thepackhub
INNOVATION ZONE

PACKAGING INNOVATION

BRIEFING REPORT

APRIL 2023

Welcome

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

In this comprehensive and unique monthly report, you'll find a wealth of information on the latest packaging innovations and industry news. With 144 pages of content, including 115 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 more than 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 continues to gain momentum with many initiatives in the dry food, household, and personal care sectors. **Check out our refill event here**. 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:

- Naturally Done
- Everyday Engagement
- The Online Surge
- Making Life Easy
- Materially Changed
- Protect and Preserve
- Recycling Resurgence
- Getting Noticed
- Refill Revolution

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Naturally done

This month saw a continued focus on bio-based packaging, with an incredible 24 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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Sustainable biomaterials packaging manufacturer increases portfolio

Finnish sustainable biomaterials packaging manufacturer Sulapac has further expanded its portfolio of materials to include Sulapac Luxe. The new material comes in response to demands from the beauty industry's leading brands for more environmentally conscious packaging solutions that still offer high-end luxury feel, function, and aesthetics. Characteristics of Sulapac Luxe include high density, resistance to temperature fluctuations, ceramic feel and sound, and a glossy, smooth surface, which are important for luxury brands. Sulapac Luxe is made from industrially compostable materials. It leaves no permanent microplastics or toxic load behind. Besides materials for injection moulding and extrusion, Sulapac Luxe is commercially available to all manufacturers and slips seamlessly into existing injection moulding production lines. Sulapac's portfolio includes solutions for thermoforming, allowing cosmetic companies to create sustainable logistic trays and point-of-sale displays, as well as for 3D printing enabling sustainable prototyping.

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Spanish start-up successfully produces prototype packaging made from algae

Spanish start-up AlgaEcopack, who have ties to the University of Cádiz (UCA), has announced that they have successfully produced its first prototype packaging for fruit and vegetables made from algae. The prototype of the trays is based on seaweed collected from the Cadiz coast for the transport and sale of vegetables. The project has a budget of nearly €286,000 (£253,000) and an expected project duration of two years. They plan to finish the assignment in April 2024 with aspirations to then market their product. A spokesperson for the project said that the work carried out confirmed with this first prototype that it is possible to recycle a vegetable residue such as algae (arribazones), which accumulate on the beaches of Cádiz and which harms the municipalities, and to then transform them into fully biodegradable trays.

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Scientists develop method that uses light to transform lignin into sustainable plastic

Researchers at Boston College have developed a scientific method that uses light to transform lignin into sustainable plastics. Lignin is a complex plant-derived polymer found in the cell walls of almost all dry-land plants. Trees are composed of 20-30% lignin, which it acts as a natural and strong binder. The scientists developed a catalyst that can selectively break down specific chemical bonds in lignin when exposed to light. The lignin is converted into intermediate-sized, soluble molecules called oligomers. The team then converted the oligomers into sustainable plastics by reacting with a molecular glue called crosslinkers. The findings advance a potential strategy for the waste-free system of polymer manufacture and circular plastic economy reuse. The research team aims to develop a novel method that converts lignin into sustainable plastics that can be recycled chemically.

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Scientists develop edible cling film from fish gelatin

Scientists from the Astrakhan State Technical University have developed an edible cling film. This packaging is reported to be similar to ordinary plastic, only it is of organic origin, and is made from gelatin obtained from fish scales. The film has similar properties to plastic: it does not smell and does not let in extraneous aromas, and it keeps food fresh. In experiments, dumplings coated in the film can be boiled and then eaten in the packaging. A spokesperson for the university said that the biodegradable film can be used to produce bags that can store frozen products such as dumplings, nuggets, and meatballs. Bulk products can also be stored in such plastic bags. It is used to increase the shelf life of confectionery products and preserve their properties. Most importantly, there are no problems with disposal. In a composting environment, the packaging will disappear in a week without causing damage to the environment.

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Researchers create biopolymer based on starch and chitosan

Researchers at the Lobachevsky University in Nizhny Novgorod, Russia have created a biopolymer based on starch and chitosan, the packaging of which is completely biodegradable, according to the university. Chitosan is a sugar that comes from the outer skeleton of shellfish, including crab, lobster, and shrimp, and is commonly used in medicine and drug manufacture. Modified starch and chitosan dissolved in acid are combined with a crosslinking agent and foamed. In this way, materials with desired properties can be created. Having made the composition strong and insoluble in water, the scientists obtained a sorbent for industrial water purification from metal and non-metal ions. The material can be reused, and in addition, it can be safely disposed of. According to the scientists, depending on the synthesis conditions, it is possible to obtain water-retaining agents for agriculture, absorbing medical materials and nutrient media for growing plants without soils from starch and chitosan.

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Fungus could prove to be a biodegradable alternative to plastic

A team of researchers from institutions in Finland, The Netherlands, and Germany have identified a fungus as a potential biodegradable alternative to plastic. According to the scientists, the tinder fungus (Fomes fomentarius) has some surprising properties. They have discovered properties that could provide a natural, biodegradable alternative to certain plastics and other materials in the future. The wood-eating fungus has historically been used to catch a spark for fires, though it has also been incorporated into clothing and used for medicine. The researchers looked at the structural and chemical composition of the fruiting body of F. fomentarius, using samples collected in Finland. Parts of the fungus were as strong as plywood, pine, or leather, the team reports – while also being more lightweight than those materials. The results could offer a source of inspiration for producing multifunctional materials with superior properties for diverse medical, industrial and packaging applications in the future.

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Spanish researchers develop sustainable packaging from invasive seaweed

Researchers from the University of Cadiz, Spain, have been developing sustainable packaging made from an invasive seaweed. The algae, Rugulopteryx Okamura, is an Asian species that, upon reaching the Strait of Gibraltar, has become an invader and, for years, a nightmare for fishermen in Cádiz, and for the Town Halls, which every so often have to remove tonnes from the shores of the beaches, so as not to ruin tourism in the area. A vegetable growing cooperative will be its first “client” for the seaweed-based packaging. Through its products, its innovative packaging will travel with its vegetables throughout Spain and Europe, when the packaging reaches this stage. Tonnes of algae piles that the local municipalities currently send to landfill, will in future, be taken to a plant where they will be washed and dried, before being processed naturally to become the containers for fruits and vegetables.

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Partnership looks to bring dry moulded fibre bottles to market by 2025

London-based PA Consulting and Swedish dry moulded fibre innovators PulPac have launched the Bottle Collective. The aim of the initiative is to industrialise a high-speed, low-cost dry moulded fibre recyclable bottle process. The development of the technology intends to be a viable alternative to single-use and commodity plastic bottles and applicable for multiple products and categories. Dry moulded fibre technology is reported to use a third of the amount of water compared to wet moulded pulp. PA's mechanical engineering, design, automation, and material sciences teams and PulPac's technology have already developed the first functioning prototypes. Multiple leading brand partners have joined the Collective to continue developing and scaling fibre bottles by 2025. Potential uses for fibre bottles could be for water, dairy, non-carbonated soft drinks, adult beverages, detergent, skincare and haircare. Bespoke shape, size, and decoration capability is also possible to deliver a differentiated and distinctive brand presentation.

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Canadian researchers create biodegradable polymer from carrots

Researchers from the University of Toronto, Canada have created a fully-biodegradable polymer from carrots. The investigators have developed a carotenoid-sourced compound to make a fully-degradable, soluble polymer that disintegrates with acid and sunlight. They note that the work lays the foundation for a new class of fully degradable conjugated poly azomethines that uses building blocks from nature. The research team combined 10-carbon dialdehyde and p-phenylenediamine to make three poly azomethines with different side chains. In testing the degradation of the resulting polymer, the researchers determined that it could be degraded with both acidic and artificial sunlight conditions. Acid hydrolysis accelerated the polymer degradation rate and artificial sunlight generated additional degradation products. Polymers and plastics from natural, biodegradable ingredients are increasingly demanded in consumer products and packaging. It's reported that these offer a more sustainable alternative to conventional non-biodegradable plastics of fossil origin.

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Scientists develop biodegradable glass

Researchers at the Chinese Academy of Sciences, Beijing, have developed an experimental biodegradable glass that breaks down when composted. The exploratory glass is made from two chemically modified ingredients – amino acids or peptides. Amino acids are molecules which combine to form proteins, while peptides are short chains of amino acids. When pieces of the glass were composted, microbes in the soil broke them down within three weeks to 7.5 months, depending on the specific amino acids or peptides used. Studies also showed that the glass harmlessly biodegrades within the body, suggesting that it could be utilised in applications such as drug-dispensing implants, which don't have to be removed after their job is done. A spokesperson for the academy said that the concept of biomolecular glass might underlie a green-life technology for a sustainable future. However, the biomolecular glass is currently in the laboratory stage and far from large-scale commercialisation.

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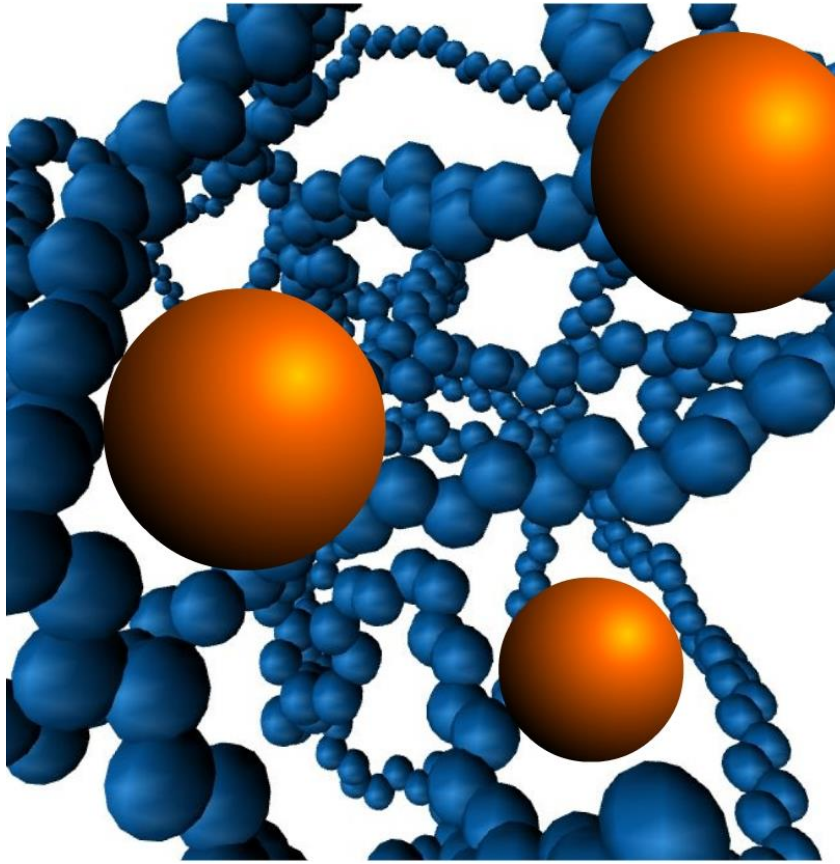
Spanish researcher develops biodegradable “active” packaging

As part of their doctoral thesis, a researcher at the University of Navarra defends the use of biodegradable “active” packaging, with antioxidant or antimicrobial substances, to improve food preservation and contribute to environmental care. The researcher maintains that incorporating these additives in the packaging, and not directly in the food, reduces deterioration of the product and the risks to the consumer. The researcher also says that biodegradable plastic containers that incorporate these nanoparticles degrade three times faster in sewage treatment plant wastewater than simple plastics, and considers that the result of the research “is very encouraging, since it would facilitate rapid disposal of all food packaging and would contribute to caring for the planet”. It is also thought that the materials developed could have other uses, such as in biomedical applications (bone prostheses and implantable devices, controlled release of drugs), water treatment and disinfection or elimination of air pollutants, among others.



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German project looks to replace plastic with bio-based alternative

As part of the German government-funded GREEN research project, mechanical engineering company Manroland Goss, as part of a consortium, wanted to provide an alternative for plastic consumption in the freezer, among other things. A bio-based paper/board barrier is being developed to protect food from external influences while keeping it fresh. The popularity of frozen goods continues to grow and with it the demand for more packaging. Only around half of the packaging waste is recycled. In Germany, around 38 kilograms of plastic waste are generated per person every year. Plastic films are mainly used because they protect the product and its packaging. As a mineral oil and water vapour barrier, the newly developed board product is intended to provide equivalent protection against the migration of unwelcome substances – with the main difference being that plastic is saved in the process.

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World’s first compostable pallet wrap made from food waste

An Australian material science company called Great Wrap has launched what is reported to be the world’s first compostable pallet wrap manufactured using food waste. The food waste used for the wrap, derived from potatoes and sourced from two of the country’s biggest potato producers, is currently not processed on-site. The next important step will be to get the biorefinery running on-site, and also to scale up an end-of-life collection service for the pallet wrap to create a fully circular solution. With commercial trials completed, the company’s 10,000sqm Tullamarine site will soon house the country’s largest stretch wrap manufacturing facility. The plant, equipped with a state-of-the-art cast extruding line for the film, is currently running at 5000T capacity. Multinational brand owners and large retail groups both in Australia and the USA have already reportedly snapped up trial batches.

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New self-adhesive labels are designated home compostable

German adhesive label manufacturer Herma has announced that two of its self-adhesive materials using the new adhesive 62Q have enabled them to obtain certificates of compliance, issued by DIN CERTCO in each case, with the international standard NF T51-800:2015. The materials in question can now carry the “DIN Tested – Garden Compostable” mark. This means that compliant labels that are still attached to fruit and vegetable peelings can be composted by consumers in their own compost heap or bin. The labels biodegrade without leaving behind any substances giving cause for concern. As the labels incorporate the adhesive 62Q, they do not require the special conditions and high temperatures that are key to industrial composting. The company also says that this label stock is very easy to cut during the printing process and offers good adhesion.

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Partnership expands availability of biodegradable bottles in US and Canada

St. Louis-based packaging supplier TricorBraun has announced that it has signed an exclusive agreement with US-based startup BioBottles, expanding its sustainable packaging offerings. The agreement enables TricorBraun to exclusively offer BioBottles – the first and only biodegradable bottle specifically designed and engineered for the nutraceutical industry—to nutraceutical companies in the US and Canada. BioBottles Planet IQ technology turns ordinary plastics, such as HDPE and PP, in the presence of oxygen at the end of their useful life into a material with a different molecular structure. At the end of the process, it is no longer a plastic and has changed into a material which is biodegradable by bacteria and fungi in the open environment. BioBottles are FDA and food grade compliant, with a five-year shelf-stable life. They are available in various sizes and colours, and the cost is comparable to conventional plastic bottles.

