FUTURE OF PACKAGING

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Choose Cartons
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SUSTAINABLE PACKAGING
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Increasing packaging speed and reducing packaging material, transport costs, storage space and return rates.

This is our answer to the important question of how to ship the growing number of parcels sustainably. We do this by using an innovation in packaging technology. Raconteur special reports are published exclusively in publications.

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Less is More

This is our answer to the important question of how to shop the growing number of parcels sent to us. We do this by using an innovative way. Air makes up more than 90% of our protective packaging. Less than 1% is fully recyclable material. FP International is an expert in environmental solutions to solve your packaging challenges: increasing packaging speed and reducing packaging material, transport costs, storage space and return rates.

More E-commerce

With the growth of online shopping, it is time for innovative ways to reduce packaging and minimise the impact on the environment.

Less Energy

We only produce recyclable and reusable packaging materials. Our products have the lowest carbon footprint in the industry, which makes them effective to manufacture, transport and recycle.

Less Time

Since our products are manufactured on site and on demand, you will spend less time handling material and changing rolls. Integrating our inflators into your packing stations will cut down storage space and increase both productivity and packing speed.

Less Weight

Packing with air-packed products reduces both weight and the carbon footprint of your journey to your customer.

Less Material

Our air cushions are made from gas, are fully recyclable and contain no harmful materials. Since the cores of our rolls are recycled and 100% recyclable, they are also RoHS and REACH certified and comply with EN13427 and ISO14021. They are also RoHS and REACH certified and comply with EN13427 and ISO14021. Even the cores of our rolls are recycled and 100% recyclable. They are also RoHS and REACH certified and comply with EN13427 and ISO14021.

More

FP International is an expert in air cushions, which solve your packaging challenges by reducing packaging costs, transport costs, storage space and return rates.

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Packaging solutions for forward-thinking reuse and recycling, is among our fit for its purpose, and designed for the thing that’s not there, such as effec consumer goods for a living and I value But, as Mondi Group’s consumer packaging use plastic, what we use it for and how much commercial demand for some of our most recognition at trade fairs, but comming solutions regularly win prizes and rigid plastics in flexible plastics compared to 1% average of 12 minutes and take 500 to today is lost after a single use, according to the United Nations. Food waste reaches up to 6% of our own waste and burnt another 2 months ago, and in half its weight. The debate around plastic waste is more nor less – and it must be reused imise material and energy use, and 20% of global consumers who think the following would be effective at reducing unnecessary use of unrecyclable plastic when considering any of these policies. Over the last 15 years, the UK’s glass and paper industries have been forced to adjust to “compostable” plastic food packaging, a marketing strategy that has yet to become a reality. The circular economy is all about reducing waste and promoting the use of materials that can be recycled or reused. It’s not just about what we consume, but also how we make and use products. Mondi Group’s focus on the impact of plastic packaging on the environment is part of a broader commitment to sustainability. The company is working on reducing the environmental impact of its operations and products, and has set targets for reducing its carbon footprint and waste generation. Mondi is also committed to using sustainable materials and improving the recyclability of its products. The goal is to make every package the company produces more sustainable and easier to recycle, with a focus on increasing the use of renewable and recycling-ready materials. Mondi’s efforts in this area reflect wider trends in the industry, as companies and governments alike recognize the importance of reducing waste and promoting sustainability. But there are still gaps in the circular economy, with many consumers and businesses not fully embracing the principles of reducing, reusing, and recycling. Mondi is working to bridge these gaps, through piloting new ideas, and collaborating with regulators and other stakeholders to drive progress. The circular economy is a complex and challenging concept, but it holds the potential to create a more sustainable and resilient future for all. Mondi’s focus on sustainability and its commitment to driving change in the packaging industry is an important step towards realizing a more sustainable future.
Questions are being asked about the way we use plastic, what we use it for and how much we need it. In the case of plastic packaging, some question whether having no plastic is actually better than any packaging at all. But, as Mondi Group’s CEO Georg Kasperkovitz says, this is the moment of all of us to embrace the circular economy.

At Mondi, we are innovating and making sure we have the best packaging solutions for forward-thinking companies. Our paper and flexible plastic packaging innovations make it easier for brands to upscale and scale up, and the more demand there is for new packaging, the more innovative solutions regularly win prizes and commercial demand for some of our most innovative sustainable packaging we’ve limited before this. The more people focus on the impact of plastic waste in the ecosystem.

The demand around plastic waste is driving the trillion-euro-waste strategy for plastics in a circular economy. A global plastic protocol to support the action of whether needed. These are markets that are far ahead. Now and the future of recycling. The circular economy is all about recycling and making our most important task is to reduce waste and pollution. Environmental solutions are their goal and ready for the moment.

