thepackhub
INNOVATION ZONE

PACKAGING INNOVATION

BRIEFING REPORT

MAY 2023

Welcome

Welcome to ThePackHub's Packaging Innovation Briefing Report for May 2023.

In this comprehensive and unique monthly report, you'll find a wealth of information on the latest packaging innovations and industry news. With 118 pages of content, including 90 new packaging innovations for the month, you can be sure that you'll stay informed and up-to-date on all the latest developments in the packaging industry.

So sit back and enjoy this exciting journey through the world of packaging innovation.

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Summary

This report highlights the recent developments in packaging innovation, with a focus on bio-based packaging, technology-based solutions, e-commerce packaging, functional packaging, plastic reduction, and refillable and reusable packaging. Sustainability continues to be of primary focus with around 80% of new initiatives being environmentally focused.

The bio-based packaging sector is expanding rapidly particularly seaweed-based packs, and packaging that connects with consumers is still essential. Additionally, with the growth of e-commerce, there are increasing opportunities for brands and retailers to offer packaging solutions tailored specifically for this channel. The trend towards refillable and reusable packaging is gaining momentum, with many initiatives in the dry food, household, and personal care sectors. Recycling initiatives also continue to be one of the most active sustainability areas, driven by challenging Plastic Pacts commitments and packaging taxes.

The Nine Trends →

The innovations featured track ThePackHub's nine trend areas:

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Naturally done

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Naturally done

This month saw a continued focus on bio-based packaging, with 13 new initiatives in the space. Biodegradable and compostable packaging continue to be developed, as well as new bio-based alternatives to plastic. However, the lack of established industrial composting systems in most markets is a significant barrier to mass adoption.

Additionally, there are concerns about compostable and biodegradable packaging contaminating existing recycling streams, and the cost of such packaging is often three to four times higher than conventional plastic-based products. Despite these challenges, the bio-based packaging sector is expanding rapidly, with many new initiatives in development and not yet available on store shelves. However, big brands are yet to widely adopt these new packaging options, and most usage is currently limited to small challenger brands looking for a sustainable point of difference.

Seaweed packaging is a particularly strong are of development in recent times.

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Naturally Done

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Bio-cellulose packaging offers sustainable alternative to single-use plastics
Chemists redesign biological PHAs to make them more durable and versatile
Researchers make biodegradable optical components from crab shells
Startup uses rice stubble to create alternative to EPS
Indian startup creates biodegradable packaging from agricultural waste
Clay-based technology reduces plastic use and extends shelf life
Label manufacturer launches range of sustainable options
Biodegradable pack developed from prickly pear cactus and pineapple peels

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Sustainable new adhesive tape has 92% bio-based carbon content

German manufacturer of adhesive tapes and self-adhesive product solutions tesa, is launching what they say is a more sustainable alternative to conventional packaging tapes. tesa 60408 consists of a natural rubber adhesive with 100% bio-based resin and a paper backing made from sustainably managed, certified forests and other controlled sources. The new tape is aimed at the food and beverage industry, the pharmaceutical industry or the areas of logistics, warehousing and supply chains. The packaging tape is said to be ideal for light and medium-weight packaging up to 20 kg and can also be printed with different colour systems. DIN CERTCO awarded the adhesive tape the highest rating for bio-carbon content (> 85 %) as tesa 60408 has a total bio-based carbon content of 92%. tesa 60408 is characterised by high tensile strength, is tear-resistant and securely closes cardboard boxes and products. It is suitable for both manual and automatic dispensers.

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Israeli start-up developing packaging using organic waste and fungi

MadeRight is an Israeli start-up that is developing sustainable materials from fungi. The company's holistic approach brings together fungi and organic waste to create biodegradable materials, the first of which will be a sustainable alternative to plastic that is suitable for rigid packaging. The company takes organic side streams from the food, agriculture and biotechnology industries that would otherwise be sent to landfill or downcycled into feed. In a controlled, solid-state fermentation process, fungi turns this would-be waste into biomass. The start-up is working with 'a few' fungal species and selects them depending on the organic waste substrate used. Through several biotechnological steps, MadeRight then extracts materials from the biomass to mix in with plastics – either fossil plastics or bioplastics – to create pellets. The company sees Europe as its go-to market, though the company will be required to pass the stringent European Commission's food contact materials regulations.

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Swiss supermarket moves to potato starch for Easter packaging

Swiss supermarket chain Migros has moved away from metalised PET (polyethylene terephthalate) packaging for part of its Easter offering this year. The coloured Easter rabbit packaging is now made from potato starch and is a by-product of French fry production. Further starch is also obtained via industrial potato processing, while paper fibres and water are also added. Industrial potatoes have a much higher starch content than food potatoes and are unsuitable for direct consumption, thus providing a usable by-product. Aside from now being used for packaging, the starch is used as a thickening agent in soups and sauces and to make paper, cardboard or glue. The work to develop the potato starch packaging took two years to come to fruition by Delica, who are Migros's chocolate, snacks and drinks subsidiary. After use, the packaging can be recycled in the waste paper stream.

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European project looks to use natural colourant for packaging

A project called CurCol is setting out to assess the economic potential of regionally produced plant-based colourants, focusing on the yellow natural colourant curcumin. It is reported that with an estimated 87 million tonnes of packaging waste annually in Europe, non-biodegradable synthetic colourants pose significant environmental challenges. This Interreg NWE project unites partners from Ireland, Germany, Belgium, and the Netherlands to develop curcumin-based alternatives. While curcumin is already used in food and pharmaceuticals, its poor UV stability has limited its application in packaging. CurCol's research aims to improve UV stability and create additional colours, like red and blue. The project's long-term goals include valorizing biobased dyes in biodegradable packaging, introducing valuable crops to the greenhouse industry, identifying new supply chains, and supporting job and economic growth. The innovation could also benefit the textile and cosmetics industries in the future.

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Funds raised allows expansion of single-use clay packaging production in US

San Francisco-based start-up GaeaStar has announced that it has raised US$6.5M (£5.25M) to expand its operations in the United States, its products are currently made at their plant in Germany. The company manufactures single-use clay cups and bowls, using just clay, water and salt, which are said to have reduced environmental impact. The company says they have developed a 3D printer that can produce a cup or bowl every 30 seconds. GaeaStar technology combines traditional techniques with additive manufacturing technology. The company says that additive manufacturing is efficient and environmentally sustainable by design as it only uses material where needed, producing zero waste, and manufacturing on demand. The clay cup idea came into existence when the company founder travelled in India and noticed that street vendors would sell tea in crudely handmade terracotta cups, commonly known as “Kulhars” which patrons in the area used and then threw them away.

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Bio-cellulose packaging offers sustainable alternative to single-use plastics

Cellugy, an Aarhus, Denmark-based biotechnology company, is developing innovative and sustainable bio-cellulose packaging. The company's mission is to replace single-use plastics with sustainable alternatives with minimal environmental impact. Using a patented fermentation process, Cellugy transforms agricultural waste into a flexible and robust bio-cellulose material called EcoFLEXY. This biodegradable material is designed to replace traditional plastic films used in various packaging applications, such as food packaging and personal care products. EcoFLEXY offers several environmental advantages over conventional plastic packaging. It is home compostable, biodegradable, and non-toxic. The production process also uses agricultural waste, promoting a circular economy and reducing waste.

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Chemists redesign biological PHAs to make them more durable and versatile

Researchers from Colorado State University have redesigned biological PHAs, a type of biodegradable plastic, to make them more durable and versatile. The redesign could lead to the development of new PHA-based products for packaging that are more sustainable than traditional plastics. PHAs are produced by bacteria and other microorganisms. They are made from renewable resources, such as cornstarch and sugar, and can be broken down by microorganisms in the environment. This is seen to make them a more sustainable alternative to traditional plastics made from petroleum which can take hundreds of years to decompose. However, PHAs have some limitations. They are often brittle and difficult to process. The new redesign addresses these restrictions by using a different type of PHA that is reportedly more durable and easier to process. The researchers also developed new methods for processing PHAs, which could lead to the development of new PHA-based products. The new PHAs could make a wide range of products, from packaging to clothing and medical devices.

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Researchers make biodegradable optical components from crab shells

Researchers from the University in the Philippines have developed a process to turn crab shells into a bioplastic that can be used to make optical components known as diffraction gratings. These gratings are lightweight, inexpensive, and biodegradable, which could enable portable spectrometers that are also disposable. Due to its promising optical properties, the researchers explored chitosan, a material extracted from crab shells and often used as a packaging bio-material. Chitosan, in purified form as a solution, is transparent and can be moulded much like silicone while having a higher refractive index, which is important for certain applications. The researchers washed and dried the shells, turned them into a chitosan solution using a chemical process, and made gratings using soft lithography. This replication process uses a silicone mould to copy the surface features of an object.

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Startup uses rice stubble to create alternative to EPS

An Indian start-up called Dharaksha Ecosystems has created a replacement for expanded polystyrene (EPS) packaging out of “rice stubble”, the dead stalks left over after the rice season in India, millions of tons of which are burned every year. After harvest, the farmers need the waste cleared off their land as soon as possible. Its high moisture content means it’s not useful for stove fuel, so they burn it in massive pyres. In their factory, Dharaksha turns 250 metric tons of rice stubble harvested from 100 acres of farmland in Punjab and Haryana into packaging while paying the farmers a rate of $30 per acre for something they would usually burn. They combined the stubble with mycelium, which they found was acting as a binding agent, turning the baled stubble into something durable. They sell around 20 metric tonnes of their product every month, mostly by selling to glassware companies.

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Indian startup creates biodegradable packaging from agricultural waste

Dharaksha, an Indian startup, is making strides in sustainable packaging by transforming agricultural waste into biodegradable packaging materials. With the dual goals of reducing plastic pollution and managing agricultural waste, Dharaksha is addressing two pressing environmental challenges. The startup collects waste materials, such as paddy straw, sugarcane bagasse, and banana stems, which are usually burned or left to decompose, contributing to air pollution and greenhouse gas emissions. Through an innovative process, these waste materials are broken down into cellulose fibres, which are then combined with water and other organic binders to create a pulp. This pulp is subsequently moulded into various packaging shapes and dried to form durable packaging materials. The biodegradable packaging decomposes in just 90 days. In addition, it is non-toxic and free from harmful chemicals. By repurposing agricultural waste, Dharaksha is not only contributing to a circular economy but also providing farmers with an additional source of income.

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Clay-based technology reduces plastic use and extends shelf life

A new solution from a Boston, MA startup promises to tackle the two significant challenges of reducing plastic use and extending product shelf life. BERKM addresses these issues by decreasing the amount of plastic used in packaging by 20% and increasing product shelf life by six times. The technology also eliminates multi-layer coatings, enhances recyclability, and enables the development of new product lines. The driving force behind this innovation is a natural clay-based technology that improves essential material properties, including a reported 29-fold increase in gas barrier performance, 66% improvement in strength, 37% enhancement in heat distortion, and 52% increase in UV resistance. While the primary focus is on PET, the technology can also be applied to PP and PE materials. This new solution has gained attention from the plastic packaging industry as well as attracted interest from global brand owners.