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Luxury brand chooses sustainable limestone-based packaging

TBM is a Japan-based company specialising in developing, manufacturing and distributing LIMEX, an innovative new material mainly made from limestone and inorganic materials. It has recently announced that its LIMEX product is to be used in luxury brand LVMH's (Moët Hennessy Louis Vuitton) KENDO OLEHENRIKSEN brand, for skincare packaging. The move is part of a larger initiative to transition OLEHENRIKSEN's primary packaging components to materials like glass, bio-resin and PCR. It is reported that LIMEX, which contains 50% or more inorganic material such as calcium carbonate, reduces greenhouse gas emissions compared to petroleum-based plastics. It's a viable alternative to the ABS and PP resin typically used in cosmetic components and can be manufactured with existing plastic moulding machinery. Significantly, LIMEX can be recycled in the same way as products designed with a single material. Cosmetic packaging made from LIMEX is said to have a luxurious matte texture and a substantial feel.

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Kid’s meals move to recyclable fibre packaging

London-based Healthy kids’ food brand Little Dish has announced that it is relaunching its range of eight children’s meals with more sustainable, 100% recyclable packaging. The new packs are made from 85% wood fibre, which the company says is recyclable in UK homes through kerbside collection, instead of being recycled via specific collection points, like most baby food pouches. Since the trays are made from wood fibre, the meals are microwave cook only. Little Dish meals are nutritionist approved, and each meal contains up to 6 different vegetables and contributes to at least one of the recommended 5-a-day items of fruit and vegetabes. Little Dish meals are available in the chilled section of all major supermarkets and online at an RRP of £2.85.

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Adhesive labels made entirely from recycled fibres

German adhesive label manufacturer HERMA has announced that it is extending its portfolio of sustainable adhesive materials by launching a thermal paper made entirely from recycled fibres. This new material, known as HERMAtherm rECO (grade 903) is a white thermal paper without protective coatings, i.e. in economy quality. Its surface produces a good print quality that can hardly be distinguished from conventional thermal paper.
Typical applications for HERMAtherm rECO is for the weighing and labelling area of food packaging. EAN codes and other code systems can also be displayed well on it. This thermal paper is equipped with the multi-layer adhesive 62Gpt. The company has also announced that two other thermal label papers have also been phenol-free since the beginning of the year: HERMAtherm Top M (grade 912) and HERMAtherm D (grade 919).

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Herbal tea manufacturer chooses compostable packaging

A collaboration between two Argentinian companies has resulted in a compostable pack for a yerba producer from Oberá, Molinos La Misión SA. Ledesma NAT produces paper made from sugar cane and corn starch, with no chemical bleaches and no tree fibres used. Plastimi SME then converts the resulting paper into a biodegradable bag that is reported to degrade in nature in 180 days. The company selling the yerba mate (a traditional South American beverage) urges consumers to carry out a challenge: drink a rich yerba mate. When the yerba is finished, reuse the container using it as a pot. “Plant it, and you will see how quickly it becomes part of the earth. And enjoy your little plant every day”, they invited. The paper produced by Ledesma NAT paper was launched in 2019 and has an almost neutral carbon footprint indicator, which means that it mitigates almost all its carbon emissions.

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Biodegradable bag extends shelf life of fresh produce

Florida-based Peelon are providers of innovative solutions for the fresh produce industry. They have now announced the launch of Peelon-Fresh, a groundbreaking, shelf-life-extending, biodegradable bag. Peelon-Fresh is made from 100% biodegradable materials, making it a reportedly responsible choice for businesses that want to reduce their carbon footprint. It is designed to extend the shelf-life of fresh produce, keeping fruit, vegetables, and even leafy greens fresher for longer periods of time. The Peelon-Fresh bags have been tested on over 40+ different products, all showing positive results, bringing opportunity to a wide market of users in the fresh produce industry. Peelon-Fresh bags are anti-microbial and temperature-resistant, meaning that companies can also reduce their costs of transportation by opening the door to non-refrigerated transportation. These films can be easily applied during the packaging process, making them a convenient option for both producers and distributors.

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University creates biodegradable straws that do not become soggy

Scientists from South Korea's Inha University have produced biodegradable drinking straws that do not become soggy. Many non-plastic straws break down when wet, while others require complex production processes. The researchers looked to lignin, a type of organic polymer which makes up much of the support tissue in plants – including trees, and is a byproduct of the pulp and paper industry. The researchers combined lignin with either potato starch or plant-derived polyvinyl alcohol (PVA), then added citric acid to that mixture. They then spread the slurry into a thin sheet, rolled that sheet into a cylinder and allowed it to dry, then heated the cylinder in a vacuum. The resulting bioplastic self-sealed along the seam, forming a long, skinny tube cut into individual flexible straws. The straws didn't become soggy when immersed in liquid and exposed to the elements for two months, the lignin straws had significantly biodegraded.

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Scientists make can coating from tomato waste

As part of a project to replace BPA (bisphenol A) in plastics used for food packaging, researchers from Spain's La Mayora Institute of Subtropical and Mediterranean Horticulture and the Institute of Materials Science of Seville are looking at an alternative made from a type of agricultural waste known as tomato pomace. The scientists started by drying samples of the tomato pomace. The resulting powder was subsequently mixed with a sodium hydroxide solution. After repeatedly filtering that solution to remove the sodium hydroxide, the researchers were left with a waxy compound known as a lipid. That lipid was then mixed into an ethyl alcohol solution sprayed onto samples of aluminium, tin-free steel and tin-coated steel. Once the spray had dried, the result was a polymerised lacquer coating, which proved very effective at protecting the underlying metal. The scientists now plan on testing the coating on cans containing various foods.

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Organic superfoods company moves to compostable coffee pods

Oregon-based Laird Superfoods, which was launched in 2015 by surfer Laird Hamilton, has launched a product called Bright Cups, as its own sustainable version of individual coffee pods. These commercially compostable single-serve coffee pods are made with plant-based materials and share the taste of coffee with that of the brand's best-selling Focus mushroom. Bright Cups is one of the only single serve BPI (Biodegradable Products Institute) certified compostable coffee pods available. Laird Superfood is on a mission to reduce the amount of single-serving waste that ends up in landfills, especially as around 12 billion single-serving capsules were reportedly purchased last year. As part of its sustainability drive, the company has been moving to solar power in its new facilities and is constantly identifying ways to reduce its carbon footprint with an employee-led sustainability committee.

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Start-up produces insulation and packaging materials from side streams of the wood industry

Fiberwood is a Finnish start-up and producer of insulation and packaging materials from side streams of the mechanical wood industry. Their products perform in a similar way to Styrofoam EPS (expanded polystyrene) products. Metsä Group's innovation arm is now funding them, Metsä Spring, to enable scaled-up production capabilities at its pilot plant. Fiberwood's cushioning and protection sheets are manufactured with foam-forming technology. They claim to be bio-based, plastic-free and compostable, biodegrading into soil at end-of-life, leaving no microplastics behind. Air pockets are said to enhance the insulation capabilities of the sheets, which are also reported to be carbon negative as they bind carbon dioxide to the wood itself for as long as the product exists. They undergo 'no meaningful warpage', remain effective in changing conditions, and are designed for easy, safe, and quick installation.

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Everyday Engagement

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Everyday Engagement

Packaging that effectively connects with consumers plays a crucial role in the market. We continue to observe a variety of innovative examples, such as utilizing smart technology or unique packaging graphics to spark engagement. Maintaining a consistent dialogue with consumers can greatly enhance brand-building efforts.

Tech-based solutions like RFID, NFC, and QR codes are becoming increasingly popular and cost-effective for these purposes. Sustainability is also a key factor in the use of technology-based packaging, as many lack proper disposal methods. However, as recycling options improve, this sector is becoming more viable. Additionally, utilizing technology in packaging also provides valuable data insights for brands.

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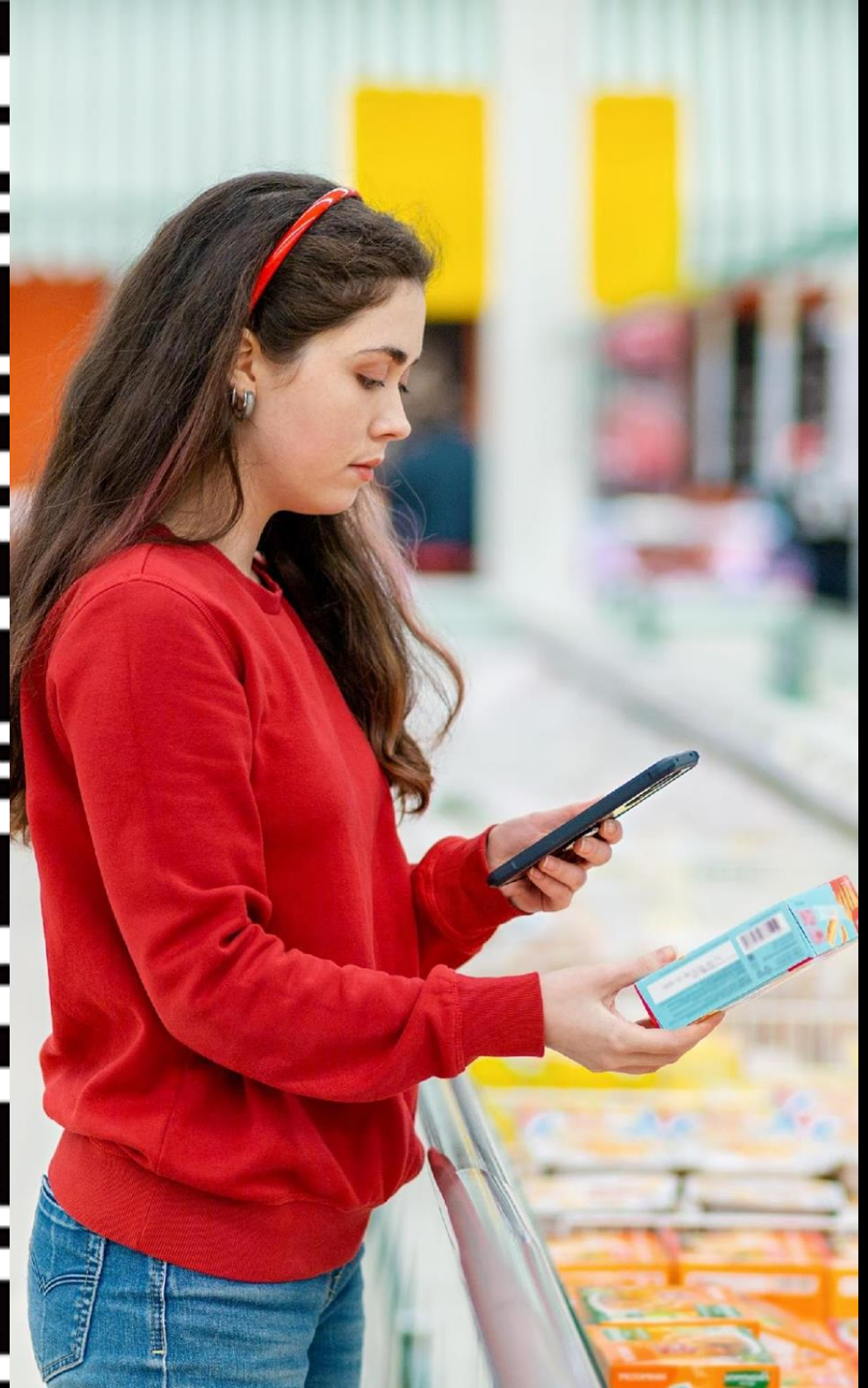

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Everyday Engagement

Counterfeit products can be detected with smartphone
Transparent void label promises memorable unboxing experience
Smart packaging captures important data for new beauty product launch
Pizza chain revisits 1990’s §basketball-themed promotion
Chip and software update could turn smartphones into RFID readers

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Counterfeit products can be detected with smartphone

Gerresheimer is a German manufacturer of healthcare and beauty packaging. They have announced a partnership with California-based TruTag Technologies, a brand protection specialist, to offer an innovative, secure digitisation solution for cosmetic brands. The solution involves the integration of invisible microparticles that can be detected and decoded by a smartphone directly on the products. Consumers or brand protection experts can use an app to scan and authenticate the beauty product packed in Gerresheimer glass. A spokesperson for Gerresheimer said that luxury industries and cosmetics are particularly affected by counterfeiting, and the problem is growing steadily due to increased online purchases. Counterfeit cosmetic products do not just harm the reputation of health and beauty brands. They could also be dangerous to end-consumers. Almost all solutions that enable the authentication of a single product require special detectors or sophisticated equipment. The new solution Gerresheimer and TruTag Technologies developed requires only a commercially and widely available smartphone.

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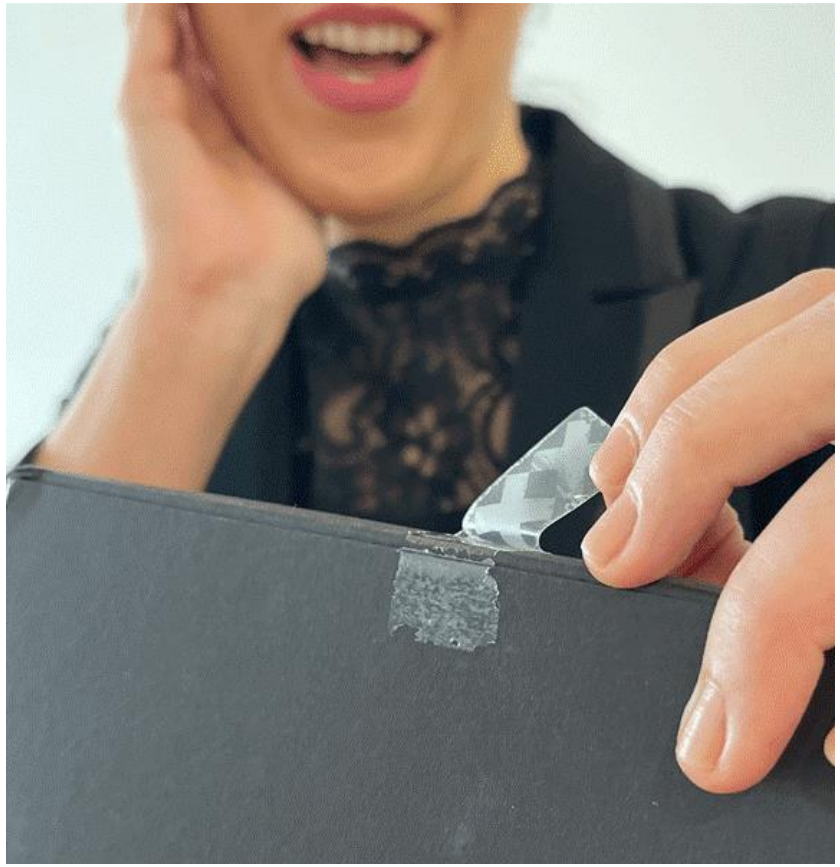
Transparent void label promises memorable unboxing experience

Securikett, the Austrian security label producer and global product and brand protection leader, has launched its revolutionary HighContrastVoid security label technology. The tamper-evident void label is completely transparent, providing the highest level of product protection without altering the product's external appearance or requiring package redesign. This groundbreaking innovation allows brand owners to protect their products easily, and the label's surprising opening effect creates a memorable "unboxing" experience for the consumer. The design allows for customization of the opening effect, making it reportedly particularly suited for luxury products.