We can see some years for which food packaging is better suited, a percentage of shredded waste and food waste collected. Food waste makes up about 9 per cent of global food and agriculture waste. Food packaging supports supply chains and reduces food waste. Food waste is the major problem, both environmental and economic, and the food we throw away is not only a waste of food but also of money. We need to make sure that our food packaging is fit for purpose – neither over-packaging nor under-packaging. But 30 per cent of the weight of food plastic packaging today is lost after a single use, according to a report by the Ellen MacArthur Foundation. Single-use plastic waste, like bottles and pipes, is currently not good enough for the environmental and economic conditions.

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Now is the time for creative design

From materials to marketing, innovative packaging designs are helping to launch impactful new brands

The Ordinary

The Ordinary revolutionised the beauty industry with its ‘no-nonsense’ approach to skincare. Every item is sold as a bare minimum priced to cost parity, many for less than a pound.

Adidas Parley

Among consumer brands, Adidas is perhaps the most innovative in its use of plastics. Every item is sold as a bare minimum priced to cost parity, many for less than a pound.

Thinx

Thinx may be the most upfront about their use of plastics. Every item is sold as a bare minimum priced to cost parity, many for less than a pound.

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Asprouse

The lead brand in the international sustainable swimwear market is Asprouse. Every item is sold as a bare minimum priced to cost parity, many for less than a pound.

Material changes in sustainable packaging

Going green in the beauty packaging sector is not easy but it can be done, says Jeremy Garrard, director of design and advanced technologies at Quadpack.

Snack

UK snack company Snack has developed imaginative, sustainable, recyclable and compostable packaging. Every item is sold as a bare minimum priced to cost parity, many for less than a pound.

Sharon Thiruchelvam

In the future of packaging, the most exciting developments are expected to arise from the increased understanding of the options. Some of them will be viable to pass these extra costs on to consumers.

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Blister packs are highly efficient and effective, particularly for beauty products. No-one can argue against them. However, they are not sustainable. The plastic waste problem is not going away, it is only going to get worse. The beauty industry must take this problem seriously and consider the use of sustainable alternatives.

The principle of the blister pack is simple. A product is placed within a pocket and attached to a backing sheet. The backing sheet is then sealed and the whole is cut into individual pockets. The pocket is then removed to expose the product. The principle is simple and efficient, but it results in a significant amount of plastic waste.

Quadpack has been working on several fronts to develop sustainable solutions. One of these is the use of biodegradable materials. These materials are designed to break down over time and are typically used in the packaging of food and pharmaceutical products. However, they are not yet widely used in the beauty industry.

Another approach is the use of alternative materials that are more environmentally friendly. For example, Quadpack has developed a packaging solution that uses a wooden material instead of plastic. This material is biodegradable and is sourced from sustainable forests.

In addition to the use of sustainable materials, Quadpack is also working on innovative design solutions. One of these is the use of digital technologies to reduce the amount of packaging used. This approach involves the use of augmented reality and 3D printing to create packaging that is both visually appealing and environmentally friendly.

Quadpack is also working on developing new processes that are more efficient and have a lower environmental impact. For example, Quadpack is working on a process that uses a combination of printing and embossing to create packaging that is both visually appealing and sustainable.

In conclusion, the beauty industry must take the problem of plastic waste seriously and consider the use of sustainable alternatives. Quadpack is working on several fronts to develop new solutions, and we are confident that these solutions will be successful.
Seaweed on rising tide of sustainability

Consumers have become more attuned to sustainability, prompting restaurants and shops to launch initiatives to reduce single-use plastics in packaging.

**JEGG CLARK**

Reports of the future of flexible plastic packaging have been greatly exaggerated. But this is not innovation for the sake of it. Each innovation that replaces non-sustainable materials or packaging design can create new opportunities.

"A big concern is that retailers prompt their customers to purchase a product by putting it in plastic wrapping, which is the best possible form of waste," says Giles Gibbons, chief executive of Good Business and director at the UK Packaging Designers Association. "Consumers should be properly educated and given the option to purchase a product without a shrink wrap or clamshell, for example. But this is not innovation for the sake of it. Each innovation that replaces non-sustainable materials or packaging design can create new opportunities."}

Packaging that makes a real difference

Consumers and brands are continually demanding more from packaging, from sustainability to enhanced ease of use.

**Rick Smith**

"We are producing badly designed packaging at an increasing rate," says Smith. "We cannot pretend that there is some kind of magic wand that will enable us to stop producing packaging without looking at its environmental footprint or its long-term effects."

