



# ZERO PACKAGING:

Reducing  
Single-use  
Plastic in  
Packaging

L.A\_C\_U\_N\_A

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## 1

# THE (END OF THE) AGE OF PLASTIC

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**The growing global population and on-the-go consumer lifestyles, which generate vast quantities of disposable packaging, are resulting in high plastic pollution levels, threatening both land and sea life. The widespread use of plastics has surpassed that of all other man-made materials except cement and steel. Worldwide production of plastic has increased from two million metric tonnes in 1950 to 348 million metric tonnes in 2017, with just 10% of that being recycled.**

Brand owners and retailers face mounting public pressure to reduce their environmental impact and embrace more sustainable packaging solutions. Single-use plastics in particular (straws, packaging, eating utensils, etc.) have increasingly come under fire, becoming the subject of brands' corporate citizenship goals and government regulations alike. Consumers are increasingly mindful of the impact of their purchases on their health and the environment, with more and more shoppers choosing products that are sourced — and packaged — responsibly, holding brands to account for unsustainable practices.

Forward-thinking brands are responding to this pressure by embracing environmentally-friendly alternatives such as packaging-free solutions, refillable packaging solutions and bioplastics as well as implementing more robust recycling schemes and circular economies. Meanwhile, less scrupulous brands are resorting to 'greenwashing' tactics that attempt to win eco-conscious consumers' loyalty through minor changes and effective marketing, without making real improvements to the sustainability of their practices.

There is an opportunity for FMCG companies to differentiate themselves while making a difference by embracing sustainable business practices that include eco-friendly packaging solutions and encouraging their business partners to follow suit.

## 2

# THE RISING TIDE OF PLASTIC WASTE

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**Since the outset of commercial plastic production in early 1907, the uncontrolled disposal of plastic waste has been causing environmental and health problems worldwide. As global awareness of the dangers posed by plastic pollution grows, many municipal, regional, and national governments are deciding to take action.**

China began importing secondary raw materials in the 1980s and subsequently grew to become the world's largest importer of recyclables, buying around 60% of plastic waste exported by G7 countries by mid-2017. The country's emergence as a manufacturing powerhouse towards the end of the twentieth century created a massive demand for raw materials, and purchasing recycling scrap helped to meet this demand. In July 2017, the global recycling industry was completely disrupted when the Chinese government announced that it would begin taking action to phase out such imports. By the end of 2017, imports had dropped to 10% and at the start of 2018, the country implemented an import ban on 24 types of recyclable materials — including plastics — as part of an environmental reform movement dubbed 'National Sword', designed to deal with the country's own growing waste problems. Prior to the ban, some 95% of the plastics collected for recycling in the European Union and 70% in the US were sold and shipped to Chinese processors for recycling.

On the heels of China's ban, recyclable waste found its way to smaller markets in Southeast Asia. In the first half of 2018, imports of plastic trash increased by 56% in Indonesia, doubled in Vietnam, and rose in Thailand by 1,370%, while Malaysia became the world's biggest importer of plastic scrap — its volume is now double that of China and Hong Kong, according to an analysis of trade data by the Financial Times. These nations do not have the capacity to deal with the waste influx and are already considering imposing restrictions of their own. Meanwhile, most waste management companies requested to handle the extra plastic waste have already reached their legal limits. There is an urgent need for plastic recycling infrastructure and plastic reduction measures around the world. Unfortunately, it will take time to establish such infrastructure, and in the meantime, much plastic waste is being incinerated or ending up in landfills and waterways.

In South Africa, some 90% of all waste is currently landfilled. In spite of this, recycling rates are high. According to Plastics|SA, more than 334,727 tonnes of plastics were recycled in 2017, making South Africa's input recycling rate 43.7% — a cut above Europe's recycling rate of 32.1% for the same year. However, while recycling rates are impressive, local recyclers are often at a loss when it comes to selling surplus recyclate produced over and above the needs of their existing customers. For this reason, "developing suitable end-markets has become critical for the sustainability of the plastics recycling industry," says Anton Hanekom, executive director of Plastics|SA.

