



PACKAGING INNOVATION

BRIEFING REPORT
NOVEMBER 2022



Welcome

Welcome to ThePackHub's Packaging Innovation Briefing Report for November 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 135 pages of content and have collated 105 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 15 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

[Technology centre develops cosmetics container made from organic waste](#)

[Scientists print edible QR codes into foods](#)

[Cellulosic biomaterials improve the functions of treated papers](#)

[Start up uses macroalgae to create bio-based, fully biodegradable plastic alternative](#)

[Packaging supplier unveils materials made from agricultural waste](#)

[Four year research programme promotes cellulose as alternative plastic packaging material](#)

[Spanish thermoformer creates biodegradable packaging for cosmetics](#)

[Supermarket chooses salmon packaging made from silphie paper](#)

[Scientists work on the creation of multifunctional packaging](#)

[Biodegradable plastic materials created using sunlight and CO2](#)

[Paper-based silicon release liners protect pressure-sensitive glue lines](#)

[Biotech company launches new concept for microwave heating](#)

[Leaf collection solution is 100% recyclable and plastic-free](#)

[Russian scientists aim to develop packaging from nanocomposite material](#)

[Swedish start up aims to achieve 100% bio-based packaging](#)

[Moulded pulp company creates cutlery with dry moulding technology](#)



Technology centre develops cosmetics container made from organic waste

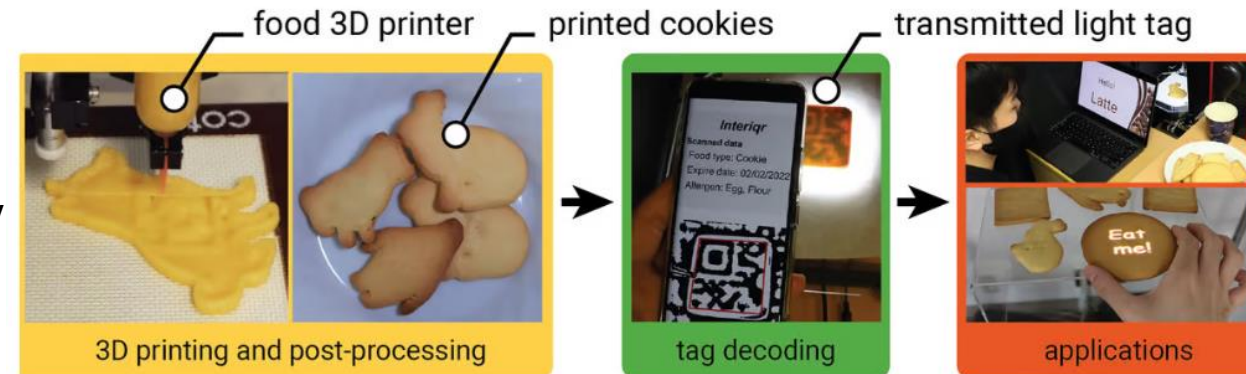
Ainia Technology Centre in Valencia, Spain has announced that it has developed a cosmetics container produced with a bioplastic obtained from solid urban waste. The production of this bioplastic has been achieved through two biological processes: the first, fermentation without oxygen, allows organic waste to be transformed into volatile substances (AGV), and in the second, these substances have been transformed by microorganisms into a biopolymer. The integration of these two bioprocesses allows the revaluation of waste, while reducing the manufacturing costs of the biopolymer, they point out from the entity in a statement. This bioplastic is one of the results obtained within the framework of URBIOFIN, a European demonstration project on the techno-economic and environmental feasibility of a biorefinery to revalue organic urban waste and convert it into bioproducts for production on a semi-industrial scale. Several container prototypes have been tested by the cosmetic companies Walla (Germany) and Weleda (Switzerland).



[Back to trend contents](#)

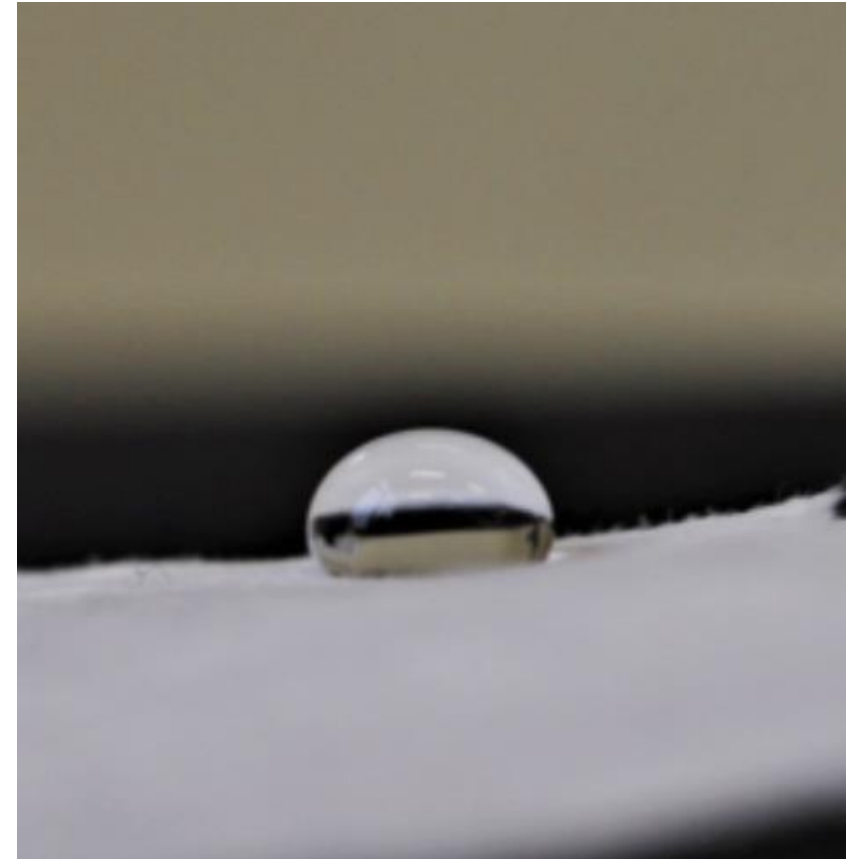
Scientists print edible QR codes into foods

Scientists from Osaka University in Japan have developed a way of printing a 3D QR code within food. Called interiqr, (as in 'interior QR'), doing so doesn't affect the taste or outward appearance of the food, nor does it require the use of any labels. The researchers recently 3D-printed cookies which were smooth and normal-looking on the outside but contained a pattern of air voids on the inside. Although those patterns couldn't be seen under normal lighting, they showed up as silhouetted windows when the cookies were viewed from the front while lit from behind. An ordinary smartphone was then able to read the codes, revealing the data stored within. The scientists are hoping that it could ultimately provide manufacturers, retailers and consumers with an alternative to more wasteful, costly approaches such as the paper labels that are routinely applied to fruit, or RFID tags that are applied to packaging.



Cellulosic biomaterials improve the functions of treated papers

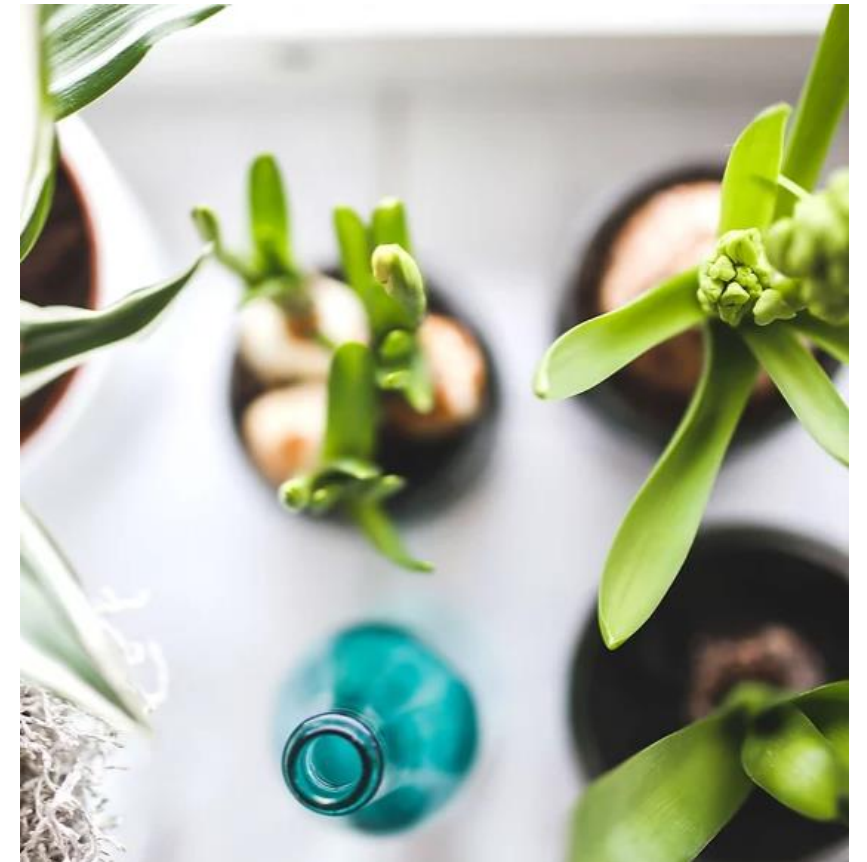
FunCell is a French company exploiting a breakthrough innovation from a leading French academic laboratory, by creating a new generation of additives for cellulosic materials to improve the mechanical strength to treated papers, both in wet and dry state. FunCell is a shortened name that derives from 'Functionalisation for Cellulosic materials'. The company supplies two products BioWet and BioGraft. FunCell extracts from biomass a polymer whose role in nature is to give strength to cellulosic materials and they further improve this capability by slightly modifying the polymer thanks to a green chemistry process. BioWet is fully bio-sourced, biodegradable and doesn't hinder the recyclability of paper or cartons, while no changes are required to the paper-making machine. BioGraft comes as an additional benefit to paper and cellulosic materials treated with BioWet. The company says that the combination of BioWet and BioGraft opens a range of applications for the cellulose-based packaging industry.



[Back to trend contents](#)

Start up uses macroalgae to create bio-based, fully biodegradable plastic alternative

Biotic is a start up that uses macroalgae and a secret recipe to create fully bio-based, fully biodegradable PHBV (Poly (3-hydroxybutyrate-co-3-hydroxyvalerate)). PHBV is a microbial biopolymer with reported excellent biocompatible and biodegradable properties that make it a potential candidate for substituting petroleum-derived polymers. The unique biological polymer that Biotic uses, is produced from a ubiquitous and naturally grown sea algae. Using these macroalgae in the process, carbon dioxide is absorbed, and the macroalgae can assist in reviving marine life as the two provide a mutual contribution to each other; the algae feeds from the marine life nutrients, and other marine life feeds on the algae. Biotic's polymers are completely biodegradable without any need for a specific environment (such as compost), the result being that there is no need to sort garbage or to recycle the final products, as they simply degrade back to CO₂ and water.



[Back to trend contents](#)

Packaging supplier unveils materials made from agricultural waste

Test Valley Packaging, based in the south of England has formed a partnership to bring to market packaging made from reused agricultural waste, also known as RAW. Card and paper will be supplied by London-based envopAP in a number of different formats for a wide range of packaging products including cartons, printing paper and mailing bags, with room for innovation to expand to void-fill and paper bubble-wrap. The material comes from India and is a by-product of the sugar industry, also known as bagasse. Until recently, the huge amount of sugar cane waste generated was simply discarded by farmers who had little use for it. The manufacturing process is exactly the same as that of wood pulp and does not consume any more energy. The company also claims that RAW Packaging could mean a saving of up to 28% of carbon emissions compared with producing paper and card from wood pulp.



[Back to trend contents](#)

Four year research programme promotes cellulose as alternative plastic packaging material

Earlier this year, the Grenoble Institute of Engineering and Management (INP) in France, launched the Cellulose Valley Industrial Excellence Chair, in order to offer the industrial sector high-performance and recyclable cellulose packaging in the paper industry. The programme, which will last for four years, will work on proof of concepts and propose solutions expected by society in these areas. The work will be supported by eight companies that have a vested interest in the promotion of cellulose, including Ahlstrom, DS Smith, Guillin Emballage, Aptar, Decathlon, Marie, Chanel, and Citeo. The idea is to work on primary and secondary packaging, for food, cosmetics or other sectors with often common issues, such as those relating to barrier properties for liquid formulas, closure constraints or decorations. The first projects included work on Gruyère and chocolate packaging, on wedging elements, new types of corrugated cardboard, and on high-performance moulded cellulose.



Spanish thermoformer creates biodegradable packaging for cosmetics

Pohuer is a Spanish thermoforming company based in Alicante. They have just launched a range of standard packaging for cosmetics that is made from biodegradable materials with minimal environmental impact. The company says that the move has led it to a reduction of 8,000 tons of waste by changing to totally biodegradable materials and energy savings of 70% in its production processes while also not using harmful additives. Pohuer says that it has incorporated a polyethylene-based enzymatic additive into the base material of each product, which contains a series of catalytic enzymes that will help to break down the material. This new material will, with an adequate composting process, completely biodegrade into carbon dioxide, biomass and water. The decomposition of the container can be total or partial depending on the thickness and exposure of the product. Biodegradation has been proven through various certifications.



Supermarket chooses salmon packaging made from silphie paper

German supermarket chain Kaufland has announced that it will offer its K-Bio smoked salmon in paper-based packaging made from silphie, supplied by sustainable material manufacturer OutNature. Silphie, also known as the cup plant, is native to eastern and central North America. It grows anywhere from 3 to 8 feet tall and has reported low demands on the climate, soil and the previous crop. It also produces high amounts of biomass. In addition, the processing of the silphie fibres uses less water and energy, and the fibres are obtained without using chemicals. OutNature has succeeded in separating the fibres of the energy plant Silphie using a biothermal process before bioenergy production and in making them usable as a new raw material produced in Germany. In 2021, silphie was flowering in around 8,000 hectares in Germany.



[Back to trend contents](#)

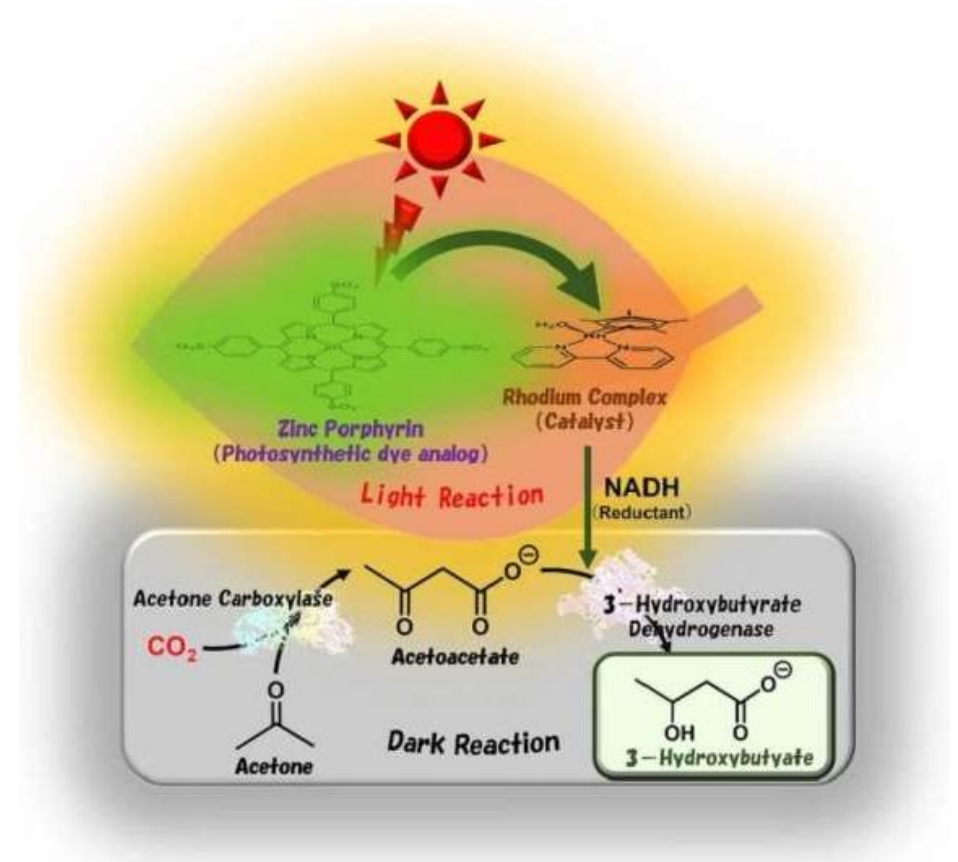
Scientists work on the creation of multifunctional packaging

Czech scientists at the Mendel University in Brno, in the country's southeast, have announced that they are working on functional packaging materials. These include edible, enriched and 3D printable packaging and are based on three types of material, namely biopolymers, lipids and additives. Biopolymers are edible with nutritional qualities, that is, polysaccharides and proteins. In the group of lipids, that is, edible waxes and oils, the natural resin of shellac and olive or oregano oil stand out. Its specific function in the container is insulation, as it prevents the passage of moisture. The additives include substances that work as softeners or plasticizers to ensure that the final material is flexible and does not break. They see the next step in enriching the containers with vitamins and other substances with nutritional value that, in addition, could be printed on 3D printers together with the food itself.