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Smart packaging captures important data for new beauty product launch

Cambridge Design Partnership (CDP) are a consultant organisation offering an end-to-end design and innovation service. They were approached by global beauty brand Avon who wanted to maximise the potential of a critical new packaging launch. ANEW Reversalist Infinite Effects Night Treatment Cream is reported to be a ground-breaking skincare product. The product combines two different night creams that need to be rotated every seven days to prevent the user's skin adapting to the skincare regime. The solution was to use CDP's unique user insight service diialog™ for a new perspective. The diialog™ service uses miniature sensing technology discreetly fitted to products or packaging to capture quantitative data during user tests. The results of the diialog™ trial revealed that users were able to correctly follow the regimen of rotating the dispenser each week, while there were very few cases of triallists forgetting which end of the device to use.

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Pizza chain revisits 1990's basketball-themed promotion

US restaurant chain Pizza Hut has resurrected a promotion first seen in the 1990's – mini basketballs and special pizza boxes that transform into basketball hoops. This is the latest in a number of promotions by the company. They introduced the idea of "Newstalgia" by bringing back promotional branding campaigns and aesthetics from the past but with updated and modern sensibilities. Previously updated promotions include last year's "Book It!" programme, which rewards students for reading books. As part of the campaign, Pizza Hut included a retro T-shirt with the original "Book It!" logo. The year before that, Pizza Hut brought back a pizza box printed to look like a game of Pac-Man, as well as a full line of apparel and accessories modeled after the red design elements of its original restaurants. Items like red plastic drinking glasses referenced the original fountain drink cups that many Gen X-ers and millennials grew up with.

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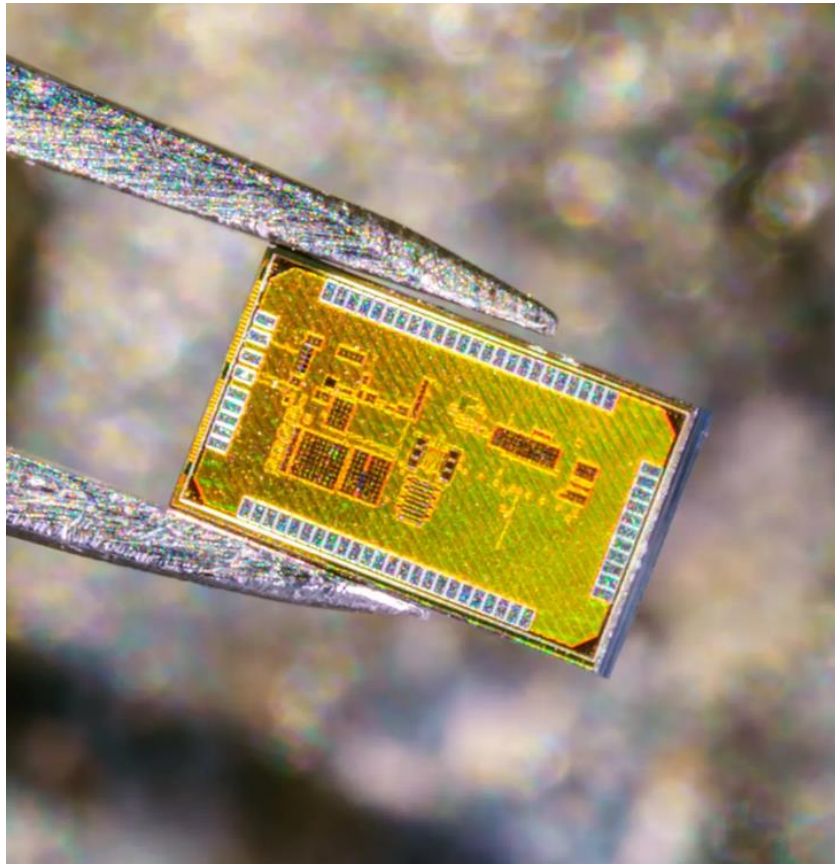
Chip and software update could turn smartphones into RFID readers

Researchers from the University of California, San Diego have developed a way of turning everyday smartphones into full-on RFID (radio-frequency identification) readers. RFID tags wirelessly provide a wealth of information on products or other items, but they can only be read by dedicated portable devices. That may soon change, however, as a tag-integrated chip and a software update could allow everyday smartphones to do the job. This could open up a host of new consumer engagement opportunities through packaging. The chip itself is half a square inch in size (3.2 sq cm) and costs just a few cents to manufacture. The software update simply converts the phone's outgoing Bluetooth signal into a format that the chip can more easily convert into a Wi-Fi response. That Wi-Fi signal could conceivably contain information such as expiry dates for perishable items, ingredients of food products, or instructions for usage. The scientists are now hoping to commercialize the technology, either through a spinoff company or an existing industry partner.



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The Online Surge

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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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The Online Surge

US retailer adopts right-sized, on-demand box machine technology
New technology described as revolutionary solution for supply chain management
Paper-based tear strip increases recyclability of e-commerce packaging

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US retailer adopts right-sized, on-demand box machine technology

Multinational retailer Walmart has partnered with Salt Lake City-based Packsize, who will provide the retailer with right-sized, on-demand box machines using technology designed for Walmart's e-commerce deployment. The first machine called the Ultra5, has already been installed in the first of Walmart's four next-generation fulfilment centres. The Ultra5 can produce up to 600 boxes per hour. By right-sizing the boxes, the technology minimises the costs and environmental impact of unneeded corrugated box material. The box configuration also allows retailers to fit up to one-third more boxes on carrier trailers, which ultimately gets more orders to customers each day. A key benefit for Walmart is that it eliminates the guesswork of picking by prompting the employee to pick the right-size container. The speed of the box's throughput enables orders to be packaged, labelled and ready to ship in 30 minutes.

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New technology described as revolutionary solution for supply chain management

Israel-based technology company Unilog, have launched Ucontrol Sensos, which it describes as a revolutionary IoT solution. The company says that with Ucontrol, customers have real-time visibility and control over every aspect of their supply chain, from origin to the end consumer until the product is opened and used. The real-time sensors provide proactive control through a contactless operation. The company says customers can simply ‘Stick & Go’ with no required courier scans of manual reporting. The printed battery uses non-hazardous primary Zinc Manganese (Zn-MnO2), which contains a wireless module. The device has a maximum operational lifetime of 12 months in optimal conditions. Features include Package in motion/static; Temperature tracking (report outside of pre-defined thresholds); Seal open (consumption/tamper); Shock/Impact; Temperature logging and can be used for ground, air and sea logistics. The Sensos label can be stored at temperatures between -20°C to 40°C with operating temperatures of -20°C to 60°C.

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Paper-based tear strip increases recyclability of e-commerce packaging

German adhesive tape manufacturer tesa has launched tesa 51344, a paper-based tear strip for envelopes and boxes. The launch is in response to the increase in e-commerce business. According to Statista, over 159 billion packages were sent worldwide in 2021. By 2027, the volume is expected to reach 256 billion packages, which corresponds to an annual growth rate of 8.5%. The innovative, strong paper backing of the tesa 51344 is coated with an adhesive that ensures reliable adhesion even to cardboard boxes with a high recycled content. tesa 51344 also complied with PTS-RH 021:2012 recycling standard and confirmed that tesa 51344 is recyclable and can therefore be disposed of with cardboard material. It also passed several application tests with different types of cardboard and corrugated board with flying colours. The adhesive tape impressed in the tests with its high adhesive strength and reliable opening behaviour, and is suitable for automated production lines.

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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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Innovative spice container utilises coffee pod technology

Burlap & Barrel is a New York-based supplier of single-origin spices. They have launched an innovative new format called the Spice Passport. It is designed as a travel pack so that users never need to eat bland food on the go again, and contains eight of the company's most popular herbs and spices. The spices are packed in aluminium pods similar to coffee pods, which are then packed in a lavishly printed board sleeve. Although the pods are modelled on Keurig-style coffee pods, they are much smaller and contain only half a teaspoon of spice. The flat bottom allows the pod to sit on a countertop. The wide brim and tab act as a handle. An aluminium foil cover protects the pod and can be easily removed. The modified atmosphere aluminium packaging is said to extend the life of the contents to around three years and possibly even longer.

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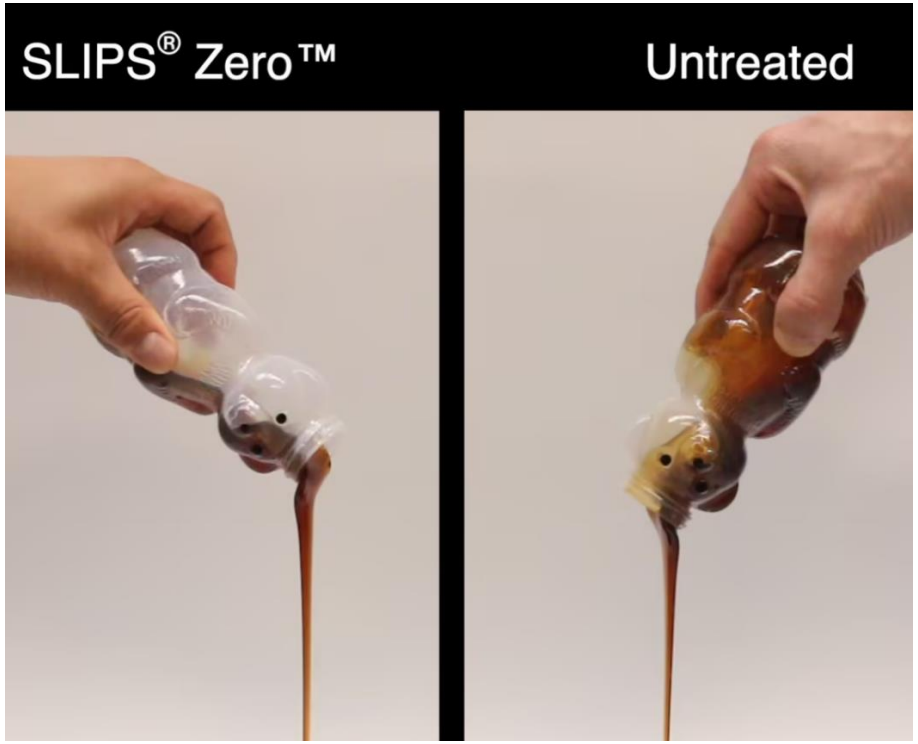
Additive allows complete emptying of liquid packaging

Based in Hopkinton Massachusetts, Adaptive Surface Technologies, Inc. (AST) is an industrial technology company that produces additives and coatings that repel fluids, contaminants, ice, and biological fouling. For the packaging industry, Adaptive Surface Technologies has developed a SLIPS technology solution to allow the complete emptying of plastic food containers using entirely food-safe materials. This technology enables packaging designers to take advantage of distinctive new shapes and formats to differentiate their brands. These shapes may have previously been impossible due to residual product sticking inside the package. The solution comprises a GRAS-designated (generally regarded as safe) edible oil on FDA-approved plastic resins for direct food contact. It also utilises industry-standard application equipment and readily available ingredients and helps to reduce product waste and facilitates package recycling or reuse.



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Patented bag-in-box tap has tamper protection feature

Smurfit Kappa Bag-in-Box, based in the Epernay champagne region in France, has announced the launch of the patented Vitop Uno tap, reportedly the first tap on the Bag-in-Box market to have tamper protection attached. The new tap design complies with the upcoming single-use plastics directive as it does not require the consumer to remove the tamper-proof cover. Instead, it is deactivated when the product is used for the first time and remains an integral part of the tap without affecting the subsequent use of the Bag-in-Box product. Tests on Vitop Uno in France, Spain and Sweden have shown that the convenience of the new tap remains the same and that the environmental aspect of the packaging has a positive effect on consumers' purchase intentions. The tap is patented in Europe, the USA and several other countries.

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Smart labels designed for self-application medicines

Faller Packaging is a German manufacturer and system supplier of pharmaceutical secondary packaging. The business has launched a range of smart labels with printable temperature or light indicators to make it easier for patients to take responsibility for their own consumption. Introducing these smart labels follows the current trend towards intelligent solutions for medicines administered at home: temperature or light indicators on the labels increase the user-friendliness and safety of self-application medicines (SAM). The labels with light indication are equipped with a sensor that turns brown when the incidence of light is too high. When the lighting conditions are right, the message green = ‘OK’ is output. The brand owner can easily print the indicator on the label without electronics. The shape, colour, temperature range, branding, text, and more can be customised. Depending on the desired application, the sensor is reversible or irreversible.

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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 32 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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Specialty paper manufacturer offers functional paper products

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New technology could remove need for valves in coffee bags

Two US coffee producers have partnered to begin testing a new flexible film sealing technology. This new technology, TiMELESS, intends to remove the coffee industry's requirement for one-way plastic degassing valves. The two companies involved in the trials are Texas-based NuZee and California-based Apffels. It is reported that 1.85 billion coffee packs with one-way plastic degassing valves were estimated to be sold in North America last year. Using their TiMELESS technology, the companies say that they expect significantly increased efficiency, reduced logistical costs, and access to more sustainable manufacturing practices. NuZee plans to expand the TiMELESS technology if the testing is successful. A spokesperson for Apffels said that the company is excited to embrace new single-serve coffee formats with NuZee that deliver sustainability, convenience, and great coffee quality, while also testing the innovative TiMELESS technology to reduce valve consumption.

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Flow wrap switch cuts plastic by half

Tyson Foods' fresh meats division has introduced a new flow wrap pack for their ground beef products. This new packaging solution uses less plastic than traditional packaging and eliminates the need for trays. According to the company, the flow wrap requires approximately 50% less energy and uses approximately 50% less plastic than traditional expanded polystyrene product packaging. It also reportedly keeps products fresh for up to three times longer. The flow wrap packaging offers an air-tight seal to maintain the colour and freshness of the product, prevents leaks and drips, and provides clear packaging for product visibility. The packaging is also designed with convenient tear edges for easy opening by the consumer. Introducing this packaging provides retailers with an immediate solution to meet the demands of environmentally-conscious consumers while minimizing plastic waste. Initially, Tyson Foods will test the flow wrap packaging on their ground beef products at their Council Bluffs, Iowa plant. If successful, the company will consider expanding this packaging to other case-ready products. A spokesperson for Tyson Foods stated that recent consumer tracking surveys have shown that consumers are willing to pay 20% more for sustainably-produced fresh meat products.