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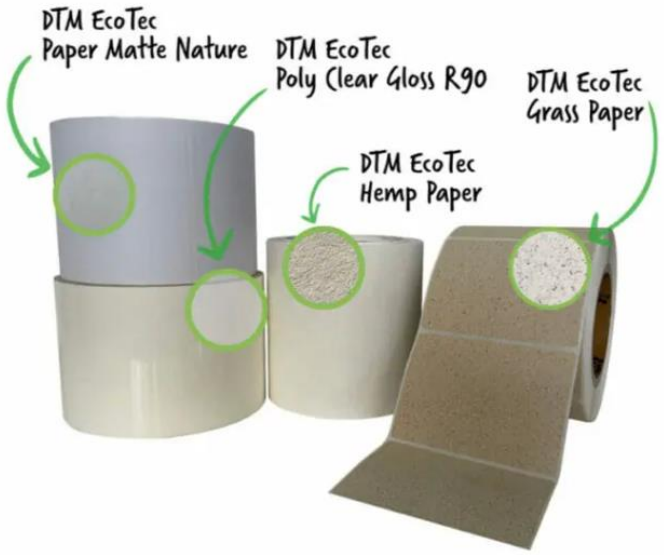
Label manufacturer launches range of sustainable options

German specialty printers DTM Print have launched four sustainable inkjet label options as part of its EcoTec line. EcoTec Hemp Paper is made from 100% hemp fibre, which is reportedly five times longer than wood pulp, is tear-resistant and can often be recycled. The company also offers a grass solution with DTM EcoTec Grass Paper. The label's natural grass fibres give the paper material its natural appearance and reduce the amount of process water required in the production process. DTM EcoTec Paper Matte Nature is made from 100% recycled carrier material from used label rolls. DTM EcoTec Poly Clear Gloss R90 is a glossy, transparent PET label made from 90% PCR PET (Post Consumer Recycled) material but with the same printing properties and mechanical characteristics as its non-PCR counterpart DTM Poly Clear Gloss.



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Biodegradable pack developed from prickly pear cactus and pineapple peels

Researchers in Peru have developed a new packaging solution that utilizes waste materials from prickly pear cactus and pineapple plants. The project, led by Dr. Rosalía Cuba and her team at the National University of San Marcos (UNMSM) in Lima, aims to reduce plastic pollution by offering a sustainable alternative to traditional packaging materials. The biodegradable packaging is made from the peels of prickly pear cactus and pineapple, which are usually discarded during fruit processing. Using an innovative extraction method, the researchers obtained cellulose from these fruit peels, which was then combined with glycerol and citric acid to create a flexible yet sturdy bioplastic material. Not only does this new biodegradable packaging decompose within three to four months in the natural environment, but it also minimizes waste generated during the fruit processing industry. The manufacturing process does not require the use of any harmful chemicals. The researchers have filed a patent for their invention and seek investors to scale up the production process.

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The Online Surge

The e-commerce industry has experienced substantial growth in recent times, and this trend is influencing packaging development. The COVID-19 pandemic has accelerated this trend, as the need for online-specific packaging remains significant.

The e-commerce market has seen a significant spike due to the pandemic, as consumers worldwide shift from physical stores to online platforms. A significant number of these consumers are online shopping for the first time, and it is likely that many will continue to do so. The role of shopping and packaging has changed permanently as a result.

As the e-commerce market continues to expand, there are increasing opportunities for brands and retailers to offer packaging solutions that are tailored specifically for this channel, rather than simply replicating the packaging used in physical stores. Packaging designed for e-commerce does not require the same level of security measures, as the purchase decision is made on a screen and bright on-pack messaging is not necessary. Additionally, packaging does not need to be explicitly designed to be attractive on a physical store shelf.

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Innovative reversible toy packaging designed for e-commerce

Algorithm-based solution chooses best packing option

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Innovative reversible toy packaging designed for e-commerce

In collaboration with British corrugated packaging specialist DS Smith, German toy manufacturer Playmobil has developed reversible packaging that serves both as product packaging and as e-commerce packaging for shipping. The solution, which has been optimised for online, conserves natural resources as it serves as a robust shipping carton and high-quality product packaging. If the customer wants to give the toy set as a gift, they can easily turn the box over in a few simple steps to reveal the traditional, colourful Playmobil packaging. Despite external influences during transport and shipping labels applied, reversing the packaging gives the customer flawless product packaging to give away, collect or keep. This new format is exclusively available on Amazon for the Playmobil airport set from the City Action theme world.

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Algorithm-based solution chooses best packing option

Carolina-based FastFetch has an algorithm-based solution for determining optimal outer packaging. The system learns by analysing historical order data to pick the best solution. The system can handle over forty different outer case sizes, maintained in racks positioned near the packing station. The technology chooses the most suitable option, which is then indicated to the packer by LED strips on the racking. LED and voice-activated signals to the packers replenish the cases. The system can also automatically place orders with the case supplier to replace used cases. The company says that the solution typically reduces stockholding by 30%. Shipping costs are also reduced due to the minimisation of packaging size, as less fuel is required for transportation. Also, less material consequently goes to recycling/landfill. The company claims an expected ROI of around six months.

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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.

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Making Life Easy

New coding system claims to raise industry benchmark

Chicken fillets packed individually for consumer convenience

New OLED display can be stretched to twice its length

Paper microwave susceptor food pack is a world first

Smart cap for pharmaceuticals improves patient adherence

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New coding system claims to raise industry benchmark

Paul Leibinger GmbH & Co are German manufacturers of continuous inkjet printers. They have announced that they will launch a new coding and marking system that will ‘raise the benchmark’ for applying codes such as best-before dates onto a range of materials at this year’s Interpack exhibition. A spokesperson for the company said that in the case of cost-sensitive applications, such as in the Food and Beverage sector or in the FMCG (Fast Moving Consumer Goods) segment, it is decisive that the marking runs smoothly and without any interruptions. The company claims to have developed an entirely new coding and marking system that delivers exactly what it promises: absolutely worry-free printing. They also say that the new system boasts the lowest operating costs in the industry.

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Chicken fillets packed individually for consumer convenience

Kronfågel is one of Scandinavia's largest poultry companies and a market leader in Sweden. It has launched chicken fillets in a new format that it says makes it easier for the consumer to defrost and cook the number of fillets required. Kronfågel's new ChickyPack contains four portion-packed 150g fillets that open with a flap, so no scissors or knife is needed. With ChickyPack, the consumer can easily tear off the desired number of fillets and then put the rest back in the freezer without affecting the shelf life or quality. Also, as the fillets are the same size, it facilitates cooking, and the consumer can control the cost per portion. Each individual portion pack also has a best-before date. The company hopes that ChickyPack can also reduce food waste as they are easily identifiable in the freezer.

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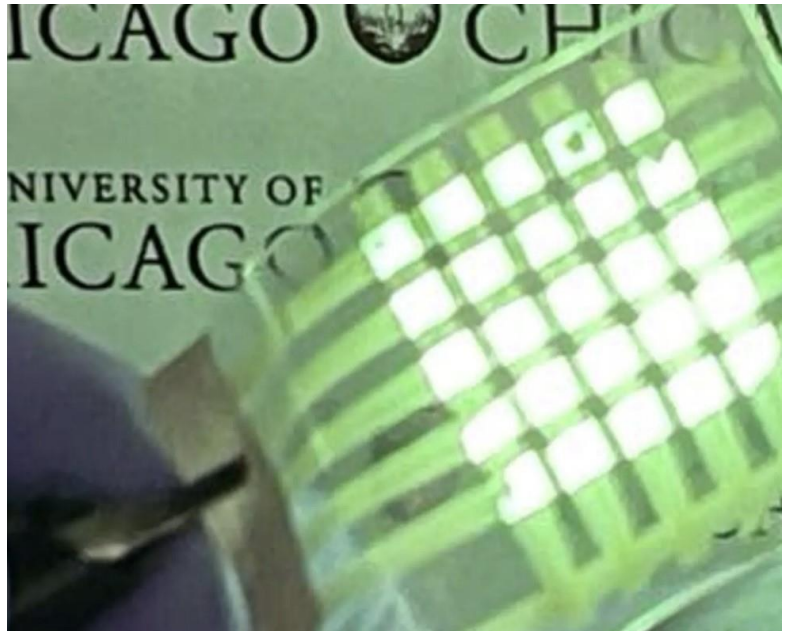
New OLED display can be stretched to twice its length

Researchers from the University of Chicago have developed a new OLED display that can be stretched to more than twice its length while still maintaining light emission and a clear image. The development opens the door to a wide range of wearable electronics as well perhaps some long-term packaging applications. The OLED display is made of a new material that is both stretchable and electrically conductive. The material is made of a network of tiny carbon nanotubes that are embedded in a polymer matrix. When an electric current is applied to the material, the nanotubes form a conductive network that allows electrons to flow freely. This allows the display to be stretched without breaking the electrical connection. The researchers say that their OLED display could be used in various wearable electronics, such as smartwatches, fitness trackers, and medical devices. The display could also be used in flexible displays for smartphones and other electronic devices. This new OLED display is a significant step forward in the development of wearable electronics. The display is more durable and flexible than previous OLED displays.



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Paper microwave susceptor food pack is a world first

It is reported that microwave food packaging is a $17 billion global market, which has evolved over the years with solutions designed to deliver more functionality and user convenience in this format. Folia Materials, a Bedford, MA, startup, has announced the development of the world's first-ever paper microwave susceptor food packaging. Current crisping susceptor sleeves are made from aluminium bonded to plastic. It is reported that some consumers still avoid microwave cooking in plastic packaging as well as striving for more sustainable products. Folia Materials has created the world's first-ever 100% paper microwave food susceptor with a patented plant-based coating. The coating is popular with brand owners because it improves food quality by soaking up grease, oil, and water. Consumers are also happy due to the delivery of crispier, better food texture. The business is looking for manufacturing and brand owner partners to work with as they look to scale manufacturing.

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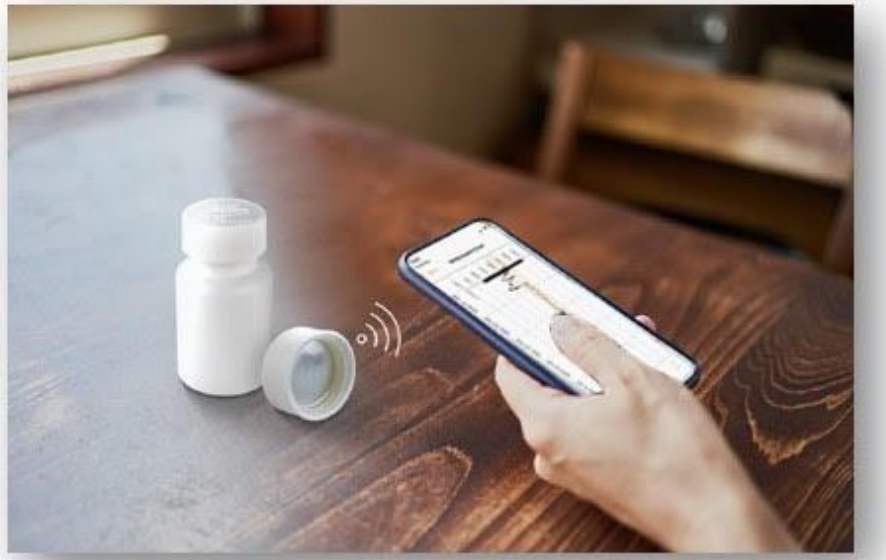
Smart cap for pharmaceuticals improves patient adherence

Berry Global has launched a patented child-resistant closure that features innovative digital technology to improve medication adherence. The new Berry Digi-Cap digital child-resistant closure is said to be ideal for clinical trials, drug development, research and academic studies. Patient behaviour data is analysed to enhance medication adherenc and gain insights into its effectiveness relative to the prescribed regime. A microprocessor incorporated into the closure records patient openings and stores usage history. The microprocessor is activated once the patient pushes down to open the closure, and the recorded information car then be easily transferred via NFC to external devices such a smartphones and PCs for further viewing and analysis. Drug companies can add extra features such as LED lights on the closure to show when the medication should be taken. The Berry Digi-Cap is compatible with 38-400 standard pharma packaging bottles and existing filling lines and can withstand the sealing process.



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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 environmental 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 are a long way off.