Biodegradable plastic materials created using sunlight and CO2

Scientists at Osaka Metropolitan University have announced a significant advance with their innovative artificial photosynthesis technology that produces biodegradable plastics from acetone and CO₂. This has been designed to address the plastic waste crisis while moving toward the goal of carbon neutrality. The team from the Research Center for Artificial Photosynthesis at Osaka Metropolitan University has successfully synthesized 3-hydroxybutyrate, a raw material for poly-3-hydroxybutyrate (PHB), a strong water-insoluble polyester used for packaging materials, from acetone and CO₂. With a visible light-driven catalytic system utilizing sunlight and two biocatalysts, the researchers achieved a yield of about 80%. Mimicking natural photosynthesis, the team artificially reproduced a light reaction, which involves sunlight, and a dark reaction, which fixes CO₂, and synthesized 3-hydroxybutyrate. In the future, they aim to produce 3-hydroxybutyrate through artificial photosynthesis using CO₂ contained in exhaust gas emitted from factories.



Paper-based silicon release liners protect pressure-sensitive glue lines

Oxford-based Essentra Tapes has launched a new range of paper-based silicon release liners, called EASILINER, that are designed to protect pressure-sensitive glue lines. It enables the preservation of adhesive qualities on packaging formats where a glue line is used in production. It is expected to cater for the e-commerce packaging market, maximising the efficiency of customer operations, reducing machine downtime and minimising material changeovers. The paper release liners are available as kraft, glassine, and clay coated liners, at a range of grammages and finished reel widths. Essentra Tapes' capabilities also uniquely allow for both pancake and traverse/spool wound reel formats, with the latter offering a route to increased efficiency and subsequent cost savings for sheet plant businesses. When used in tandem with the widely deployed RippaTape collection, Essentra says it represents a complete opening and closing solution for sheet plant converters.



Biotech company launches new concept for microwave heating

Swedish Biotech company Gaia Biomaterials has launched a new product that is suitable for the microwave heating of food but is also compostable. This achievement has been the goal of Gaia since the business launched. A spokesperson said that since the company was founded, they had nurtured a vision of a microwave-safe material that could also be broken down in a home compost. Step by step, they have approached the goal by adjusting the material and the production process to achieve their goal. The new material is a thermoformable version of their mineral-filled biomaterial Biodolomer, which is available in various forms, such as film, bags and pouches as well as trays and cutlery. Their latest innovation was launched at Scanpack 2022, in Gothenburg.



Leaf collection solution is 100% recyclable and plastic-free

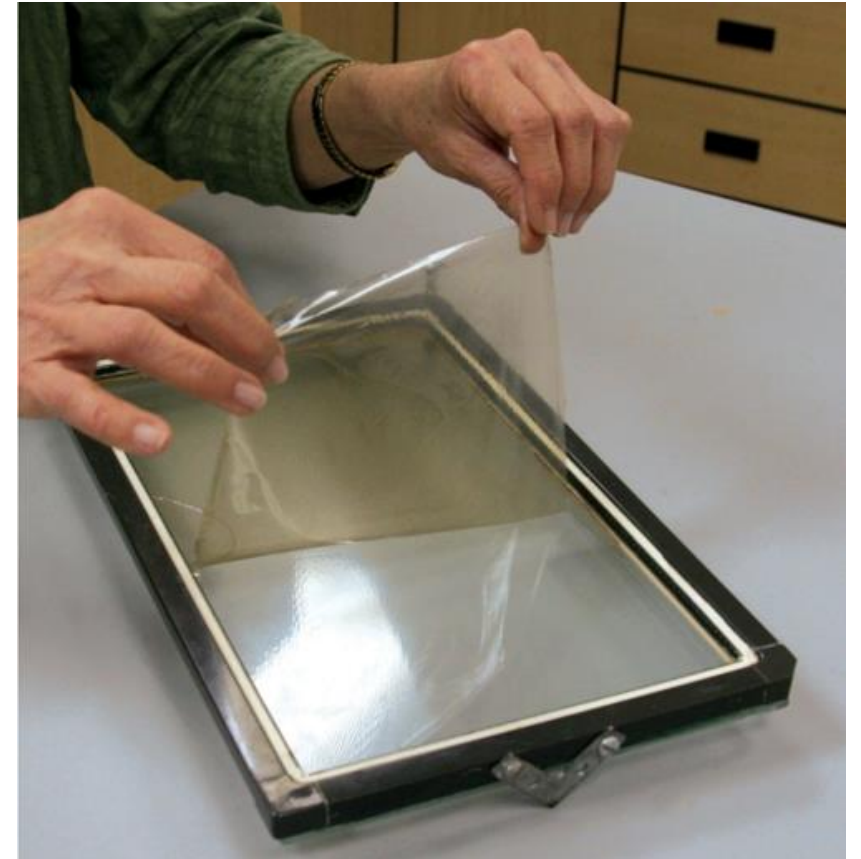
The American division of DS Smith has announced the launch of The GreenChute, which is a 100% kerbside recyclable and reusable corrugated yard waste bag filler. The GreenChute utilises DS Smith's Greencoat technology, which is a wax-free, 100% recyclable coated alternative to wax-coated boxes that provides a safe and leak-proof barrier while also moving away from fossil-fuel based materials in favour of fibre-based alternatives. Thanks to its Greencoat technology, GreenChute resists moisture to help easily collect yard debris, including leaves, branches, grass and other waste. The cardboard lawn funnel holds the user's lawn bag open and in place to easily rake leaves and lawn clippings into a pile and place them through GreenChute into the bag for disposal. The cardboard structure includes a printed QR code that, when scanned, shares the assembly and usage instructions for consumers.



[Back to trend contents](#)

Russian scientists aim to develop packaging from nanocomposite material

Scientists from the Department of Analytical Chemistry at St. Petersburg State University have announced that they are developing biodegradable packaging from the remains of agro-food waste. The material they intend to develop will take the form of a nanocomposite film, which as well as being biodegradable, is also edible. A spokesperson for the university said that the nanocomposite will consist of carrageenan (an extract from a red seaweed known as Irish Moss, commonly used as a thickener and gelling agent), arrowroot starch and nanocellulose with the addition of flower extract. These ingredients are seen as environmentally friendly resources that are sourced from the remains of agro-food waste. The packaging will be degradable, free of toxins and carcinogens, and will protect bacteria and germs from growing on products. They also added that the film will increase the shelf life of products and will change colour when they begin to deteriorate.



Swedish start up aims to achieve 100% bio-based packaging

Swedish start-up Yangi, is collaborating with a number of project partners. They have a goal of understanding and developing new barrier chemistry and methods for the formation of fibre-based packaging related to dry-forming and wet-moulding technologies. Yangi manufactures machines for the dry forming of cellulose fibres into various types of recyclable packaging, with the intent of pushing the packaging industry to become more environmentally sustainable. Yangi claims its technology is new and makes it possible to go from cellulose pulp to finished packaging in one machine line using no added water. Project partners include Holmen Iggesund, Solenis, Fiber-X, FutureLab & Partners AB, Duni Group, KTH Royal Institute of Technology, Lund University in Sweden and an unnamed premium brand owner within the consumer goods segment. Yangi says the wider aim of the project is to achieve 100% bio-based packaging without losing product qualities that can satisfy the rising demand for circularity and recyclability.



[Back to trend contents](#)

Moulded pulp company creates cutlery with dry moulding technology

Swedish moulded pulp packaging company Pulpac has announced that it has created cutlery from an 'almost no water' process, known as Dry Moulded Fibre technology. The company says that it has invented a dry fibre forming technology that uses air, instead of water, enabling manufacturing speeds that are up to ten times faster than conventional fibre forming, and which saves massive amounts of both water and energy. CO2 emissions are also lowered by up to 80% compared to single-use plastics. A report by the Research Institute of Sweden found that spoons made from the material are biodegradable and have good recyclability. The climate impact of the spoons is reported to be 2.5 g CO2 equivalent per spoon (3.8 g each) or about 0.66 kg CO2eq per 1 kg product. The programme has designs ready for protective lids, coffee cup lids, cold drink lids, cutlery and trays.



[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.

Everyday Engagement

[Eco-friendly soap packaging made from vegetable waste](#)

[Low cost packaging created from seaweed](#)

[Korean PE manufacturer chooses bio-based anti-fog additive](#)

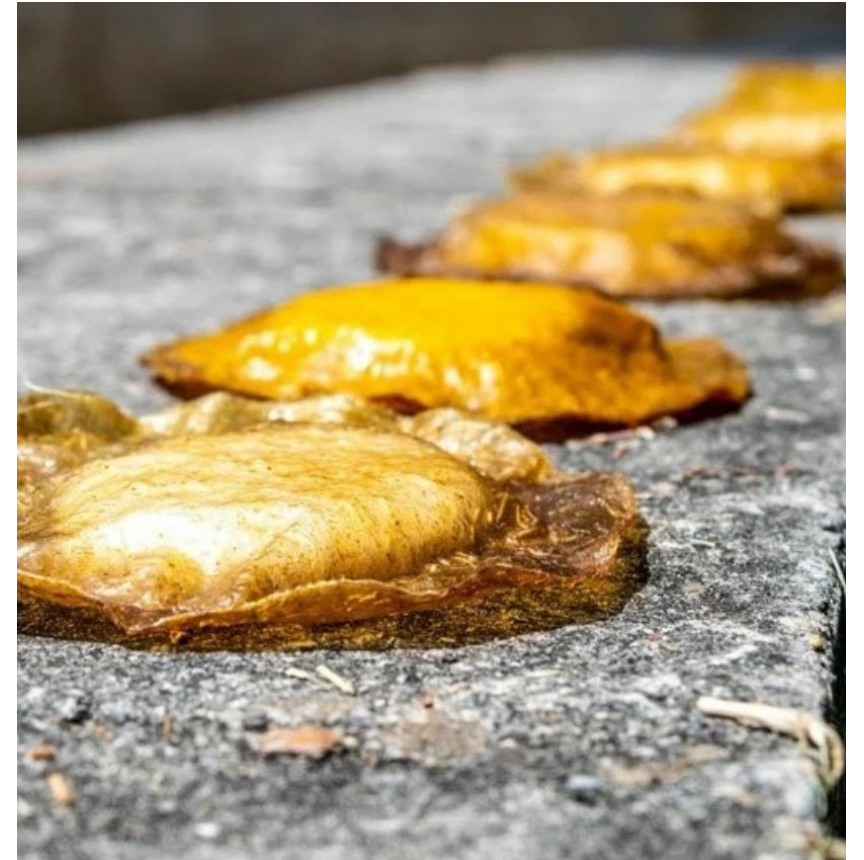
[Liqueur manufacturer launches bottle with temperature-sensitive label](#)

[Japanese customers can personalise drinks bottles](#)



Eco-friendly soap packaging made from vegetable waste

A Turkish designer has developed eco-friendly soap packaging made from waste vegetable matter. The product, called “Packioli” is made primarily of waste artichoke leaves, which make up around 80% of the product. This is then combined with peapod bioplastics in order to create packaging that commercial soap brands can use. To give the packaging a little colour, beetroot and turmeric are added. It is said to be fairly easy to open either on its own as you tear it or if put under water pressure. The packaging is reported to be able to withstand being wet for about a week, after which it starts to biodegrade. The finished product has a distinctive, uncommercial look, with a handmade, rustic feel to it and is unlike anything currently available on the market.



Low cost packaging created from seaweed

Mumbai-based start-up Zerocircle is making low cost packaging from seaweed. It is considered a potential effective resource for making bioplastics because it comes with a low water and land footprint. It is harvested in the sea, so no fertilisers or pesticides are added. Extra water is not required, the sea has everything required for the seaweed to grow. Zerocircle source their seaweed through tie-ups with two farms in Gujarat and Tamil Nadu, who cultivate it for them. Zerocircle uses largely red, brown, and green seaweed, which amounts to about 12,000 species. After collecting the seaweed, it is dried and turned into a powder, which is then turned into the final material. With this, they make handbags, bags for clothes, film for food, and more plastic alternatives. Also, unlike other bio-based alternatives, it does not emit methane when it degrades. Zerocircle aims to produce a tonne of seaweed-based film a day.



Korean PE manufacturer chooses bio-based anti-fog additive

Palsgaard is a Danish company that specialises in emulsifiers and stabilisers for bakery, dairy and other food products. They also have a range of bio-based, food-grade polymer additives to optimise the shelf-life, aesthetics, safety and sustainability of sensitive food packaging. The business has now announced that their Einar 611 bio-based anti-fog surfactant has been specified by a South Korean supplier of food-grade polyethylene (PE) film solutions. The customer had been looking for a cold anti-fog additive that would effectively protect the packaged food from spoilage by preventing the formation of condensation droplets on the inside of the film. Einar 611 is a renewable polyglycerol ester made from vegetable oils that are not competing with food or feed sources, and has been developed as a highly effective replacement for conventional anti-fog chemistries. Produced in reported fully CO₂-neutral factories, it helps PE film manufacturers, masterbatch makers and processors minimise their Scope 3 emissions.



[Back to trend contents](#)

Liqueur manufacturer launches bottle with temperature-sensitive label

German liqueur Jägermeister has announced the launch of a promotional bottle that features a temperature-sensitive label. By freezing the bottle down to -18°C , a code on the label to the rear of the bottle is revealed allowing consumers to enter an online competition to win various prizes, including mini Jägermeister freezers, a Jägermeister 'cradle' which keeps a bottle at its optimum temperature, £50 Jägermeister e-shop vouchers and branded green shot glasses. The ultimate, however, is the grand prize of a European Jägermeister festival experience for four. 500,000 promotional bottles have been produced in the German market for both 70cl and 50cl (plain and price-marked) sizes. The company says that other bigger prizes will be announced on social media through the end of the year, alongside Jägermeister's ongoing 'The secret is ice cold' campaign.



Japanese customers can personalise drinks bottles

While shopping at the Shinjuku Marui Main Building in Tokyo, a new stand lets customers personalise their drink bottle labels, and is operated by a start-up called Col.a.fruits. This new business offers colourful fruity drinks in personalised bottles. Customers can order from a selection of seven fruit lattes and seven fruit teas, which can be customised through a phone before picking up at the shop. Going to the Col.a.fruits website, consumers can pick either a latte (milk) or tea base and their choice of fruit flavours including strawberry, peach guava, pineapple, mango, melon, blueberry and apple lychee. The label colour can then be customised, a name and emoji stamp added, and the addition of a short English message. Once the customer is happy, they pay directly on the website and receive a QR code and time slot to pick up their drink. Prices start at ¥920 (£5.57).



[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 instore. 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.

The Online Surge

[Anti-theft package delivery box has alarm protection](#)

[Wine start-up creates e-commerce friendly solution](#)

[Polish online company replaces plastic mailers for paper](#)

[German returnable packaging system aimed at the e-commerce market](#)

[Sustainable e-commerce shippers can be used over 200 times](#)

[Recyclable packaging solution aimed at e-commerce sector](#)

[Label manufacturer introduces thermal linerless labels](#)



Anti-theft package delivery box has alarm protection

Nevada-based DoorBox claims to be the world's number one anti-theft package delivery box with alarm protection. The locking assembly securely connects and disconnects to all types of doorknobs, guardrails, posts or a wallmount (supplied) in about 3 seconds. The DoorBox is secured using the alarm-enabled steel cable. When packages are brought to the door, the delivery person will simply place them inside, without needing any code to open it, then press the lever to lock it closed, securing all of the packages. If the recipient has multiple packages being delivered on a single day, they can set delivery instructions on an Amazon account just once. Amazon will send those delivery instructions out during every delivery. DoorBox is also completely weatherproof, yet lightweight and portable. The tamper-proof alarm has a rating of 120 decibels. The Ultra Premium Doorbox is available for \$189 (£167).