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US champagne importer launches aluminium bottle

BGPL USA, the U.S. importer and marketer of the renowned French wine Veuve du Vernay has announced a new 250ml aluminium bottle for its Veuve du Vernay Ice Rosé. The 250ml aluminium pack reportedly presents several benefits to the consumer, including faster cooling time, durability to prevent bottle breakage, and chill retention to keep the wine cooler longer. The company says that these elements make it ideal for enjoying the product outdoors with friends at a picnic, poolside, at the beach or at music festivals. The shimmering label encapsulates the full bottle, featuring the Eiffel Tower seen across Veuve du Vernay's Ice collection. Veuve du Vernay Sparkling Ice Rosé is the number one selling sparkling wine under $20 in the U.S. The new aluminium format meets consumer demand for sustainable packaging alternatives in the wine industry and is seen as the ideal format for individual consumption and retails at $5.99 (£4.90).

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Energy storage solutions manufacturer moves to smart packaging

Milwaukee-based Clarios, who are one of the world's largest providers of vehicle energy storage solutions, including the brand Varta, has announced that they have formed a partnership with Vegabaja Packaging, who have a plant in the Alicante town of Dolores. The collaboration aims to improve the traceability of the supply chain of its products thanks to the implementation of a system of intelligent packaging that uses unique and variable QR codes. With its digital printing system, which allows variable data to be printed and the incorporation of new technology for generating QR codes, Vegabaja Packaging manufactures boxes for Clarios with a unique and dynamic QR code on each package. This project has been running for eight months and has already brought benefits to Clarios. Each product's differentiation and unique identification allows the company to avoid losses and generate complete traceability throughout the supply chain.

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Label-less bottle aims to disrupt wine market

Fourth Wave Wines has announced the launch of Crate, a label-less wine that showcases the quality of their high-end, barrel-matured wine while minimizing the environmental impact of the packaging. Produced from some of Australia's finest red wine regions, Crate is designed by Sydney-based Denomination, a leading sustainable drinks branding specialist. The innovative design eliminates conventional branding materials and streamlines the necessary packaging components. The only brand and product information is contained within the small space of a capsule. Crate challenges conventional packaging that uses paper labels. By eliminating label printing, adhesives, and paper usage, Crate is reported to be more sustainable than traditional wine packaging. In addition, the removal of the label component reduces the energy required during the bottling process. Unlike traditional labelling, which requires a PET liner, Crate's design eliminates this. The result is a sleek, uncluttered design that stands out. Despite its minimalist design, the cap contains all the necessary mandatory information. Crate is an excellent example of a sustainable, high-quality wine that highlights the possibilities of innovative packaging design.

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High barrier paper designed for use on digital presses

Florida-based S-One Labels & Packaging (S-OneLP) has announced the launch of FlexPaper Barrier Paper. The solution marks the first paper-based coated structure in the S-OneLP EMEA line specifically designed for HP Indigo Digital Presses. The company says that this new product meets the demand from converters who want to save money, increase profits, print faster, and have the ability to place low minimum orders. FlexPaper Barrier Paper is a multilayer of paper and plastic, and is said to work best with HP Indigo presses, but also functions well with a wide range of flexo press solutions, as it provides grease, oil, water vapour, and oxygen barrier properties. The features of FlexPaper Barrier Paper are as follows: puncture resistance and heat sealability, high opacity, and a polyethylene/EVOH COEX sealant layer which prevents leaking and keeps contents fresh. The paper element is also FSC (Forestry Stewardship Council) certified.

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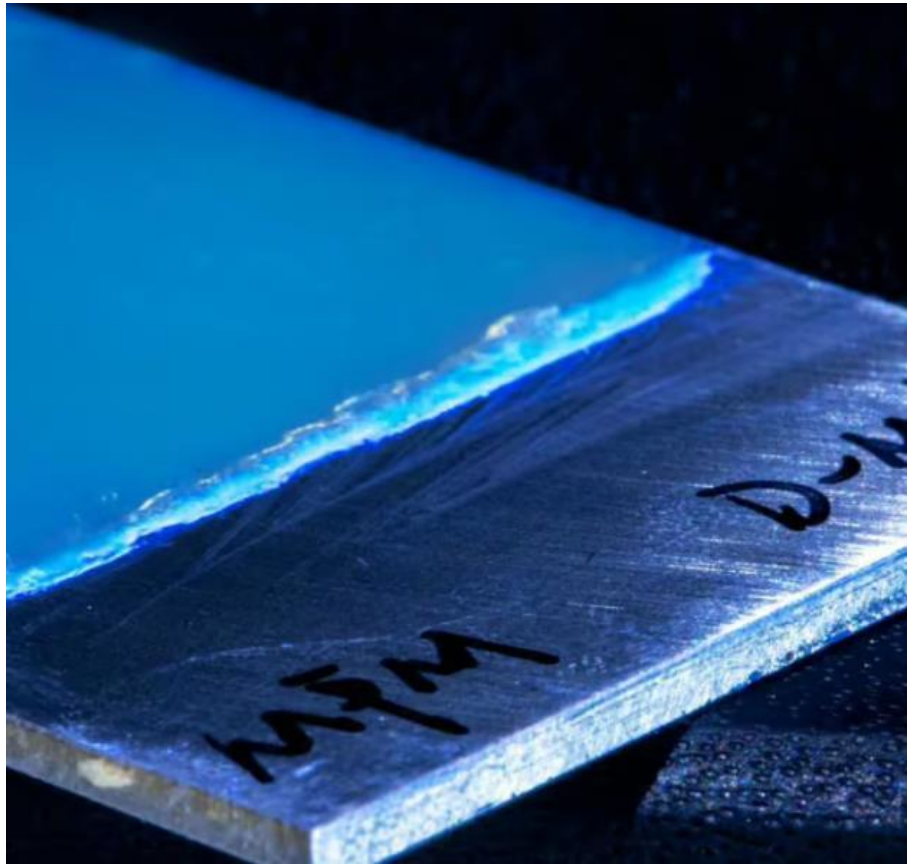
Researchers develop new anti-corrosive material that self-heals

Researchers at ETH Zurich university have developed a versatile new material that could help in the ongoing battle against corrosion for buildings and vehicles. The polymer coating not only protects against corrosion, but highlights cracks as they form, automatically repairs damage to itself, and can be recycled at the end of its life. The new material is called Poly(phenylene methylene), or PPM for short, and can be sprayed onto a surface where it hardens into a solid polymer coating. As well as being anti-corrosive, PPM also demonstrated a self-healing ability. When the team deliberately scratched the coating, then exposed it to the solution, it was found to patch up the break on its own quickly. This works because the solution reacts with the aluminium underneath, which causes the area to heat up and melt the polymer just enough to flow into the gap.



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Speciality paper maker eliminates acrylates from fast food packaging

German speciality paper maker Koehler Paper has announced that its range of flexible packaging paper for the fast food industry is now free from acrylates, making it a sustainable alternative to the packaging paper currently used in the sector. Late in 2022, the company launched Koehler NexPlus Wrap, a paper designed for burger packaging with extremely low grammage, onto the fast-food market. Then, with Koehler NexPlus OGR, the company also brought an oil and grease-resistant, sustainable paper onto the market, which is suitable for packaging foods such as fries, sandwiches, wraps, and burritos. The solutions that were originally launched as Koehler NexPure paper have now been developed further and are available with immediate effect as Koehler NexPlus paper. The paper is made exclusively of pulp from certified sustainable forestry and controlled sources as its fibre material.

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Australian supermarket chain trials displays made from ocean-bound plastic

Mars Wrigley Australia is conducting trials with supermarket chain Coles on sustainable off-location displays made from ocean-bound plastic. The two companies say this initiative will reduce 74 tonnes of cardboard from Coles' value chain and a potential eight tonnes of plastic stopped from entering the marine environment. The companies are working alongside Vancouver-based ocean plastic recyclers Plastic Bank, and Australian retail display company 5P Group to collect and stop plastic from entering the ocean, melt it down and mould it into permanent displays. The new recycled ocean-bound plastic displays form part of Mars Wrigley's broader point-of-sale overhaul with Coles, which also includes stackable cardboard shippers that reduces cardboard and plastic from the company's value chain and creates greater operational efficiencies. The new product displays are being trialled in 51 Coles stores nationwide, with the ambition to roll out to all Coles stores in 2024.

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UK supermarket replacing plastic with board for own-label laundry detergents

UK supermarket chain Sainsbury's has announced that it is replacing its sleeved plastic bottles for its laundry detergents to an FSC-certified (Forestry Stewardship Council) board-based carton. The carton will be supplied by the Norwegian board packaging company Elopak. The new board-based cartons are said to be 35% lighter than the original plastic packaging. The cartons are expected to take thirteen lorries off the road annually, reducing both plastic usage by 80%, and reduce carbon emissions of the own-brand laundry range by 50%. It has been calculated that the move will help save 22 tonnes of plastic waste per annum. It is claimed that customers can recycle the new packaging at kerbside or deposit them at recycling banks. Due to the unusual format for laundry, the packs have bright and highly visible messaging to make it clear that the contents are not to be consumed. Products moving to the new board-based carton include Sainsbury's 750ml super concentrated laundry liquid, bio super concentrated, non-bio super concentrated, colour super concentrated, and lavender super concentrated lines.

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French manufacturer unveils monomaterial board yoghurt pot

French paper and board packaging company CEE Packaging Solutions is unveiling a cardboard yoghurt pot at the 2023 edition of the Carrefour des suppliers de l'industrie agroalimentaire (CFIA) in Rennes (Ille-et-Vilaine). It is claimed to be the first board-based yoghurt pot to be produced in France. The new yoghurt pot is based on CEE's Earth Cup which is claimed to be the first monomaterial paper cup without a PE liner, and is recyclable and suitable for home composting. This Earth Cup is a patented innovation that can be easily recycled in the paper waste stream. Made in France using European raw materials, the Earth Cup is produced in accordance with the strictest food quality and safety standards and meets all regulatory requirements, with a claimed lower environmental impact than any other type of yoghurt cup.

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Insulated packaging is made from sustainable materials

Nordpack GmbH is a German packaging supplier based near Hanover. They have announced the development of two sustainable insulated packaging products for temperature-sensitive goods. The company can offer either the Eco Fleece bag or the Eco Fleece Box. The biological bag is made from recycled paper covered with a fleece fabric. The paper inner lining is disposed of with the waste paper after use and therefore, the whole package is recycled as one. The principle of combining recycled paper and fleece casing can also be found in the new cool box – the Eco Fleece Box. Mail-order pharmacies, senders of meal kits and other customers from the e-commerce sector who carry out temperature-controlled transport can now make use of this innovative ecological solution. The company says the packs operate from 2°c, to a guaranteed 8°c for up to 48 hours.

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New ink is direct food contact approved

Munich-based Hubergroup is a manufacturer of printing inks. The German manufacturer has just launched their new MGA Contact ink – this new series of food contact sheetfed offset inks, which, when combined with an adequate dispersion varnish, can be used in direct contact with food, without any other functional barrier required. To achieve this result, the ink manufacturer has only used components authorized by the directives of the European Union and those of the Food and Drug Administration, the American administration of foodstuffs and drugs, relating to direct contact with food. Additionally, to avoid contamination, this ink series is produced in a separate production facility at its factory in Celle, Germany. The colour gamut and colour fastness of the ink series are similar to traditional offset inks, and printers need no adaptation to use MGA Contact inks.

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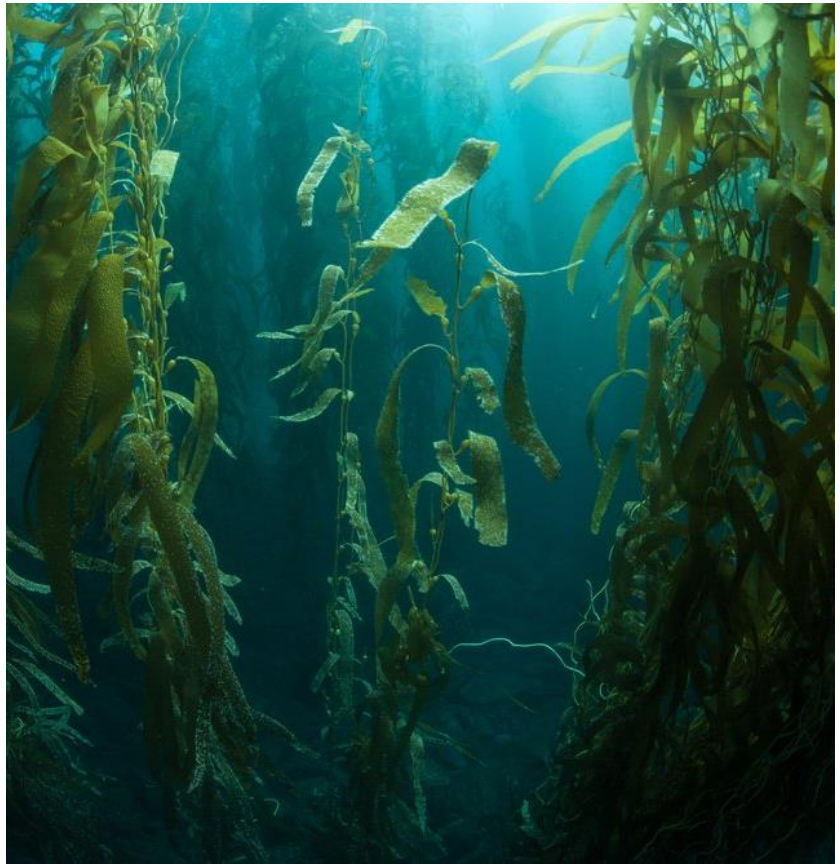
Researchers create first cosmetic whose packaging is also applied to the skin

Researchers at the UIC Barcelona's Bioengineering Institute of Technology (BIT) have created the first single-use solid cosmetic where the packaging is also applied to the skin, contributing to eliminating plastics in the sector. The cosmetic container would go inside a box that, in the future, would serve as a face mask. The product is made with natural waste such as algae, shrimp and sand, and dissolves in contact with water. The effect achieved on the skin is identical to that of a cream. The product for which a patent has already been applied is similar to a small sponge, which melts completely in contact with water. A spokesperson for the university said that In the future, they wanted the packaging to go inside a box made up of oval structures that could also be used as a face mask. In this scenario, all the product would be used.