Australia has said some of its cities will bury more plastic in landfills as a result of the ban. On the other hand, the European Union has responded more thoughtfully, announcing that, by 2030, all plastic packaging must be recyclable, with a goal of recycling 55% of plastic waste by 2030. In March 2017, The European Union (EU) Parliament voted in legislation which aims to increase the recycling rate of packaging materials to 70%, reduce landfilling of packaging items to 5% and reduce food waste to 50% by 2030.

Similarly, a number of regulatory instruments have been implemented worldwide to reduce the plastic bag problem, ranging from traditional approaches like bans, voluntary codes of practice and the marketing of alternative bags, to economic tools such as taxes or levies. In January 2018, UK lawmakers enforced a ban on microbeads, a non-biodegradable plastic product used in personal care products. Ordinary people like citizen scientists and young entrepreneurs are also taking matters into their own hands. For example, South African fashion label The Joinery is manufacturing fabrics made from recycled plastic bottles gathered around the city of Cape Town.

No matter where you are in the world, China's disruptive policy decision should be seen as a trigger-point to develop sustainable plastic waste management practices, improve recycling practices in waste exporting countries, and as an opportunity for the world to come up with bold, innovative ideas to more realistically dispose of a material that has accumulated more waste than any other.

According to a report published in the journal *Science Advances* in 2018, only 9% of the plastic ever produced has been recycled globally — highlighting a need to re-think design and regulation in a way that incentivises reuse.

**One million plastic bottles are bought every minute (or about 20,000 per second) around the globe.**

**Of the 5,800 million tonnes of plastic waste produced between 1950 and 2015, only 9% was recycled.**

## 3

# PLASTIC'S WANING POPULARITY

Consumers are becoming more mindful of product packaging, carefully considering which materials were used and whether they can be disposed of in a safe and environmentally responsible manner. Increasingly, consumers expect packaging made from sustainable resources, or that can either be reused, recycled, or composted — and are demanding that less packaging material be used altogether, placing enormous pressure on brands through highly publicised boycotts and protests. In this consumer landscape, retailers that have placed health and sustainability at the core of their business model are thriving.

In January 2018, UK supermarket chain, Iceland, pledged to go plastic-free on its own-label range, and Pret A Manger doubled its discount for customers bringing reusable cups to 50p. By April, over 40 companies — including Tesco, Lidl, Marks and Spencer, Waitrose, J Sainsbury, Unilever, Procter & Gamble and Coca-Cola — signed the UK Plastics Pact to ditch unnecessary and problematic single-use packaging by 2025. Since then, Swedish multinational furniture retailer IKEA has promised to remove single-use plastic from its products and its restaurants globally by 2020.

As more environmental research emerges, the trade-offs inherent in manufacturing choices are becoming more apparent. This raises difficult questions around how to respond when emerging evidence casts doubt on processes and products previously considered environmentally sustainable. Iconic outdoor-wear brand Patagonia faces this dilemma. With its brand identity rooted in environmental activism, the brand led the use of recycled plastic bottles in its fleeces. Now it — along with other apparel makers — faces evidence that tiny synthetic fibres, shed in the wash, are polluting the oceans and entering the food chain as microplastics.

The World Economic Forum and the Ellen MacArthur Foundation predict that without critical action, there will be more plastic than fish in the ocean by 2050, threatening marine biodiversity and posing a risk to human health too. According to the 'Future Agenda 2025' report, plastic waste has been found in the digestive systems of at least 267 different species of water animals, and 80% of marine pollution comes from land-based activities. The main problem is that about 40% of the planet's surface is ocean that belongs to no country in particular and is mostly unregulated. Plastic pollution has also been detected in seafood sold for human consumption. A 2015 study by a team of researchers from the University of California, Davis and Hasanuddin University found man-made debris in 25% of seafood market fish, and 67% of all species sampled in the US.