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Alternative to EPS foodservice packaging launched
High-performance cast polypropylene film launched for food packaging
Design agency launches paper-based cosmetic packaging range
Swedish partnership is developing fibre-based alternative to metal jar lids
French company manufactures sustainable wooden trays for fruit and vegetables
Champagne house adopts lightweight 800g bottle
Collaboration brings paper-based alternative to foam protective packaging
Recyclable plant-based coating provides gas and aroma barrier
Alcopop manufacturer introduces new can format
Introduction of new sustainable paper range for e-commerce packaging
Startup launches new recyclable alternative to PE layer on bags and pouches
Innovative six-pack design for mobile app vending machine sales launched
Distillery introduces new sustainable bottle for rum
Paper-based tube reduces plastic consumption by 46%
Own label detergent pods move to board packaging
Spanish supermarket eliminates plastic packaging for its fresh tomatoes
Bag-in-box solution for lubricants launched Europewide
Packaging solution developed for sustainable seafood transportation
Collaboration produces leak-proof VFFS paper packs

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Alternative to EPS foodservice packaging launched

Luton-based Seal Packaging is a business that focuses on providing sustainable packaging solutions. In response to the upcoming UK ban of EPS (expanded polystyrene) for foodservice packaging planned for October 2023, they have launched their Infinity TopSeal products, with trays made from EPP (expanded polypropylene) and lidding material made from PP, which are both regarded as 100% recyclable. Also, as the Infinity TopSeal trays are comprised of over 60% air, this makes them much lighter than traditional sealed trays, while also having a lower carbon footprint. The EPP trays were developed in conjunction with Klöckner Pentaplast. EPP is seen as a sustainable replacement for EPS, which has been the favoured material for making takeaway food trays and clamshell burger boxes for many years. The trays are embossed with the phrase ‘Recycle Me’ to help raise awareness. Infinity TopSeal was launched at the Hotel, Restaurant and Catering Show at ExCel in March.

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High-performance cast polypropylene film launched for food packaging

Innovia Films has launched Rayoface AQBSA, a new high-performance cast polypropylene (CPP) film for food and beverage packaging. The film is said to offer excellent barrier properties, high printability, and good machinability. Rayoface AQBSA is made with Innovia's proprietary AQBSA resin technology, which reportedly provides superior barrier performance to traditional CPP films. The film is also said to be highly printable, with excellent ink holdout and scratch resistance. Additionally, Rayoface AQBSA is easy to process, with good machinability and weldability. The film targets various food packaging applications, including retort, aseptic, and flexible packaging. Rayoface AQBSA is said to be a sustainable choice for food packaging, being made from renewable resources and being recyclable.

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Design agency launches paper-based cosmetic packaging range

Morrama is a London-based design agency that helps startups develop their ideas. They have now created their range of off-the-shelf packaging items for the beauty and cosmetics sector. Called Maya, the range was developed with Shanghai-based PPK. The Maya range stands out for its use of cellulose pulp refills made of bamboo and sugarcane waste. The range comprises lipstick, make-up palette, jars and pump bottles. The refills for lipsticks and solid formulas are 100% paper, while the pump bottle and jar refills have a thin PP (polypropylene) or PET (polyethylene terephthalate) coating. PPK is working on next year's 100% plastic-free refill, exploring plant-based and bio-PP barrier options. All packaging options come with refills made from renewable paper pulp that can be either composted or recycled as paper waste at the end of life and are manufactured using renewable energy.

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Swedish partnership is developing fibre-based alternative to metal jar lids

A three-way Swedish partnership is developing fibre-based lids to replace metal screw lids for products such as jams, smoothies, compotes, and other lidded foods and beverages. Blue Ocean Closures is working with jam makers Swed-jam and the Research Institutes of Sweden (RISE). The partnership will research and develop bio-based substitutes for existing lid materials. It is estimated that recyclable paper lids could potentially decrease over 500,000 tons of CO2 equivalents every year. As well as cutting down on the number of harmful materials entering the environment, fibre lids are expected to meet the increasing demand for more sustainable packaging solutions. Blue Ocean's lids are manufactured using advanced, proprietary vacuum press forming. The design is a combination of a thin top-seal barrier layer, which is compatible with any filled goods, and a body made of sustainably sourced FSC fibre material.

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French company manufactures sustainable wooden trays for fruit and vegetables

CF Embal is a French company that manufactures wooden trays that are mainly aimed at seasonal and early fruit and vegetables, which is a growing market as more customers are looking for a sustainable alternative to plastic. In the 1990s, the company invested in a unique system that allowed them to produce wooden trays automatically using a single sheet of peeled poplar wood. A process has also been developed over time to eventually get rid of staples that were originally used to form the trays. All of the company's poplar wood is PEFC certified and located at a maximum distance of 250 km from their factory, which lowers their carbon footprint. The raw material is managed sustainably, and traceability is possible on all packaging, which guarantees the CSR aspect and sustainability of the material. Trays can range in size from 100g to 1kg, and can also be printed.

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Champagne house adopts lightweight 800g bottle

Champagne brand Telmont has introduced a new bottle design to reduce the environmental impact of its packaging. The French champagne house has adopted a lightweight 800g bottle, significantly lighter than traditional champagne bottles that usually weigh between 900g and 950g. The lighter bottles require less raw material and energy for manufacturing, and their reduced weight results in lower fuel consumption during transport. The new design retains the champagne bottles' traditional shape and style while incorporating the benefits of a lighter packaging solution. As consumer awareness of sustainability issues grows, the adoption of lightweight packaging solutions, such as Champagne Telmont's 800g bottle, is becoming increasingly important. By taking this step, the brand hopes to set an example for others in the industry to follow.

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Collaboration brings paper-based alternative to foam protective packaging

Two German packaging companies have collaborated to bring a paper-based alternative to foam-based sliding boxes, commonly used for protecting delicate technical and medical equipment. The L-BOXeco is a sustainable, paper-based standard packaging system. The solution is based on a two-part system made of a corrugated cardboard cover with an integrated fibre cast fixation insert. Buhl-Paperform has many years of experience in the field of paper-based pulp moulding development, while Lindner Verpackungen brings its expertise in solid and corrugated board to the cooperation. As current suppliers of foam-based sliding boxes, Lindner Verpackungen also offers market proximity and an established sales network. With this combination of competence and know-how, the new paper-based alternative can be seen as a one-to-one replacement and thus enable a quick and easy changeover for customers. The L-BOXeco will be presented for the first time at the trade fair LogiMat in Stuttgart, Germany at the end of April.

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Recyclable plant-based coating provides gas and aroma barrier

Japanese chemical producer Kuraray has launched a new repulpable, plant-based granulate designed for extrusion coating. Called PLANTIC EP, the company says that it provides a gas and aroma barrier for paper and cardboard packaging without impacting recyclability. PLANTIC EP's barrier materials are produced from starch and can be used in recyclable and compostable packaging formats. Its gas barrier properties are expected to prolong the shelf life of perishable products. Because it is made from renewable, plant-based materials, it is anticipated to enable the reuse of materials that could not previously be recycled. PLANTIC EP has also been applied to kraft paper using the extrusion process with a bonding/heat-sealing layer of polyethylene from Texas-based Westlake – resulting in a series of flexible pouches, cartons, and multi-layer films with high-barrier properties. PLANTIC EP is currently being assessed for its recyclability in European recycling streams.

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Alcopop manufacturer introduces new can format

loucester-based SHS Drinks, owners of the WKD alcoholic drinks brand, is launching its WKD Blue in a new 250ml can format. The new aluminium cans will be available in 4 and 10 can formats. Research carried out by the company highlighted the popularity of cans amongst its target consumers. It showed that the format is one in which drinkers expect to see the category leader represented. The new format will be introduced across take-home in April and May 2023, new graphics will communicate that the new can format is present inside the fully-enclosed board multipacks. The company said that aside from direct consumer usage benefits, the new 250ml cans will also help offset packaging industry price rises and allow SHS Drinks to continue to offer WKD consumers the “best possible value for money”.

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Introduction of new sustainable paper range for e-commerce packaging

Fedrigoni, a leading Italian paper manufacturer, has released a new range of sustainable paper designed specifically for e-commerce packaging. The range, named “E-commerce Papers,” offers various paper options suitable for different packaging applications, such as boxes, envelopes, and void-filling material. The collection comprises 100% recycled and FSC-certified materials, providing sustainable alternatives for e-commerce businesses seeking to reduce their environmental impact. The paper range also includes options with high resistance to tearing and moisture, ensuring product protection during shipping. In addition, Fedrigoni’s E-commerce Papers claims to offer a premium aesthetic, enhancing the unboxing experience for consumers. With the e-commerce industry rapidly growing and consumers becoming increasingly eco-conscious, Fedrigoni’s new paper range is well-positioned to meet the demands of both businesses and end-users.

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Startup launches new recyclable alternative to PE layer on bags and pouches

An Israeli startup has launched a new recyclable alternative to the commonly used PE (polyethylene) layer used for sealing and moisture protection. VBseal, from Melodea, is resistant to water vapour, oil, and aroma and has heat-sealing properties. The coating is fully recyclable. It is also free from paraformaldehyde and bisphenol A and is FDA and BfR-compatible. A spokesperson for Melodea said that VBseal offers a solution that enables the reduction or even the eradication of plastics in packaging. The new product is said to be ideal to replace EVOH and/or PE on paper as it has the same or higher performance while being price competitive with these structures. The company has also invested US$500,000 in a pilot plant and innovation centre. VBseal is designed to line the packaging of fresh foods, cereals, fast foods, detergents, cosmetics and confectionery such as biscuits and ice cream.

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Innovative six-pack design for mobile app vending machine sales launched

Take, a new type of beverage company, has collaborated with Graphic Packaging International to create an innovative six-pack solution for their beers to be sold through their mobile app and vending machines. The Take & Go Clip Pack is a six-bottle clip-style pack that is applied using a lightweight, durable hand-held device, allowing product visibility and security for smart fridge technology to read bottle caps and charge consumers accurately. The recyclable paperboard packaging features glued sleeves and perforations that allow for the easy removal of individual bottles while maintaining structural integrity. The packaging design won the 'Innovation of the Year' award at the 79th Annual North American Paperboard Packaging Competition and has been placed in more than 2,000 smart fridges, with a projected 10,000 placements by 2024.

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Distillery introduces new sustainable bottle for rum

A four way partnership has announced the introduction of a new sustainable bottle for rum. Demon Rum has partnered with 17A Distillery, Kinsbrae Packaging and Frugalpac to produce and bottle in the southwestern United States. This much lighter Eco Bottle dramatically reduces the company's overall shipping cost and carbon footprint. The production of the Eco Bottle reportedly uses 84% less water, six times less CO2 and is five times lighter than a comparable glass bottle. Demon Rum says that by using the Eco Bottle the weight reduction dramatically reduces the company's overall shipping cost and carbon footprint. 94% of the bottle is made from recycled board, the other 6% of the packaging is the food-grade pouch inside. The new Eco Bottle will be sold in stores by Earth Day 2023 and joins the distinctive glass bottle, as both are sold in 750ml, six-bottle cases.

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Paper-based tube reduces plastic consumption by 46%

Swiss tube manufacturer Neopac has launched what it says is a new sustainable paper-based tube. This new solution, called the PaperX tube reportedly reduces plastic consumption by 46% compared to standard co-extruded tubes. The carbon footprint is also reduced by 24% compared to conventional plastic tubes. The tube body is made of 80% paper from FSC-certified (Forestry Stewardship Council) forests. The company says that the unique tactile properties of PaperX offers consumers a pleasant and smooth paper experience in the store and at home. PaperX can be printed both flexographically and digitally. Suggested applications include natural and organic cosmetics, skincare products, body lotion and suncare products. It is available in pack volumes ranging from 40-200ml. Nepac says that PaperX can be easily filled and sealed on standard tube filling lines.

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Own label detergent pods move to board packaging

German discount supermarket chain Norma has announced that it is moving its own label Toptil washing detergent away from plastic and into a board container. The change to board packaging began in March 2023 for its 3-in-1 colour and heavy-duty pods. The company says the move to board packaging will save around 21 tonnes of plastic packaging annually. They also state that the board box of the 3-in-1 pods is made of at least 91% recycled paper and is recyclable. The FSC certificate makes it clear that the highest environmental standards were met during production, from the forestry operation to the final processing of the cardboard. The box has a secure closure to ensure that the product is safe for children. The SCIC (Superior Child Safety Closure) certificate guarantees consumers that the detergent will not fall into children's hands even if the packaging does.