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Start-up uses paper-based bottles for commercial cleaning products

A UK start-up has launched what it claims is one of the world's first plastic-free paper-based bottles for commercial cleaning products, which it says is both fully recyclable and compostable. BioVate Hygienics has launched the Zero Compromise range of all-natural cleaning products. The plastic-free bottle is made in the UK using sustainably sourced vegetable waste fibre paper pulp. This makes the bottle plastic-free and created using materials that would otherwise be discarded. This sustainable sourcing also means that no trees were cut down in the production of the new bottles, helping to reduce waste and lessen the bottles' carbon footprint. The bottles feature a bio liner made from a natural latex to prevent contact with the liquid cleaning products. The screw neck and cap are made of bamboo, which is said to break down easily and can also be recycled.

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Sustainable prescription packaging replaces plastic bottles

Parcel Health, a women-founded sustainable medication packaging startup located in Pittsburgh, PA, has set its eye on minimising pharmaceutical packaging waste, starting with its first product, a pill bottle replacement made of board, called the Phill Box™. The system, which is reported to be best suited for oral solid doses, is designed to be functional while also being recyclable, compostable, water-resistant, and an easy-to-use alternative to traditional packaging. The Phill Box is Programme for the Endorsement of Forest Certification (PEFC)-certified. The box is coated with a sustainable proprietary coating that gives it water-resistant qualities to withstand accidental spills, and it also has a slight grease-resistance quality to make peeling off labels easy. Patient perception has reportedly been overall positive, though they admit that the geriatric population has taken longer to warm up and sometimes struggles to understand the opening mechanism.

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Italian machinery manufacturer launches sustainable detergent packaging solution

Fameccanica is an Italian machinery manufacturing group operating in automation and robotics for the consumer goods industry. They have introduced a new family of solutions called Greenpackt that the company says helps make “going green” as attractive to brand owners and manufacturers as it is to consumers. Two pack formats are offered: rigid pack and stand-up pouches, ranging in size to accommodate between 15 to 60 single-use packs. They all offer excellent moisture resistance to protect against humidity and water vapour. The rigid pack solution also meets a requirement especially critical to this product category: safe child-resistant openings with secure closures in compliance with the standards of AISE, the International Association for Soaps, Detergents, and Maintenance Products. The biodegradable materials save an estimated 83.4 grams of CO2 carbon emission per pack of 20 single-use units. This is reported as approximately 53% lower than that of polypropylene (PP).

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UK crisp brand switched to paper-based multipack wrap

PepsiCo has announced it is conducting a trial of paper-based outer packaging for two flavours of its Walkers Baked six-pack multipacks. This move aims to replace plastic and promote higher recycling rates and replaces plastic outer wrapping. The trial packs are currently available for the Walkers Sea Salt and Cheese and Onion crisp flavours, and can be purchased in over 300,000 six-pack Walkers Baked multipacks sold at 800 Tesco locations. The paper-based outer packaging can be easily and widely recycled with conventional kerbside recycling. The paper-based packaging is expected to contribute towards PepsiCo's commitment to eliminating virgin fossil-based plastics from its European crisp and snack packaging by 2030, as part of its pep+ global health and sustainability transformation plan. Consumers are encouraged to provide feedback on the design and functionality of the paper-based packaging. The project took more than two years to develop, and PepsiCo hopes it will help reduce the amount of plastic waste generated from snack packaging.

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Startup invents sustainable packaging for kebabs

Brothers Bilal and Chihan Dalgic, who grew up in the kebab business through their father's shop in Weilheim, Germany. They have used this experience to invent an innovative and sustainable doner kebab pack. Traditional aluminium foil packaging is leak-proof and keeps the meal warm, but the resulting waste can create an environmental problem. The Dalgic brothers spent a year and a half in creative development looking for an alternative, experimenting with different materials and negotiating with packaging producers. Kebag is more environmentally friendly and streamlines the work processes for staff, making it faster and easier to use than traditional aluminium foil packaging. Customers appreciate the practical handling and environmental benefits. Since founding their start-up, they have gained 50 regular customers for their new solution. The difference in price between aluminium foil and Kebag is only seven Euro cents, making it a worthwhile investment for businesses and the environment. The Dalgic brothers have already won the German Packaging Award and have been nominated for the Green Product Award for their innovative and sustainable solution to kebab packaging.

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UK label manufacturer introduces matt white coated BOPP linerless label

Innovia Films, based in Cumbria, has announced an extension to their linerless label range, introducing a specialist matt white coated BOPP (biaxially oriented polypropylene) film. Called Rayoface AWPMatt, the film is available in a thickness of 92um and has a unique matt white printable surface on one side and an adhesive receptive coating on the other. The company says that AWPMatt has enhanced stiffness, so it is suitable for use with all large formats, wide edge leading, linerless applications, from Top & Side, C-wrap, and D-wrap labels, through to full wrap and skin pack labels. The enhanced coating technology means AWPMatt has a matt, paper-like surface finish, but gives all the benefits that a high-performance BOPP label needs for these demanding applications. AWPMatt has reported outstanding moisture and water resistance, making it perfect for labelling products such as dairy, meat or fish, which will be part of wet or frozen supply chains.

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German noodle manufacturer moves to recyclable PP material

German noodle manufacturer Settele has announced that it has moved its “Buabaspitzle” Schupfnudeln (German potato noodles) out of an unrecyclable PA/PE (polyamide/polyethylene) composite structure and into a recyclable PP-based (polypropylene) material. The move was facilitated by Südpack, based in Ochsenhausen, Germany. The most important goal of the ambitious project was maximum product protection against food spoilage and for a long shelf life and freshness of the sensitive package contents. But high transparency of the packaging, and the heat resistance of the film for the pasteurization of the products were also close to the top of the priority list. The PP films are reported to be recyclable and reduce the pack weight by around 7%. “Buabaspitzle” are said to be the “perfect combination of wheat flour, potato, egg and spices” and is often served as an accompaniment to meat dishes. They are available in pack sizes of 500 and 1,000g.

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Australian manufacturer launches monomaterial PET lidding film

Australian sustainable packaging manufacturer Caspak has developed a new monomaterial PET (polyethylene terephthalate) top web that seals to thermoformable PET films or preformed mono layer semi-rigid trays. Being a monomaterial PET structure, Caspak says this new innovation makes recycling easier, as consumers are able to place the entire PET tray in a kerbside bin, without the need to peel it away and seek out a soft plastics recycling stream as before. The top web is designed to meet APCO's minimal plastic weight allowance according to the Packaging Recyclability Evaluation Portal (PREP) for the hard recycling stream. The film is being offered by Caspak as an independent addition to a customer's existing mono-layer trays, allowing stock on hand to be utilised to create a solution that works within existing machinery and processes. Caspak says it has plans to roll out a string of more sustainably-focused packaging solutions over the coming months.

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Compostable fast food containers launched in India

YashPakka Limited, based in India, has launched CHUK compostable delivery containers. The 100% compostable delivery containers have been manufactured using bagasse – the agri-residue of sugarcane. About 90% of the raw material being used by the company is sourced locally. After use, the products turn into compost within 180 days. Chuk containers will be available in four different sizes – 350ml, 500ml, 750ml, and 1000ml. All the containers come with snug-fit lids, and are therefore spill-proof and leak-proof. In addition, they are also microwavable, freezable and ovenable. Some of these attributes add to the utility of CHUK delivery containers as opposed to regular plastic containers. Chuk products have been launched after rigorous research and development with multiple tests and trials being conducted using real-life delivery scenarios. The delivery containers have already found some takers in brands such as Shri Mata VaishnodeviShrine Board, FabCafe, Salad Point, Greenit, and Basil Box.

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Gin outer packaging moves from plastic to corrugated

Italian start-up The Gin Way has replaced its previous plastic packaging with corrugated board packaging made from recycled paper, and is fully recyclable. Called the Eco-Self Seal Cardboard and designed by the Botta Packaging company of Trezzano sul Navigliothe, the new packaging has been specially designed to protect cylindrical products. Made of corrugated cardboard and covered with a self-adhesive natural latex adhesive, the packaging adheres to the product without leaving marks on the surface, guaranteeing greater protection of the goods by preventing them from moving inside the packaging during transport and handling. The adhesive used for the pack is of natural origin and is separated from the cardboard by filtration during the recycling phase. The Gin Way was founded in 2020 to guide gin enthusiasts to discover the many labels present on the Italian market, where today there are more than five hundred.

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Outer packaging for feminine hygiene product moves to paper

US multinational consumer goods company Procter and Gamble has announced that it has rolled out paper-based outer packaging for its Always Cotton Protection Pad Range across Europe. The FSC-certified (Forestry Stewardship Council) paper-based packs are now available in France, Belgium, Netherlands, Germany, Switzerland, Austria, the UK, Ireland, Sweden, Norway, Finland and Denmark – and were launched in Spain and Portugal last week. According to a recent ISO Life Cycle Assessment, the new Always Cotton Protection paper packaging reduces greenhouse gas emissions by more than 60% compared to virgin fossil plastic bags across Europe, and after use can be fully recycled in the paper waste stream. The innovation was initially launched as part of a pilot project with German retailer, ROSSMAN in 2021 and has since gone on to win two packaging awards at the 2021 German Packaging Awards and the 2022 World Star Global Packaging Awards.

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Sustainable nappy manufacturer moves to paper outer packaging

Kit & Kin is a British company that makes eco nappies (diapers) and wipes. They have announced that they have now moved all of their disposable nappy range from plastic outer packaging and into 100% recyclable paper. The company says that they are the first retail nappy brand in the UK to do this. Kit & Kin uses sustainable, plant-derived materials to help end dependency on non-renewable resources. The super absorbent core contains bio-based gels (based on mass balance) and totally chlorine-free, FSC-certified wood pulp from sustainably managed forests. The top layer, outer lining, leg cuffs and packaging are all made from 100% sustainable materials. As a B Corp-certified business, Kit & Kin says that they are continuously looking for ways to reduce their environmental impact even further and this move to paper packaging is just another stop on this journey.

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Global food giant moves coffee packs to recyclable monomaterial

Nestlé Portugal has announced that its Nescafé coffee packaging for professionals, ie, for restaurants and cafés, is now easier to recycle. The aluminium layer in the previous bag's make-up has now been removed, making it a monomaterial. Nestlé says that the safety and quality of the coffee is unaffected by the change. This move to a monomaterial means that after use the empty packs can now be recycled in Portugal's yellow recycling bins. The artwork has also been simplified, with a predominantly white palette, which the company says makes it easier to read. Nestlé has made the commitment that, by 2025, more than 95% of packaging will be reusable or recyclable, aware that the focus will always be on achieving 100%. Through this commitment, the company is making its contribution to the Portuguese Pact for Plastics – of which it is a founding member.

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Corrugated alternative to PE shrink film for beverage cartons

Leading European corrugated packaging manufacturer Smurfit Kappa has announced the launch of Brick Clip, which is being marketed as a recyclable and biodegradable alternative to PE (polyethylene) shrink film. Brick Clip is available in standard 4, 6 or 8 carton multiples, and is available for cartons with or without caps. The Brick Clip solution makes it possible to reduce the surface area of cardboard by 50% compared to a complete package while offering high performance in terms of resistance – of the cardboard handle, the sticking of a brick and resistance to handling shocks. Brick Clip packaging is recyclable and biodegradable and made from renewable resources, using wood fibres from sustainably managed forests. In cases where the paper is disposed of in nature, it will disappear in a few months. Brick Clip follows in the footsteps of their previous shrink film alternatives for cans, Top Clip and Green Clip.

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New 100% paper pouches aim to replace bubble wrap-based mailers

Cepap La Couronne is an old, established French company traditionally producing stationery products. They have decided to diversify into e-commerce packaging with the launch of a range of embossed paper pouches and sachets, with or without gussets, designed to replace conventional solutions lined with plastic bubble wrap. The move is being supported by Raja Group, headquartered near Paris, who have invested €1.5 million (£1.32 million) in the development. The bags are made of 100 and 120 g/m2 pure brown kraft paper, PEFC (Programme for the Endorsement of Forest Certification) certified. It is reported that the strength of 918 kilopascals makes it one of the strongest kraft papers in the market. During the shipping tests carried out by Cepap La Couronne and RAJA, fragile products including Christmas decorations, make-up palettes, and spirits arrived intact and well-protected by the packaging. RAJA will offer the two new products at a price approximately 10% higher than their equivalents.

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Gin producer introduces stand up pouch format

6 o’clock gin, based in Bristol, has announced the launch of a stand up pouch format for its London Dry gin brand. The pouches contain 700ml and are designed for trade customers to decant directly into the company’s blue bottles. The company has calculated that by using pouches, CO2 emissions are reduced by 94.4%, as production of pouches weighing only 30g produces 46g of CO2, versus 812g for a glass bottle weighing 650g. After use, the pouches can be returned to the distillery by Royal Mail free post service, which is then sent onto TerraCycle to be recycled. Alternatively, consumers can send directly to TerraCycle, or deposited at designated TerraCycle recycle points in the UK. Customers also get saving – the gin in pouches retails at £33 for 700ml, while the standard glass bottle comes in at £36.

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McDonald’s Brazil reduces single-use plastic usage by 48%

The operator of the McDonald’s chain in Brazil and over 19 countries in Latin America and the Caribbean, Arcos Dorados, has announced that it has reduced its single-use plastic usage by 48% in the last four years. This move means that the amount of board packaging used has reached over 90%. The company also became part of the Amigos da Natureza initiative, created by Brazilian online food ordering and food delivery platform iFood to promote the reduction of waste generated from deliveries. With the initiative’s expansion, the company already has more than 640 McDonald’s restaurants participating in the project, along with thousands of restaurants that deliver via iFood that do not send items such as straws and plastic cutlery. According to the company, since the beginning of the campaign, participating establishments have already contributed to reducing the use of 730 tons of plastic, totalling around 330 million orders without single-use plastic items.

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Specialty paper manufacturer offers functional paper products

Delfort Group is an Austrian manufacturer of specialty paper and printed products. The company says that they are committed to continuously improving the environmental performance and functionality of barrier paper packaging. As part of this commitment, they are developing the next generation of recyclable paper packaging solutions with their R&D partner DELSCI. DELSCI is a Traun, Austria-based research organization that invents smart paper packaging solutions for food and consumer goods applications. They are a team of scientists and technologists on a mission to empower people to consume responsibly. This means replacing plastic wherever possible with functional paper that works harder than ever before to help protect the environment. DELSCI's scientists, paper engineers and product designers will develop and customize paper to a customer's exact packaging needs. DELSCI designs recyclable, biodegradable and compostable paper with the right barrier properties.

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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.