**Seaweed on rising tide of sustainability**

Seaweed could be a positive development for consumers, as concerns over increased single-use of plastics in the convenience sector rise. While some might historically have been put off by the exotic nature of seaweed, it is now being trialled in a variety of innovative and engaging ways.

"I can’t remember a time when there has been such a marked change on a particular issue in such a short period of time," says Smith.

"There are many small and medium-sized enterprises that are innovating and experimenting with seaweed-based packaging," he adds. "But this is not innovation for the sake of it. Each innovation that replaces non-sustainable materials or packaging design can create new opportunities."
Consumers have become more attuned to sustainability, prompting restaurants and shops to launch initiatives to reduce single-use plastics in packaging.

Seaweed on rising tide of sustainability

Rising demand for seaweed could be a positive development for consumers, as seaweed offers enormous scope of plastics in the convenience sector. While some might historically have been concerned about the nutritional value when they dined out for a few days to a week, seaweed can offer a practical and practically unlimited supply of the impact of single-use plastics in changing behavior.

“Replacing sauce sachets is very easy,” says Lise Wijkström, director at LEON. “It seems a small step, but if success-fu...”

Skipping Rocks Lab might be just as effective in keeping food fresh for longer as traditional packaging. However, it has also surprised some single-use plastics from its partner despite tight packaging.

“Seaweed on the rise”

Consumers have become more attuned to sustainability, prompting restaurants and shops to launch initiatives to reduce single-use plastics in packaging.

Packaging that makes a real difference

Consumers and brands are continually demanding more from packaging, from sustainability to enhanced ease of use.
Plastics are in danger of being demonised, but how can these versatile materials be made environmentally friendly in the packaging industry?

“The reason for choosing packaging was quite straightforward,” says Sander Defruyt, New Plastics Economy lead at the Foundation. “It is the biggest application of plastics, with about one third to 40 per cent produced going into packaging. Especially because of the short lifespan of most packaging, if you also look at the volumes at end of use, it represents almost 60 per cent of that material stream, too. “On top of that, it is very visible and recognisable. Almost every person on the planet, every single day, comes into contact with plastic packaging.”

The list of leading brands, retailers and packaging companies working towards using 100 per cent reusable, recyclable or compostable packaging by 2025, or earlier, now numbers 14. They are Amcor, Colgate-Palmolive, Ecover, evian, Innocent, L’Oreal, Mars, Marks & Spencer, Nestlé, PepsiCo, The Coca-Cola Company, Unilever, Walmart and Werner & Mertz.

To realise its vision, the New Plastics Economy initiative has launched the concept of Plastics Pacts. The pacts bring together national and local authorities, businesses involved in designing, producing, using and recycling plastics, as well as NGOs, innovators and citizens.

The UK Plastics Pact is the first of this planned global network of agreements, led by WRAP (Waste and Resources Action Programme) and launched in April 2018. A second pact is being developed in Chile, with local B Corp TriCiclos.

The UK Plastics Pact sets out four big targets for 2025: making 100 per cent of plastic packaging reusable, recyclable or compostable; getting 70 per cent effectively recycled or composted; incorporating 30 per cent average recycled content across all plastic packaging; and eliminating all problematic or unnecessary single-use plastic.

“The thing that is really bold and ambitious about the pact is it’s what you call systemic change,” explains Peter Skelton, WRAP lead on the UK Plastics Pact. “It is looking at the whole system moving from linear to circular. The nature of the targets is such that it needs businesses from across the value chain, governments and citizens to help meet them.”

UK Plastics Pact targets for 2025

100% of plastic packaging should be reusable, recyclable or compostable

70% of plastic packaging should be effectively recycled or composted

30% average recycled content across all plastic packaging

Action should be taken to eliminate problematic or unnecessary single-use plastic items through redesign, innovation or alternative (reuse) delivery models

Glass packaging is already...
Pact is central to forming a circular economy. The goals are interdependent and demanding, adds Mr Defruyt. “While each of these targets is important in itself, they are also mutually reinforcing; it is almost impossible to achieve any one of these targets without achieving the others,” he says. “In addition, they are all really ambitious. The first is 100 per cent and you can’t get more ambitious than that. The 70 per cent means roughly doubling today’s recycling rates and the 30 per cent recycled content probably represents about a fourfold increase.”

The UK Plastics Pact now boasts some 87 members, including all major supermarkets, plus global food and beverage brands, restaurant chains, packaging, waste and recycling companies, from Aldi and Birds Eye, to Pizza Hut, Quorn, Valpak and Vesdia.