Wine start-up creates e-commerce friendly solution

Australian wine start-up Greenskin Wines, which was founded in 2020, has been awarded two awards at the Packwine Design Awards. Greenskin was recognised for its innovative approach to wine packaging in both the Best Alternative/Sustainable Package Design Award and People's Choice Award for its recyclable soft pouches, which are said to take 80% less energy to produce compared to a 750ml glass bottle, and its 6-pack, which comes with a prepaid mail-back recycling system for return to partner REDCycle. It has a box weight of only 4.8kgs. The pouch material is a laminate of high density polyethylene (HDPE), low density polyethylene (LDPE), aluminium (foil), nylon, polyethylene terephthalate (PET) and polypropylene (PP), while the neck and lid are made of HDPE. The company says that the innovative design provides a game-changing solution to the current glass bottle crisis in Australia, where more than half of glass wine bottles end up in landfill.



[Back to trend contents](#)

Polish online company replaces plastic mailers for paper

Modivo is a Polish online fashion brand. They have announced that they have introduced a new packaging solution called Papieropaki. The new paper-based format is to take the place of the previous plastic packaging. Customers are starting to receive their orders in MailerBags made of Kraft paper, which is a renewable resource. The packaging comes from a local supplier, is prepared according to the criteria of sustainable development and is recyclable. The bags are available in three sizes, and are adjusted to the weight of individual products. The new packaging is used across all of the products that Modivo sells except for products that are too heavy, and could tear the paper bags and potentially damage the goods. The Papieropaki mailers are made of a raw material that is recyclable and depending upon thickness and conditions, will decompose within a few months.



German returnable packaging system aimed at the e-commerce market

Wir Kiste Kreis is a German returnable packaging system aimed at the e-commerce market. The drive to make this change was due to the rate that forests are being felled so they decided that part of the solution would be the introduction of reusable and returnable shipping boxes. The company says that their boxes are made from 100% recycled and recyclable material, are more stable than comparable boxes, and are easy to erect. There is a flap incorporated in the design to make returning easier. They are reported to be inexpensive to produce and FSC (Forestry Stewardship Council) certified. They also say that their system is fully traceable via an app, and the return system is available to any customer. Through the app, returning the boxes can be incentivised. They have calculated reaching the ecological break-even point after the first reuse. It is reported that if all 4.51 billion shipments were sent with their box and only reused a second time, Germany could save 329,531 tons of CO₂e per year.



Sustainable e-commerce shippers can be used over 200 times

LimeLoop is a sustainable shipping company based in San Francisco. They provide upcycled mailers for companies to post their products to customers. Orders are zipped up into a LimeLoop returnable package. The secured pack is then mailed out to the customer complete with a prepaid return label. Once delivered, the customer simply removes the order and flips over to reveal the return label. The customer then simply leaves the empty LimeLoop package for the carrier to pick up or posts it back themselves. The package then goes back to the retailer to be used over and over again. It is claimed that the LimeLoop Platform takes the guesswork out of the logistics process, providing the vendor with insights on their environmental impact savings, location of their packages, and resources to promote fast and reliable delivery. The reusable packaging is sleek, durable, and lightweight, and LimeLoop says each pack is durable enough to be reused up to 200 times.



Recyclable packaging solution aimed at e-commerce sector

Finland-based Walki has announced the launch of a new packaging solution aimed at the e-commerce and non-food sectors. WalkiFibre Wrap is said to offer high strength and is also heat sealable, unlike many other paper-based packaging solutions that are glued. The major advantage of heat-sealable paper solutions is that manufacturers can use the same equipment that is used to seal plastics. WalkiFibre Wrap can be offered as a base material with heat seal properties on the back and a high quality flexo print on the front. There is no need to hire a separate print service provider as Walki can supply the finished packaging material on rolls. Traditionally, most paper-based packaging solutions are coated with polyethylene (PE), making them difficult to recycle, whereas WalkiFibre Wrap is heat sealable and fully recyclable, with no need to separate the coating before recycling.



Label manufacturer introduces thermal linerless labels

Ohio-based label manufacturer Avery Dennison Label and Packaging Materials has announced the launch of a new direct thermal (DT) linerless label platform. The company states that the unit is designed for information labels, e-commerce, food delivery and pick-up, quick-serve restaurants, weigh scale and logistics applications. The unit is reportedly 32% thinner than lined labels and holds 50% more labels per roll. This leads to fewer roll changes, increasing operational speeds, and improving warehouse utilisation. The product is available through a flexible service model with roll widths from 4-in. to 60-in (10cm – 152cm). The linerless label platform uses emulsion adhesives to support semi-permanent and removable applications with adhesive and silicone coatings, which means self-wound labels won't stick to those underneath. The company says that the Avery Dennison blank linerless labelling solution offers productivity, sustainability, and safety benefits.



[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



[World's first thumb activated trigger spray](#)

[Laptop packaging can be converted into computer stand](#)

[Collaboration develops a new solution for reclosable packaging](#)

[New app allows visually impaired to hear health product information](#)

[New patented dispensing technology chosen for two new beauty launches](#)

[American food producer launches hummus in squeezable pouch](#)

[New paper-based pasta pack features double label](#)

[First champagne bottle designed for space travel](#)

[Frozen food manufacturer introduces packaging to aid visually impaired](#)

World's first thumb activated trigger spray

Canyon Europe, who are headquartered in Northern Ireland, develops what they say are world class, innovative and environmentally friendly dispensing systems. Their latest offering is the Poseidon, which Canyon says is the world's first thumb-activated trigger sprayer, and that they claim is lightweight and easy to use. Poseidon has a distinctive look, with an ergonomically shaped handle which is said to provide easier and better control, while also creating shelf impact. Poseidon has been designed to keep hands away from the liquid when in use, giving improved user safety, while a built-in security feature prevents leaks during transit. It is claimed to be highly compatible across a wide range of product areas, including professional and home cleaning uses, for use in animal care, and in the garden for fertilisers and weed control. Designed for improved durability, Poseidon has been developed to be reused.



[Back to trend contents](#)

Laptop packaging can be converted into computer stand

As part of the launch of its new ExpertBook B9 14" laptop, Taiwan-based computer hardware manufacturer ASUS has gone a step further in advancing the sustainability of its computer packaging. Not only is 95% of the box made from FSC Mix paper, meaning all wood, paper, and/or other wood-based materials within the product come from FSC-certified material, recycled material, or controlled wood, but it is also designed to be repurposed as a computer stand. The laptop box incorporates magnetic suction to make the process of folding the box into a laptop stand easy for consumers. The multipurpose box was designed by ASUS's in-house packaging department, a division established specifically to focus on packaging material research and innovation. ASUS says that it has received positive feedback from users, who apparently love the packaging design.



Collaboration develops a new solution for reclosable packaging

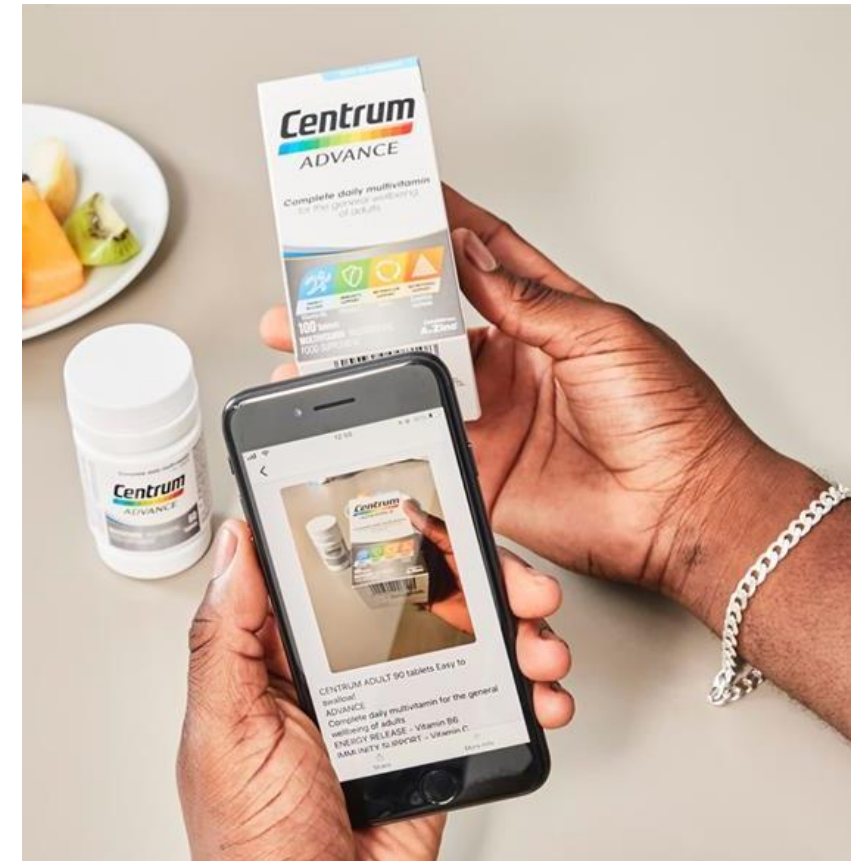
Two European chemical companies have collaborated to bring a new solution for reclosable packaging to market. German company Henkel, and Dutch company LyondellBasell have jointly developed a new reclosable system more convenient for consumers. This innovation uses Henkel's hotmelt adhesive, which is itself based on a LyondellBasell plastomer. Thanks to its unique composition, the final hot melt adhesive manufactured by Henkel allows it to achieve a soft first opening while maintaining the desired reopening and closing properties in APET containers and polyolefin trays, even after multiple uses. The solution is said to have very good compatibility with coextruded materials such as PE (polyethylene) or PETG (polyethylene terephthalate glycol). The companies say that the use of reclosable systems is expected to increase in the coming years as concern about food waste increases among consumers.



[Back to trend contents](#)

New app allows visually impaired to hear health product information

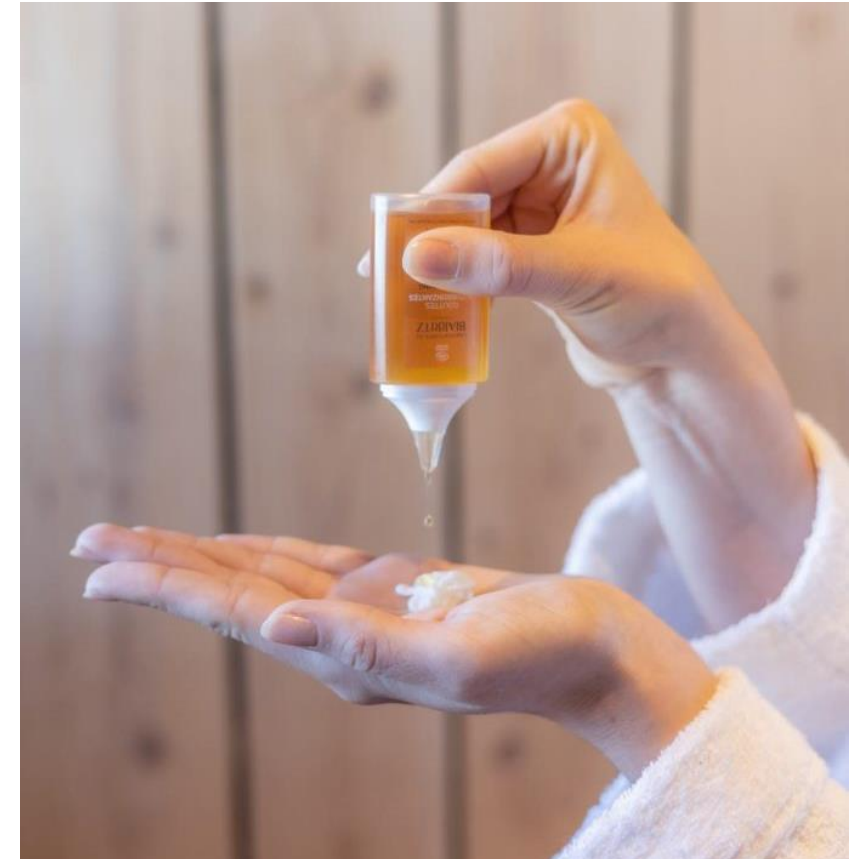
In a joint project, British multinational consumer healthcare company Haleon and technology giant Microsoft are launching an enhanced version of the latter's Seeing AI app, which they say will advance inclusivity and improve accessibility. This new collaboration will help people who are blind, have low vision or have difficulty reading packaging labels due to low literacy. With the launch of Haleon's 'Always Read the Label,' campaign for World Sight Day, consumers will be able to access more detailed labelling information directly from Haleon by scanning the product barcode. Consumers will be able to hear important label information for over 1500 everyday consumer health products such as Sensodyne, Centrum, Aquafresh, ChapStick and Emergen-C. The app will read out the product name and all text on the packaging. The user can skip ahead or move back to the relevant section. There are plans to expand globally and add additional languages in the future.



[Back to trend contents](#)

New patented dispensing technology chosen for two new beauty launches

Aptar Beauty and Home has announced that its Star Drop dispenser with patented SimpliSqueeze technology has been chosen for two new beauty product launches. It will be used for French cosmetic company Laboratoires de Biarritz's Face & Body Self-Tanning Drops and French children's skincare company OUATE for its MY 1,2,3 SUNSHINE sunscreen. Star Drop's SimpliSqueeze valve with retraction, gives an ultra-precise, immaculate, drop-by-drop dispensing experience. Its transparent pipette applicator and soft bottle allows for a perfect dosage. Star Drop is a full package solution, is compatible with PP recycling streams, and is also available with the option of integrating post consumer recycled (PCR) content. The company says that the ergonomic design of Star Drop makes it easy to use and dispense with just one hand. The pack is compliant with ECOCERT/COSMOS specifications regarding organic formulas. It is also ISTA-6 certified, making it suitable for e-commerce applications.



[Back to trend contents](#)

American food producer launches hummus in squeezable pouch

New York-based Ithaca Hummus has announced the launch of a new travel-friendly snack called Ithaca Squeeze. The new product, which is aimed at children, comes in a squeezable pouch. The protein-packed, gut-friendly snack is available in three varieties, Plain, Beet, and Red Pepper. Ithaca Squeeze packs strong flavours in a convenient, portion-controlled 3oz pouch with 5g of fibre and 7-8g of plant-based protein for consumers to take with them wherever they go. The company says that consumers can squeeze it on their favourite crackers, crisps, and vegetables, or eat it straight up to make lunch boxes, or even office snacking, more enjoyable and filling. Parents and snackers can purchase Ithaca Squeeze at select retailers including Whole Foods (North Atlantic & Northeast), Fresh Direct, Big Y, Hungryroot, Price Chopper, Albert's Organics, and UNFI Fresh, with additional retailers rolling out nationwide throughout the fall for \$2.99 per pouch.



New paper-based pasta pack features double label

Earlier this year, Lustucru launched its “Good French pasta” range, which the company says was its first 100% paper-based pack. This also applied to the reclose label, and the move will save an estimated 40 tonnes of plastic and 160 tonnes of cardboard per annum. The company also says that the consumer “can better feel and imagine” the pasta through the new packaging. The new packaging, supplied by Picourt Packaging also features an innovative feature to prevent the paper bag from tearing. The reclose element is two labels, and one always stays attached to the bag, with the other resealing to it, thereby preventing the bag from tearing on opening and closing. Picourt Packaging also says that the double label, which resulted from months of research and testing, is printed on “eco-sourced adhesive paper”.



First champagne bottle designed for space travel

Axion Space are the builders of the world's first commercial space station. In a collaboration with champagne producer Maison Mumm and designer Octave de Gaulle, they have produced the first champagne bottle designed for space travel. Mumm Cordon Rouge Stellar is contained in a 375 ml glass bottle that is secured by a stainless-steel opening and closing device. It sits inside a shell made from aeronautical-grade aluminium, which was designed to protect the bottle. Rules state that for a pressurized liquid container, a second protective layer is to be provided in the design in case of failure of the first one. The bottle's upper part consists of a long neck, topped with a ring that retains the cork and locks the bottle's stainless-steel mechanism. This prevents the cork from popping and allows the bottle to be safely uncorked. Despite its futuristic look, the bottle aims to let users recreate the usual champagne-tasting experience.



[Back to trend contents](#)

Frozen food manufacturer introduces packaging to aid visually impaired

British frozen food manufacturer Aunt Bessie's, has introduced NaviLens technology to two of its most popular products in order to support visually impaired shoppers. The move, in collaboration with the Royal National Institute of Blind People (RNIB), uses tags on the packaging to provide audible product information and navigation to assist the visually impaired, increasing the packaging's inclusivity. The customer uses the NaviLens app on a mobile device, and the tags on the packaging can then be accessed, without focus, and up to 12x further away than ordinary QR codes, making the product easier to locate both in-store and at home. Customers will then be provided with audible information about the product, such as the product's ingredients, instructions for cooking, and recycling, which can all be heard aloud through the shopper's mobile device. The tags are on packs of Aunt Bessie's Glorious Golden Yorkshires and Crispy & Fluffy Roasties.