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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Protect and Preserve

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Indian researchers develop colour-based sensors from agricultural waste
Plant-based packaging manufacturer introduces tamper-evident offerings

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Spanish researchers use whey in packaging to increase cheese shelf life

The Go Orleans project is a Spanish multi-organisation initiative responding to the need of the cheese sector to recover waste and to put new production and conservation processes on the market to keep products fresh for longer and thus reduce food waste. The project features the expertise of the Valencian Community Agri-Food Business Federation (FEDACOVA), AIMPLAS, the Plastics Technological Institute, the University of Valencia, ADM Biópolis and the Dehesa Dos Hermanas and La Cabezuela cheese factories. The research project has so far managed to add value to whey to improve the conservation of the cheese itself and reduce food waste through a natural active packaging. This active coating, developed by AIMPLAS and which uses an active coating with antifungal properties from whey, has been incorporated into packaging with conventional printing technologies, allowing the shelf life of cheeses to be extended by between 25% and 50%.

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Insulating hood extends product shelf life and reduces damage

Ecocool is a German company that specialises in sustainable insulation products. Their new product, the thermal hood, is said to extend shelf life and reduce temperature damage through the supply chain. It is considered especially suitable for air transport and protecting fruit, vegetables and cut flowers. The new thermal hood ‘Eco-Breath’ has been consistently further developed based on Ecocool’s globally successful pharmaceutical thermal hoods, having been adapted to the requirements of food logistics. The hood consists of micro-perforated foil on a tear-and-puncture-resistant PP fabric. The reflective film layers insulate effectively, protecting the goods from heat and frost damage. The microperforated structure helps to remove ethylene produced by ripening processes and thus prevents ethylene-related product ageing. The micro-perforations improve the exchange of air humidity on the product during strong temperature fluctuations and thus prevents condensation, extending shelf life and reducing temperature damage and spoilage along the logistics chain.

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New range of flow pack packaging extends shelf life of fresh products

Israel-based Post Harvest Solutions has announced that its Zoepac range of flow pack packaging is about to enter retail stores. The Zoepac range allows customers to extend the benefits of modified atmosphere packaging to retail products stored at room temperature. The company is particularly interested in targeting SKUs with low sales rates and high losses or rejects. The company also has a unique packaging solution for table grapes. The traditional sulphur pad and coatings can be replaced with their sulphur bag and modified atmosphere (MA) coating. The company says they expect to be fully compostable within a year or two. They also say that the estimated 31% of global food losses and waste must be addressed, before discussing the need to increase agricultural land to feed a growing population. This, they say, makes Post Harvest Solutions packaging range a sustainable solution, reducing the demands on land and resources.

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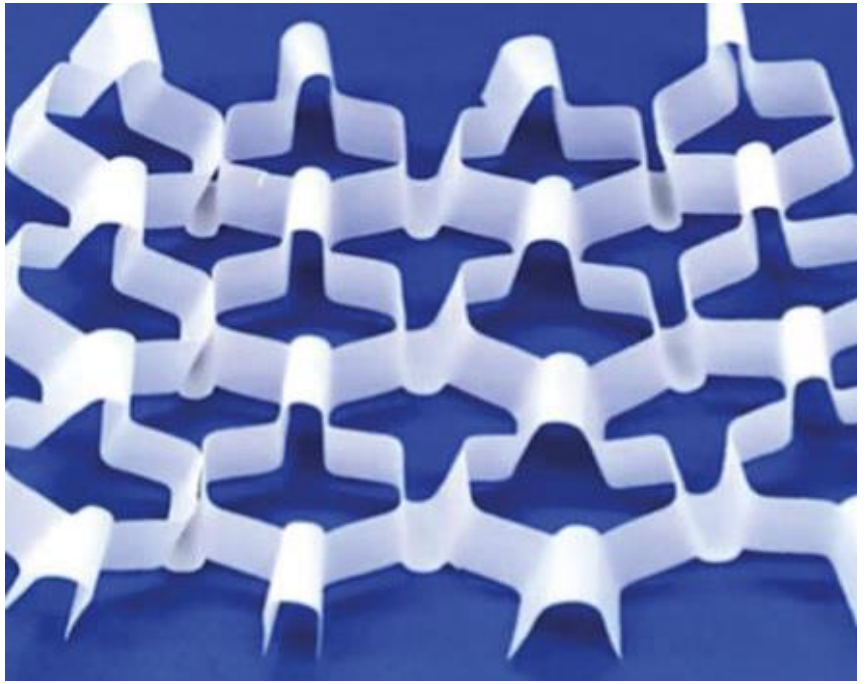
Low-cost method for making protective honeycomb structures inspired by origami

Japanese researchers, inspired by origami techniques, have announced that they have found a low-cost method to make paper sheets fold themselves into honeycomb structures. They recognised one of the most difficult aspects of using origami in practical applications is finding a convenient, cost-effective way to fold the sheets of material into the desired shape. The structure is formed autonomously by a reaction between the printing solution and the paper. The researchers first cut out a grid of rectangles on a flat paper sheet and then used the inkjet printer to apply the printing solution in a carefully devised pattern. This results in the honeycomb structures folding themselves in a matter of minutes. This new technique has the potential for tailor-made protective packaging for fragile goods, including electronic components or vegetables, and protective gear such as helmets.



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Smart jar trial combats food waste

With their smart new packaging format, Unilever's Hellman's mayonnaise is changing how consumers think about food storage and waste. The brand is trialling a 'smart jar' that incorporates thermochromic ink, which responds to the temperature of a consumer's fridge. The pack reveals hidden illustrations on its label when the temperature dips below 5°C. Some foods can spoil up to three days faster if stored above this temperature. Developed by Ogilvy UK, the trial jar aims to combat the millions of fridges running warm, causing stored food to spoil faster. Not only does this new packaging hope to reduce food waste, but it's also seen as a fun and engaging way of educating consumers on how they can make a difference. The smart jars come with labelling designed by Melbourne-based illustrator Ellen Porteus, calling on mayonnaise fans to 'make taste not waste.' By distributing these prototype products to social media influencers, Hellman's hopes to encourage users to take simple steps towards reducing food waste and preserving the quality of their food. The technology has reportedly taken over a year to perfect

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Companies join forces to offer short-run pouch opportunities

Global flexible packaging company ProAmpac has joined forces with FirstWave Innovations, part of SinnovaTek, and a co-manufacturer of aseptic food products. The companies have partnered to utilise ProAmpac's short-run pouching capabilities to allow co-packers to launch aseptic shelf-stable liquid food in a convenient, flexible custom-printed spouted pouch using Scholle IPN's patented aseptic-capable fitment. FirstWave's aseptic filling technology and ProAmpac's short-run pouching capabilities allow co-packers to launch aseptic shelf-stable liquid food in a convenient, flexible custom-printed spouted pouch. This new capability is ideal for market trials, trade shows, product samples, and launches. This matches FirstWave's precision-scale processing capabilities, enabling new aseptic products at any scale. A spokesperson for ProAmpac said that spouted pouches continue to replace rigid containers in new applications, and partnering with SinnovaTek's proprietary aseptic technology was a great opportunity to leverage this trend using less packaging in a growing food technology platform.

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Indian researchers develop colour-based sensors from agricultural waste

Researchers at the Indian Institute of Technology Roorkee (IIT Roorkee), Department of Polymer and Process Engineering, have developed structural colour-based sensors by making structural colour from an unexpected natural resource – agro-waste sugarcane bagasse. It is a colour-based stimulus-responsive sensor from nano-cellulose, having implications for intelligent packaging. The colour of the laminated films comes from a ‘chiral nematic liquid crystal’, a specific molecular self-assembly that interacts selectively with specific colours of visible light. The nanocellulose suspension is non-toxic and produced from readily available natural material, and is reportedly highly suitable for upscaling. To make this structural colour film, the bagasse must first be ground into tiny microscopic fragments called cellulose nanocrystals. The composite films displayed good visual colour-sensing properties with moderate antibacterial activity for Escherichia coli bacteria. This is the first demonstration of a photonic film having the potential as a candidate material having implications in bio-optical engineering and intelligent packaging.

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Plant-based packaging manufacturer introduces tamper-evident offerings

Canadian packaging manufacturer Good Natured Products makes plant-based plastic containers from several different products, but mainly PLA (polylactic acid). They have now announced the expansion of their range of food packaging, with the patent-pending GoodGuard tamper-evident food packaging. Key features of these clamshell trays include a dual-hinged tamper-evident design with a locking tab, and smooth walls for 360 degree visibility of the greens or deli dishes inside. The seal is designed to fit snugly around the edge of the tray, creating an air-tight barrier that prevents any air, moisture or contaminants from entering, preserving product quality and freshness. It also features a crush-resistant and stackable space-maximizing design. The trays are available in 8 oz., 12 oz., 16 oz., 24 oz., and 32 oz. sizes. The main feedstocks used to produce Good Natured Products products are corn starch and sugarcane, and reportedly uses materials from less than 0.04% of annual corn crops.

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Recycling Resurgence

thepackhub INNOVATION ZONE

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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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French water brand moves out of coloured PET bottles to aid recycling

French water company Badoit, Danone's sparkling water brand, is abandoning its red and green PET (polyethylene terephthalate) bottles in order to facilitate recycling of its plastic bottles. The differentiation will go through to the labels and the caps. Danone indicates that 70,000 tonnes of coloured PET plastic bottles are sold every year in France by all companies, and that recycling into new bottles remains difficult. A spokesperson for Danone said that until now, the coloured bottles of their Badoit brand went through specialised recycling channels and were intended for uses other than food. The material from each recycled Badoit bottle can be used to make new bottles if correctly sorted. Production has already started in Saint-Galmier (Loire), and the green and red bottles, which hold a 15% share of the sparkling water segment, will gradually disappear from the shelves.

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Dutch supermarket moves to recyclable paper-based bread bag clip

The largest supermarket chain in the Netherlands, Albert Heijn, has announced that it is gradually phasing out the use of plastic clips on its bread bags, and that the clips would instead be replaced with ones made out of recyclable paper. The move is being made in collaboration with the bakery business Borgesius. Sell-by and best-before dates can be printed directly onto the clips, which are said to be easily recyclable in a reported first for bread bag packaging in the Netherlands. The paper clips have begun their roll-out, are set to package more products in the coming months, and are expected to replace plastic clips by the summer completely. The company currently uses 125 million plastic clips annually, which cannot be recycled because they are too small for the sorting machines used for plastic waste.

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Norwegian dairy moves to 50% rPP pots

Norwegian dairy company Tine has announced plans to replace the polystyrene (PS) pots of two of its Rømme products and one of its sour creams with polypropylene (PP) alternatives containing 50% recycled material in pursuit of the company's sustainability strategy. The move is being made with the help of Berry Superfos, who are said to have worked closely with TINE on the design for the polypropylene pots, which are thought to be more robust than their polystyrene counterparts and claimed to improve customers' experience with the product. It is reported that PP is a material with a lower climate footprint than PS because, among other things, it has a lower melting point and is, therefore less energy intensive. Also, 50% of the PP in the new pots consists of recycled PP (rPP), then the pots' climate footprint is improved, saving 110 tonnes of virgin fossil plastic material.

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First labels containing ocean bound plastic waste

Helsinki-based UPM Raflatac has announced that it is the first label manufacturer in the world to introduce OBP (ocean bound plastic) waste into its labels. Designed for cosmetic, home and personal care, beverage and food packaging, this new laminated product is made by chemically recycling OBP – polymers found within 50 km of waterways – mainly collected in Southeast Asia's coastal regions. A spokesperson for UPM said that with less than 10% of the world's polymers being recycled, this is an important step towards their Ocean Action Label adding value to what was previously worthless. In the process of giving new life to a previously useless material, UPM has partnered with Saudi chemical company SABIC.

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Collaboration brings bags and pouches containing 40% PCR LLDPE to market

Plastic packaging producer Charter Next Generation, based in Milton, Wisconsin, has announced that it is to start producing food-grade packaging using Arkansas-based Revolution's Encore food-grade PCR-LLDPE (post-consumer recycled linear low-density polyethylene) resin in the production of stand-up pouches, pre-made bags and roll stock for both vertical and horizontal form fill and seal packaging. The companies hoped the collaboration would help drive market adoption of commercially available post-consumer recycled, linear low density polyethylene for food and flexible packaging applications. The resin supplied by Revolution will contain 40% recycled content. Both Charter Next Generation and Revolution are members of the U.S. Plastics Pact, a consortium. As Pact members, they committed to reach 30% PCR in their packaging by 2025.

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Confectionery giant moves to rPET for Chinese chocolate brand

Mars Wrigley China has announced the introduction of its first fully PCR rPET (post consumer recycled polyethylene terephthalate) packaging. The packaging is for their Cui Xiang Mi (CXM) chocolate brand. After launching the packaging for CXM, Mars Wrigley China plans to provide the rPET lid for brands such as Snickers and M&M's this year. Through this, the manufacturer aims to save 300 tonnes of virgin plastics in a year. The use of rPET for packaging is part of Mars Wrigley China's wider efforts to make its packaging reusable, recyclable or compostable. Last year, Mars China partnered with other industrial leaders and national associations to launch Flexible Plastics Reborn. This initiative was claimed to be China's first industry-wide flexible collection pilot, the programme aims to collect 50,000 tonnes of flexible packaging waste by the end of 2025.

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Australian beverages move to rPET bottles

Australian food and drinks manufacturer Bega Group is launching a 100% recycled plastic bottle (excluding cap and label) for its impulse milk beverage range nationally, while its PIDA-nominated product, The Juice Brothers has achieved Carbon Neutral Certification. The rPET (recycled polyethylene terephthalate) bottle is for Bega's flavoured milk and ice coffee products under 1L, which the company says will be fully converted to the 100% rPET packaging by September this year. Bega Group's packaging sustainability goals, embodied in its 'Planet Pledge', sees a commitment to having approximately 50% of its products use recycled materials and 100% of products being either reusable, recyclable or compostable by 2025. The move is not the company's first venture into rPET – its juice range branded The Juice Brothers, packaged in 1.5L rPET bottles, is already available on shelf, and has now achieved Carbon Neutral certification.

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Compost bags contain 20% PCR material

A three-way partnership has resulted in the development of a compost bag that contains 20% post-consumer resin (PCR). When New York-based NOCO's Buffalo River Compost brand Tend launched its 1-cubic-foot bags of Brian's Best compost in 2022, it said that it found limited options available for sustainable packaging. Tend then reached out directly to EFS-Plastics, a mechanical recycling company headquartered in Canada that creates customised plastic resin. Plattsburgh, New York-based Salerno Packaging Inc., an affiliate of Inteplast Group, of which EFS-plastics is a joint venture, worked in partnership with Tend over the past year to manufacture the lawn and garden bag, addressing areas such as the bag's thickness and durability as well as graphic design. A spokesperson for EFS said that their film recycling plants can now produce a range of high-quality LDPE [low-density polyethylene] and LLDPE [linear-low-density polyethylene] PCR that are tailored for many different consumer-facing applications.

