosable solutions for flexible packaging. It has now launched a new product, designed for large, woven PP (polypropylene) bags of up to 50lbs (22.68kgs). The new product, called Fresh-Lock Grip and Rip, is focused on pet foods and serves as an alternative opening solution for woven polypropylene (WPP) film packaging with sewn tops. By using tear-bead functionality, the reclosable solution provides a simpler opening for consumers. The solution also provides a hermetically sealed package that helps protect pet food products from exposure to moisture and pests. The company says that pet owners want safe and convenient products, which is why their reclosability experts prioritise the consumer experience the same way pet food producers prioritise the quality of their product. As well as its Grip and Rip solution, Fresh-Lock offers a variety of reclosable solutions, which it will be showing at SuperZoo in Las Vegas, in August.



[Back to trend contents](#)

UK sports nutrition company launches energy gel refill bottle

HIGH5 is a UK-based company specialising in sports nutrition products, including energy bars, gels and hydration tablets. The business has acknowledged that although single-use plastics are widely used in their industry and are ideal for keeping energy gels fresh, this method is not very sustainable. The company says that while constantly looking at new and alternative materials they have found a solution, which is a refillable, reusable bulk gel bottle. The company says that the idea is that you fill up your reusable gel flask at home, allowing you to personalise your carb intake and even dilute the gel with water to your taste. After use, the consumer simply washes out the flask with soapy water and uses it again and again. The 150ml flask with refill costs £12.99 (\$15.37), the 250ml flask with refill costs £13.99. Single refill packs, which contain the equivalent of 13 gel packs, cost £9.99.



[Back to trend contents](#)

Returnable, refillable initiative for milk bottles in New Zealand

Synlait Swappa Bottle is a returnable, refillable initiative for milk bottles in New Zealand. The scheme works on a deposit system, and after the initial charge for the bottle, the customer just returns the empty, washed bottles, which are then sterilised and refilled. Synlait says that the charge for the bottle, NZ \$10 (£5.25), means that customers are more likely to return the bottles. The Swappa Bottles are made from stainless steel, which Synlait say is more durable and sustainable than glass. Swappa Bottles are currently available in two New World stores, which are St Martins and Fendalton in Christchurch, with more expected to follow shortly. A QR code on the base of the bottle lets Synlait and the customer trace the bottle. The code can be scanned to find out how many times it's been filled and other unique information.



[Back to trend contents](#)

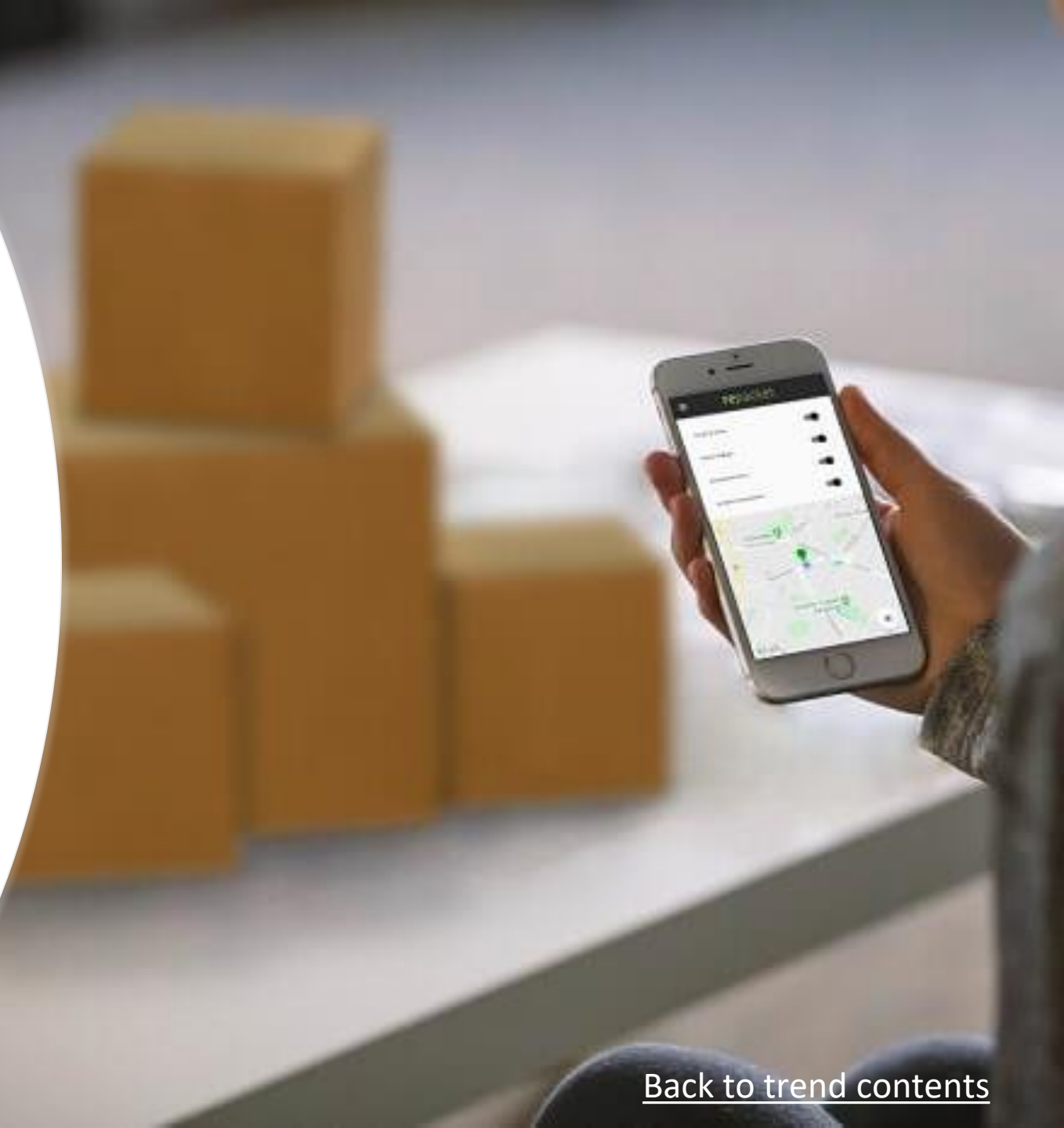
Parcel delivery service introduces reusable packaging