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 19 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 not likely in the short to medium term.



[Back to Start](#)

Materially Changed

[Plastic-like material developed with different physical properties in different areas](#)

[Dishwasher tablets move to paper-based packaging](#)

[Skin care products launched in water-soluble sachets](#)

[Online retailer introduces new steak packs to target plastic reduction](#)

[Industry first claimed for olive oil in aluminium bottle](#)

[Supermarket chain switches coffee pods from plastic to aluminium](#)

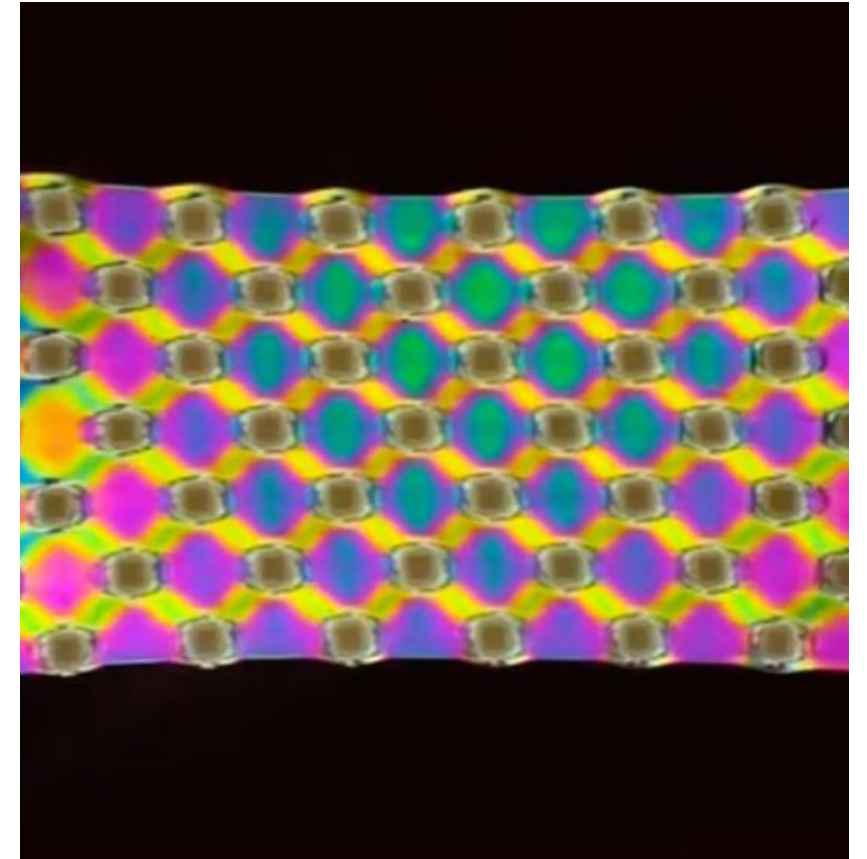
[Beverage giant to trial the removal of plastic shroud packaging](#)

[Crisp brand moves outer packaging from plastic to board](#)

[Next Trend →](#)

Plastic-like material developed with different physical properties in different areas

Scientists at the University of Texas at Austin have developed a first-of-a-kind plastic-like material that is pliable in some areas and stiff in others. As a starting point, the chemists used monomers, small molecules that band together to form polymers. In this case, the polymers were much like those found in commonly used plastic. However, after testing a dozen candidates, the scientists found a catalyst that could be integrated into the monomers to make them respond to visible light, delivered with a cheap blue LED. This had the effect of creating a semicrystalline polymer with similar attributes to rubber, forming a hard and rigid material. The areas not exposed to light, meanwhile, remained soft and stretchy. As well as potential packaging applications, the researchers have imagined a broad range of applications for their creation, including anchoring electronic components in wearable tech or medical devices and improving the strength and flexibility of robots.



Dishwasher tablets move to paper-based packaging

Anglo-Dutch multinational consumer goods company Reckitt has announced that it is switching to paper-based packaging for its Finish dishwashing products. The new packaging will be launched exclusively with French retailer Carrefour and will be introduced across 1,200 stores next month. The development of the paper-based packaging is a joint development with multinational packaging manufacturer Mondi and will use paper derived from sustainable sources while reducing plastic use by 75%. As packaging for the tablets must be heat-sealable and water-resistant, a certain amount of plastic will still be used to strengthen the paper-based structure of the packaging. Reckitt claims that once fully rolled out, the new paper-based packaging will eliminate the need for more than 2,000 tonnes of plastic annually, equivalent to around 50 million plastic one-litre bottles. The new packaging is also expected to reduce emissions by 15% across the lifecycle of the packaging compared to traditional versions.



[Back to trend contents](#)

Skin care products launched in water-soluble sachets

Deardot is a South Korean vegan beauty and cosmetics company. The brand is known for its anhydrous single-dose sheet-type products that transform into a light foam upon contact with water. At the Cosmetic 360 trade show at the Carrousel du Louvre in Paris, they presented two new versions of its nomadic and ultra-practical anhydrous skincare products. This new format is sachets which dissolve in water in seconds, with “no pollutant residue”. The company says that after using the cleanser, the sachet dissolves in the sink and can be flushed down the drain with no worries about any adverse environment impact. It is easy to carry and use, Deardot’s anhydrous sheets are lightweight and hygienic. It is claimed that they combine a low carbon footprint and sustainable packaging. The new dissolvable sachets will be used on its Dangyuja Face Cleanser Sheets and Dangyuja Body Cleanser Sheets, replacing the biodegradable paper used in the packaging of its previous products.



[Back to trend contents](#)

Online retailer introduces new steak packs to target plastic reduction

British online retailer Ocado has unveiled a new packaging format for its meat steaks, which the company says will eliminate 8 tonnes of plastic packaging per annum. The retailer developed the new format with their Northern Irish meat supplier Linden Foods, which now double stacks steaks one on top of the other. This change means that the pack now uses 50% less plastic than the previous format. Ocado says that they amended the packaging to draw customers' attention to the fact that there are two steaks in the pack by adding and enlarging the number '2'. A roundel was also added to highlight the reduction in plastic of the new format. The company also said that during the last 12-18 months, it ran extensive trials on mono materials for both preformed and thermoformed applications. As a result, 11 tonnes of plastic used in its steak lines are now recyclable.



Industry first claimed for olive oil in aluminium bottle

Chicago-based Trivium Packaging has announced the launch of what it says is the 'first ever' aluminium bottle for edible oils in the United States. While metal has been used for larger tins of bulk liquid or in aerosol formats of edible oil containers, this is the first time that Trivium has adapted its bottle to be suitable for edible oil closures. The metal is capable of protecting and maintaining the technical properties of the oil while being environmentally sustainable. The bottle has high-speed in-line printing capabilities enabling the metal packaging to take on multiple graphical effects without needing labels. This allows brands to use the entire bottle's surface to achieve their desired look without adding paper or plastic components. Trivium reports that three-quarters (74%) of consumers claim that they are willing to pay more for sustainable packaging.



Supermarket chain switches coffee pods from plastic to aluminium

British supermarket chain Sainsbury's has switched all of its own label coffee pods from plastic to aluminium. Sainsbury's was the first UK retailer to label its own-brand aluminium coffee pods as recyclable last year. Before this it was widely believed that aluminium coffee pods were too small to be recycled at kerbside and needed to be recycled via specialist collection schemes. The company says that to recycle the pods, all customers need to do is empty the pods with a teaspoon, rinse them, and place in their usual kerbside recycling. Alternatively, Sainsbury's says, customers can purchase a Dualit EcoPress from Sainsbury's in store or online. The device ensures that coffee is separated and removed from the aluminium, and ready to be recycled. The supermarket giant claims that the new range, which will be rolled out next month, will help save an estimated 10 million pieces of plastic each year.



[Back to trend contents](#)

Beverage giant to trial the removal of plastic shroud packaging

British beverage giant Britvic is conducting a trial with its glass bottle supplier Encirc, to remove the plastic shroud on its drinks pallets set for the retail sector. Instead of plastic shrouds, the pallets will be secured with strapping that can be recycled after use. Encirc will also use reusable plastic layer sheets that can be washed in between uses, instead of single-use board layer pads. The companies have estimated that if the trial is successful it would remove around 2,000 tonnes of plastic packaging from Britvic's retail supply chain, while the replacement of board layer pads could potentially save 24kgs of board per pallet, helping to contribute to Britvic's circular packaging goals. Since 2021, Britvic has sent zero waste to landfill. The results from the trial will be announced in Autumn 2022.



Crisp brand moves outer packaging from plastic to board

UK crisp giant Walkers has announced that it is removing the plastic wrap from its 22 and 24 bag multipacks, and replacing it with a new corrugated board format. The company says that they have invested £14m in the implementation of the sustainable format, and that 250 tonnes of virgin plastic will be removed from its supply chain annually. Following a successful trial with Tesco, the new multipack outer packaging will be on-shelves in all major supermarkets in the UK in the coming weeks. Alongside the new packaging format, Walkers has invested in a new stretch film to wrap around pallets. This new film is produced using nanotechnology which puts tiny air bubbles into the film to reduce the amount of plastic used, while retaining the same strength and stretch needed to protect the crisps. The move to this new film will lead to a reported 40% reduction in virgin plastic year on year.



[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 saw 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



[Sustainable barrier coatings expansion into US](#)

[Degradable film uses light to self-sterilise against viruses](#)

[Temperature sensor changes colour if frozen foods have thawed](#)

[Sustainable fast-food packaging now with enhanced barrier properties](#)

[Water-based antimicrobial coating inhibits bacterial growth by up to 99.99%](#)

[Collaboration reduces titanium dioxide content in milk bottles](#)

[Partnership to develop anti-counterfeiting inks using quantum dot technology](#)

Sustainable barrier coatings expansion into US

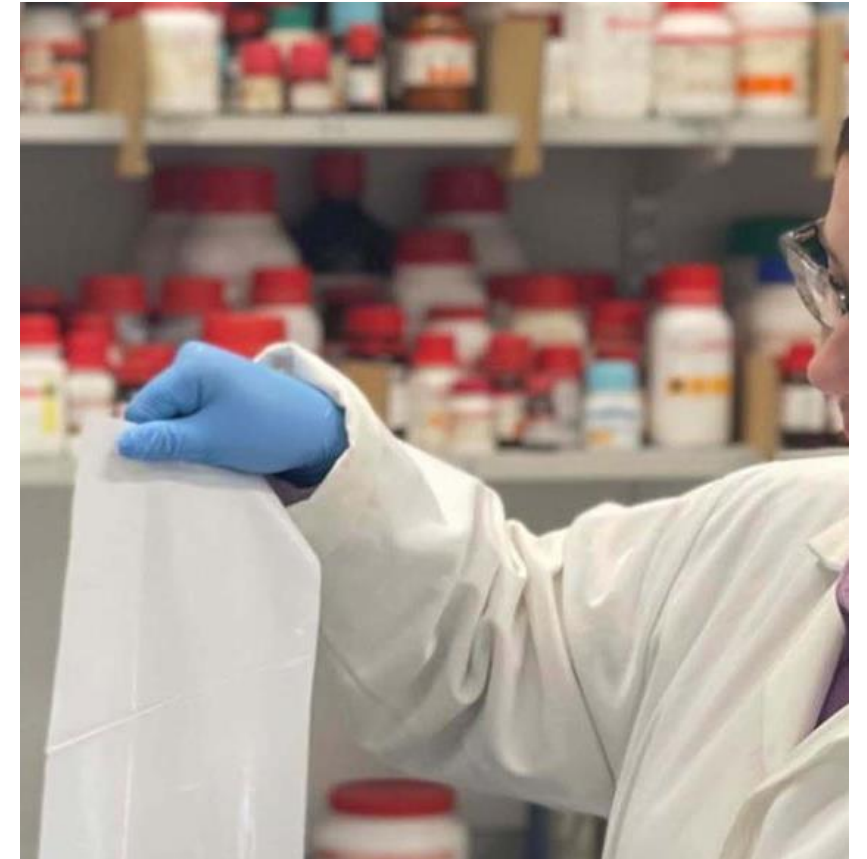
Melodea is an Israel-based company that produces sustainable barrier coatings for packaging. The company has announced plans to open a manufacturing site in the United States to open up availability in North America. Melodea sources its material from wood pulp, a side stream of the paper-making industry. The company has developed a formula derived from cellulose nanocrystals (CNC). These withstand high humidity and protect packed products from oxygen, water, oil and grease. The material may be used to manufacture items such as paper-based pouches, lids and moulded pulp trays. Melodea says that the plastic-free, plant-based coatings are biodegradable, fully recyclable and non-toxic to consumers and the environment. Two of the company's products are MelOx, which protects packaged products from oxygen, oil and grease transmission, and VBcoat, which counteracts the transmission of water, oil and grease. A spokesperson for Melodea said that CNC is emerging as one of the most promising solutions to help replace environmentally harmful materials.



[Back to trend contents](#)

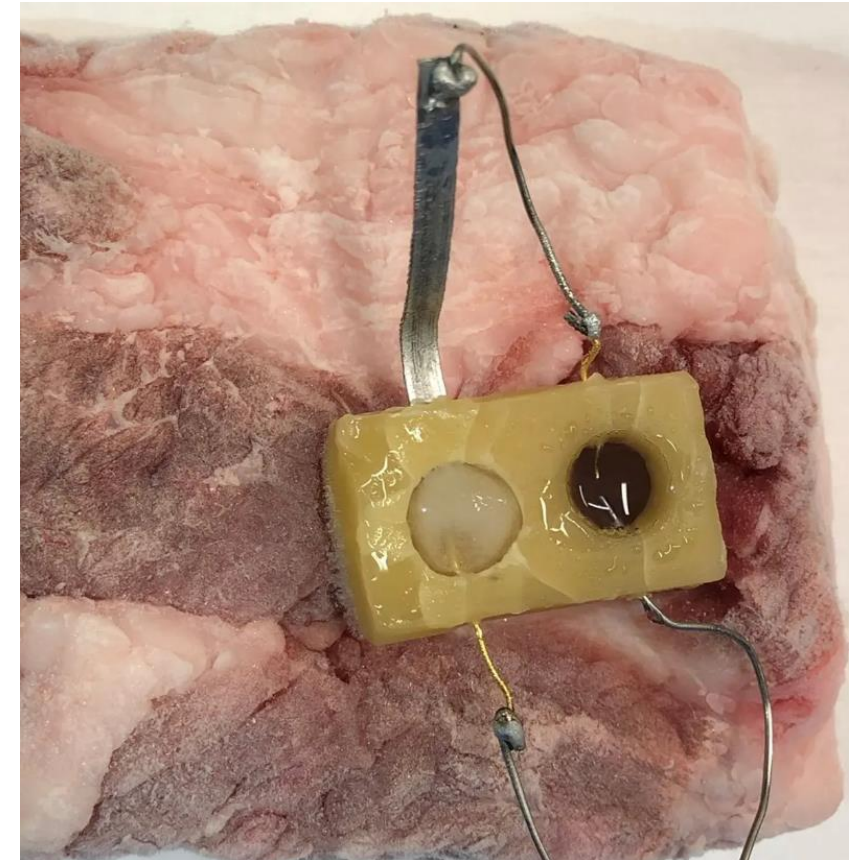
Degradable film uses light to self-sterilise against viruses

Scientists at the Queen's University Belfast have announced that they have developed a degradable plastic film with a self-sterilising coating that can kill viruses through the absorption of UV and fluorescent light. The researchers say that the film is coated with a thin layer of particles that absorb UV light and produce reactive oxygen species (ROS), which kill viruses. The researchers tested the film for antiviral activity using four different viruses – two strains of influenza A, a highly-stable picornavirus called EMCV, and SARS2, the virus that causes COVID-19 – by exposing it to either UVA radiation or light from a cool white fluorescent lamp. They found that the film effectively kills all of the viruses, even in a room lit with white fluorescent tubes. The technology used to create the film also ensures it is degradable. The film is low-cost to produce and can be readily scaled.



Temperature sensor changes colour if frozen foods have thawed

A team from the Istituto Italiano di Tecnologia (Italian Institute of Technology) has developed a temperature sensor that changes colour to let you know if an item of frozen food has been defrosted and then refrozen. The design of the sensor incorporates two electrodes – a magnesium anode and a gold cathode – which are separated by a frozen electrolyte solution. In various versions of the sensor, that solution has contained salts and electrolyte-rich grape, apple and melon matter. If the electrolyte solution remains frozen, nothing happens. However, if it thaws, electrons flow from the anode to the cathode, causing the sensor to generate an electrical current. That current in turn causes a red-cabbage-juice-based solution to change from a reddish-purple to blue colour. It then stays blue, even if the sensor is refrozen. It is hoped that the technology could take the form of a thin, inexpensive, single-use, edible material.