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Spanish supermarket eliminates plastic packaging for its fresh tomatoes

Spanish and Andorran supermarket chain Caprabo has announced that it is removing plastic and introducing 100% recyclable and compostable packaging for its fresh tomatoes. The new format is a combination of paper, paper mesh and bamboo. The company says that the move will reduce the company's annual plastic use by three tonnes, accounting for the sales of about 250,000 kilograms of tomatoes a year. A spokesperson for the company said that Caprabo hoped to advance initiatives that contribute to minimising the impact of plastics on the environment. And as a supermarket, they could do so with micro-actions that allow them to take extreme care of the environment. Caprabo sells products sourced from local production processes. Its Proximity Programme for Regions scheme gives approximately 300 small producers, agricultural cooperatives, and over 2,800 of their products access to its stores.

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Bag-in-box solution for lubricants launched Europewide

PETRONAS Lubricants International (PLI) has launched its sustainable and circular PETRONAS Syntium Bag In Box (BIB) packaging solution in Europe. This product offers a reported more environmentally friendly UN Mark Certified solution, complying with all transport regulations for packaging and shipping dangerous goods. The PETRONAS Syntium BIB carton pack comprises two complementary components, a cardboard exterior and a soft plastic interior bag formulated for viscose products. Compared to traditional plastic bottles, the new packaging solution uses up to 85% less material, reducing up to 92% of plastics. Both the cardboard exterior and inner plastic bag are durable and provide a strong aromatic barrier, as well as a clean pour, free from spillage and glugging. This initiative reduces waste and carbon emissions while providing a reported convenient and durable packaging solution.

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Packaging solution developed for sustainable seafood transportation

Saica Group has launched an innovative packaging solution that promises to shake up the seafood sector. The packaging, built on a sheet of recycled cardboard and an internal PE-PET laminate, acts as a barrier against water, providing a reportedly more sustainable alternative to EPS (expanded polystyrene). The pack has no cuts and offers barrier functionality through its cut-out design, meeting industry water resistance requirements. Using recycled and recyclable materials, such as corrugated cardboard from recycled paper, reduces environmental impacts. The Saica Pack ensures food safety and reduces the volume and space required for storage, providing logistical advantages. The solution was developed hand in hand with wholesaler Maresmar.

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Collaboration produces leak-proof VFFS paper packs

Swedish pulp and paper manufacturer Billerud AB and German machinery manufacturer Syntegon (formerly Bosch Packaging) have launched Axello Zap, a completely new packaging system. Axello Zap is the world's first completely paper-based, fully sealed food packaging for flour, pasta and sugar products. The bag's closure makes it completely tight, and the companies claim that nothing can leak out. The paper material is a mono material and Syntegon has developed a ZAP module with a vertical form-fill-seal equipment. Billerud and Syntegon believe that here they have a clear competitor to plastic packaging, and they anticipate a lot of interest from brand owners. The two companies hope that the Axello Zap system will become a "role model" for this type of packaging, as they see clear environmental advantages and cost advantages with systems where nothing can leak.

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Protect and Preserve

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Protect and Preserve

Solutions that prolong shelf life, decrease food waste, and safeguard contents have both environmental and economic benefits. We continue to observe new developments in this area. The COVID-19 pandemic has led to an increase in supply chain-based initiatives that aim to safely distribute vaccines.

Preventing food waste remains a crucial goal, and we are monitoring various packaging formats that have been engineered to reduce food waste. It is widely reported that between 33-50% of all food produced globally goes to waste, with a value of over $1 trillion. Advancements in technology are playing a role in addressing this issue, with many recent developments using technology to detect and communicate changes in the state of food. Packaging plays a vital role in minimizing food waste. In this section, we will focus on examples that enhance the environment by extending shelf life or reducing waste, as well as packaging that protects the product through improved secondary packaging solutions that take into account environmental or cost considerations.

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Oxygen barrier coating extends shelf life and reduces food waste

Researchers investigate egg-based coating to extend shelf life of fruit and vegetables

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Dosing cap prevents vitamin and mineral deterioration

Graphene-reinforced polyethylene film offers enhanced properties

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Thermal transfer ribbons provide customised security and anti-counterfeiting options

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Oxygen barrier coating extends shelf life and reduces food waste

CF Embal is a French company that manufactures wooden trays that are mainly aimed at seasonal and early fruit and vegetables, which is a growing market as more customers are looking for a sustainable alternative to plastic. In the 1990s, the company invested in a unique system that allowed them to produce wooden trays automatically using a single sheet of peeled poplar wood. A process has also been developed over time to eventually get rid of staples that were originally used to form the trays. All of the company's poplar wood is PEFC certified and located at a maximum distance of 250 km from their factory, which lowers their carbon footprint. The raw material is managed sustainably, and traceability is possible on all packaging, which guarantees the CSR aspect and sustainability of the material. Trays can range in size from 100g to 1kg, and can also be printed.

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Researchers investigate egg-based coating to extend shelf life of fruit and vegetables

A scientist from the William Marsh Rice University in Texas has won the National Science Foundation award to develop a sustainable, low-cost, egg-based coating to extend the shelf life of fruits and vegetables. The scientist, who is an Assistant Research Professor in materials science and nanoengineering, said that the goal of the project was to develop an eco-friendly, biodegradable, protein-based nanocomposite coating that could be applied to the surface of a variety of shaped fruits and vegetables. It is hoped that the coating will extend shelf life by reducing spoilage, dehydration and microbial growth rates. The project hopes to address food preservation as well as waste management challenges that could help improve access to fresh produce in food deserts, ie, areas with poor access to healthy and affordable foods.

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Active anti-bacterial film technology helps extend pack shelf life

Dartmouth, Nova Scotia, Canada-based Impactful Health R&D have introduced their new Actipack solution. It is a new active anti-bacterial film-based technology packaging solution for fish products. The anti-bacterial components in Actipack are all derived from natural sources. The film is 100% biodegradable and compostable in industrial conditions. By prolonging the shelf life of fresh fish, Actipack helps reduce organic waste and allows retailers, exporters, and processors to capture more value from their products. Its extended shelf life capabilities contribute to a more efficient supply chain and reduced food waste. Actipack meets the rigorous FDA Oxygen Transmission Rate requirements, making it suitable for skin or vacuum packaging applications. Its compliance with these standards ensures that the packaging maintains the quality and freshness of the product. Actipack is sold in rolls, allowing seamless integration into fish processing production lines without incurring additional costs.

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FlexiFlow packaging solution offers enhanced food safety and sustainability

Klöckner Pentaplast, a global packaging solutions provider, has introduced FlexiFlow, a packaging solution designed for modified atmosphere packaging (MAP) applications that improves food safety and sustainability. FlexiFlow is made from advanced, high-barrier materials that protect food from external factors, such as oxygen and moisture, resulting in extended shelf life, reduced food waste, and improved safety. Additionally, the materials are recyclable, making them a more environmentally friendly option. FlexiFlow features a reclosable, easy-to-open design for consumer convenience and good product visibility, crucial for attracting shoppers at the point of sale. Its versatile design is suitable for various food products, including meat, poultry, fish, cheese, and fresh produce, and can be tailored to meet specific requirements. Klöckner Pentaplast's commitment to sustainable packaging is evident in the FlexiFlow product line.

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Dosing cap prevents vitamin and mineral deterioration

Florida-based BlastMax has a patented dosing cap for beverages which keeps all the ingredients fresh until ready for the consumer to drink. This means that vitamins and minerals do not break down as they would in conventional drinks when sat in water for extended periods. To release the ingredients, all the consumer does is push the top of the cap, which breaks the seal, and by shaking the bottle the ingredients are mixed with the water. The company says by utilising Blast Cap Technology, the customer now has the opportunity not only to eliminate many harsh chemicals present in most drinks to keep them stable on the shelf. BlastMax has the facilities to manufacture, fill, and seal customers' products. They also custom manufacture filling and sealing equipment for customers' needs, from 10 to 600 bottles per minute.

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Graphene-reinforced polyethylene film offers enhanced properties

Gerdau, a leading steel producer, has joined forces with the Brazilian Center for Graphene Research to develop an innovative graphene-reinforced polyethylene film. This new material boasts improved strength, barrier properties, and electrical conductivity, opening up new possibilities in various industries, including packaging and electronics. The collaboration has resulted in significant advancement in incorporating graphene into plastics, with the film material suitable for a wide range of applications, from enhancing packaging performance to reducing waste in industries that rely on high-performance films. Graphene, a single layer of carbon atoms arranged in a hexagonal lattice, is renowned for its remarkable properties, being 200 times stronger than steel while being lightweight and flexible. It also has exceptional thermal and electrical conductivity. The development of the graphene-reinforced polyethylene film shows the potential of incorporating advanced materials into everyday products such as packaging.

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Manufacturer expands range of custom sterilisable medical packaging

California-based Cleanroom Film & Bags (CFB) has announced that it has expanded its range of sterilisable packaging to include custom Tyvek products. Tyvek is claimed to be ideal for medical devices, pharmaceuticals and diagnostic instruments, and CFB's sterilisable packaging made with DuPont's Tyvek material provides a superior microbial barrier, excellent puncture resistance, and exceptional tear strength. Meeting the highest level of sterilization standards, CFB's Tyvek sterilizable packaging is compatible with gamma, plasma, autoclave, EtO and steam sterilization methods. It is available in various formats, including peelable pouches and header bags. The company says that CFB's design capabilities, paired with the company's proprietary manufacturing process, allow for a high degree of customisation to meet the specific requirements of each application. CFB supplies manufacturers of wound care products, implants, inhalers, surgical devices and medical instruments.

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Thermal transfer ribbons provide customised security and anti-counterfeiting options

German supplier of thermal transfer ribbons, Leonhard Kurz, is to showcase two innovative security and anti-counterfeiting solutions for product labelling at LogiMAT 2023. With its TTR Unique UV and TTR Unique VEROSPEC, labels can be equipped with effective, individual security features that are invisible to the naked eye. The elements hidden in the printing ink of the thermal transfer ribbon can only be detected using a test device. The company says that there are hardly any limits to the design possibilities. While logos of product brands, company names or almost any other design request can be incorporated into the TTR Unique UV and appear as a security effect using a conventional UV lamp, a special reading device is required for the TTR Unique VEROSPEC. In this case, the product is protected even more effectively using completely invisible, customised elements.

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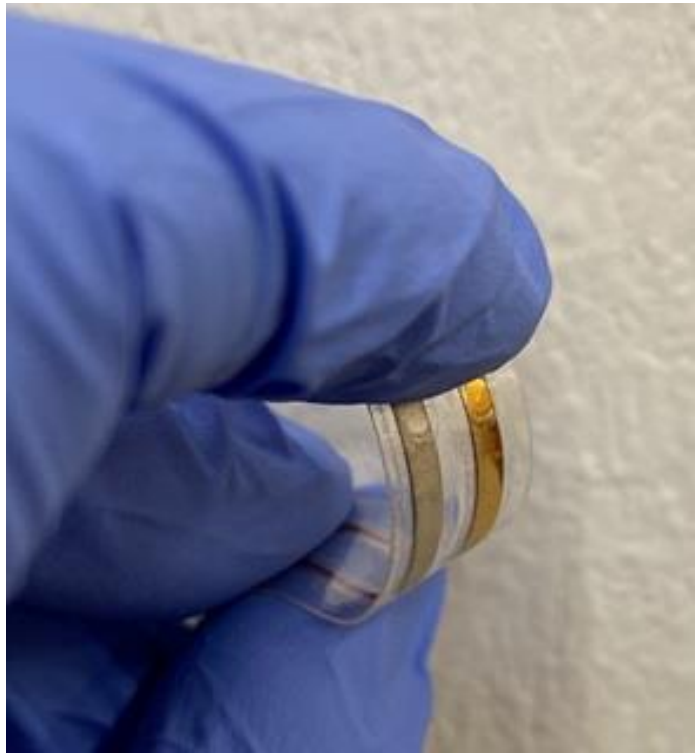
Compact pH sensor enables continuous freshness tracking in food packaging

A Southern Methodist University (SMU) graduate has designed a compact pH sensor to identify food decomposition in real-time. The innovative sensor can integrate into food packaging materials, such as plastic films, enabling continuous freshness monitoring. The flexible pH sensor measures just 2mm by 10mm, significantly smaller than the bulky devices currently used in the industry, impractical for incorporation into individual food packages. Khengdauliu Chawang, a doctoral student and the sensor's lead developer, explains that the pH sensors function similarly to wireless radio frequency identification devices found in airport baggage tags. As food packs containing this sensor pass through supply chain checkpoints, they can be scanned, and the data transmitted to a central server for real-time pH level tracking. This system allows for the accurate determination of freshness thresholds through the supply chain. The user-friendly solution is also disposable. Monitoring pH levels is important for assessing food freshness, with higher levels often indicating spoilage. However, the electrodes in existing real-time pH sensors require bulky, expensive electric batteries. Chawang's sensor, on the other hand, utilizes minimal biocompatible materials, reducing costs and enabling disposability.