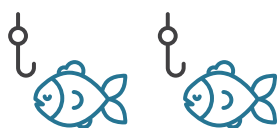
**40%**  
of plastic produced is  
packaging that is used just  
once and then discarded.

**8m**  
metric tons of plastic  
ends up in the world's  
oceans annually.

Bioplastics are made by obtaining natural polymers from renewable biomass sources, such as vegetable fats and oils, corn starch, sugar cane waste, straw, sawdust, recycled food waste, and more, as opposed to petroleum-based plastics. The advantages of bioplastics include that they can biodegrade, are carbon-neutral, and can offer energy savings in production. Some are even compostable, making them easy to dispose of. However, many bioplastics require specific conditions — such as moisture and temperature levels — to properly biodegrade, and these conditions are usually not met in landfills, where the majority of bioplastics still end up. Another drawback is, if not disposed of correctly, bioplastics can 'contaminate' recycling batches of other plastic, leading to the entire batch ending up in a landfill. While bioplastics are certainly better for the environment, they are not a silver bullet and their use requires a number of supporting measures to ensure optimal effectiveness.

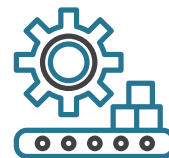
According to a comprehensive sector survey by Greenpeace International in late 2018, FMCG corporations are the predominant driving force behind the throwaway economic model fuelling the plastic pollution crisis. The FMCG sector represents one of the largest industries worldwide. The survey reveals that most FMCG companies are growing at rates of 1-6% each year; and if current trends continue, their use of single-use plastic will likely increase proportionately.

While a growing number of FMCG companies worldwide are committing to '100% recyclable packaging' goals, watchdogs like Greenpeace remain skeptical, saying that this is not enough, and that these companies must do more to ensure that their product packaging actually gets recycled. This global issue requires brands to actively reduce plastic waste and pollution, incorporating reclamation initiatives and recycling into the production process, transitioning to circular business models.



**Fishing lines** take an estimated **600 years** to break down, while **plastic bottles** take an estimated **450 years**.

The production of **biodegradable plastics** is currently very low, estimated at around **4 million tonnes per year** — which is just over **1% of global plastic production**.



Across many countries in South Asia and Sub-Saharan Africa, **80-90% of plastic waste is inadequately disposed of**, and therefore at risk of polluting rivers and oceans.

## 4

# THE BUILDING BLOCKS OF A CIRCULAR ECONOMY

A concept that has been gaining significant traction of late is that of the 'circular economy', an alternative to the traditional linear economy (make, use, dispose). Circular economies seek to eliminate waste from the production cycle, making the most of resources by keeping them in use for as long as possible to extract maximum value from them, and recovering, regenerating and repurposing products at the end of their service life — or waste byproducts — as input for new production processes. The Ellen MacArthur Foundation, a charity dedicated to promoting the circular economy framework, has outlined four building blocks required for building circular economies.

1

## CIRCULAR ECONOMY DESIGN

Core competencies need to be built that facilitate reuse, recycling and cascading. Vital areas are material selection, standardised components, designed-to-last products, design for easy end-of-life sorting, separation or reuse of products and materials, and design-for-manufacturing criteria that take into account possible useful applications of byproducts and waste.

2

## NEW BUSINESS MODELS

New models are required to replace existing ones or take advantage of new opportunities. Companies with large market share and capabilities along several steps of the linear value chain can drive circularity by leveraging their scale and vertical integration.

3

## REVERSE CYCLES

An essential part of a circular model is enabling the return of products and materials back to nature or back into the industrial production system, minimising the leakage of material from the system. This covers delivery chains, sorting, warehousing, risk management, power generation and even molecular biology and polymer chemistry.