Sustainable fast-food packaging now with enhanced barrier properties

Swiss speciality chemical company Archroma has announced that its Appretan NTR paper packaging range, which is claimed to be made with 30% renewable raw material, is now capable of imparting barrier properties onto fast food packaging such as wraps for burgers or sandwiches. As a part of Archroma's Nature Bites barrier system, the paper can reportedly be combined with the company's Cartacoat primers to provide short-contact food packaging that is both food-safe and recyclable – replacing the plastic films that traditionally line paper food packaging yet which impact its recyclability and compostability. Appretan NTR was originally designed for use in nonwoven articles such as tea bags and coffee filters. The company says that the range hopes to maintain water, oil, and grease resistance while continuing to cut down on industrial reliance on fossil fuels.



Water-based antimicrobial coating inhibits bacterial growth by up to 99.99%

The global leader in antimicrobial additives, US-based Microban, has launched a new product called LapisShield, a non-heavy-metal technology designed to integrate antimicrobial functionality in water-based coating formulations. The company says that LapisShield inhibits bacterial growth by up to 99.99%, effectively preventing the formation of mould and mildew. Microban also claims that LapisShield has several advantages over traditional antimicrobial products, including being clear and UV stable and easy to incorporate, mix, and disperse. The company also says that the stability and clarity of LapisShield allow it to be easily integrated with a wide variety of coatings systems, including anti-fingerprint and anti-smudge formulations, and applications requiring optically clear performance, while also claiming to be a more environmentally-friendly technology. It protects against the detrimental effects of microbes, including stains, odours and premature degradation, extending the lifetime of coated products using Microban's technology.



[Back to trend contents](#)

Collaboration reduces titanium dioxide content in milk bottles

Two companies have joined forces to produce long-life PET (polyethylene terephthalate) milk bottles with a reduced amount of titanium dioxide (TiO₂). Specialist bottle preform maker Société Générale des Techniques (SGT) and American additive company Avient have used additive technology called ColorMatrix Lactra Four, One and Zero, which offers both reported superior whiteness in the bottle and high protection for photosensitive liquids. Despite the low thickness, some 200 micrometers, of the barrier, 99.9% of the light is blocked. Thus preserved from oxidation and the “taste of light” linked to the degradation of riboflavin, milk treated at ultra-high temperature (UHT) can be kept for several months without altering taste and organoleptic properties. The reduction in the mineral load also reduces the problems of greyish colouring of the recycled bottles. The technology is also suitable for recycled PET. As the name of the technology suggests, Avient also offers TiO₂-free formulations.



Partnership to develop anti-counterfeiting inks using quantum dot technology

Two companies have announced that they are to continue their six-year-long partnership in order to develop anti-counterfeit security inks using quantum dot technology. The companies involved are UbiQD, a New Mexico-based nanotechnology company, and Sicpa, a Swiss security business known for providing security inks for currencies and sensitive documents, such as identity documents and passports. Quantum dots (QDs) are semiconductor nanoparticles with visual and electronic properties that differ from larger particles due to quantum mechanics. QDs also exhibit high-efficiency photoluminescence over a wide range of tunable colours. QDs can be programmed into materials by modifying the conditions in which they are manufactured, leading to different sizes, shapes and compositions. They can also emit different wavelengths of light, leading to being used as an alternative to dyes and pigments for security features. These factors make the structure and patterns of the dots created within the ink extremely difficult to replicate.





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. Pending 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 on the horizon, influencing the recycling of packaging. The UK's has already been implemented in April this year, which 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](#)

[Researchers discover method for measuring how plastics degrade](#)

[Snack bar packaging to incorporate recycled content](#)

[Pilot scheme rewards consumers for returning drinks containers at UK supermarket](#)

[Collaborations bring mono-material packaging solutions to market](#)

[Recyclable mono PP films replace difficult to recycle structures](#)

[Dispensing closure eliminates need for foil seal](#)

[Mobile NIR solution can distinguish between PET-A and PET-G](#)

[World's first fully transparent recyclable mid-barrier blister pack announced](#)

[Shrink film polymers contain 60% PCR content](#)

[Collaborations develop sustainable flexible solutions that contain 50% PCR](#)

[German pilot scheme successfully recycles EPS](#)

[Juice company offsets impact of 170t of packaging via blockchain technology](#)

[Lightweight, fully recyclable spray head developed for cleaning products](#)

[‘Adaptive flex-band’ developed for tethered cap solution](#)

[Detergent packaging is made from beverage carton waste](#)

[Laser coder is compatible with recyclable food films and plastics](#)

[Norwegian pet food manufacturer moves to recyclable high-barrier PE packaging](#)

[Recycling breakthrough turns one common type of plastic into another](#)

[Plastic cavitation technology approved by recycling organisation](#)

[Confectionery giant launches jars with 15% PCR plastic](#)

[Chocolate giant unveils recycled packaging roll out](#)

[Researchers develop method of infinitely recycling plastic](#)

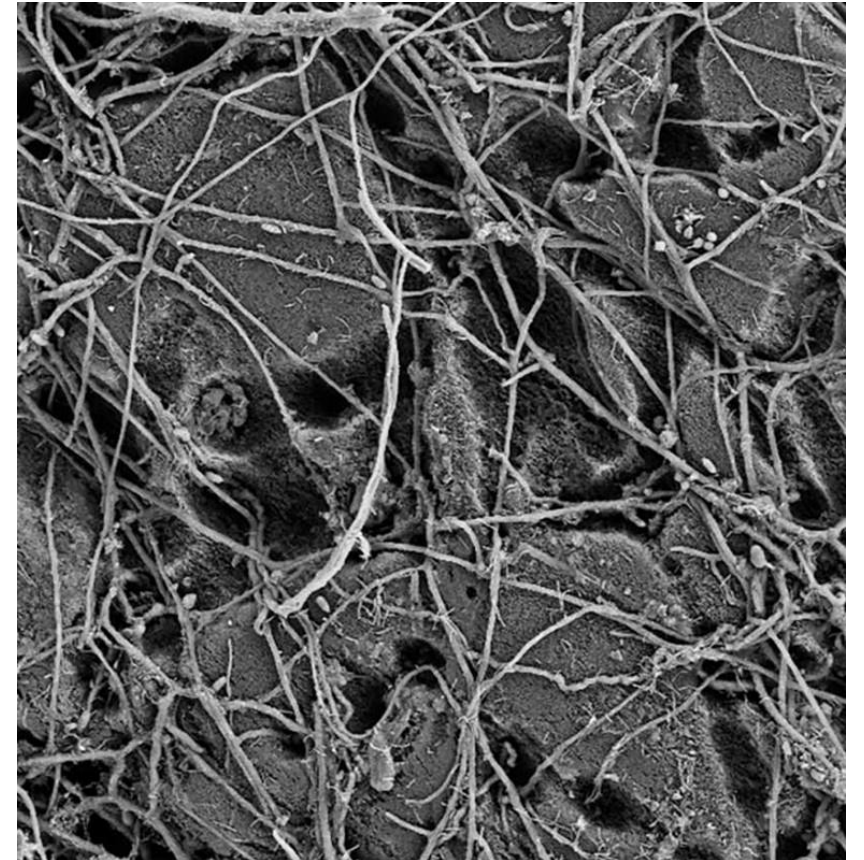
[Confectionery giant announces major packaging innovations](#)

[Bubble wrap products made from 50% recycled plastic](#)

[Next Trend →](#)

Researchers discover method for measuring how plastics degrade

Researchers from ETH Zurich say that they have devised a method for accurately measuring how plastic degrades in the environment. They say that a lot of plastic packaging is currently inaccurately labelled as “biodegradable” because tracking the degradation of polymers in soil is a complex task. The method requires that the scientists follow the polymer carbon throughout the degradation process, which is hard because there is a lot of other naturally occurring organic carbon (in the form of things like leaves and roots) in the environments to which they add the polymer. The team devised a method of distinguishing polymers from other naturally occurring carbons by replacing some of the carbons in the polymer with a stable carbon isotope that is naturally very rare. They say that they now have the tools in hand to assess how polymers need to be designed and how systems need to be operated to ensure complete biodegradation of polymers.



Snack bar packaging to incorporate recycled content

Confectionery giant Mars has announced that its KIND snack bar packaging is to incorporate recycled plastic content. The company stated that the new material had been redesigned for maximum circularity and is produced through the recycling of used mixed plastic that would otherwise be destined for incineration or landfill. This means that the new packaging is eligible for drop-off in-store recycling in the UK and kerbside in Ireland. Mars has set itself the target of reducing the amount of virgin plastic it uses to pack its products by 25%, incorporating 30% recycled content into plastic packaging, and redesigning more than 12,000 packaging components across its portfolio to fit with recycling infrastructure. A spokesperson for the company said that the move accelerated their sustainable packaging journey and, in collaboration with partners such as SABIC, are enabling new opportunities to provide consumers with packaging designed for circularity.



[Back to trend contents](#)

Pilot scheme rewards consumers for returning drinks containers at UK supermarket

French spring water company Evian and UK supermarket chain Sainsbury's are conducting a 15-day pilot return scheme for drinks containers at a North London store. Customers at Sainsbury's Enfield branch are invited to take part in the digital scheme and will be incentivised to recycle their drink containers in store to be in with a chance to win tickets to Wimbledon tennis in 2023, to which Evian is also a long-term sponsor. The pilot scheme is being run in partnership with digital green-tech company, Re-Universe, to encourage recycling behaviour amongst supermarket shoppers. The scheme, which will run for two weeks starting on the 17th October will encourage shoppers to recycle their empty water bottles and cans. By scanning the QR code at the designated return point, and then the barcode on their Evian bottle or can, customers will be entered into a draw for a chance to win Wimbledon finals tickets.



Collaborations bring mono-material packaging solutions to market

Swiss machinery and service provider BOBST has announced the launch of its oneBARRIER mono-material solutions. The oneBARRIER PrimeCycle solution is a collaboration with Dow, and Zermatt, who contributed to the film production, and Sun Chemical who provided the barrier adhesive. The OneBARRIER PrimeCycle solution is a polymer-based mono-material providing a full PE barrier to replace metalised polyester films. Reportedly EVOH- and topcoat-free, it is said to maintain its barrier qualities while also being designed with recycling in mind. There is also a paper-based solution available, called OneBARRIER FibreCycle, which is said to be another mono-material and recycle-ready solution, this one made of paper and created in collaboration with Michelman and UPM. BOBST claims to have designed FibreCycle in response to a growing demand for sustainable, paper-based packaging within the industry.



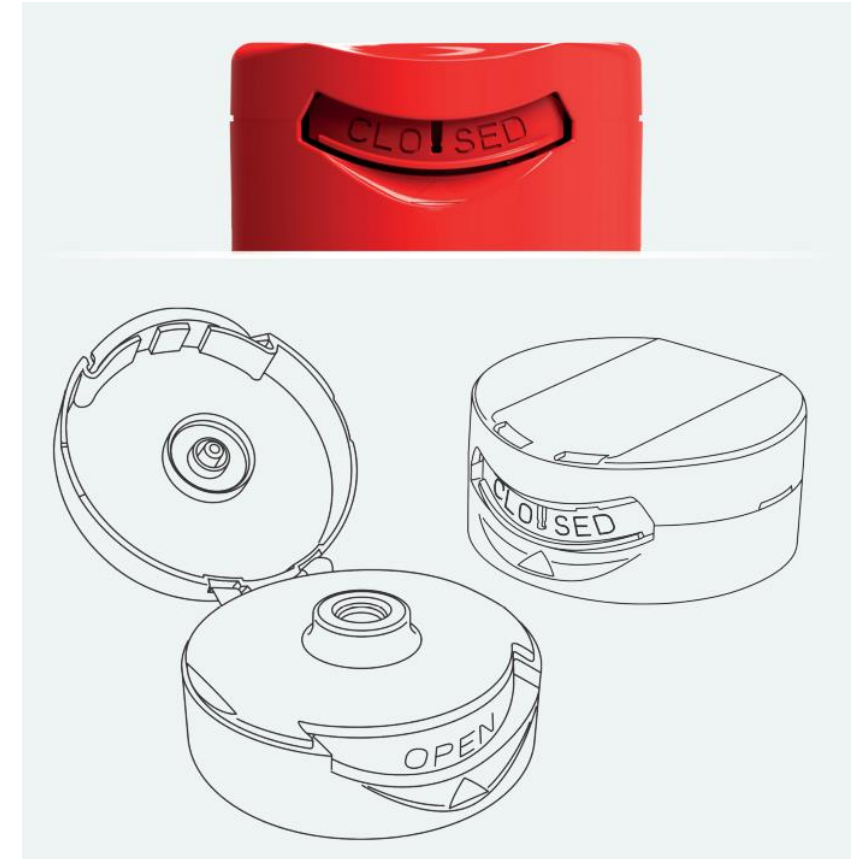
Recyclable mono PP films replace difficult to recycle structures

Jindal Films is an Indian supplier of OPP (oriented polypropylene) films. They are able to offer a range of PP films intended to replace PET-based (polyethylene terephthalate) applications. With Bicolor 12MB100, Jindal Films is launching a thin OPP film with high rigidity for a wide range of PET replacement applications. For more demanding applications such as in retort sterilisation scenarios, where there is a need to minimise shrinkage and visual distortion during heat sealing and steam autoclaving, Jindal Bicolor 25MR100 is a suitable material. To emulate paper-based laminates, Bicolor 18 & 25CSR, a low gloss level material is available. To help brand owners phase out their non-recyclable barrier laminates (e.g. PET/ALU/PE, paper/ALU/PE), Metallyte 16MM883 is recommended. Finally, PVdC-coated films can be replaced by Jindal Films new Bicolor 36&42 COS5 films with PVdC-free designs, specifically intended for the demanding cosmetics packaging market.



Dispensing closure eliminates need for foil seal

US-based Aptar, global leaders in dispensing solutions, have announced the launch of Slide, a unique dispensing closure that does not require the application of a foil liner for shelf-stable food products, which is the market norm today. To eliminate the need for a foil liner, Aptar Food + Beverage developed a patented non-detachable tamper evidence system which is built into the closure. Upon first opening the package, the tamper evidence band visually slides from the “closed” to the “open” position and locks into the lid of the closure. Slide provides a much more convenient experience, as consumers no longer need to unscrew the closure (cap), remove and dispose of the liner, and put the closure back onto the bottle before dispensing the product. Aptar’s life cycle analysis comparing Slide to a closure with a foil liner showed that liner-free packaging reduces greenhouse gas emissions by a reported 16%.



Mobile NIR solution can distinguish between PET-A and PET-G

TrinamiX is a subsidiary of German chemical giant BASF. Their mobile NIR spectroscopy solution, designed for the on-site identification of more than 30 different plastics is now supplemented by a further application. It provides information about the PET type of a sample at the touch of a button. It is now able to distinguish between PET-A and PET-G. Amorphous polyethylene terephthalate (PET-A, or APET for short) is a popular material for recyclable packaging for food, cosmetics or hygiene products. PET-G is modified PET to which glycol has been added. As a result, PET-G has a higher transparency than PET-A, which remains stable even after heating. In addition, melted PET-G has a lower viscosity. These properties favour applications in the areas of packaging, 3D printing and visible parts. The separation of PET-G and PET-A is important, as only pure materials can be fully recycled. Due to different melting ranges, recycling a mixture of PET-A and PET-G is conventionally difficult.



World's first fully transparent recyclable mid-barrier blister pack announced

Pennsylvania-based TekniPlex Healthcare is claiming to have developed the world's first fully transparent recyclable mid-barrier blister pack. The company says that the blister pack is recyclable through PP (polypropylene) recycling streams, the mid-barrier blisters consist of a polyolefin blister film and a barrier PP lidding film. According to TekniPlex, this makes it the first combination of blister and lidding to be certified as recyclable. The new materials also feature barrier protection against moisture. Initial machinability analyses have reportedly been positive, with large-scale tests scheduled soon. A spokesperson for TekniPlex said that technical challenges needed to be overcome with extensive research, trials and dedication to make transparent barrier blister packs recyclable. TekniPlex Healthcare will present samples of the new packaging at this year's Pack Expo in Chicago.