The government is, of course, part of the system too and plays a critical role in setting the regulatory framework, especially perhaps considering pact commitments are voluntary. As well as providing a necessary legislative push, it can also put in place a catalysing commercial pull, by way of fiscal incentives.

Funding packages to date include £20 million for single-use plastic waste innovation, £28 million for research into marine impacts, £20 million towards developing nations and £16 million for national and city-level waste management, plus introduction of a bottle deposit scheme and consultation into using the tax system to tackle single-use plastics, beyond the existing carrier bag charge.

While pots of money are clearly welcome, for Mr Skelton there are also longer-term strategic alternatives available to government of more intrinsic value. He says: “What is probably more critical is the reform of the PRN [Packaging Recovery Note] system, because that is not currently aligned to drive the behaviour we need to meet the targets. There is no fiscal incentive to use recycled content.”

Mr Skelton is relatively upbeat, though, about prospects for PRN rule changes, given that Environment Secretary Michael Gove has been making positive noises about recommendations submitted by WRAP, working with the Industry Council for Packaging & the Environment and the Advisory Committee on Packaging.

“Having that systemic year-on-year funding coming from the PRN reform is the thing that will be the game-changer. Local authorities can be incentivised and encouraged to collect plastics because it costs them and it costs householders in sorting and reprocessing. The closure of China as an end-market means we need investment in our own capacity,” says Mr Skelton. “What is really encouraging is that because of the focus on plastics, demand for recycled content is higher than it has ever been. So we need the infrastructure, the sorting, the contracts with local authorities in place to meet that 30 per cent target.”

Plastics represent not only a risk, but also an opportunity. Reports suggest the global plastic packaging market could be worth as much as $400 billion by 2023. This is an industry with an appetite for growth and investment. It is also a sector ripe for innovation and disruption. When the Ellen MacArthur Foundation launched a $2-million New Plastics Economy Innovation Prize, together with the Prince of Wales’s International Sustainability Unit, in 2017, the broad base of more than 670 entries was testament to the dynamism of the market. Included on the new business models being pitched was CupClub, pioneering reusable packaging for coffee and one of the 11 eventual winners.

Reuse business models are under-explored and there could be much more attention paid to how we deliver products to consumers, argues Mr Defruyt. “This is not a recycling story alone. While it is part of the solution, we won’t simply recycle our way out of this problem, neither will we compost our way out,” he says. “We need to acknowledge there is a role to play for eliminating problematic and unnecessary items. There is a role for rethinking business models, innovating and redesigning.”

The rethinking debate must remain nuanced and avoid blantant plastic bashing or demonising, concludes Mr Skelton. “There is definitely packaging that is unnecessary and problematical, but lumping all plastic into one category is misleading and unhelpful. We have a mantra: ‘There is no bad material, just inappropriate application,’” he says.

Of course, challenges remain, including finding solutions for such things as multilayer packaging or recycled food-grade polypropylene. But there are exciting developments too, such as the groundbreaking demonstration facility for integrating mechanical and chemical recycling at Project Beacon in Scotland.

The Ellen MacArthur Foundation has also just announced they are working towards a global coalition of leading businesses and governments that will significantly raise the ambition level of commitments, bolster credibility and drive transparency deeper.

The plastics system might still be broken, but the fix is on.
Attitudes towards the environment, and how packaging affects it, vary wildly from country to country. This infographic explores the views of different nations when it comes to waste, recycling and what’s needed to reduce packaging’s impact on the planet.
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### Important factors of environmentally friendly packaging

- Easy to separate different materials for disposal
- Recyclable
- Refillable/reusable
- Made from renewable sources
- Reduced carbon footprint
- Made from unbleached paper

### Most waste

- Municipal solid waste generation daily per capita (kg)
  - United States: 2.58 kg
  - Canada: 2.33 kg
  - Australia: 2.31 kg
  - Germany: 2.11 kg
  - South Africa: 1.92 kg
  - France: 1.79 kg
  - UK: 1.71 kg
  - Japan: 1.30 kg
  - Saudi Arabia: 1.24 kg
  - Mexico: 1.24 kg
  - South Korea: 1.03 kg
  - Brazil: 1.02 kg
  - China: 0.93 kg

### Non-recyclables

- Percentage of people who are concerned with the use of non-recyclables/disposables
  - United States: 75%
  - Canada: 80%
  - Australia: 80%
  - Germany: 77%
  - South Africa: 89%
  - France: 80%
  - UK: 84%
  - Japan: 61%
  - Saudi Arabia: 90%
  - Mexico: 85%
  - South Korea: 84%
  - Brazil: 82%
  - China: 79%
  - India: 87%