4

## ENABLERS AND FAVOURABLE SYSTEM CONDITIONS

To achieve a truly circular economy with widespread material reuse and higher resource productivity, market mechanisms will play a vital role, with support from policymakers, educational institutions and popular opinion leaders. Enablers include collaboration, suitable incentives, international standards, industry leaders who set examples, and financing opportunities.



## 5

# FIVE CIRCULAR BUSINESS MODELS TO CUT PLASTIC WASTE

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**Transitioning to a circular economy represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits. By becoming less dependent on finite resources, businesses can plan better, operate more consistently and future-proof themselves by becoming more self-sufficient. This is known as the 'circular advantage'. The circular economy can generate value well past the initial material cost savings that are often the focus of investor pitches and annual reports. While projections of the exact figure vary, there is consensus that the circular economy represents a trillion-dollar opportunity globally.**



## 1. CIRCULAR SUPPLY CHAIN

This model is based on supplying fully renewable recyclable or biodegradable inputs to the industrial process to underpin a circular production and consumption system. It is designed to replace the linear approach of using finite resources while phasing out waste and inefficiencies in the system, and is a particularly powerful model for companies focused on scarce commodities or ones with a major environmental footprint. For example, packaging made from fungi has been growing in popularity. Creating a composite from mushrooms allows for it be used in much the same way as plastic or polystyrene. The applications of this material are almost endless, but with plastic packaging being one of the worst waste sources, it could be one of the most effective ways to start. Once used, the packaging can be composted and broken down, returning to nature or helping to grow the next crop of mushrooms.



## 2. RECOVERY AND RECYCLING

Recapturing value at the end of a product's lifecycle to feed into another drives return chains and transforms waste into a resource. The recovery of resources is a model closely related to the traditional recycling market, but it must leverage innovative technologies and capabilities in order to recover almost any type of resource from waste at a level at least equivalent to that of the initial investment. This model enables companies to remove material leakage and increase the value of product return flows. This makes it a good fit for companies that end up with large amounts of by-product during production or situations where waste material from products can be cost-efficiently reclaimed. For example, Walt Disney World Resort sends food waste including grease, cooking oils and table scraps from select restaurants in its complex to a nearby 5.4MW anaerobic digestion facility. The organic waste is converted into renewable biogas to generate electricity, with the remaining solid material processed into fertiliser. The energy generated helps to power Central Florida, including Walt Disney Resort's hotels and theme parks.



## 3. PRODUCT LIFE EXTENSIONS

This model requires companies to extend the lifecycle of products through maintenance, repair, upgrading, remanufacturing or remarketing. This retains or increases value that would have been otherwise been lost through wasted materials, while generating revenue through the extended usage. The model enables products to stay economically useful for longer, requiring products to be upgraded in a more modular way, with components being replaced as opposed to entire products. This model is suited to B2B markets with large capital requirements (such as industrial equipment) and B2C companies that operate in markets with large amounts of pre-owned products and only incremental improvements on newer versions. For example, telecommunications company Motorola made history recently by releasing an official DIY smartphone repair kit. This is notable in an industry that not only generates large amounts of waste but has actively created products and schemes that encourage regular new phone purchases.



#### 4. SHARING PLATFORMS

A sharing platform model uses a platform for collaboration among a group of users, individuals or organisations. The platform facilitates redistribution in times of overcapacity or underutilisation to increase productivity and deliver value for users. It is most commonly used by companies that seek to increase the utilisation of assets when they are not in use, without having any involvement in the manufacturing process. For example, the business-to-business sharing marketplace FLOWW2 allows users to rent out their underutilised business equipment and services to other members. This allows users to earn revenue from assets that required upfront capital investment while allowing other companies access to equipment they may not otherwise be able to afford.