[Back to trend contents](#)

Shrink film polymers contain 60% PCR content

British multinational chemicals company Ineos, has formed a partnership with Southampton-based PolyClear Group to launch 60% PCR (post consumer recycle) LDPE (low density polyethylene) for shrink film applications. Ineos says it has applied its product and technical expertise from across its European operations to create the Recycl-IN grades for packaging and pallet wrapping and that the design has the same characteristics as virgin plastics. The companies say that these new polymers support a more sustainable and circular approach, directing plastic waste from landfill back into valuable polymer products. A spokesperson for PolyClear said that the film properties they have witnessed are unlike those achieved with ordinary recyclates, and offer their customers the confidence they need with their packaging requirements. Ineos says it is committed to delivering “a sustainable future and to achieving Net Zero in its operations”.



Collaborations develop sustainable flexible solutions that contain 50% PCR

Austrian chemical company Borealis has collaborated with two partners to produce flexible packaging products incorporating 50% post-consumer recyclate (PCR). The two parties are flexible packaging manufacturers Plastotecnica, based in Italy, and Finland-based Rani Plast. Both companies are using new low density polyethylene (LDPE) PCR grades developed and produced by mechanical recycling expert Ecoplast, part of the Borealis Group. The move to 50% PCR material reportedly results in a 35% carbon footprint reduction in raw material production when compared to virgin polyolefins, whilst maintaining the same film thickness as virgin materials. The partnership between Borealis, Plastotecnica and its manufacturer of high-tech and flexible bottling and packaging lines, ACMI SpA, has resulted in fully recyclable multilayer collation shrink film with appealing optics and pack stability. Borealis and Rani Plast jointly developed a film structure for more sustainable flexible packaging used for tissue paper products such as kitchen roll and toilet paper.



German pilot scheme successfully recycles EPS

A German pilot scheme has successfully recycled EPS (expanded polystyrene) from yellow bag product. The yellow bag is used in Germany for plastic, metals and more difficult to recycle products such as composite materials. In a joint project with lightweight sorting plant operators (LVPs), various tests have succeeded in separating EPS from the plastic fraction and sorting it. Critical to success was the use of innovative infrared technology, which made very targeted sorting possible. The separated EPS was then granulated and foamed in the extruder. The result is high-quality recycled EPS, also known as rEPS. Until this pilot project, separate sorting in the standard flow of packaging from the yellow bag was considered too complex and not profitable for all players. This can now be refuted for the first time with the experience and knowledge gained from this project with the potential to commercialise this in due course.



Juice company offsets impact of 170t of packaging via blockchain technology

Greenpeople is a Brazilian manufacturer of cold pressed juices, teas and coconut water. Through a partnership with Polen, a startup that neutralises the impact of packaging through blockchain technology, they have offset 100% of their packaging fed into the market in 2019 and 2020. This amounted to about 168 tons of cardboard and 2.8 tons of plastic. This is 170.43 tons of packaging in total. This prevented the emission of 6.33 tons of CO2 into the atmosphere. The solution developed by Polen generates tokens (each equivalent to one kilo of compensated material) in its blockchain system, certifies the waste sorting process in cooperatives and waste managers, audits all applicable licenses operations and guarantees the traceability of recycled material for proof required by the National Solid Waste Policy (PNRS). Greenpeople only needed to offset 22% of the mass equivalent to the packs it placed on the market, but they wanted to carry out 100% compensation.



Lightweight, fully recyclable spray head developed for cleaning products

German detergent and cleaning products manufacturer Werner & Mertz has collaborated with Berry Global to develop a lightweight, fully recyclable spray head for its Frosch brand. The spray head is fully recyclable because it consists of only one group of plastics, polyolefins; 97.6% are made of polypropylene, and only the valves, which make up the remaining 2.4% of the total weight, are made of polyethylene. Both polymers can be assigned to one polymer group and are mixable in recycling. Also, 29% of the pump mechanism is made from recycled material. The weight of the spray head has also been reduced to a minimum. It is claimed to be the lightest spray pump of its kind, weighing 18% less than commercially available triggers on the German market. The spray pump is also said to be more powerful than the predecessor model and will manage at least 5,000 pumping strokes making it suitable for reuse applications.



© Werner & Mertz

‘Adaptive flex-band’ developed for tethered cap solution

Switzerland-based Corvaglia is a highly specialised provider of closure solutions for the beverage industry. EU Directive 2019/904 states that by 2024 all PET (polyethylene terephthalate) bottles must have tethered caps. The business has now announced the launch of the ‘adaptive flex-band’ injection mould technology, which combines the different and conflicting requirements of beverage bottlers and consumers. The latter prefer a convenient opening and closing experience, and consumer tests have revealed that this requires locking it in the open position with a large opening angle, which requires a hinge mechanism. The key objective for beverage bottlers is finding closure solutions that can be easily applied to the bottles on an industrial scale, which makes it easy to ensure high productivity. Combining both requirements in a single closure solution is difficult to implement from a technological point of view. However, Corvaglia has now been able to combine these two demands.



Detergent packaging is made from beverage carton waste

A collaboration between three German companies has resulted in prototype detergent packaging made from multilayer beverage carton waste. The prototype is made possible by a promising new technology: Saperatec's extended mechanical recycling process for thin-layer composite materials, which leads to new recyclates. The two-layer construction is made entirely of polyethylene (PE), with the inner sealing layer being more than 50% PCR (post consumer recycled) rLDPE made from beverage carton waste. The outer layer is laminated with Henkel's adhesive optimized for recyclability. Overall, the packaging will contain at least 35% PCR rLDPE, which is in line with the proposed recommendations for the EU Non-Food Packaging Directive. The prototype was developed by Saperatec GmbH, a developer of recycling processes for composite packaging made of different materials, along with Wentus, a supplier of packaging films whose flexible monopolyethylene packaging design enables easy recyclability, and Henkel, the adhesives, sealants and functional coatings supplier.



Laser coder is compatible with recyclable food films and plastics

Cambridge-based Domino Printing Services has announced the launch of a new high-speed laser coder compatible with recyclable food films and plastics. Conventional laser coders used on multi-material substrates are incompatible with new mono-material structures. Therefore, the Domino U510 UV laser offers a laser coding solution adapted to these new packaging materials. The U510 printer codes directly onto plastics and mono-material white and coloured films without needing additional laser developer on the substrate, thanks to a photochemical reaction on the surface layer of the plastic. Integrating into existing production lines for flexible food films intended for horizontal and vertical bagging applications (HFFS and VFFS), this coder reproduces texts, graphics and 2D codes with high contrast and at very high speed. In addition, its laser head and controller are protected from dust and water displaying an IP55 waterproof rating.



[Back to trend contents](#)

Norwegian pet food manufacturer moves to recyclable high-barrier PE packaging

Norwegian pet food manufacturer Felleskjøpet has collaborated with leading global leader in packaging and paper Mondi, to switch to recyclable high-barrier packaging for the relaunch of its Appetitt premium brand. Felleskjøpet will be using Mondi's FlexiBag Recyclable, a pre-made mono-material polyethylene (PE) bag, for the relaunch of the range of dry cat and dog foods. It will replace the previous unrecyclable multi-layer solution, delivering packaging that is designed for recycling, according to CEFLEX D4ACE guidelines, and is recyclable in existing Norwegian plastic recycling streams. FlexiBag Recyclable is said to provide excellent product protection and helps to preserve the premium pet food, thanks to its high barrier material. It also has excellent print qualities that guarantee good visibility on-shelf. A slider enables easy opening and closing for the bigger bags to ensure long-lasting freshness, whilst a handle allows for convenient transportation.



[Back to trend contents](#)

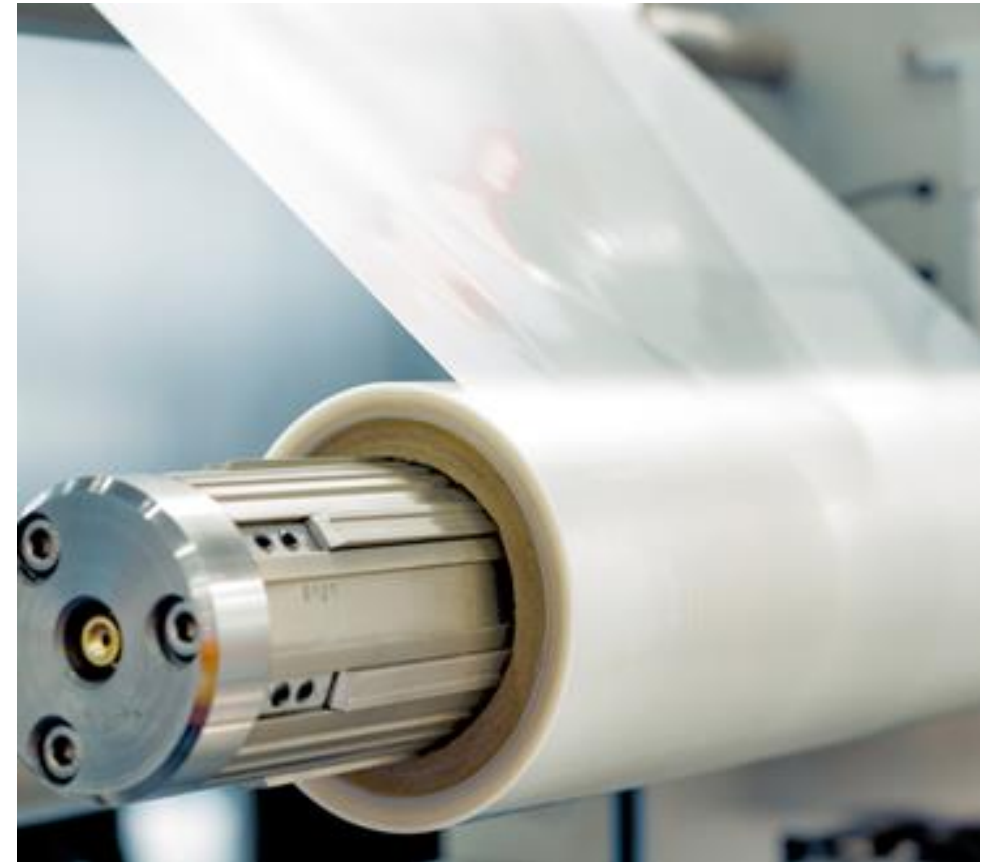
Recycling breakthrough turns one common type of plastic into another

Students at the University of Illinois Urbana-Champaign have developed a new plastic recycling process which can upcycle one common type of plastic into another. The team started with the most widely produced plastic in the world, PE (polyethylene), which reportedly accounts for around 29% of the world's plastic consumption. A catalyst was then used to remove hydrogen from the material and create a reactive location in the chain of molecules, and then another catalyst to split the molecules at this location and cap the exposed ends. A third catalyst then shifts this reactive location along the chain so the process can be repeated. This leaves behind molecules of propylene, which serve as the building blocks for the world's second most widely used plastic, PP (polypropylene). The team says they also have the means to scale up and implement their technology, which they calculate could result in massive reductions in global greenhouse emissions.



Plastic cavitation technology approved by recycling organisation

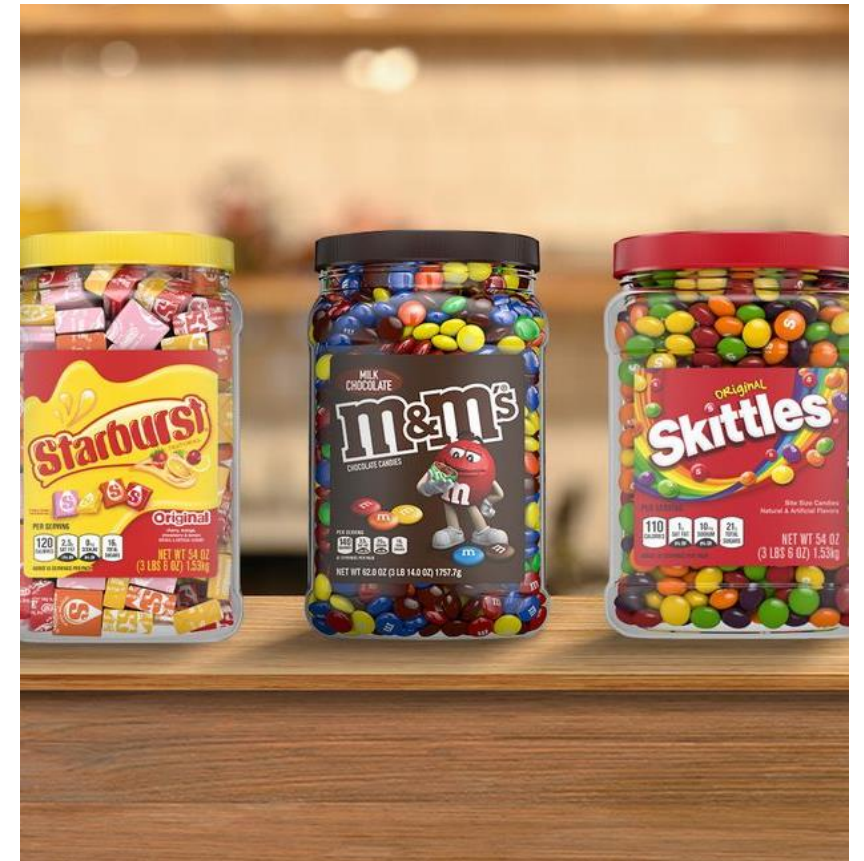
Belgium-based RecyClass is a European cross-industry, non-profit promoter of plastic recycling. It has now announced that it has approved Void Technologies' VO+ cavitation technology. VO+ is a patented cavitation technology that replaces solid plastic with micro and nano-scale air pockets to create high performance products with a reduced environmental footprint without any gas injection or heavy mineral fillers. Void says that Cavitated MDO (Machine Direction Orientation) PE (polyethylene) films using Void's new 'VO+ PE Masterbatch' offer 35% material saving achieved via density reduction and downgauging, and also opacity without TiO₂ (titanium dioxide). The technology has now been accredited as fully compatible with the European polyethylene recycling stream, paving the way for its adoption by film and packaging manufacturers across the European Union. A spokesperson for Void said they are looking forward to working alongside film producers, packaging machinery manufacturers and brand owners to harness the capabilities of their VO+ Technology.



[Back to trend contents](#)

Confectionery giant launches jars with 15% PCR plastic

Mars US has announced that it is launching confectionery jars that contain 15% PCR (post consumer recycled) PET (polyethylene terephthalate). The new jars were developed in collaboration with Berry Global. The easy-grip square jars are available in three sizes, 60, 81 and 87 ounce varieties and will eliminate approximately 300 tons of virgin plastic each year. Mars has pledged to reach 100% recyclable packaging by 2025, and is investing hundreds of millions of dollars to redesign its packaging. As well as the addition of 15% PCR PET, Berry was also able to reduce the weight of the larger jars by 10 grams each, which the company said will save 374 metric tons of carbon dioxide annually. Berry says this alone is the equivalent of 42,084 gallons of petrol consumed, 45,494,350 smartphones charged, or 72.8 homes' electricity use for one year.



[Back to trend contents](#)

Chocolate giant unveils recycled packaging roll out

Mondelez Australia, owners of the Cadbury chocolate brand, have announced that they are rolling out packaging that contains 30% recycled plastic. The new, more sustainable packaging will be used on its family blocks range for Cadbury Dairy Milk, Caramilk and Old Gold. The company says that the move will see more than 120 tonnes of packaging waste diverted from landfill. They also say that the new packaging looks and feels the same, carrying Cadbury's iconic purple colour and preserving the chocolate's taste, texture, and shape. The new packs also feature an on-pack QR code, leading Cadbury consumers to more information on the packaging innovation, and how Cadbury is supporting a circular economy for packaging. Cadbury has sourced 120 tonnes of recycled content from overseas, indicating a demand for recycled soft plastic packaging produced locally in Australia. The first packs to include recycled soft plastic have been delivered to major retailers this week.



[Back to trend contents](#)

Researchers develop method of infinitely recycling plastic

Scientists from the University of Colorado Boulder say they have developed a method of infinitely recycling plastic, creating full circularity for the material. The researchers used “reversible chemistry,” where polymers from plastic were broken down into their original monomer structure, allowing them to be reused. These monomers then serve as basic building blocks, meaning that they could be rebuilt back into polymers for the same product repeatedly. Usually, plastic is mechanically broken down into powders and then burned or bathed in solutions to create small flakes or pellets to be moulded into new products. However, this process does not allow for the same item to be made since the plastic eventually breaks down until it is unusable. Instead of breaking down the plastic, scientists activated “dormant” covalent bonds, allowing traditional polycyanurate thermosets to be recycled into monomers. It has been reported that current industrial recycling plants would be able to adopt this new chemical method.