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Spanish cocoa producer moves to recyclable board packaging

Spanish premium chocolate brand Valor has moved to more sustainable packaging for two of its instant cocoa products. This new packaging, the GreenCan from Sonoco, is 100% recyclable and made mainly from cardboard, generating no plastic waste, reducing the firm's environmental footprint. This launch makes Chocolates Valor the first firm to launch GreenCan packaging on the Spanish market. Its new 100% recyclable packaging made almost entirely of cardboard, will replace the current packaging of the entire range of soluble cocoas of the brand. A spokesperson for Valor said that from the point of view of their packaging, their procedures considered a thorough analysis of the degree of recyclability of their containers and packaging. Beyond compliance with the 2030 agenda, they say they strive daily to move towards more sustainable materials and reduce their environmental impact throughout their production process.

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Australian trial successfully recycles PE shrink packaging for meat

Sealed Air Cryovac has conducted trials with Australian recyclers APR Plastics to recycle its new Cryovac barrier shrink bag – R90, a sustainable retail packaging solution for fresh, chilled meats. The trial was conducted successfully at the APR Plastics Dandenong south facility, on its Biofabrik WASTX pilot plant, which uses pyrolysis in this advanced recycling process to convert plastic to recycled oil. The trial, which was the first of its kind carried out in Australia, brings together new recycling technology and new materials development to highlight the path to circularity in advanced meat packaging. Cryovac R90 contains over 90% PE (polyethylene) content, and is retail meat shrink packaging that is purposefully designed for recycling, meeting APCO 2023 design guidelines. The next step will be to commercialise this solution by recovering this material from the marketplace and converting it through advanced recycling back into new plastics.

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Perfume moves to 50% recycled plastic packaging

Brazilian global personal care and cosmetics group, Natura & Co has announced that one of its popular perfumes, Kaiak has been relaunched in packaging that contains 50% recycled plastic. By promoting plastic recycling chains in coastal areas, Kaiak values this material and, therefore, prevents it from being dumped and from reaching rivers, mangroves and eventually the sea. So far, with the Kaiak circularity initiative, Natura has collected more than 23 tons of recycled plastic, which is apparently equivalent to 11.6 million PET bottle caps. In addition, it has avoided the emission of 39.5 tons of CO2 into the atmosphere, the equivalent of nearly 7 trips around the world by car. Natura is reportedly a pioneer in using waste material, integrating premium post-consumer recycled plastic and glass into its packaging. Among the company's objectives is eliminating plastic packaging waste and migrating from an exclusive use model to a reuse model.

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Washing powder packaging produced with 30% PCR resin

Brazilian cleaning products company GTEX has announced that its new Urca washing powder pack has been produced with post-consumer recycled resin (PCR). The innovation allowed 30% of the virgin plastic used in product packaging to be replaced with high-quality recycled plastic, accelerating the use of sustainable solutions in flexible packaging. The resin used is supplied by Dow Chemicals and converted into film by flexible packaging manufacturer Finepack. The resin used for the packaging is Dow's Revoloop PCR polyethylene (PE) resin, which is produced by mechanical recycling, allowing high-quality recycled materials to be incorporated into new packaging. Post-consumer plastic is collected by cooperatives and then used to manufacture Revoloop resin, produced by Dow in partnership with São Paulo-based Boomera LAR. A spokesperson for GTEX said that eliminating waste was part of their commitment to reducing their environmental impact and meeting the demands of consumers.

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Collaboration results in recyclable PE pouch with high barrier properties

A multi-company collaboration has resulted in a recyclable PE (polyethylene) stand-up pouch with high barrier properties. The five companies involved are petrochemical giant ExxonMobil, adhesive manufacturer Henkel, polyolefin film specialists Kraus Folie, ink supplier Siegwerk, and printing press manufacturers Windmöller & Hölscher. After use, the new pouch can reportedly produce an almost colourless recyclate. This has been achieved by applying Siegwerk's delamination/deinking primer technology. The pack's oxygen barrier properties are credited to Henkel's one-component barrier coating, Loctite Liofol BC 1582 RE, as well as Siegwerk's CIRKIT OxyBar BC 1582. The MDO-PE films are in turn a joint development between ExxonMobil and Kraus Folie, produced on the VAREX II extrusion line with inline MDO units using ExxonMobil's HDPE and Enable performance PE. Cyclos HTP has also confirmed that the pouch is recyclable, and Siegwerk also states coloured and white inks by them meets Critical Guidance by The Association of Plastic Recyclers (APR).

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UK supermarket moves to recyclable board for laundry pods

British supermarket chain Tesco has announced that it is moving its own brand of laundry detergent pods out of plastic tubs and into recyclable board packaging. The new box contains more than 90% recycled cardboard and is FSC certified, but it does still contain a thin plastic liner inside to protect the pods. Despite this, the box can reportedly be put in the normal household recycling bin when empty. The move will remove four million pieces of plastic across eight products, the equivalent of around 252 tonnes of plastic per annum. The move to recyclable board comes as part of Tesco's 4Rs packaging strategy, which aims to tackle the impact of plastic waste. In practice, the company says that this means it removes plastic where it can, reduces where it can't, and looks at ways to reuse more and recycle what's left.

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Biotransformed PP packaging degrades completely in record time

India-based Toppan Specialty Films and UK-based Polymateria have announced a breakthrough in sustainable plastics by developing packaging which fully biodegrades leaving no microplastic and toxins behind. Data released shows that biotransformed packaging can return to nature in a record time – a declared 176 days. The revolutionary technology reportedly does not affect the mechanical or aesthetic qualities and allows the plastic to be recycled for a predetermined time via a time-set feature. It is claimed to be the fastest-ever full biodegradation of biaxially oriented polypropylene (BOPP), which is used in food and cosmetic packaging. The result was achieved using Polymateria's innovative biotransformation technology, which they claim is set to play a significant part in reducing plastic pollution. Products using Polymateria's technology can be recycled, but if they escape into nature, they will "biotransform" into a bioavailable wax. The wax then attracts microorganisms like bacteria and fungi, which safely digest it and return it to nature without harm.

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Hook-and-loop fastening brand introduces weight-reduced recyclable option

Iconic hook-and-loop fastening brand Velcro has introduced a new 100% recyclable closure offering a 20% weight reduction compared to standard Velcro products. The VELCRO Brand PRESS-LOK 954 closure system is a fully recyclable monolayer polyethylene (PE) closure that is easy to process onto recyclable polyethylene structures and weighs 20% less than first-generation VELCRO Brand PRESS-LOK closures. The PRESS-LOK 954 closure system is designed specifically for use with 2-10kg monolayer polyethylene laminate flexible packaging. Ideally suited for commercial applications, including pet foods, lawn and garden and food packaging, the VELCRO Brand PRESS-LOK 954 closure system features the company's exclusive hook-to-hook closure, enabling consumers to easily align the seal to precisely and reliably close flexible packaging pouches to ensure contents stay contained and fresh. This makes re-closure quick, easy and reliable even for those with dexterity issues, children and the elderly.

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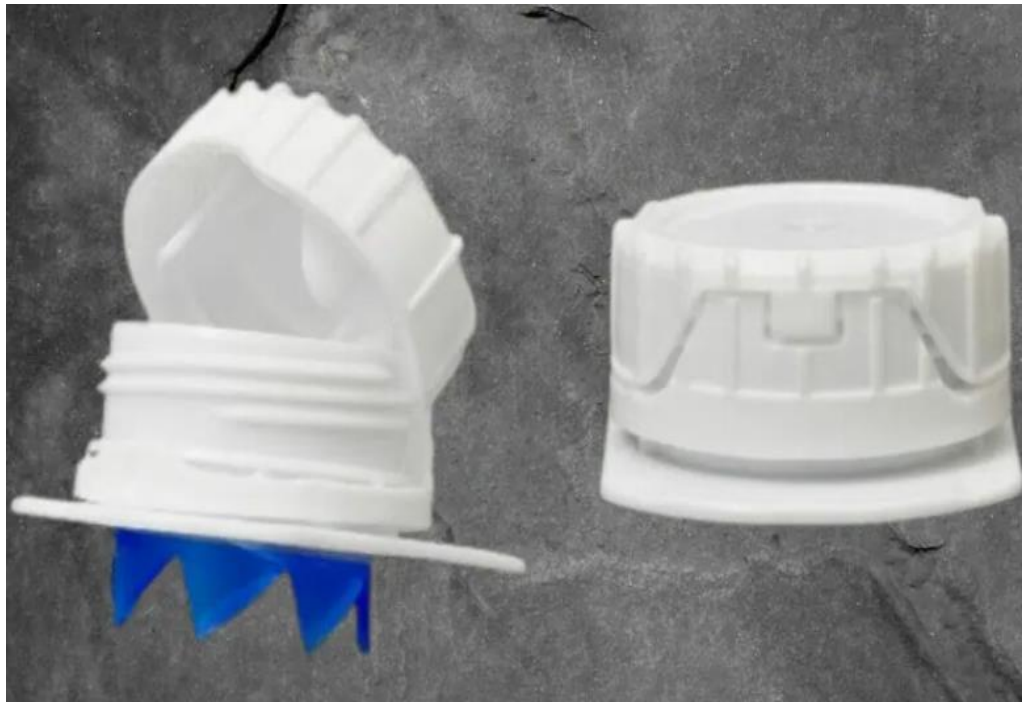
Tethered cap development for beverage cartons

Luxembourg-based United Caps has announced the launch of the 23 H-PAK, said to be an effective and sustainable tethered closure for carton packaging. The new closure solution has a patent pending and permanently connects the lid to the cardboard packaging for easy recycling. During development, importance was emphasised to the fact that it can be used directly in existing filling systems, seamlessly integrated into existing processes and enabling rapid implementation in the production line. One of the special features of this new tethered closure is the audible click when opening. The sound, perceived as pleasant, indicates to the consumer that the cap is fully folded. After opening, the closure remains in an optimal position to guarantee the best possible pouring. One particular feature is the specially shaped cutting edge, which effortlessly cuts through the pre-laminated hole, leaving the opening clean and smooth every time.



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Bakery ingredients supplier moves to sustainable packaging

Puratos, based in Belgium, are providers of bakery and patisserie ingredients to artisan, retail, industrial and foodservice customers. The company has now announced that it is moving to more sustainable packaging for its products. The changes will mean that all Puratos's packaging will become 100% "recycle-ready". Selected packaging types will benefit from additional improvements such as paper certified by the Forest Stewardship Council (FSC) and an ink reduction of up to 70%, as well as a more sustainable production process with fewer chemicals and less energy used. Puratos promises to enhance the functionality of several packaging types for its customers' convenience, including easier recycling, simpler opening and closing and better pallet stacking properties. With these developments, Puratos is moving closer to reaching its goal of being carbon-neutral across operations by 2025 and a zero-waste-to-landfill company by 2030 – while simultaneously helping to lower customers' environmental footprints worldwide.

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Unique design delivers tethered cap solution

Starting July 2024, the EU will require all beverage pack closures to be fixed or tethered to improve recycling rates. To meet this requirement, Sävjo Plastic AB has developed a new, patented continuous snuff box with a unique design that keeps all parts of the box and lid connected even when opened. Sävjo Plastic's new snuff box is injection-moulded entirely in one mould, making it cost-effective and more sustainable. The streamlined design reduces the number of parts that could potentially end up in nature and increases the amount that can be recycled. All Sävjo Plastic boxes, including the new continuous snuff box, are user-friendly and optimized for use with filling lines. To facilitate production, the box is delivered with the lid closed. In addition to the continuous snuff box, Sävjo Plastic also offers environmentally certified snuff boxes made with pine oil to reduce CO^2 impact. The company has also produced oyster shell cans and is currently testing various materials to create a final product that is fully compostable in ordinary household compost.

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Companies join forces to offer recycled PS packaging

AmSty, also known as Americas Styrenics LLC, is a North American polystyrene manufacturer specialising in circular recycling. They are now collaborating with Pactiv Evergreen, the leading fresh food and beverage packaging manufacturer in North America. Based on a mass-balance approach, certain Pactiv Evergreen packaging will use AmSty's ISCC PLUS-certified recycled polystyrene (PS). ISCC PLUS is an internationally recognised certification process for circular content, which audits the supply chain from end to end. Together, the companies will develop innovative foam polystyrene packaging products. A spokesperson for AmSty said that its lightweight and performance qualities make foam polystyrene a desirable material, and with the addition of circular content through advanced recycling, it makes even more sense. Pactiv Evergreen will begin offering its customers the ability to purchase the ISCC PLUS-certified polystyrene packaging in the first half of 2023.

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New bottle paves the way for circular plastic packaging

Svensk Plaståtervinning and retailer ICA have collaborated to introduce a groundbreaking circular plastic packaging solution consisting of 95% recycled plastic from Swedish households. The innovative packaging will be used for Skona detergent and is made entirely from plastic collected and sorted by Svensk Plaståtervinning. The launch of this new Skona bottle marks a major step forward in developing sustainable plastic packaging and represents a critical milestone in achieving circularity. The partnership between these two companies aims to create a paradigm shift in plastic recycling by significantly reducing emissions from incineration and decreasing the demand for new plastic. Plastic incineration accounts for 8% of Sweden's total carbon dioxide emissions, making this a crucial project for reducing the country's carbon footprint. By creating circular plastic flows on a large scale, the collaboration will help build a market for recycled plastic raw materials while minimizing the need for new fossil plastics. This vision represents a significant step towards reducing the environmental impact of plastic packaging and developing a more sustainable future for our planet.

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German mineral water firm moves to tethered caps

Leading German mineral water firm Gerolsteiner Brunnen is introducing tethered caps across its range of mineral waters. The changeover to what the company calls “stay tuned caps” began in March 2023, and they expect to have moved to tethered caps completely by the end of the first quarter 2024. According to EU regulations, the caps of non-returnable PET bottles must remain firmly attached to the bottle even after opening to ensure that the bottle and cap are recycled together reliably. The legislation is due to come into force on July 3rd 2024. The new caps are also lighter, resulting in material savings of 0.05g or 0.33g per closure, depending on the type. Drinking comfort is also addressed, with the neck ring’s reduced diameter increasing the closure’s opening angle to 160 to 180 degrees. Therefore, the tethered cap reportedly doesn’t interfere with pouring or drinking from the bottle.

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Recyclable monoploymer PP laminate film has multiple applications

Parkside Flexibles, based in West Yorkshire, has announced the launch of a new recyclable mono-polymer PP (polypropylene) laminate film. The new laminate offerings are available in duplex or triplex formats, in a range of thicknesses, with either matt or gloss finishes, all suitable for full-colour printing. The new laminate aims to replace non-recyclable aluminium foil and PET structures. It can be utilised in a wide range of packaging formats, including flow wraps, bags, sachets, stick packs, pillow packs, pouches and more. The new film reportedly possesses superior gas, mineral oil, water, light and UV barrier performance to extend product shelf-life and reduce food waste, as well as being ideal for a wide range of food applications, including coffee, soup and confectionery. The mono-polymer film can also be used in packaging products that require more rigorous barrier properties, such as condiments, toiletries, perfumes, medicines and alcohol.