#### 5. PRODUCT AS A SERVICE

This model serves as an alternative to the prevailing model of 'buy and own' and more closely resembles a leasing model through pay-for-use agreements. Durability and upgradability are increasingly becoming important in this model, shifting the focus from quantity to quality. Features of longevity and reusability are no longer seen as threats to future sales, but rather drivers of revenue and cost reduction. One of the most popular examples is operated by Philips, the multinational technology company, which shifted from selling light bulbs to offering 'lighting-as-a-service'. This allows customers to save money by paying only for the light they use while removing the need to deal with replacements for burnt out bulbs or system upgrades. It allows Philips to retain control of its products, making it easier to reclaim valuable materials, while maintaining an ongoing customer relationship.

# 6

## A NEW WAVE OF PLASTIC ALTERNATIVES



### LUSH'S NAKED RANGE

In a world first, shoppers can purchase their favourite cosmetics completely free from packaging in Lush's Naked shops in Milan, Berlin and Manchester. The brand, already celebrated for its sustainable approach to beauty products, is taking it a step further by completely eliminating plastic from a growing number of its stores. The brand also launched a new app with a visual recognition tool called 'Lush Lens', which allows consumers to scan products for information using their smartphone camera.



### IKEA'S MUSHROOM-BASED PACKAGING

In early 2018, furniture giant IKEA announced that it will replace Styrofoam packaging with its new 'EcoCradle' packaging, made from biodegradable mycelium (fungi) in an effort to reduce waste. The US company Ecovative is behind the alternative 'mushroom packaging' solution, which is created by growing mycelium through clean agricultural waste such as corn husks. Over the course of a few days, the fungus bind the waste together, forming a solid shape. It is then dried to prevent it from growing any further.



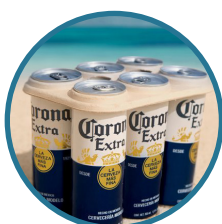
### CARLSBERG'S GLUED-TOGETHER SNAP PACK

In an effort to reduce plastic waste globally by more than 1,200 tonnes per year, Carlsberg announced that its canned multi-packs will transition towards a new 'Snap Pack' technology. The cans are bonded together with small dots of a specially-developed glue that is strong enough to hold full cans of beer together, but can easily be 'snapped' apart.



### THE LOOP STORE

The Loop Store is a circular shopping platform that replaces the packaging of everyday essentials from single use disposables to durable feature-packed design. Products are delivered to the consumer's home with the packaging collected, cleaned and refilled before being returned. The store is launching in the US and France in 2019 with a host of big name household brands.



### CORONA'S BIO-BASED SIX-PACK RINGS

Mexican beer brand, Corona, has ditched the plastic rings that hold its six-packs together in favour of a new packaging solution made from plant-based fibres and by-product waste. If left in the environment, the rings break down into organic material that is not harmful to wildlife. Corona is the first global beer brand to trial 100% plastic-free six-pack rings.



### L'ORÉAL'S SEED PHYTONUTRIENTS PACKAGING

L'Oréal's new Seed Phytonutrients brand comes packaged in the first-ever shower-friendly paper bottle. Each bottle is made from 100% post-consumer recycled paper and lined with a post-consumer recycled plastic liner, resulting in a shampoo bottle with 60% less plastic than a traditional one. When you shower, the paper will get wet, but thanks to a mineral coating, it will dry quickly and look good as new in no time.



### GUINNESS' CARDBOARD MULTI-PACK

Diageo announced in early 2019 that it will replace the plastic holding its Guinness cans together with 100% recyclable and biodegradable cardboard. According to Diageo, this innovation will reduce plastic waste by 400 tonnes per year. The company is investing EUR €18.5 million to reduce plastic use, removing plastic ring carriers and shrink wrap from its multipacks of Guinness, Harp, Rockshore and Smithwick's.

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# PACKAGING INNOVATION GLOBAL MAP

All over the world, startups and institutions are working on developing sustainable packaging solutions to reduce our reliance on single-use plastic packaging.