[Back to trend contents](#)

Confectionery giant announces major packaging innovations

Nestlé Confectionery UK has announced major packaging innovations for two of its biggest sellers. KitKat, which is reportedly purchased by six out of ten UK households, is to move to a wrapper made from 80% recycled plastic, using the International Sustainability and Carbon Certification (ISCC) mass balance approach. These wrappers can be recycled at more than 5,000 supermarkets across the UK and placed in household kerbside recycling in the Republic of Ireland. The rollout will begin this month on the two-finger pack, before being extended across the entire range by 2024. In the other innovation, Quality Street will move to paper packaging for their individually wrapped sweets. By replacing the double layer of foil and cellulose with a paper wrap, Quality Street will remove more than two billion pieces of packaging material from the brand's supply chain. The paper wrap has a special vegetable-based coating for the paper, which does not hinder the recycling process.

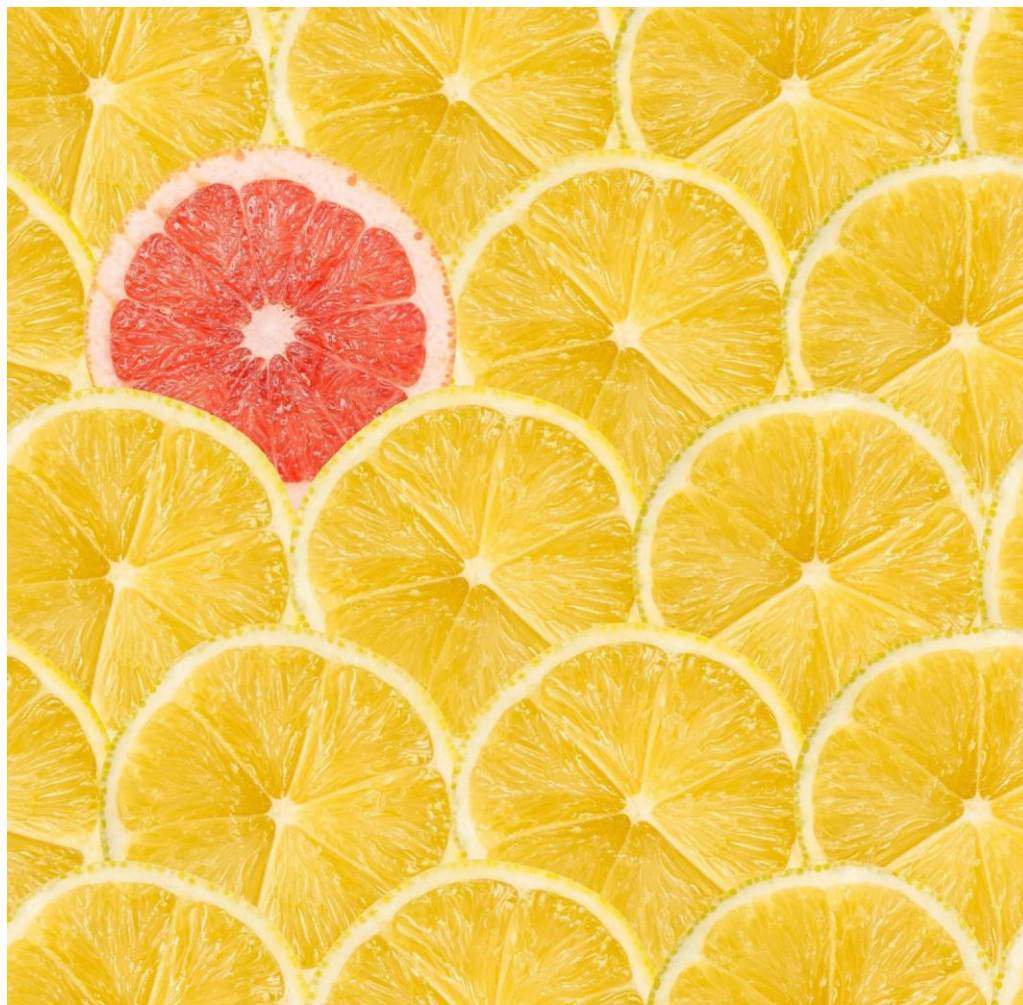


[Back to trend contents](#)

Bubble wrap products made from 50% recycled plastic

Sealed Air, the owner of the original Bubble Wrap brand, has added two new products to its range. The new developments are made from 30 or 50% recycled plastic waste, combined with what they call 'ultra-thin' 12µm film, to decrease material usage and carbon emissions. The films made from 30% recycled materials include the Bubble Wrap brand AirCap LRT and the Bubble Wrap IB Recycled Content Films. The AirCap LRT comes in ready-inflated rolls, while the IB Recycled Content Films need to be inflated on-site by operators. The Bubble Wrap brand Fill-Air Extreme Efficiency Recycled Content Films are derived from a minimum of 50% recycled plastic. Of that 50%, 30% comes from third-party certified material collected from post-consumer waste and 20% from post-industrial recycled content. The Fill-Air Extreme Efficiency Recycled Content Films are inflated on demand, with various void fill cushion sizes.





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.

Getting Noticed

[Flexible pouch with hologram-like features launched](#)

[‘Unshareable’ confectionery protected by biometric safe](#)

[Can maker to replace traditional varnish with laminated film](#)

[New approach to digital printing might disrupt the pack decoration market](#)

[“Invisible” labels have innovative visual effects](#)

[Spiced rum producer launches limited-edition UV bottle for Halloween](#)

Flexible pouch with hologram-like features launched

Flexible packaging company Printpack have partnered with optical effects company Fathom Optics to create what they say is the first hologram-like 3D pouch produced on a wide web flexographic press. Although only using standard ink and equipment, Fathom's software creates 'next-level' optically-varying features with the illusion of motion and depth, much like a hologram, the companies claim. Printpack has used Fathom's software to create a holographic, jungle-themed pouch. The optical print effects make it appear as if a tiger is coming through the surrounding jungle leaves. Designed to stand out on a crowded shelf, this premium package, with motion effects, is reported to give consumers a truly mesmerizing and interactive experience. The companies believe this visually arresting printing technique is perfect for everything from pet treats to confectionery, giving a unique boost to specialty promotions.



‘Unshareable’ confectionery protected by biometric safe

As part of a new campaign by Mars for its Starburst brand, the company is giving consumers the chance to win a limited edition ‘unshareable’ packaging safe for its All Pink candies, which, thanks to biometric fingerprint technology, means that only one person can unlock and access the candy inside. Developed exclusively for the campaign, the Mycube Safe boxes come in a pink colour personalized to the brand. Mycube is a third-generation family business known for manufacturing secure home safes. The Mycube safes are made of reinforced steel and tamper-proof door bolts. These features make the Starburst safe reusable for long-term storage purposes. The safes will not be sold on supermarket shelves – consumers can enter a chance to win them on the Starburst website for a limited period. The All Pink Un-shareable pack builds on the consumer-generated “You Are A Pink Starburst” movement.



[Back to trend contents](#)

Can maker to replace traditional varnish with laminated film

Novelis Inc., the world's largest aluminium recycler and manufacturer of beverage can sheet, today announced that the company is launching new laminated aluminium surfaces for beverage can ends. Novelis says that this innovative application improves beverage container appearance, increases production process efficiencies and will apparently lower CO2 emissions for European beverage brands and can makers. Coloured aluminium beverage can ends, especially black, are popular for new beverage products and energy drinks. However, producing lacquered, black ends also poses challenges regarding colour stability and can makers' production processes. At Novelis' Göttingen site in Germany, which specialises in rolled aluminium surface finishing, the laminating film is applied by a combination of pressure and heat. For beverage can makers, adoption of the laminated sheet is simple, as the production of laminated ends does not require any can line retooling. In fact, it requires less cleaning, leading to increased productivity.



New approach to digital printing might disrupt the pack decoration market

Israel-based Velox Digital has announced the launch of what they say is a new 'high-quality' DTS (direct-to-shape) digital printing technology for extruded and laminated packaging. With its latest ink technology innovation, Micro-Pixel Drop Shape Control, this new technology, which is part of the Velox IDS-PT Series – aims to provide high ink efficiency alongside photorealistic accuracy in images, fine graphic elements, and ultra-sharp text and lines. Each drop is said to be regulated as it hits the substrate to enable the same volume to spread and cover large areas while enabling drop diameters that are up to 60% smaller than previous Velox ink technology. It is also suggested that the development combines the benefits of flexo, screen, and dry offset printing into one machine. Other perks are said to include wide colour gamut, high adhesion and abrasion resistance, and substrate and surface-agnostic performance.



[Back to trend contents](#)

“Invisible” labels have innovative visual effects

German business specialising in thin film technology and hot stamping, The Kurz Group have recently launched Light Line inVisible. This is a new film-based and transparent label material that gives a ‘no label’ appearance and can be used to create ‘invisible’ labels with holographic effects. The company says that Light Line inVisible creates a holographic effect that is combined with a translucent colour layer. Due to the highly transparent colours, the diffractive structure is accentuated in a special way and can optimally showcase its play of light in the reflections. They add that the design can be overprinted inline via cold transfer and used partially or over entire surfaces. Light Line inVisible is part of the Kurz series of film-based label materials under the Light Line brand.



[Back to trend contents](#)

Spiced rum producer launches limited-edition UV bottle for Halloween

London-based Halewood Artisanal Spirits has launched a limited edition bottle of its Dead Man's Fingers spiced rum to mark Halloween. The bottle features the brand's skull logo and Halloween-themed webbing, which is illuminated under UV light and subsequently glows in the dark. A spokesperson for Halewood said that Dead Man's Fingers' bold, unconventional brand personality lends itself perfectly to Halloween festivities, and that they knew their audience loves celebrating this fun and social time of year, so couldn't resist the opportunity to create a stand out new bottle design to mark the occasion. To celebrate the launch, Dead Man's Fingers has launched two UV Spiced Rum Halloween serving suggestions for the on-trade and at-home entertaining. These are the Dead Man's Glow, made with tonic and a lime wedge, and Glow Shots, made with tonic and a pack of jelly. The limited edition bottle is available at an RRP of £26.



[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

[Back to Start](#)

[Distillery unveils ultra-premium whisky collection in unique packaging](#)

[Refill packs added to cycle lubricants range](#)

[Intelligent labeling introduction enables circular packaging](#)

[Pilot programme for reusable cups at Swedish theme park](#)

[Shoppers can purchase leading brand products in reusable packaging](#)

[UK's first smart on-shelf refill system for laundry detergent](#)

[Spanish perfume and beauty brand launches refill system](#)

[Body care company launches shower gel refill in aluminium can](#)

[Reusable vacuum drinks cup features spill-proof technology](#)

[US retail giant offers customers reusable packaging option](#)

[Furniture retail giant introduces reusable food and drink system](#)

[Leading Swedish restaurant joins deposit scheme for its takeaway packaging](#)

[Malaysian start up hopes to encourage use of returnable containers for takeaways](#)

[Reusable and recyclable coffee cup scheme launched in London](#)

[Water bottle features scented pods that flavour the water](#)

[London-based reusable container scheme for workplaces, restaurants and events](#)

[Body care brand launches refillable shower products](#)

[Reusable, returnable packaging scheme for French businesses and consumers](#)

[Spanish company launches refillable jar with outer wooden outer layer](#)

[Sports beverage brand introduces bottle that tracks hydration levels](#)

[Mono material cosmetic jar is refillable and recyclable](#)

[London-based bistro trials returnable beer bottles](#)

[Bottled water company moves to refillable bottle solution](#)

[Next Page →](#)

Distillery unveils ultra-premium whisky collection in unique packaging

Scottish distillery Glenfiddich has launched a collection of three rare whiskies inspired by the exploration of time. Called the 'Time Re:Imagined Scotch whisky Collection', the range comprises 30-Year-Old Suspended in Time, 40-Year-Old Cumulative Time and 50-Year-Old Simultaneous Time. The 30-Year-Old and 40-Year-Old come in a triangular bottle by Bormioli Luigi, based on the brand's iconic bottle. The 50-Year-Old is housed in a bespoke, hand-blown three-sided crystal decanter by Glasstorm comprised of two opposing triangles. The secondary packaging, by GPA Luxury, for the 30-Year-Old, has a ribbon-like design, with cut-out windows revealing the decanter inside. The 40-Year-Old features a bespoke jesmonite – a composite material comprised of a mineral base in an acrylic resin. The 50-Year-Old's casing, by Zone Creations, is made of aviation-grade aluminium. The 30-Year-Old whisky is priced at €1,050 (£915) for 70cl, the 40-Year-Old retails at €4,000 (£348) and Glenfiddich 50-Year-Old, with only 220 pieces available, costs a whopping €40,000 (£34,887).



[Back to trend contents](#)

Refill packs added to cycle lubricants range

British cycle and motorcycle maintenance company Muc-Off has announced that it is adding refill versions to its lubricant range. The new products consist of Wet Weather Lube and Dry Weather Lube, as well as the C3 Ceramic Wet Lube and C3 Ceramic Dry Lube variants. The new 300ml bottles will fill the standard 50ml bottles six times, giving a packaging saving of over 43% compared to individual bottles. Muc-Off said that the Wet Weather and Dry Weather Lubes also offer a 45% cost saving versus the 50ml alternatives, whilst the C3 Ceramic Wet and Dry Lubes come in at 63% better value. Muc-Off said it has taken the opportunity to move away from plastic for the refill, for a more sustainable 50% PCR aluminium alternative. The refills are priced at £17.99 for the Wet Weather Lube and Dry Weather Lube, and £27.99 for the C3 Ceramic Wet Lube and C3 Ceramic Dry Lube.



[Back to trend contents](#)

Intelligent labeling introduction enables circular packaging

Danish company SwipBox is a developer of high-tech parcel locker solutions. They have now announced an intelligent labelling solution called SwipBox Circuit that will enable web shops and logistics providers to use strong packaging materials up to 1,000 times. To use SwipBox Circuit, the consumer simply removes the content from the package at the parcel locker and leaves the packaging for the courier to return, eliminating the waste normally associated with parcels. Compared with disposable cardboard packaging, which has a reported average lifetime of 24 hours of use, the sustainable benefits of the reusable solution become clear. SwipBox is launching Circuit this autumn following successful pilots in Sweden, Denmark and Norway. According to the company, it will help customers meet the forthcoming legal requirements of Directive 94/62/EC on packaging and packaging waste.



Pilot programme for reusable cups at Swedish theme park

Swedish theme park Gröna Lund will conduct a returnable cup pilot scheme with beverage giant Coca-Cola. Visitors can choose a reusable mug and fill up their favourite drink themselves at one of the park's filling stations. Each refill mug is marked with a unique chip, which is read when refills are purchased, and in this way data about the mug's journey and number of uses can be assessed. Before the visitor leaves, the mug is returned at deployed drop-in stations or at one of Gröna Lund's lucky wheels, where the visitor gets to play once for free as a thank you. The pilot project began on 21 October with the start of Gröna Lund's Halloween celebrations, and the scheme will run until 6 November. The success of the project will be evaluated in a study, which will be carried out by Chalmers Industri teknik.



[Back to trend contents](#)

Shoppers can purchase leading brand products in reusable packaging

Customers at Giant Food, in Virginia, and Washington D.C. can now purchase top-brand products in reusable packaging thanks to a partnership between the retailer and Loop. Customers will be able to walk into any of the ten Giant grocery stores in Virginia and D.C. participating in the programme and purchase more than twenty products, including Nature's Path, Stubb's BBQ Sauce and Kraft-Heinz branded products, packaged in reusable containers instead of single-use packaging. When finished with a product, customers can return the empty packaging to a Loop Return Point at any of the participating Giant stores. From there, the containers are sent to Loop to be sanitised, then returned to the suppliers to be refilled and returned to the Giant store for future purchase. Customers are charged a small deposit at the Giant checkout, and a full refund is given once the container is returned.



UK's first smart on-shelf refill system for laundry detergent

Lidl UK is trialling on-shelf smart refill stations for laundry detergent in two of its stores. Through the machine's automated, touchscreen experience, customers can simply pick up the pouch, choose their favourite detergent and follow the simple on-screen instructions. Innovative 'closed-fill' technology incorporated into the pouch cap allows customers to fill up with the cap still on, enabling faster filling while eliminating the chance of mess and spills. Customers will save around 20p per refill, compared to Lidl's Formil single-use product. Located on-shelf in the store's laundry detergent section, the refill stations will increase store capacity by up to 300%, as they use the space of 66 single-use detergent bottles but can fill more than 245 individual pouches. Chilean tech company Algramo's smart technology will help Lidl record how many times each pouch is refilled and how much packaging has been saved through the trial.