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Recycling Resurgence

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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.

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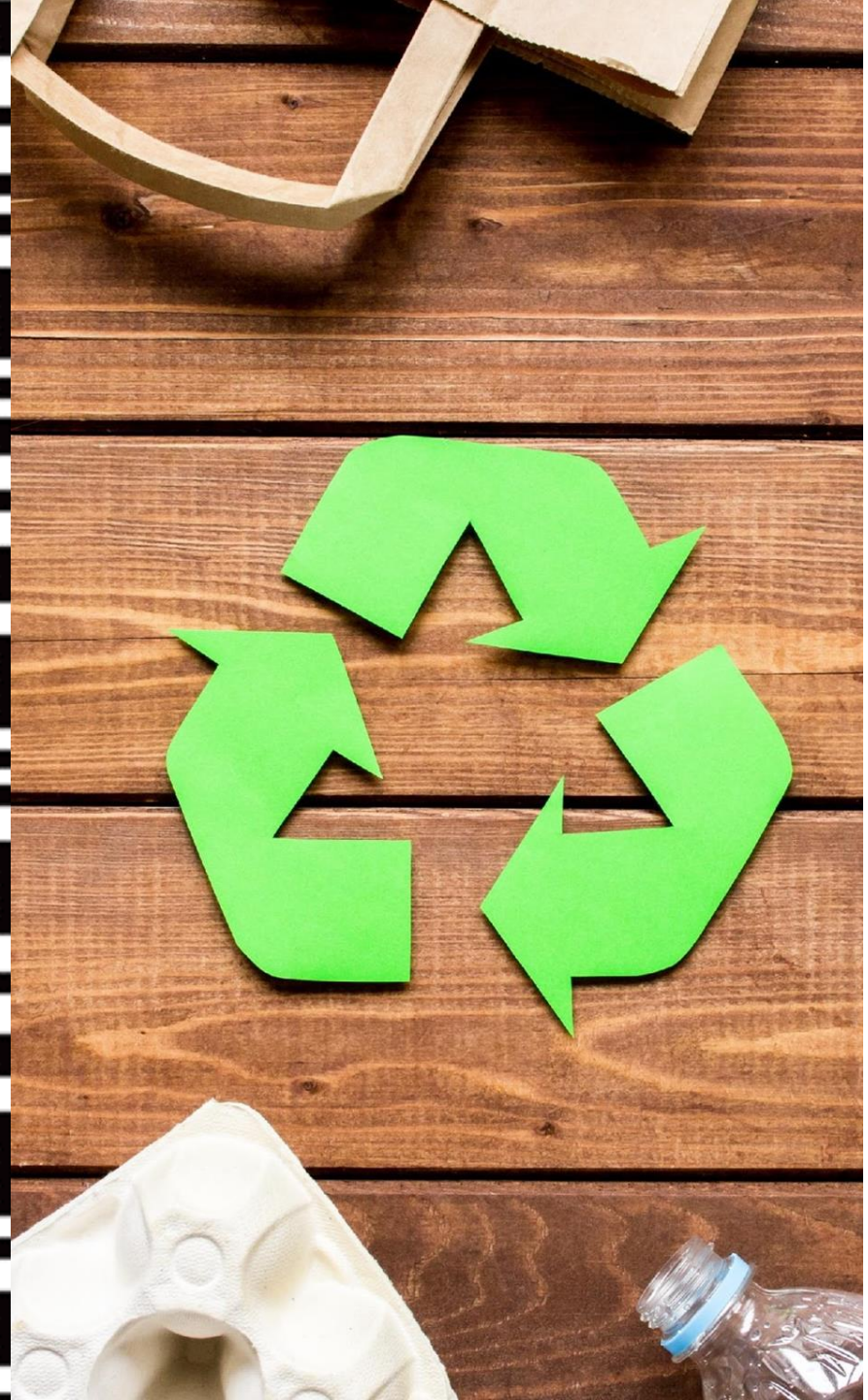

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Investment advisory firm successfully pushes for more sustainable packaging
Scientists create recyclable plastic made from super glue
Supermarket introduces chilled meal trays with 30% PCR content
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Discounter introduces 'anti-waste' bags to tackle food waste

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Launch of sustainable mono material for food trays

German chemical company BASF has launched a new PBT (polybutylene terephthalate) material that the company says helps to overcome two issues faced by plastic packaging: the move towards mono material solutions, and making the recycling of packaging as simple as possible. This new PBT product, called Ultradur Barrier B6560 M2 FC TF is touted as a true mono material, offering advantages in sorting and recycling. BASF says that Ultradur Barrier B6560 M2 FC TF's barrier properties in food packaging extends the shelf life, which leads to reduced food waste and transport costs. Also, the material is characterized by excellent barrier properties. The processability of the PBT is ideal for the extrusion of films and the thermoforming of packaging or technical parts, making it suitable for packaging with very thin-wall geometries. BASF says it is a sustainable alternative to PET/PO (polyethylene terephthalate/polyolefin) structures and aluminium.

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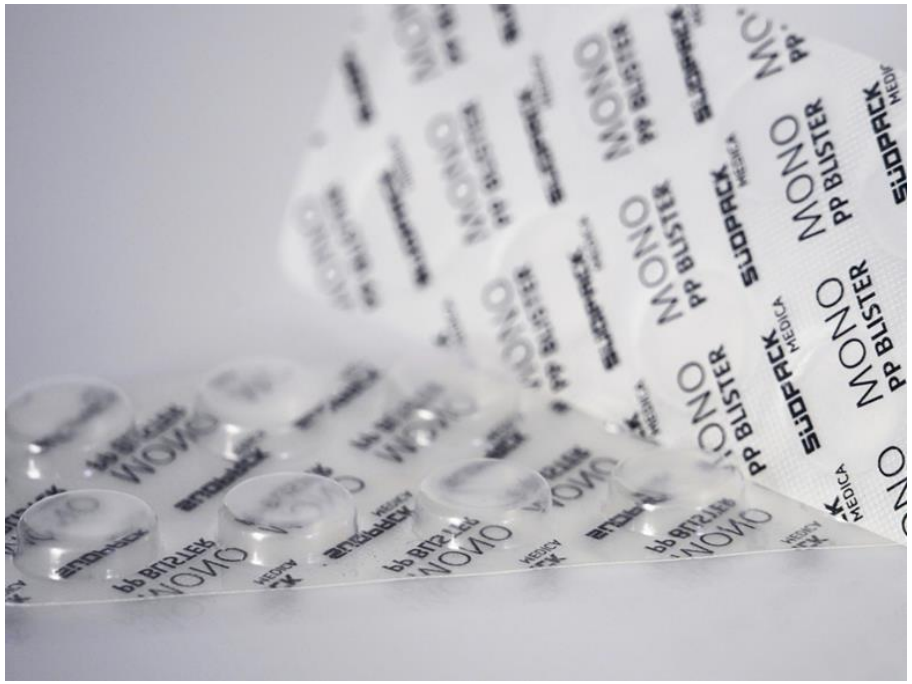
New blister packaging is now recyclable

SÜDPACK has unveiled a new recyclable, mono-polypropylene (PP) blister packaging solution for the pharmaceutical, medical goods, and life science industries. The new solution, PharmaGuard, is made from high-density polypropylene and is said to be compatible with various barrier materials for product protection. PharmaGuard is designed to be easy to process on existing packaging lines with only minor modifications. The top and bottom webs of the blister are manufactured via a coextrusion process. This reportedly ensures an efficient and high-quality packaging process. In addition to its recyclability and ease of processing, PharmaGuard is also said to offer several other advantages, including high transparency for a clear view of the product and a large processing window. SÜDPACK say that PharmaGuard is the first recyclable, mono-polypropylene blister packaging solution on the market that meets the stringent requirements of the pharmaceutical, medical goods, and life science industries. The company is confident that PharmaGuard will be a valuable addition to its product portfolio.



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American dairy moves to bottle that contains 30% rHDPE

Californian dairy Clover Sonoma has announced that it has moved its one gallon (3.78 litres) organic milk to a new bottle that contains 30% rHDPE (recycled high-density polyethylene). The material chosen for the bottles is Envision's EcoPrime food contact-approved rHDPE, which has been available for more than 15 years, but manufacturers and brands have been slow to adopt the material, which is believed to be due to a lack of experience running PCR (post consumer recycled) materials, and also cost, as PCR resin is 8 to 10% more expensive than virgin HDPE resin. Another challenge for milk producers seeking to use rHDPE in their milk jugs has been sourcing clear PCR content. PCR content in other consumer packaged goods products is more readily available, but food-grade PCR content less so until now. EcoPrime is made from kerbside-recycled food and beverage packaging and uses a unique, patented cleaning process designed to eliminate contaminants.

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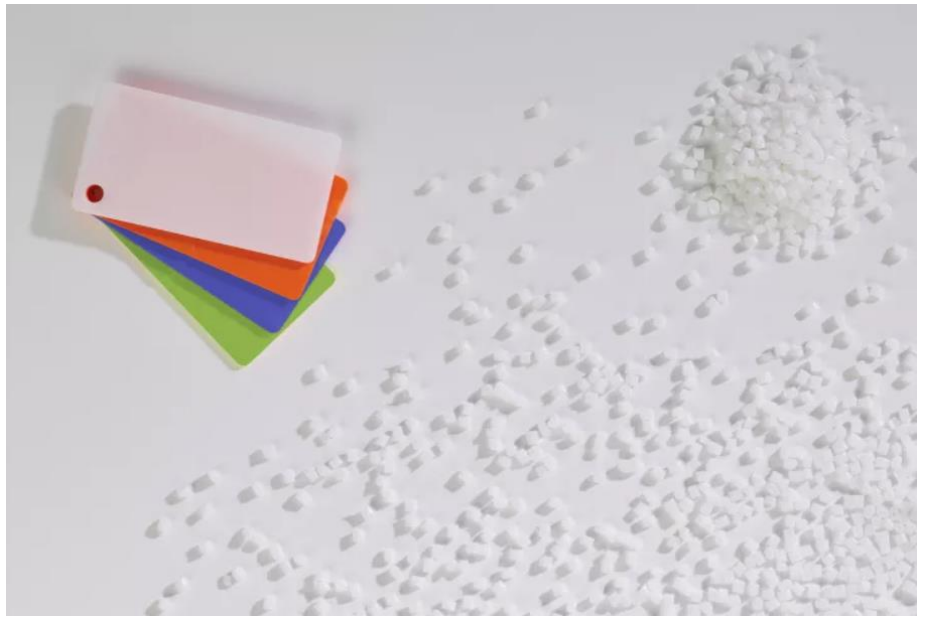
Recycled PP resin using natural colours is dishwasher-safe

FKuR is a German manufacturer of high-quality special plastic compounds including bioplastics. Their Terralene rPP (recycled polypropylene) has a natural to white appearance, compared to the often grey appearance of recyclates. As a result, they can be coloured in a variety of ways and provide packaging manufacturers with greater flexibility. The material is a hybrid compound based on polypropylene, which combines the ecological advantages of recyclates and bio-based raw materials with very good recyclability. Depending on the product type, the recyclate content ranges from 30 to 60% and comes from post-consumer waste streams. The bio-based share is up to 33%. The drop-in product range can be used in a variety of ways due to the good flowability and the natural colour of the granules, but is currently still limited to the non-food area. Terralene rPP reportedly meets the requirements for temperature or chemical resistance and can be used for dishwasher-safe reusable plastic items.