**APEEL SCIENCES (California, US)** 

Apeel Sciences' FDA-approved edible powder, Edipeel, is made from leftover produce peels and skins. Dusted onto produce, it slows down ripening by keeping moisture in and air out.

**WHEYPACK (Portugal)** 

The Wheypack project has created a sustainable, biodegradable whey-based bioplastic. Cheesemakers are expected to benefit, as they can now use their own by-products to package their products.

**AREKAPAK (Berlin)** 

Berlin-based startup Arekapak has created a bio-packaging using palm leaves. The packaging offers high stability and resistance against heat, cold and water.

**EVOWARE (Indonesia)** 

Evoware makes edible cups and containers from chemical-free, nutritious farmed seaweed as a biodegradable alternative to plastic packaging.

**KAFFREE ROMA (North Carolina, US)** 

Kaffree Roma's eco-friendly coffee cups, Kaffree are made from coffee grounds. The dishwasher-safe, reusable cups have a slightly ceramic look and impart a coffee scent.

**AVANI ECO (Indonesia)** 

Bali entrepreneur Kevin Kumala created a bioplastic using starch from locally-abundant cassava, vegetable oil and organic resins. The non-toxic plastic dissolves within months, and instantly in hot water.

**UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) (US)** 

USDA scientists have developed a casein-based edible cling wrap made from milk proteins, reportedly 500 times more effective as an oxygen barrier than plastic equivalents.

**CHINESE ACADEMY OF SCIENCES (China)** 

Researchers at the Chinese Academy of Sciences have created a polyester composite that decomposes in seawater, causing no pollution.

**NOKWARE SKINCARE (Ghana)** 

Ghana-based cosmetics company Nokware Skincare has launched biodegradable bamboo packaging for its skincare brand.

**LACTIPS (France)** 

Lactips is developing thermoplastic pellets derived from casein, a natural protein found in milk. The 100% biodegradable pellets can be moulded into films, packages and other shapes.

**AALTO UNIVERSITY (Finland)** 

Researchers from Aalto University developed a sustainable, biodegradable polymer with higher mechanical strength than conventional plastic.

**BAKEY'S FOOD (India)** 

Bakey's Food has invented edible, biodegradable cutlery made from millet, rice and various Indian spices. The baked forks, spoons and chopsticks are tasty, preservative-free, and have a three-year shelf life.

**BIOFASE (Mexico)** 

Margarita Talep has developed an algae-based sustainable alternative to single-use packaging. The bioplastic only includes natural materials and biodegrades in 2-5 months.

**PAPTIC (Finland)** 

Paptic makes sustainable, recyclable packaging material made from wood fibre. Paptic packaging is flexible, reusable and lightweight. It consists of 70% renewable and 80% recyclable materials.

**UNIVERSITY OF OTAGO (New Zealand)** 

Researchers at the University of Otago are creating a biodegradable, edible bioplastic food wrap to replace petrochemical-based plastics.

**MARGARITA TALEP (Chile)** 

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**SMOKEY TREATS (South Africa)** 

Cape Town startup Smokey Treats launched Woodland Craft Cigarettes in late 2018. Unlike normal cigarette butts, these cigarettes completely biodegrade within three months.

**CELLULOSE NET TUBE (Austria)** 

Cellulose Net Tube is a compostable net packaging that prolongs the shelf life of fresh produce and prevents sprouting.

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# MAJOR FMCG BRANDS' PLASTIC TARGETS

**Around the world, FMCG companies are facing increasing consumer pressure to reduce plastic production and eradicate single-use packaging. Here are a few recent activities and commitments undertaken by some of the world's largest FMCG stakeholders.**



### **Nestlé opens Institute of Packaging Sciences in Switzerland**

In late 2018, Nestlé launched its Institute of Packaging Sciences in Switzerland to make 100% of its product packaging recyclable by 2025. The facility features a laboratory and equipment to design new packaging technologies that will promote recycling of plastic waste and also develop functional and eco-friendly packaging.