Spanish perfume and beauty brand launches refill system

Barcelona-based perfume and cosmetics brand Equivalenza has announced the launch of a refill system that reduces plastic consumption by up to 91%. The brand already has three types of packaging with eco refills and will soon be adding a fourth in the next few weeks. The format is simple, when the product runs out, it is only necessary to buy a new refill and place it in the refillable outer container. The containers currently available for the eco refill system are the 50 and 200ml jar and the 50 and 75ml roll-on. With each eco refill of the 50 ml refillable container in jar format, Equivalenza reduces plastic consumption by 90%, while the buyer saves €2 (£1.74) on the product's price. In the case of the 200 ml container, also in jar format, the use of plastic is reduced by 91% and the price by €3 (£2.61).



[Back to trend contents](#)

Body care company launches shower gel refill in aluminium can

New York-based Bravo Sierra is a men's body care company that was set up in 2018 to show appreciation for serving and retired American servicemen. They have now announced the launch of a new pack, so that consumers can refill their existing Bravo Sierra Body Wash bottle to eliminate excess waste. The refill cans, which resemble beer cans, are made with 100% infinitely-recyclable aluminium, which the brand claims makes it the most sustainable and convenient way to use Bravo Sierra Body Wash. The body wash, available in white vetiver and cedarwood, and citrus and cedarwood, is priced at \$7.50 (£6.65) 5% of all Bravo Sierra sales are donated to a range of community support and quality of life programmes and nonprofits dedicated to serving military families and veterans. They are also committed to hiring veterans company-wide. Veterans make up 40% of their founding team and 30% of all current employees.



[Back to trend contents](#)

Reusable vacuum drinks cup features spill-proof technology

Topl is a reusable drinks cup with a unique patented feature called SpillSafe. If the cup is accidentally knocked over, the patented safety valve shuts responsively to ensure no mess, keeping the drink intact. The consumer simply twists, pushes the TOPL disc lid and drinks. By locking the lid, the leakproof design keeps any leftover liquid inside the coffee cup. Topl can be used from any angle, as per any ceramic cup. Drinks will stay piping hot for up to 3 hours or ice-cold for up to 6 hours, but TOPL is always cool to the touch due to the stainless steel double wall. Topl is available in five colours, charcoal, coral, teal, stone and salt. It is available in two sizes, short, which holds 8oz (227 ml), and regular which holds 12oz (341 ml). Prices are £27 and £29 respectively.



[Back to trend contents](#)

US retail giant offers customers reusable packaging option

American retail giant Walmart is offering customers in selected areas the chance to have products delivered through the Walmart+ InHome grocery delivery service, in partnership with Loop, the reusable packaging platform. Customers in areas of Bentonville and Rogers, Arkansas, can now buy a limited assortment of products in refillable, reusable containers and have them delivered to their homes via Walmart+ InHome. After consumers use the products, they place the empty containers in a designated spot inside or outside their homes for a Walmart associate to retrieve. The containers are then sent to Loop to be sanitized and returned to participating brands to be refilled and returned to the store for future purchases. Walmart+ InHome enables customers to have fresh groceries, everyday essentials and other items delivered to the location of their choice: dropped off at their doorsteps or unpacked right in their kitchens or garage refrigerators.



Furniture retail giant introduces reusable food and drink system

Following a successful pilot scheme, the German arm of IKEA has formed a partnership with RECUP GmbH, to introduce reusable cups and bowls in all of its restaurants in its 54 stores. The pilot scheme was conducted in three stores, in Cologne-Godorf, Düsseldorf and Ulm. The system works simply with a deposit, with customers paying a €1 deposit when buying a drink in the RECUP and a €5 deposit for food in the REBOWL. After enjoying the beverage and food, the empty containers can be returned to one of nearly 13,000 partners throughout Germany and the deposit refunded. IKEA stores also have deposit machines where RECUPs can be easily returned. IKEA says that during the pilot scheme, by using the RECUP scheme, it prevented over 18,000 single-use beverage cups from going to landfill.



[Back to trend contents](#)

Leading Swedish restaurant joins deposit scheme for its takeaway packaging

Sweden's largest sushi chain has formed a partnership with start up &Repeat to introduce their deposit scheme. From September, food from all 70+ Sushi Yama restaurants can now be ordered with &Repeat's reusable packaging. When customers use the scheme they will find &Repeat's QR code on the already recyclable packaging. When the customer scans the code with their mobile phone, there are instructions on how to sort the packaging and a map with an overview of the nearest place that they can return the packaging to after use. If the customer has their own recycling point in their office or at home, they can also register this and be rewarded for recycling the packaging. The payment comes in the form of credits in &Repeat's digital wallet and can be used to buy a new sushi meal, or as a means of payment in one of the approximate 700 restaurants that are currently connected to &Repeat.



Malaysian start up hopes to encourage use of returnable containers for takeaways

Tapauware is a Malaysian startup based in the Klang Valley that is hoping to encourage takeaway customers to start using their reusable, returnable containers when they order their take-outs. To order with Tapauware, customers first need to register as a user via its website. After paying a returnable RM30 deposit, (around £5.80) , they then become an official member. From there, members can use their Tapauware user ID to get food delivered in a reusable container – but only with participating restaurant partners, and for now there are only two partners, Spargo Eats and Loop Foods. Users have 14 days to return the container to Tapauware's collection points. Customers who don't return the borrowed containers during that period will forfeit their RM30 deposit and will need to re-register to be a user again.



Reusable and recyclable coffee cup scheme launched in London

London-based Cauli, began in 2019 by launching a reusable lunch box scheme called the CauliBox. The business has now announced the launch of the CauliCup, a reusable and recyclable coffee cup scheme. The cups, which are made from injection moulded PP (polypropylene) can apparently be reused 400 times, after which they are returned to the manufacturers to be recycled into new products. Currently, the cups are available in 10oz and 12oz sizes, and they hope to have 16oz cups in the near future. The company says that orders have already come from Barts Health NHS Trust and a number of banks in Canary Wharf. Within their closed-loop system the containers are used, returned to the return points (CauliKiosks), washed and repeatedly reused. Users of the scheme earn CauliCoins each time they use a CauliBox or CauliCup which can be collected and redeemed as sustainable discounts and rewards.



Water bottle features scented pods that flavour the water

air up® is a German water bottle that features a scented pod that tricks the brain into thinking that you're drinking flavoured water through your sense of smell. The refillable bottle is powered by aroma pods, with flavours that include watermelon, peach, raspberry-lemon, wild berry and orange-vanilla. The consumer fills the bottle with still or sparkling water, puts the straw in, and attaches the mouthpiece. The aroma pod is then removed from its packaging and pressed onto the mouthpiece. The pod is then activated by pulling it gently up until it naturally stops. It is then ready to drink. The bottle is available in either metal or see-through plastic. A starter set which includes a bottle and two pods is priced at £29.95 (\$32.86), while the 'favourite five' pod pack, which flavours 25 litres costs £11.95 (\$13.11).



[Back to trend contents](#)

London-based reusable container scheme for workplaces, restaurants and events

Junee is a London-based reuse-as-a-service provider for venues, workplaces, markets, festivals and events. Workplaces and restaurants can join the partnership, and remove single-use packaging from their businesses. Junee can provide their reusable bowls for use in workplaces or restaurants. The company designates an area for the 'Bowl Station', where colleagues can take a bowl and lid and take it to nearby restaurants that display the 'Bring Your Own Bowl' sticker. After use they return them to conveniently placed bins. They are then collected, cleaned and returned to the system. Junee says that for companies it's visible and engaging and a clear way to demonstrate their commitment to sustainability, bringing them one step closer to being a single-use, plastic-free workplace. The scheme has a measurable effect, as the impact dashboard available to companies that sign up shows waste and CO2 savings across the workplace.



Body care brand launches refillable shower products

WONDR is a Belgian natural body care brand that began by selling solid shampoo and shower bars. Noting that not every consumer is ready to move to solid bars, they have recently shifted onto a new product, which was the subject of a Kickstarter programme. The new development is a powder-based product, in which the consumer adds water, and then shakes a specially designed bottle to turn the product into a shampoo or shower gel. Silicon was chosen for the bottle's material as it is long-lasting and is also suitable for dishwashers. The cheapest starter pack retails at €37 (£32.54), and contains two refillable bottles, a 1 x 500ml shampoo refill and a 1 x 500ml body wash refill. The refill pouches are made from paper with a PLA (polylactic acid) coating and can reportedly be composted at home. The range comes in three scents, Creamy Coconut, Fresh Peach, and Healthy Herbs.



Reusable, returnable packaging scheme for French businesses and consumers

Berny is a French start-up, based in Nantes that provides businesses and consumers with reusable, returnable packaging. The model works on a deposit system. When the customer buys products in a supermarket setting, for example in the deli section, instead of using a single-use plastic container they can choose to take their product in one of Berny's stainless steel containers. The trays are stackable and have been designed to have a heat-sealable lid if required. They have a QR code on them for tracking purposes. When the customer has finished with the container, it is returned to the supermarket, where the customer has their deposit returned. The trays are then taken to a washing centre for cleaning before being returned to the system. The trays have an estimated life of 100 reuses before being recycled. The scheme is in use at several supermarkets in the north-west of France.



Spanish company launches refillable jar with outer wooden outer layer

Pujolasos is a Spanish company that specialises in luxury wood-based packaging, mainly for the cosmetics and spirits markets. They have announced the launch of P-Refill, a sustainable packaging innovation that consists of a refillable jar, with an outer wooden layer, and an inner disposable and easy to recycle plastic container. The company offers two different caps for P-Refill, either their patented Woodle, which is the first wooden cap with a disposable plastic inner for recycling, or Woon, a monomaterial wooden cap with integrated thread. Pujolasos says that both may be adapted and personalised to a wide variety of styles. P-Refill is made with certified PEFCR (Product Environmental Footprint Category Rules) and FSC (Forestry Stewardship Council) wood, helping brands commit to a socially and environmentally responsible approach to the manufacture, packaging and distribution of their products.



[Back to trend contents](#)

Sports beverage brand introduces bottle that tracks hydration levels

American sports beverage brand Gatorade has launched a new bottle that tracks personalised hydration needs and indicates to athletes when to drink, with a light-up cap. The bottle, part of the company's Gx range, is called the Smart Gx water bottle, and as well as the smart cap, features an additional app and sweat patch for optimal recommendations. The suggestions are tailored to each user and are gathered through data gathered from the individual's sweat patch and app. Gatorade claims the bottle is the world's first smart squeeze bottle and the only smart bottle with light-up cap tracking. A spokesperson for the company said that they expect the biggest impact the Smart Gx Bottle will have on the packaging industry is the importance of personalized fueling and hydration for athletes, through a smart bottle that everyday athletes can have at home. The bottle costs \$70.



[Back to trend contents](#)

Mono material cosmetic jar is refillable and recyclable

Spanish cosmetics packaging manufacturer Quadpack has announced a more sustainable addition to its Regula family of jars. The new Regula Refill Jar has been developed due to market demands for more user-friendly, premium and sustainable packaging. The Regula Refill Jar is said to be recyclable, refillable, made from a mono material, and easy to use. The 50ml pack has a thick-walled outer jar in PET (polyethylene terephthalate), with a premium, glass-like aesthetic, deemed to be perfect for prestige cosmetics brands. The inner jar, developed for optimal compatibility with most skincare formulas, is made of PP (polypropylene) and is designed to be easily thermosealed, one of the best solutions for refills. A gap in the outer jar specifically designed for easy removal, means the two components can be easily separated. The refill is just as easily inserted, making a reassuring 'click' sound when closed. New Regula Refill Jar's double-walled cap is completely made of PP, which makes all its components recyclable.



[Back to trend contents](#)

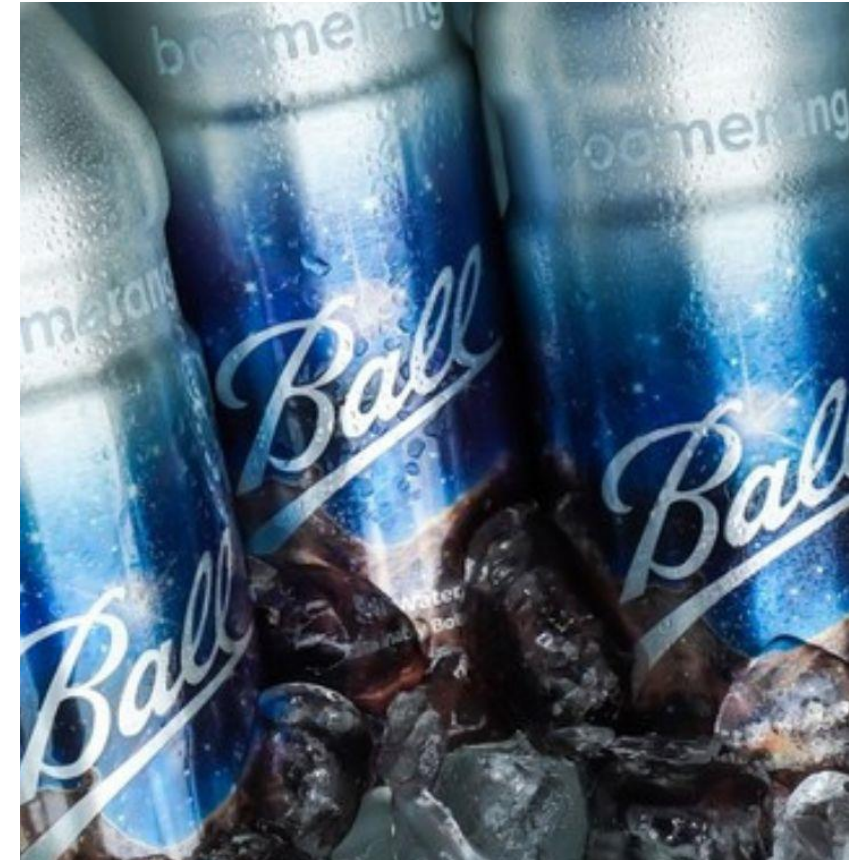
London-based bistro trials returnable beer bottles

London-based beer delivery service Draught Drop have partnered with Spar and Eat 17 to start a trial at its Walthamstow store for refillable beer bottles. Under the trial, which began at the end of August, customers were charged a premium of £1.50 per bottle, which is then returned to the customer once the bottle is returned to the store. Draught Drop said that depending on the success of the trial it could be extended to other independent retailers. The trial originally started at a £1 deposit, but was subsequently increased to £1.50. The company says that early sales have been strong and they are seeing returns already. As a partnership, Spar and Eat 17 have four stores, in Walthamstow, Hackney, Hammersmith, and Bishop's Stortford, and their business model is that of store and bistro combined.



Bottled water company moves to refillable bottle solution

Colorado-based Ball Corporation and sustainable water company Boomerang Water have partnered to provide a refillable bottle solution based on Ball's refillable aluminium bottle solution. Ball will provide the aluminium bottles for use at resorts, aboard cruise ships, student campuses and other outlets. The bottles will be used in the Boomerang Bottling System, the company's industry-leading technology that can wash, rinse, filter, fill and cap more than 3,000 bottles of fresh, premium water per eight-hour shift. Using aluminium bottles from Ball the system averts waste and carbon emissions created by the manufacture and transportation of traditional, single-use disposable bottles. Ball says that the alliance will see both companies recycle the bottles rather than dispose of them at their end of life, allowing them to then be turned into new bottles within 60 days.



About Us

ThePackHub is a leading UK based packaging innovation consultancy specialising in delivering packaging solutions to brand owners, retailers and packaging suppliers. ThePackHub manages a market-leading innovation database called The Innovation Zone. The easy to use resource has over 6,600 packaging innovations from around the world updated at 25 initiatives a week. This internal insight and knowledge feeds into much of the consultancy we undertake. ThePackHub also has an unrivalled network of packaging contacts and connections across the industry.



www.thepackhub.com

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. Our recent clients for technical support have included EAT, Greencore, Able & Cole, Loch Duart, Innocent, Aunt Bessies, Waitrose, Leathams, WRAP, KP Snacks, Iglo, Fortnum and Masons, Church and Dwight, Aubrey Allen, Glanbia, Pip & Nut and Happen!

We have published several packaging reports covering sustainability, packaging trends, supplier guides, seasonal packaging and more. ThePackHub also hosts packaging events. We have delivered a dozen face-to-face seminars that provide insight from expert speakers as well as bring the industry together to network and collaborate.

ThePackHub has a wealth of experience helping many major companies with their packaging innovation. Clients include Arla Foods, Waitrose, Barilla, Coca Cola, PepsiCo, Mondy, Premier Foods, AB InBev, Kraft Heinz, Mondelez, Mars Wrigley, Church & Dwight, PZ Cussons, Meiyume, Walgreen Boots Alliance, Marks & Spencer, Lidl, Aldi and many more.