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Innovative all-in-one packaging solution launched

French packaging company International Paper has introduced the “One Box,” an all-in-one packaging solution that simplifies shipping and storage by combining a protective outer box and an integrated pallet for wine. The innovative design, made from corrugated cardboard, is lightweight and durable, offering a sustainable alternative to other traditional packaging formats. The One Box is reportedly easy to assemble, and its foldable design allows for efficient storage and reported reduced transport costs. With the growing demand for more sustainable packaging solutions, International Paper’s One Box has the potential to offer a convenient and sustainable option for both manufacturers and consumers. The product is currently available in different sizes, holding either 1 or 2 layers of 3 or 6 bottles.

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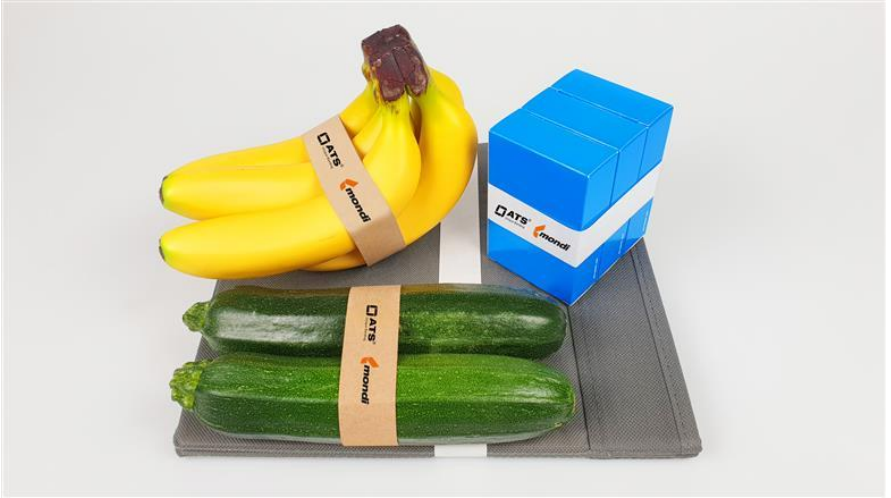
Innovative paper band is an alternative for plastic

Global packaging manufacturer Mondi has collaborated with Swiss converter ATS-Tanner to create an innovative paper band which can hold individually labelled products or bundles, replacing plastic. The kraft paper band is said to be strong enough to replace plastic on single or bundle packages and ideal for drink, fruit and vegetable and eCommerce end-uses. The band is made of kraft paper and is recyclable in existing paper recycling streams. ATS-Tanner uses Mondi's kraft paper Advantage MF SpringPack and converts it into a band by adding a functional barrier on both sides of the paper. The paper is then sealed using ultrasound, eliminating the need for adhesive. This ensures the products are secured with minimum packaging, reducing waste and delivering a cost-efficient solution. ATS-Tanner says this solution consumes 98% less energy than it would take to pack a like-sized delivery using a shrink-wrapping machine.



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Leading food producer moves to 30% PCR PET bottles for sauces

Heinz Brazil is moving its Ketchup, barbecue sauce and mayonnaise to a new bottle that contains 30% recycled PET (polyethylene terephthalate) material. The move, which will not affect the shape or colour of the bottles, is estimated to save around 700 tonnes of virgin material per annum. The new packaging was developed in just under a year by Sao Paulo-based Valgroup, who are the largest plastic producers, transformers, and recyclers in Latin America. Because these products contain no additives or preservatives, Kraft Heinz demanded a quality PET PCR resin to guarantee the integrity of the product's taste, smell and colour. Kraft Heinz is starting to implement this change in packaging material with the Heinz brand, but the idea is to move to the company's other SKUs. The initiative is part of the company's global goal of producing 100% of its packaging with recycled, recyclable or compostable material by 2025.

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New pasta packaging contains 30% PCR content

Pasta Garofalo, based in Gragnano, Italy, has announced the launch of what it claims is a first for the pasta sector. The company has moved its packaging to new recyclable packaging that is made from 30% PCR (post consumer recycled) material. The new packaging uses recycled plastic obtained from chemical recycling, which for this application makes it possible to obtain pyrolysis oil from the decomposition of the polymers that make up traditional plastic packaging waste and convert them into the raw material that can be used to produce new packaging. The solution will initially be rolled out in five packaging formats, with the company intending to extend its usage further. An on-pack QR code guides consumers to a purpose-built website with content geared towards educating consumers about sustainability practices.

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Partnership looks to promote sustainable mono-material pump

Austrian plastics packaging manufacturer Alpla has formed a partnership with the South Korean manufacturer of mono-material PP (polypropylene) pumps Hana. The joint venture aims to produce recyclable, mono-material plastic pumps for soap, lotion, and shampoo dispensers. Hana's Eco Pump is made from 100% PP, but can also be manufactured from post-consumer recycled (PCR) material. The patented design features a smooth spring execution that guarantees linear and even force over the entire pump stroke. In the future, the pumps – like all ALPLA products – will also be customisable. ALPLA began its production of standard pumps for soap and shampoo dispensers in Hyderabad, India, in 2020. By partnering with HANA Innovation, it hopes to continue its strategic growth in the injection moulding sector. The companies have also stated that their shared goal is to distribute pumps with patented plastic spring technology worldwide and offer complete systems, including the bottle.

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Collaboration produces rPET for use in barrier films

Thailand-based resin producer Indorama Ventures and Portuguese film producer Evertis have announced they are collaborating to bring recycled PET (recycled polyethylene terephthalate) from trays to food packaging barrier films. Following six years of research and development, Indorama Ventures is now commercially producing rPET flakes from post-consumer trays at its Verdun facility in France. The company claims that quality is comparable to rPET flakes from post-consumer bottles. The technology can potentially divert 50 million post-consumer PET trays from landfills and incinerators. The development supports a closed-loop economy for PET trays by giving consumers more sustainable options and enabling packaging producers to meet their recycled content targets. It also protects and preserves food, reducing about 154 million tons of food waste, costing a reported €143 billion annually across the EU.

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All of cereal manufacturer’s packaging is now 100% recyclable

British cereal manufacturer Weetabix has revealed that its entire range of products is now 100% recyclable. The company says that all of its paper-based packaging components as well as its Weetabix On The Go bottles are recyclable at home via kerbside collection, while all plastic items such as inner bags for Alpen muesli and Ready Brek can be recycled with soft plastics at most major supermarkets. The company says that they conducted extensive testing with their packaging supplier to come up with recyclable film options that would run smoothly on their machines. The company also says that these new recyclable films ensure there is no compromise on product freshness, meaning that consumers can be confident of the same Weetabix quality and taste. Weetabix added that the packaging changes will reduce the brand’s carbon footprint by 648.4 tonnes per year. This move reflects Weetabix’s commitment to sustainability and its goal to reduce its environmental impact.

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Mono-material PE stand-up pouches suited for primary packaging

German flexible packaging manufacturer SÜDPACK and packaging machine manufacturer SN Maschinenbau have announced that they will present the Pure-Line range of PE-based stand up pouches at this year's Interpack. The mono-material recyclable PE structure will be used on the SN Maschinenbau packaging machine, the FMH 300, to produce stand-up pouches with zippers. Combined with the pouch packaging machine featuring a special hygienic design, the PE mono-material is particularly suitable for primary packaging, such as grated cheese, sausages or snacks. The PE mono-material can be equipped with different features and barrier properties to ensure that products are aroma-proof, airtight and have a longer shelf life when packaged. The FMH 300 is a horizontally operating pouch packaging machine with a special hygienic design with a rotary table to form, fill and seal flat and stand-up pouches from roll stock.

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Investment advisory firm successfully pushes for more sustainable packaging

Green Century Funds, a responsible investment advisory firm, has successfully pushed Keurig Dr Pepper (KDP) to adopt more sustainable packaging practices. The firm urged KDP to consider their single-use plastic pods' environmental impact and invest in alternative solutions. As a result, KDP has announced a new commitment to sustainability, promising to make all K-Cup pods recyclable by the end of 2022 and to use 30% post-consumer recycled plastic in all K-Cup pods by 2025. Additionally, KDP plans to pilot a programme allowing customers to return used K-Cup pods for recycling. As more investors prioritize sustainable investments, companies like KDP will continue to face pressure to adopt more eco-friendly practices. This success demonstrates the power of responsible investing in encouraging companies to prioritize sustainability.

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Scientists create recyclable plastic made from super glue

Scientists at the Boise State University in Idaho have created a recyclable plastic made from super glue to create a plastic that could replace polystyrene, / commonly used in yoghurt pots, disposable cups and cutlery, and which reportedly accounts for 6% of plastic waste. When super glue is exposed to moisture, ethyl cyanoacrylate molecules bond to form polymer chains, but the reaction is so fast that only short chains are formed. The researchers created a way to slow that process down in order to form longer polymer chains and, therefore, a stronger material known as poly(ethyl cyanoacrylate), or PECA. It can be easily recycled by applying heat, which depolymerises it to its constituent ingredients. The researchers have recovered 90% of the material in tests, far exceeding many plastic recycling processes.

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Supermarket introduces chilled meal trays with 30% PCR content

A collaboration between Danish plastic packaging manufacturer Faerch, and British supermarket chain Tesco will see the incorporation of post consumer recycled (PCR) waste plastic trays back into its chilled food packaging. The Tray 2 Tray programme, developed collaboratively in 2021, is now enabling Tesco to implement 30% recycled tray content, collected from European kerbside waste, and converted into food-grade packaging in a bid to achieve full circularity. Tesco says its ready meal trays already contain up to 75% recycled content, largely sourced from bottle flake, as it is cleaner and easier to recycle. The introduction of PCR trays begins with a phased rollout set to begin in April 2023. The collaboration hopes to keep high-quality, food-grade PET within the supply chain, prevent downcycling, and contribute towards the industrial-scale recovery and recycling of PET tray packaging.

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Talcum powder manufacturer moves to 50% recycled packaging

Chilean foot care product manufacturer Brooks has launched its first containers made with 50% recycled plastic. Produced in collaboration with Santiago-based plastic recyclers Comberplast and plastic packaging manufacturer Chilarom, half of the packaging of these talcum powders was produced with recycled waste. Once the product is finished, the packaging can be transformed into other products. The move to recycled plastic means that more than 40 tonnes of virgin plastic will no longer be used per year. Brooks has gained the APL seal, which identifies companies that have complied with a Clean Production Agreement in one or more of their facilities. Brooks achieved this recognition due to their new recycled and recyclable packaging. The new line of Brooks with recycled and recyclable containers can be found in the main traditional channels, the wholesale market, supermarket chains, perfumeries and pharmacies in Chile.

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Elimination of tamper-evident strip from dispensing taps

Smurfit Kappa, a leading global packaging company, has taken an important step to improve their sustainability by removing the tamper-evident strip from its Bag-in-Box dispensing taps. This change aims to reduce plastic waste and simplify the packaging design while maintaining product safety and integrity. The company's decision to eliminate the tamper-evident strip resulted from extensive research and development, including consumer feedback and testing. The new design maintains the same level of protection against product tampering, ensuring that the contents of the packaging remain safe and secure. Removing the tamper-evident strip reduces the amount of plastic waste generated by the packaging, contributing to Smurfit Kappa's sustainability goals. This innovation also enhances the user experience by simplifying the opening process for consumers to access the packaging contents.