### **Johnson & Johnson signs New Plastics Economy Global Commitment**

Johnson & Johnson Consumer is committing to use more recycled material in packaging, reduce reliance on the single-use model, and ensure that 100% of plastic packaging is reusable, compostable or recyclable via design, partnerships and investments by 2025.



### **P&G commits to 100% reusable and recyclable packaging by 2030**

In April 2018, FMCG company Procter and Gamble announced its 2030 sustainability goals, which include 100% recyclable or reusable packaging by 2030. In April 2019, it added that it will further reduce its use of virgin petroleum plastic by 50% by 2030.



**PepsiCo aims for 25% recycled content in its packaging by 2025**

In December 2018, PepsiCo announced a new sustainability goal of using 25% recycled material in its plastic packaging by 2025. In 2016, the company unveiled its Purpose 2025 Agenda, outlining goals including that 100% of its packaging will be recyclable, compostable or biodegradable, to increase its use of recycled materials, to reduce the carbon impact of its packaging and, in partnership with the PepsiCo Foundation — to work to increase recycling rates.



**Unilever is investing £100,000 in a plastic-free sachet solution**

In December 2018, Unilever announced plans to invest GBP £100,000 (USD \$126,000) to develop a low-cost, plastic-free laundry tablet to replace its ubiquitous single-use sachets. The tablet uses a plant-derived coating for protection against moisture instead of plastic. The idea was chosen from Unilever's 'Rethink Plastic' hackathon held in November, 2018.



**AB InBev sets goal for 100% recyclable packaging by 2025**

AB InBev has made a commitment to reach 100% recyclable packaging by 2025, and to make its packaging from made from a majority of recycled content.



**Coca-Cola aims to recycle a bottle or can for every unit it sells by 2030**

The Coca-Cola Company will work with a number of partners in the coming years to deliver its 'World Without Waste' packaging vision, which includes collecting and recycling a bottle or can for every one it sells globally by 2030 and renewing its focus on the entire packaging lifecycle.



**L'Oréal makes strides in recycled materials used**

L'Oréal joined the New Plastics Economy in January 2017. In 2018, the Group replaced virgin materials with 8,705 tonnes of recycled materials (PCR), an increase of 19% on 2017. This progress results primarily from its efforts to integrate recycled materials within the plastic component of its packaging, with a 38% increase compared to the previous year.



These are just a few of the opportunities emerging in the zero packaging space. To find out more about how the packaging industry is transforming and how your company can take advantage of these shifts, contact Lacuna Innovation. Our innovation experts can help you to identify unmet consumer needs and opportunities and help you map a path to implementation.

## ABOUT LACUNA

Lacuna Innovation is a boutique consultancy that helps global organisations to sustainably innovate new products, services and business models by combining trend, insight and commercial expertise in one place. We identify new growth opportunities, immerse ourselves in markets and build in-house innovation capabilities to achieve lasting impact.

Harnessing an environment of tangible tech and creative collaborations, we can help you bring identified opportunities and concepts to life through experimentation and prototyping. With offices in Cape Town, Germany and Nepal, we have global recognition, credibility and reach, which allows us to be at the forefront of Front-End Innovation (FEI).

We are innovation architects in the business of building tangible and sustainable futures. We work with companies to facilitate their innovation efforts, using our proprietary innovation methodology.

We are not a branding or advertising agency. We seek opportunities for our clients to ensure that they remain competitively innovative. We identify and monitor trends that impact our clients' businesses, and assist them in identifying innovation opportunities to be pursued through focused research, a series of workshops, and a unique understanding of the unmet needs of consumers. Our proactive approach to FEI allows us to move beyond concept development to developing Proof-of-Concept design, prototyping and ultimately, commercialisation.

**To find out how we can help you, reach us at [hello@the-lacuna.com](mailto:hello@the-lacuna.com)**

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