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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 solurtions by 2025. Many of these initiatives are coming from startup 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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Refill cartons switch to brick-and-mortar stores

Cleancult, established in 2019, has successfully expanded from online to brick-and-mortar stores with its refill cartons for household cleaners. Walmart will soon stock Cleancult's popular Hand Soap, Dish Soap, and All Purpose Cleaner, with over 3,100 distribution points. Instead of repeatedly buying single-use plastic bottles, Cleancult customers buy refillable glass dispensers and soap refills in recyclable, paper-based cartons, decreasing plastic use by a reported 90% compared to conventional cleaning products. Cleancult's products will be available at Walmart starting at $7.48 (£6.22), with reusable glass dispensers priced at $8.98 (£7.46). Along with the Walmart launch, Cleancult has revealed a new look, premium packaging, and fresh scent range. Cleancult won the 2022 Sustainability Award from the Business Intelligent Group for its environmental efforts. As an activator in the US Plastics Pact, Cleancult aims to ensure that all plastic packaging is reusable, recyclable, or compostable by 2025.

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Refill pouch format launched for UK’s best selling instant coffee

Nestlé UK has announced the launch of a new refill pouch for two of its iconic coffee products. The new pouches will be available on Nescafé Gold Blend and Nescafé Original coffee. After use, the pouches can be recycled at recycling points in supermarkets. The new pouches will cost less than the current glass jars, and the pouch is 97% lighter than the 200g glass coffee option and has on average 60% less plastic than the jar’s lid. The pack is resealable to help preserve freshness, and once the refill is empty, consumers can recycle the pack in more than 5000 stores across the UK and through kerbside collection in Ireland. The new Nescafé Gold Blend refill pouch is available now in all major retailers and the Nescafé Original refill pouch will hit shelves at the end of March.

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Europe-wide reusable plant tray with ten year life being trialled

As part of a European trial, German plastic reusable packaging manufacturer Walther Faltsysteme has delivered the first 20,000 reusable plant trays to garden centres and wholesalers. The Euro Plant Trays are set to become part of a new European standard for plant trays and gradually replace single-use disposable ones. It is estimated that 150 million plant trays are destroyed in Germany every year – the cooperative Euro Plant Tray eG (EPT), which is made up of various DIY stores, garden centres and wholesalers from Germany, Austria, Switzerland and the Netherlands, wants to change that. Together they want to establish a reusable system and pool management for reusable plant trays, the Euro Plant Trays. Unlike the disposable trays, the Euro Plant trays are guaranteed to make 100 rounds and be in use for more than ten years, according to the company. A water reservoir supplies the plants with water.

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Foldable reusable water bottle gets development boost

DSM Engineering Materials, a company based in Troy, MI, has partnered with DiFold, a sustainability start-up, to develop foldable and reusable products. DiFold has chosen to use DSM Engineering Materials' Arnitel Eco, a bio-based thermoplastic copolyester, to produce its Origami foldable water bottle. This aligns with DiFold's objective to reduce the environmental impact of their packaging waste. The patented design of the Origami Bottle, inspired by the Japanese art of paper folding, can collapse to less than 10% of its original volume, making it convenient for users and reducing its carbon footprint during shipping. Arnitel Eco is partially derived from renewable rapeseed oil, resulting in a 50% reduction in carbon footprint compared to traditional copolyesters. The material can also be recycled and has the required mechanical properties for the folding design. Additionally, Arnitel Eco is BPA-free and can withstand temperatures ranging from -30°C to +100°C without any loss of quality in the recovered material.

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New refillable mascara incorporates antimicrobial technology

French supplier of plastic and polymer primary packaging for cosmetics, Somater has announced the launch of antimicrobial, refillable click-and-turn mascara packaging. The new mascara features their patented “Click Turn and Apply” (CTA) technology as well as an antimicrobial brush. The new packaging was a collaboration with French companies, Pylote, a company that specialises in antimicrobial mineral technology, and SIMP, who provide mascara brushes and applicators. A major requirement for the launch of a refillable solution intended for the sensitive area around the eye was the implementation of stable and permanent microbial decontamination technology. The stem and the brush were successfully tested in the independent laboratory Fonderephar, resulting in a disappearance of almost 99.99% of bacteria on the surface of the stem and 99.9999% on that of the brush. This new mascara also helps to reduce plastic waste by approximately 30% from the second use compared to non-refillable solutions. It is fully recyclable post-use.

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First self-service point for refilling detergents in Chile

A shopping centre in Santiago, Chile, has become the first self-service point for refilling cleaning product containers. Start-up EcoCarga has introduced a machine at the Parque Arauco Kennedy shopping centre that will offer certified quality and biodegradable products, liquid detergent, fabric softener, and dishwasher at prices up to 50% cheaper than in traditional outlets. The products are offered in 3 litre bottles, thus promoting responsible consumption, the reduction of plastic containers and savings for shoppers. Each pack includes a QR code that allows the traceability of each customer's consumption and the plastic savings made when using EcoCarga. A spokesperson for EcoCarga said that their strategy is to eliminate all single-use plastic containers in the basic consumption basket of household cleaning products, reduce plastic in the supply chain, and bring customers the option of sustainable consumption without additional costs and sacrificing quality.

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Food giant pilots refillable vending machines in Indonesia

Global food giant Nestlé is piloting refillable vending machines in Indonesia for its Milo and Koko Krunch brands, as part of its effort to explore solutions that help to reduce the need for disposable packaging. The pilot scheme is in collaboration with Qyos, an Indonesian start-up whose goal is to provide households with alternatives to single-use plastic. Machines also support the trial with interface systems from Chilean refill technology company, Algramo. As consumers will use their own containers, the machines are fitted with QR codes which can digitally provide product information, including ingredients and shelf life. The development of the vending machines required that the refillable systems maintain the safety and freshness of products across the supply chain while considering the local context, such as the hot and humid climate conditions in Indonesia.

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Coffee roaster trials coffee in refillable bucket format

The Netherlands-based Peeze coffee roasting company is working with SwapBox to trial a reusable alternative to conventional multilayer metallised film packaging for coffee, which is great for keeping coffee fresh, but is difficult to recycle. After conducting research into the use of reusable coffee packaging for the business market, the company decided on a washable, reusable plastic bucket that is more durable than traditional foil-based packaging after about ten uses, including return transport and washing. Glass was considered, but turned out not to be a suitable choice due to the high carbon footprint during production. With a view to washability, durability and freshness, the company consciously decided to go with the bucket. This trial is being conducted with Koninklijke Burgers' Zoo and insurer Unigarant. These companies will test the reusable coffee packaging in practice over the next three months.

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Partnership creates refillable cosmetics jar

Gerresheimer are a German manufacturer of primary packaging products made of special-purpose glass and plastics, focussing on the medical sector. They have now announced a partnership with Lyon-based Medicos Beauty Group, to develop a new clickable refill jar system. The new solution combines Gerresheimer's Gx-CyClic reusable glass and Medicos's Re-CliCK 50 ml plastic inner and lid. All the components are available as part of Gerresheimer and Medicos standard offer and can be customized in both decoration and colour. The clickable solution offers easy and intuitive handling of the refill packs to the consumer, who can effortlessly insert and remove them while safely locked to the glass jar. The lightweight glass jar is made of 40% post-consumer recycled (PCR) glass, while the inner is made of bio-based PP (polypropylene) and the cap of rPET, PET (polyethylene terephthalate) or PP. All materials are recyclable after use.

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Soap manufacturer looks to instore refill stations for its products

San Diego, California-based company Dr Bronner's is working to ratchet back its reliance on the materials used to pack its products. It has now unveiled plastic-free soap refill stations for retailers. In December, at a Jimbo's Naturally grocery store, Bronner's erected a colourful "Bulk Refill Station" pilot where consumers could fill their own containers. For now, bulk refills cost just $1 less than the on-shelf bottles. If shoppers forget to bring their own bottles, Dr. Bronner's offers rainbow-emblazoned bottles for $1, but the goal is to dramatically mitigate single-use packaging through bottle reuse. Jimbo's anticipates incorporating Dr. Bronner's-branded refill stations in its four stores this year. Dr. Bronner's will debut this new bulk refill programme at Natural Products Expo West. The company will collect information from retailers interested in installing refill stations and from distributors who might want to partner with the company.

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Shave company launches bottle with reusable dropper

Pennsylvania-based Leaf Shave is a supplier of plastic-free razors and shaving accessories. In collaboration with Spanish dropper company Virospack, they have launched Leaf Shave Oil, a formulation of vegan oils ideal for skincare before, during and after shaving. The packaging combines a moulded glass bottle and a dropper with a 100% natural wooden lid. The bottle is completely transparent, decorated with screen printing, and has a 30 ml capacity. Via a dipping well at the bottom of the bottle, it offers last-drop technology, which ensures maximum use of all the product it contains. Once the product is finished, the wooden dropper is designed to be kept. A dropper of high quality, precision and functionality, easy and comfortable to use, it is intended to be used again with the new refill bottle, a bottle with a blind cap, to save money and waste.

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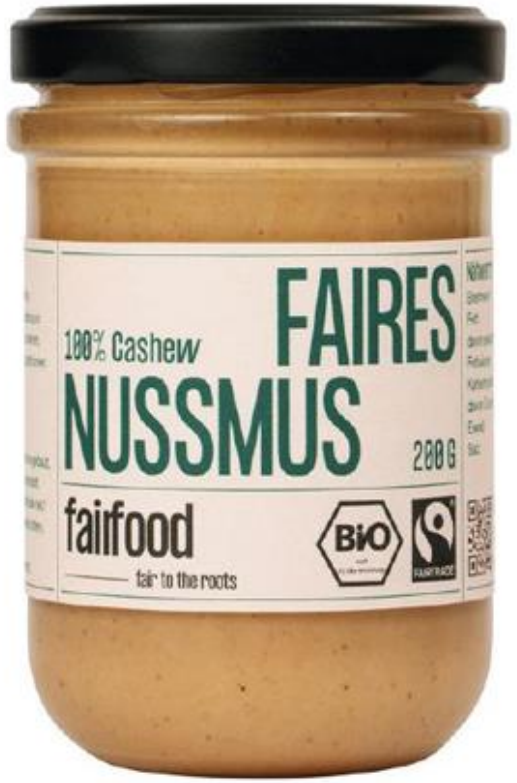
Organic food supermarket introduces returnable deposit jars

German chain of organic food supermarkets Alnatura has announced the introduction of more products in returnable deposit jars by Circujar, increasing the company's range of products sold in reusable packaging. Products available in the jars include various types of nut butter by Fairfood Freiburg, as well as fruit purees and a hazelnut spread by Pfandwerk brand, which is available exclusively at Alnatura. Over the past three years, Munich-based Circujar has developed universally usable reusable jars for these products. Customers return the empty jars to the deposit machine in stores. They are then taken to a rinsing plant for cleaning and then back to the next canning company. The jars are said to be suitable for both larger and smaller production facilities that are unable to invest in their own rinsing system for returnable jars.



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Ethical skincare company introduces refillable packaging

Houston-based Drunk Elephant has announced that its two best-selling creams will be available in refillable pods. Although all of the vegan and cruelty-free brand's packaging is already recyclable, and comes with foolproof instructions detailing how to recycle them, Drunk Elephant's latest launch takes its eco-forward initiatives even further. The brand announced on social media that it will expand its sustainability efforts by launching refillable pods. These pods are claimed to be very easy to use. The consumer removes the cap, unscrews the pump, removes the empty inner jar, and inserts the refill pod into the outer jar. The film seal is removed, the pump is screwed back on, and the refilled pot is ready. Recycling the refillable pods is just as simple as getting started—take off the cap, unscrew the pump from the white jar, and recycle the cap, pod, and jar.

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French brewery to introduce reusable scheme in smaller bottles

Meteor Brewery, based in the Alsace region of France, is the oldest brewery in France, founded in 1640. The brewery plans to launch a range of specialty beers in reusable 33cl bottles. Beginning in April, the brewery plans to launch a new range of four specialty beers, an IPA, a cherry, a triple and a Christmas beer, all in returnable bottles. Although the 75 cl format dominates the market, Meteor has opted to offer them in 33 cl bottles, given regional consumption habits. Distribution in mass distribution will be limited to the Grand Est region. On the national level, these recipes will be available within the specialised brand V and B, which has more than 250 stores.

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Belgian food packaging supplier fulfills reusable packaging law

Sabert Europe is a Belgian company that produces sustainable food packaging and tableware. With the new reusable packaging law coming into force on January 1, 2023, restaurateurs above a certain size are now required to offer reusable packaging for takeaway meals. In light of this Sabert Europe had been preparing for this development and has launched a new range of reusable packaging. The new solutions in the ReusePac line include a range of reusable food packaging designed for the delivery and takeaway markets. Thanks to a clip stacking system, they can be stacked for safe transport. Available in three different sizes, the new range is designed for reuse, maintaining its appearance and performance for at least 50 washes in a dishwasher. The containers are suitable for microwave heating. They are made from high-performance polypropylene (PP) and have a recycled PP content of more than 30%, certified by QA-CER.

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Flemish reusable cup specialists to merge

Two Flemish reusable cup specialists are merging to further develop their presence in Benelux. Goodless, based in Deinze, Belgium, and Re-Uz, also based in Deinze, and part of France-based Impact Group say that the merger will strengthen the presence of the combined company on the Benelux market. Re-Uz are reputed to be the European leader in reusable containers with its Ecocup, Green Goblet cup and reusable tableware. Goodless also offers reusable cups and packaging as well as associated services. In particular, it has developed a deposit return machine, Smart Bin, which facilitates the collection of used cups and, in return, allows the deposit paid by the consumer to be immediately refunded. Goodless also makes the reusable 9000 cup which is supplied to the Gentse Feesten, a music and theatre festival in the city of Ghent.

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Swedish convenience store to trial reusable cups

Pressbyrån is a chain of convenience stores based in Sweden. In collaboration with Finnish paper and pulp manufacturer Stora Enso and Stockholm-based tech company &Repeat, they will conduct a large-scale pilot project around reusable cups. The project is part of the preparations for next year's legal requirement to offer reusable packaging and is the first of its kind in a large-scale and open environment. The new law, which aims to reduce single-use packaging containing plastic by 50% by 2026, will come into force in January 2024. The tested reusable cups will be available in 200 and 400 ml sizes. The cups are intended to be part of a rotation system and returned to the stores. The pilot project run by Pressbyrån and Stora Enso will be carried out in 20 Pressbyrån stores in Helsingborg, Lund, Landskrona and Malmö during the period from April to June later this year.

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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 7,100 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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