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French wine merchant implements bottle collection scheme

French wine merchant Famille Ravoire has announced that it is to implement a bottle collection scheme to improve its environmental credentials. The collection scheme is expected to be in operation by June 2023 across most of its varieties of wine. The company says that bottles will be collected via its Salon de Provence site for reuse. A QR code printed on the labels of the bottles will allow customers to learn more about how the scheme will function. The company says that as part of its commitment to considerably reduce its environmental impact, this is one more step in its “ecological turning point”, which they wish to mark to encourage other operators to understand how it works and follow them in this process.

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Safety equipment supplier reduces use of virgin plastic and carbon emissions

The UK's leading supplier of safety and PPE equipment, Arco, say they have successfully reduced its use of virgin plastic and carbon emissions. The move is part of its recently launched sustainability strategy, 'A Safe Tomorrow', through which Arco has committed to reducing packaging waste in its own operations and throughout its supply chain. The company has introduced new mailing bags made from 80% recycled polyethylene (PE), which is widely recyclable in the UK, and has secured a 35% reduction in the amount of plastic used across its operations. Production has also been relocated from China to Europe, resulting in an estimated carbon emission saving of 38%. The company has also changed to a new 'void fill solution' to protect products in transit. The alternative provides a further 13% reduction in plastic usage and carbon emissions, resulting in 17% less waste. Arco's sustainability aim is to be carbon net-zero by 2045.

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Discounter introduces ‘anti-waste’ bags to tackle food waste

Following a successful trial in its Canary Islands stores, German discounter Lidl has announced that it is to roll out what it calls anti-waste bags across 650 stores in Spain. The bags are priced at €3 and contain fruit and vegetables that are suitable for consumption but do not meet conventional aesthetic standards. They will also contain products with cosmetic damage to the packaging but without damage to the product contained inside. The company says that the pilot scheme in the Canary Islands prevented the wastage of more than 20,000 kilograms of fruit and vegetables. Lidl has also been conducting trials of other measures to reduce food waste in the Canary Islands, which have also now been rolled out across the network. It is also progressively implementing a 50% discount on day-old bread and a 30% discount on cookies, pasta, canned goods and frozen products.

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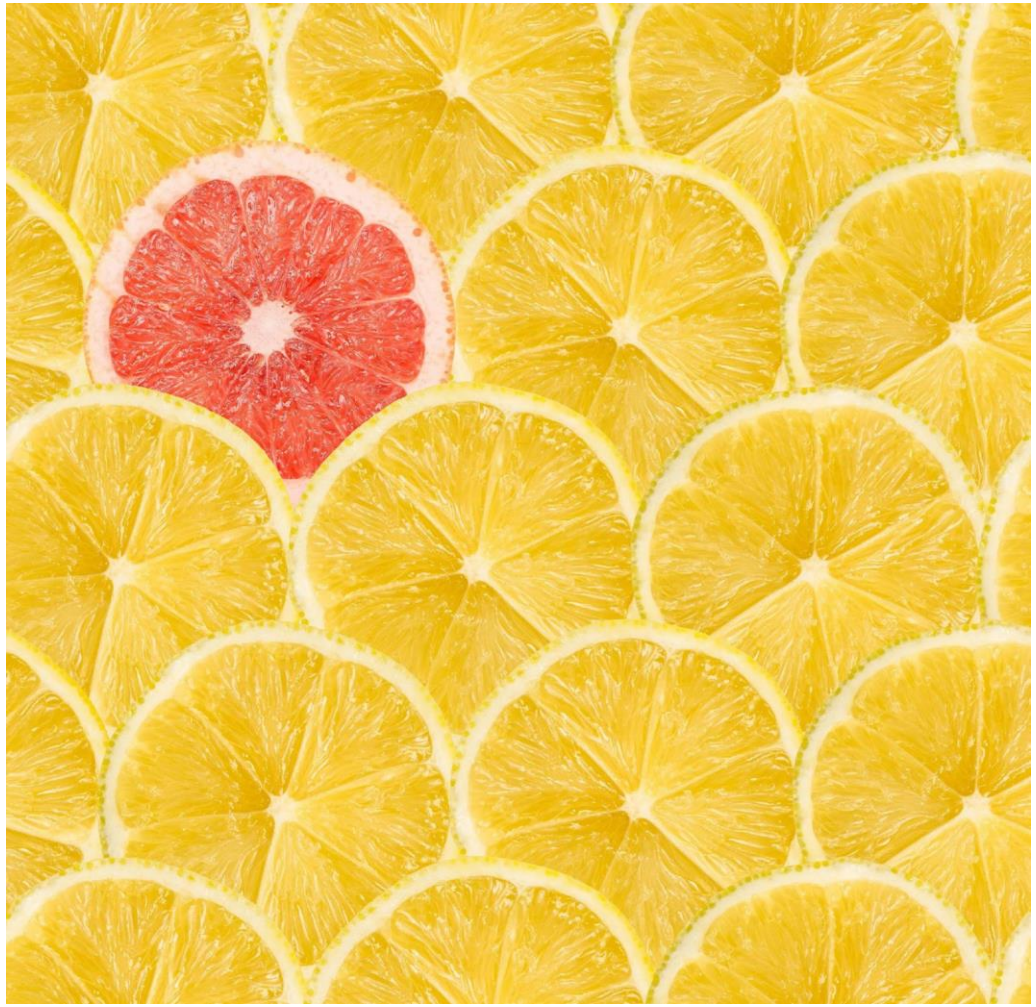

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Getting Noticed

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.

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Innovative electric vehicle-inspired beer launched

Electric car brand Tesla has released a limited-edition beer in Germany inspired by the design of its soon-to-be-launched and highly distinctive Cybertruck. Named “Cyberbeer,” the beverage is a wheat-based ale with a unique flavour profile, designed to appeal to new fans of the electric vehicle brand. The beer’s packaging also reflects the distinctive design of the Cybertruck, featuring a geometric shape and the iconic stainless steel hue. Tesla has collaborated with a local German brewery to produce the limited-edition ale, ensuring a high-quality product that aligns with the brand’s commitment to innovation and sustainability. Cyberbeer is currently available in Germany at select Tesla locations and through the company’s online store. The launch of this unique product not only showcases Tesla’s creative approach to marketing but also highlights the company’s ability to engage with fans and extend its brand presence beyond the automotive industry.

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Refill Revolution

The trend towards refillable and reusable packaging is gaining momentum as more companies explore ways to reduce their use of single-use, hard-to-recycle packaging. This growth is partly driven by the goal of the Plastic Pact to deliver reusable packaging by 2025. Many of these initiatives are coming from start-up and smaller brands, but multinational companies are also beginning to test the waters with small-scale trials and pilots. The dry food, household, and health and beauty sectors are currently the most active in this area.

Consumer attitudes towards single-use packaging are shifting, with a growing resistance to disposable packaging. The innovations in refillable and reusable packaging can be categorized into the four models outlined by the Ellen MacArthur Foundation: Refill at home, Return from home, Refill on the go, and Return on the go. The dry food, household, and personal care sectors are leading the way in this area. Many of the in-store examples of refillable and reusable packaging are currently small trials and pilots, as major retail chains test the waters with a limited number of initiatives in select outlets. The next steps of these major retailers will be watched with interest.

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Reusable packaging scheme launched in Chicago

A Chicago startup called REUSO is trying to change how people eat out. The company claims that the use of single-use plastic in the US has grown by 300% since the pandemic. REUSO, is a reusable packaging platform that functions in a similar way to a library. The system works by the customer scanning a QR code to initiate a text message. The user receives a unique PIN and the restaurant or operator enters it into the system. That allows the customer to check the container out. They then return it to an outdoor REUSO bin. There is a $1 service fee for each order which offsets the technology and washing cost, and as long as customers return them within 14 days there is no additional cost. The company says that its containers are made of PP (polypropylene) and they estimate that they could be washed and reused more than 1,000 times.

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Packaging company launches return scheme for recycling its containers

Michigan-based foodservice packaging manufacturer Dart Container has announced the launch of a new scheme, which will allow the company's US customers to ship their used Dart foodservice packaging to a relevant recycler. Known as the Next Life Take Back Program, the initiative is claimed to be the first of its kind in the US packaging industry. Customers will first clean the used Dart packaging and ensure that it is made from either paper, PET (polyethylene terephthalate), PP (polypropylene) or EPS (expanded polystyrene). They will then be required to upload proof of purchase, including the measurements of the box to be sent off, and buy a discounted UPS shipping label based on the type of material. A spokesperson for the company said that the initiative's focus is all about supporting litter reduction efforts and boosting access to recycling.

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Online food delivery company trials reusable packaging

Online food delivery company Uber Eats has begun a trial with reusable packaging for its customers in Central London. During the trial, customers will be given the option to order their takeaway in reusable containers and easily return them in a bid to tackle single use packaging. Once the customers have enjoyed their meals, all they need to do is scan a QR code on the packaging, select a day for collection (from as early as next day to no later than 3 weeks later), give the containers a simple rinse and await collection. All collections are low or no emissions, made by couriers using bikes, electric cars or vans. The trial will run for six months with a group of restaurant partners and will be managed by Again, a reusable packaging supply chain company. Participating restaurants are located within a 5km radius of the Again facility in Kennington Park.

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Beauty brand launches aluminium eco-refillable compact

Australian beauty brand Ere Perez Natural Cosmetics has launched what they claim to be the world's first 100% aluminium eco-refillable compact that is free from all hard-to-recycle materials, like glues, magnets, mirrors, paint, labels, hinges and plastics. The Eco-Makeup Wheel is a refillable single-material compact case made from just aluminium. Customers will receive the eco-refillable compact when they buy either the Corn Setting Powder or the Rice Powder Bronzer. When the product runs out, consumers can purchase refills. They just have to take off the lid, unscrew the ring, place the refill in the base of the tray, and secure the ring back in place. The company says that more of the brand's face powders will be available in the Eco-Makeup-Wheel Refill Case later in the year.

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Launch of high-end fragrances in refillable bottles

American fashion brand Ralph Lauren is adding three new products to its Polo Earth range of fragrances, which will feature refillable bottles. The new bottles ar said to be easy to refill whether consumers have the 100 ml or 40 ml size fragrance. The consumer twists of the spray applicator, then places the included funnel o the bottle's neck. They then aim the narrow spout fror the refill bottle into the funnel, and fill the bottle. The bottles are designed with an auto-stop, anti-spill syste that will stop the refilling process when the bottle is fu to prevent wasting fragrance. The new fragrance bottl uses 20% post-consumer recycled glass, and is 30% lighter than Ralph Lauren's conventional bottle. The Polo Earth Collection will be available at select retailers starting April 2023. The product lineup includes a 10ml, 40ml, 100ml and 150ml refill.

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Wine company launches refill pack to reduce environmental impact

In honour of Earth Day, award-winning wine company BOXT has launched refillable packaging for its iconic wooden boxes. The new packaging is made from recycled materials and is designed to be reused up to 10 times. BOXT, from Austin, Texas, says switching to refillable packaging will save 200,000 single-use bottles from going to landfills each year. BOXT is a female-founded, direct-to-consumer wine company that was founded in 2016. BOXT's wines are made from grapes grown in Napa Valley and are available in various styles, including red, white, and sparkling. BOXT says the new packaging will reduce its environmental impact by 50%. The company is also working on other sustainability initiatives, such as using solar power to power its operations. BOXT's refillable packaging is a great example of how businesses can positively impact the environment.

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Logistics company tests reusable packaging in pilot scheme

German logistics provider DHL Parcel has announced that it is currently piloting a reusable shipping packaging scheme. The pilot scheme is being carried out in partnership with Netherlands-based Kruitbosch, owner of bicycle brands Cortina and Alpina. As well as selling bicycles, they also supply European bicycle stores with parts and accessories. Following research, the company decided on a polypropylene box. DHL says that the boxes are expected to be reused at least a hundred times (although, in reality, this is unlikely). No filling material is needed, and the capsule is very sturdy, waterproof, stackable and can be made in various sizes. The boxes are also fitted with a tracker so the company knows how often the capsule has been used and where it is. DHL says that the first benefits are already clear; they process their orders faster as they no longer have to fold and glue boxes.