The Polish arm of InPost, the parcel locker and delivery service, has announced that they are partnering with online fashion store MODIVO, to introduce reusable packaging. Following trials, InPost will introduce the EkoBox, a concept of ecological reusable packaging and the first system of recycling of packaging for e-stores in Poland. The process works as follows: when purchasing MODIVO, the customer will have the option to choose the EkoBox returnable packaging – during the promotion, this option will be free. After receiving the parcel from Paczkomaty® InPost and taking out the ordered items, the consumer folds the box in the shape of an envelope and return it to any Paczkomaty by scanning the return code on the packaging. The packaging returns to the store, where it undergoes the process of quality verification and cleaning, and then redirected for re-use by MODIVO. EkoBox boxes were created in cooperation with the Danish company ReZIP.




Start-up aims to supply online retailers with used boxes

German start-up Green Projektmanufaktur (Green Project Manufactory) has launched what it calls “Repacket”. The aim of Repacket is to ensure that well-preserved shipping packaging should be reused, with the help of a free app. The company believes that a corrugated box can be reused up to three times on average without the material losing its protective properties, and if the carton is still in usable condition, it still offers the same protection as a new one. The company says that since the majority of the emissions are generated during the manufacture of the boxes, a second life is based on the assumption that around 45% of greenhouse gases can be saved by reusing them, and if it is used three times, the savings are around 60%. Using the app, a location search can be used to find dealers who accept boxes in the immediate vicinity. The providers can then bring in their used packaging material.



World's first reusable coffee cup exchange programme

Our Kinds is an Australian environmental organization that was developed as a platform to sustainably problem solve. Following a successful pilot programme, their Our Kinds coffee cup exchange programme, which replaces single-use coffee cups with rescued QR-coded op shop cups, is now operating in 20 cafes in Perth and Fremantle, and has so far reported saved more than 51,000 cups from landfill. When sold, the barista scans the unique QR code at the bottom of the cup, which then tells customers how many coffee cups have been saved. Cafés pay \$60 (£35.08), \$80 or \$120 a week subscription and receive cups of their choice, measurement technology, point of sales collateral, marketing support and advocacy to all levels of government on behalf of the sector. Customers are asked just to bring the cup back, the café will then professionally wash it before it goes back into the system for the next order.



[Back to trend contents](#)

About Us

ThePackHub is a leading UK-based packaging innovation consultancy delivering packaging solutions and insight to brand owners, retailers and packaging suppliers.

Innovation Zone

ThePackHub manages a market-leading packaging innovation platform. The easy to use resource has over 6,300 packaging innovations from around the world updated at 25 new initiatives every week. The service includes regularly updates, a monthly report summary, members only webinars and discounts off ThePackHub's range of services.

Technical Support

Our team delivers technical support for packaging projects, large and small. From quick and helpful tips and advice through to the project management of significant packaging initiatives, ThePackHub has established a strong reputation for helping companies from start-ups to multinational organisations.

Packaging Reports

ThePackHub has published several packaging reports covering important subjects such as sustainability, packaging trends, supplier guides, reusable and refillable packaging, seasonal and more.

Packaging Events

ThePackHub has delivered a dozen in-person packaging seminars that provide insight from expert speakers as well as helping to bring the industry together to network and collaborate. The team also host regular packaging webinars covering a range of packaging topics. We often attract around 300 registrations from participants around the world.

ThePackHub clients include Arla Foods, AB InBev, Amcor, Coca Cola, PepsiCo, Mondi, Premier Foods, Kraft Heinz, Mondelez, Mars Wrigley, Nestle, Church & Dwight, PZ Cussons, Walgreen Boots Alliance, Marks & Spencers, Lidl, Aldi, Waitrose and many more.

If you'd like to know more about how ThePackHub can help you, please let us know by contacting us at enquiries@thepackhub.com.



www.thepackhub.com