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Concentrated and refillable solutions for professional hygiene industry

The Orapi Group, the manufacturer of professional hygiene products, has announced the launch of Ultra dose, a range of five ultra-concentrated products with packaging designed to be better for the environment. Hygiene professionals are transitioning to concentrated and refillable products, which are seen as more sustainable as they help to reduce packaging waste. Brands like Tork, Kimberly-Clark, and Rubbermaid have developed innovative, eco-friendly solutions for the professional cleaning sector, such as ultra-concentrated cleaning solutions requiring less packaging and transportation, reducing carbon emissions. This forms part of a range of Orapi refill solutions now on the market.

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Grant allows development of antimicrobial reusable food packaging

CodiKoat is a company based in East Anglia, UK, that specialises in antimicrobial and antiviral coating technology. They recently announced that they have been granted £330,000 ($410,000 USD) to fund the development of CodiPac, their antimicrobial reusable food packaging. CodiKoat intends to introduce their novel antimicrobial technology Cydal to the food packaging manufacturing process. The company says that Cydal is perfect for the food processing and manufacturing industries, as it is independently certified to kill 99.99% of viruses, bacteria and fungi on surfaces within seconds. The company aims to reduce the environmental impact associated with the need for high-temperature washing or chemical sterilisation for typical types of reusable food packaging. They intend to work with supermarkets and consumers to assess the viability of this alternative to single-use packaging. The UK's national innovation agency, Innovate UK, supported the grant.

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Natural cosmetics firm launches sustainable and recyclable refill system

Spanish natural cosmetics firm Freshly Cosmetics has launched a sustainable and recyclable refill system. The new design allows consumers to refill their existing containers, of which 96% are made of long-lasting glass or aluminium. The refill packs are made from 75% vegetable fibres and come in 100% recyclable board packaging. The company says that the refill option has saved nearly 2 tonnes of CO_2 by removing 7,000 packaging items through the product refill service in their ten 'Freshly Stores' since 2020. The company says a refill is equivalent to a complete container, and its use is simple: "cut, pour and that's it". In addition, it will not be necessary to wash the old container, and the refill system contains a few more millilitres to "not lose a drop".

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Reusable solution aims to shake up e-commerce shipping

Hey Circle, a German start-up, has developed an innovative reusable packaging solution for e-commerce shipping to address the growing environmental concerns of single-use packaging. The company's reusable shipping bags are made from a durable, water-resistant material designed to withstand at least 20 shipping cycles. The bags come in four sizes to accommodate various products and are equipped with an integrated return label, making returns easy and hassle-free for customers and retailers. Hey Circle's bags are designed to be folded into a compact size when empty, allowing for efficient storage and transportation. The bags can be easily opened using a tear strip, and the adhesive strip ensures secure sealing for each shipment. Retailers participating in the Hey Circle programme can reduce their carbon footprint and demonstrate their commitment to sustainable business practices. Hey Circle's reusable shipping bags offer a practical solution for retailers and consumers alike.

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Reusable containers helps shoppers save money

Kaufland, a German supermarket chain based in Neckarsulm, has implemented reusable containers from FairCup for their salad bars. The containers, made from food-safe materials, can be used multiple times, minimizing single-use packaging and waste. Shoppers can purchase the reusable containers in-store and return them after use for cleaning and further reuse. The partnership between Kaufland and FairCup highlights the growing trend in retail to prioritize sustainability and decrease packaging waste. Kaufland has taken an important step towards fostering a circular economy and encouraging customers to adopt greener habits by providing reusable containers. Additionally, the use of reusable containers may lead to cost savings for both the supermarket and consumers over time. As the demand for single-use packaging materials decreases, it is hoped that production costs and waste management expenses may also decline. Furthermore, customers who frequently buy items from the salad bar can save money by reusing their containers, promoting sustainable behaviours.

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Refillable roll-on deodorant brand enters the market

A new refillable roll-on deodorant brand, Rollr, is making its market debut, offering a more sustainable alternative to traditional deodorants. The brand features a reusable aluminium roll-on container that can be refilled with deodorant cartridges made from 100% recycled plastic. This innovative approach significantly reduces single-use plastic waste and encourages a circular economy in the personal care industry. The cartridges are easy to replace by the consumer, making the refill process convenient and user-friendly. Rollr deodorant is vegan, cruelty-free, and free from aluminium, parabens, and sulfates. With a commitment to sustainability, the brand aims to create an environmentally conscious personal care option for consumers. By reducing plastic waste and incorporating natural ingredients, the brand is poised to impact the personal care market and deliver improved sustainability.

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Reusable shipping solution aims to replace corrugated board in supply chains

California-based reusable shipping and delivery packaging company Returnity has launched a new product, called The Last Box. It has been calculated that over one billion corrugated outer cases are used to move products between factories, distribution centres and retail stores every year. With The Last Box, Returnity plans to replace almost four million corrugated board boxes and save around 24 million feet of adhesive tape for shipping and delivery in retailers' internal operations in 2023. Each Last Box is estimated to replace 50 corrugated cases and 300 feet of adhesive tape in its lifetime. The Last box has been calculated to reduce a user's packaging costs by at least 30%. They are also designed to be stackable, allowing 30 cases per pallet and are collapsable and nest for returning. They also claim to be tamper and water-resistant, and while made from lightweight materials, they can also carry over 50 lbs (22.7kgs) per box.

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Fast food chains in Germany implement nationwide reusable packaging solutions

McDonald’s in Germany has collaborated with logistics firm HAVI to create a national reusable packaging system for its 1,450 restaurants across Germany. The reusable packaging will be available at the restaurant for a deposit, which can be returned at any McDonald’s restaurant. The initiative has been developed in response to growing regulations on single-use packaging, although there are still reported challenges in the areas of reverse logistics and customer convenience. The system has been available since the beginning of 2023, allowing customers to choose between disposable and deposit reusable packaging for drinks and ice cream cups. As reported in the Innovation Zone, Burger King has also introduced a reusable packaging system in partnership with Recup, which will be available in its 750 stores across Germany. In both cases, the deposit for reusable packaging will be added to the selling price of the food and refunded upon return.

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Coffee roaster moves from single-use packaging to reusable buckets

Three Ridings are coffee roasters based in the Yorkshire seaside resort of Bridlington. They sell coffee on a subscription basis directly to homes and businesses. In a bid to reduce packaging waste and stabilise costs, they have introduced a new circular packaging system. Local delivery customers will be offered the opportunity to receive their coffee in brand new, reusable, zero-waste eco buckets. The buckets will contain up to 3kg of coffee and once emptied, will be collected, sterilised and reused for the customer's next order. The company says that the benefits for businesses are as follows: massively reduces single-use plastic packaging waste, reduces carbon footprint, reduces costs in waste collection, and is a sturdy way to store coffee and keep it fresh, while keeping prices stable. The company says that several of their customers have already moved to the reusable bucket.

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French cosmetics company launches fragrances in upcycled, refillable format

French cosmetics company La Bouche Rouge has launched upcycled, natural and refillable fragrances. The plastic-free and refillable cosmetics luxury label enters the perfume category with a range of five natural and upcycled fragrances. All of them are packed in glass bottles that can be refilled using 100% aluminium tubes. La Bouche Rouge has designed a perfume bottle inspired by its other iconic objects. The result is a refillable bottle topped with a twist-off spray, housed in an entirely hand-crafted leather case, coming in the five colours of the fragrances in the range. Besides protecting the glass bottle, the upcycled leather outer case also hides any small imperfections in the glass – in traditional production, a third of all bottles are rejected for small imperfections in the outer glass or shape of the inner drop.

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Dutch refillable water bottle gains gold circularity certificate

Dopper is a Netherlands-based manufacturer of sustainable, refillable water bottles. They have now announced that their Dopper Original, their standard product, is now fully recyclable, and is constructed of 85% reusable materials. This makes the bottle the first in the world to receive a gold circularity certificate. The new bottle consists of 15% recycled PP (polypropylene) and 70% plant material such as sunflower, rapeseed and corn waste. In addition, all bottles of the Original line are produced in the Netherlands. The factory runs entirely on energy from renewable sources and all water used in the process is reused. The bottles are delivered by bicycle in about sixty Dutch cities to avoid unnecessary emissions. At the end of the life cycle, old Dopper bottles can be returned to one of 25 participating WAAR stores. Dopper ensures that those bottles are processed correctly by taking them apart and sorting them according to material.

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University supports development of refillable cork-based deodorant packaging

UK start-up Let's Rethink This has been supported in developing a refillable deodorant pack by the University of Lancaster's Low Carbon Eco-Innovatory (LCEI) programme, which collaborates with small businesses to develop low-carbon innovations. The refillable pack, called Nada, consists of a spherical dome case around the refillable deodorant core. The domed case is made from cork and was chosen because the cork tree is the only one that can regenerate after each bark harvest. A spokesperson for Lancaster University said that one of the biggest challenges small businesses and charities have is the lack of resources, such as personnel, knowledge and time, to devote to starting their net zero journey. The LCEI programme offers access to the skills and expertise of undergraduates, postgraduates, and world-renowned academics. The Nada prototype is now searching for investment, with discussions with manufacturers and fragrance options being explored.

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Shower gel brand moves to refillable bottle that contains 50% PCR plastic

Unilever, owners of the UK's best-selling shower gel brand, Radox has announced that it is launching refillable bottles, which the company says will save 450 tonnes of virgin plastic per annum. The new bottles are made from 50% PCR (post consumer recycled) plastic (not including the cap and label). The new bottles can be filled using new 500ml refill packs, which reportedly use 74% less plastic. The bottle has been reoriented to have the cap back at the top to make the bottles convenient to refill. The hook, which was a distinctive feature, has also been removed in order to reduce the amount of virgin plastic used. As part of the packaging redesign, Radox has changed the colour gradient on its logo to make its products easier for visually impaired people to read and has removed the 'For Men' label on its 'Feel Awake' variant to promote inclusivity.

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Collaboration promotes reuse of packaging in Chilean universities

A collaboration between Chilean reusable packaging company Algramo, digital wallet providers, MACH, and Coca Cola Andina is helping to promote the reuse of packaging in universities. In November of last year, Algramo, in partnership with the Pontificia Universidad Católica de Chile and Coca-Cola Andina, launched the first pilot of its beverage container reuse project. The initiative consisted of setting up a dispenser in the university hall of the San Joaquín campus, which is activated with the Algramo smart packaging chip and allows students and administrators to refill sugar-free drinks such as Coca-Cola, Fanta and Sprite, at a price accessible and in smart reusable packaging. The pilot managed to keep more than 800 containers in circulation, achieving a reuse of 72% and a positive reception. Following this success, the pilot will begin its second phase together with MACH, with 22 vending machines on different university campuses in the Metropolitan Region.

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About Us

ThePackHub is a UK-based packaging innovation consultancy that provides packaging solutions to brand owners, retailers, and packaging suppliers. They offer technical support for packaging projects of all sizes, with a strong reputation for assisting start-ups to multinational organizations.

ThePackHub manages a comprehensive innovation database called The Innovation Zone, featuring over 7,200 packaging innovations worldwide, with 25 new initiatives added weekly. They have a vast network of packaging contacts across the industry that helps inform much of their consultancy work. Additionally, they have published several packaging reports, covering sustainability, packaging trends, supplier guides, seasonal packaging, and more. ThePackHub hosts face-to-face seminars that provide insight from expert speakers and 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, Mondi, Premier Foods, AB InBev, Kraft Heinz, Mondelez, Mars Wrigley, Church & Dwight, PZ Cussons, Starbucks, Walgreen Boots Alliance, Marks & Spencer, Lidl, Muller and many more.

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