### Re-use disposables

- Percentage who would re-use disposable items to reduce the use of non-recyclables
  - United States: 57%
  - Canada: 58%
  - Australia: 63%
  - Germany: 43%
  - South Africa: 64%
  - France: 49%
  - UK: 66%
  - Japan: 29%
  - Saudi Arabia: 48%
  - Mexico: 70%
  - South Korea: 60%
  - Brazil: 54%
  - China: 44%
  - India: 50%

### Stop buying non-recyclables

- Percentage who would stop buying goods that have non-recyclable packaging
  - United States: 26%
  - Canada: 35%
  - Australia: 35%
  - Germany: 36%
  - South Africa: 35%
  - France: 33%
  - UK: 39%
  - Japan: 28%
  - Saudi Arabia: 20%
  - Mexico: 52%
  - South Korea: 26%
  - Brazil: 29%
  - China: 34%
  - India: 43%

### Pay extra for non-recyclables

- Percentage who would pay more for goods without non-recyclable packaging
  - United States: 13%
  - Canada: 10%
  - Australia: 13%
  - Germany: 12%
  - South Africa: 12%
  - France: 9%
  - UK: 12%
  - Japan: 6%
  - Saudi Arabia: 16%
  - Mexico: 11%
  - South Korea: 9%
  - Brazil: 9%
  - China: 23%
  - India: 5%

### Climate change

- Percentage who believe climate change is mainly/entirely caused by human activity
  - United States: 33%
  - Canada: 50%
  - Australia: 44%
  - Germany: 49%
  - South Africa: 52%
  - France: 47%
  - UK: 38%
  - Japan: 39%
  - Saudi Arabia: 62%
  - Mexico: 72%
  - South Korea: 65%
  - Brazil: 58%
  - China: 51%
  - India: 53%
Cartonboard looks set to play an even more central role in industry’s improvement and governments’ drive towards cutting environmental impact

Cardboard packaging’s recyclable nature, with around 83 per cent of paper and card packaging being sent for recycling, adds Mr Hitchin. “We should only use sustainable materials to replace ones that are truly renewable and encouraging this move is part of doing our bit for the environment.”

“Achieving recovery and recycling targets, across Europe will help, so will producers playing by the rules,” the LGA says. Time’s running out, by 2030 an estimated 111 million tonnes of plastics waste will have been exported, claims Simon Ellin, chief executive of the UK’s recycling industry that has been eliminating plastic exports for more than a year from recyclable material.

“The public do not want to see our recycling targets, they are not applied domestically in China, which contravenes WTO rules,” says Mr Ellin. “However, after January’s ban, the fact that vast amounts of packaging would go to landfill has yet to materialise, although there are reports of low-grade plastics, such as thick plastic trays, being incinerated for energy recovery.”

“You could argue that the Chinese strategy, which was introduced to improve the environment, has actually had the opposite effect,” notes Mr Hitchin. “Exports to Taiwan, which is not a DEC country, continue, because it is substantially less of the material itself, while paper prices were at £90 a tonne, paper prices are now £150 in France and Spain, and have fallen out of the market; in the UK currently there is a £50 per tonne support payment.”

“Ajust from being the best cardboard packaging strategy, there are other benefits,” the LGA says. “A Chinese ban has sent shockwaves throughout the whole supply chain. Itjudges that a retail line in six plastic boxes has helped them support China’s decision to ban imports, which it says is expected to help reduce the use of low-grade plastics, such as black plastic trays, being incinerated for energy recovery.”

“Poland is reporting that post-quality plastics are being disposed of and sent on fire. Thailand is changing stream in imports where low-value plastics have been abandoned. Exporters are supporting the efforts of countries abroad.”

“A key factor is the willingness of the Central and Eastern European countries to apply the five Rs of recycling – into the five Rs of responsibility: reduce, reuse, recycle, reduce and recycle. This is true for all European countries where the environmental policy is being implemented. It will be a sad day if we have to go back to a situation where we lose our packaging market share on a global scale.”

The company concludes: “The industry is currently turbulent. European brands are working in vain by the reduction of cold packed pasta, ready meals, Italian and Turkish food and now plastic packaging. This is the clear indication that European companies are changing their strategy, which was introduced to improve the quality of material that goes abroad. This is happening, our council has recently introduced a ban on single-use plastic and we have already received very positive feedback.”

“Thinking outside the single-use plastic box.”

A Chinese ban has sent shockwaves through the recycling industry which must now rethink its strategy.
I 97
that provide their own energy," says
than 90 per cent of European mills
logical and sustainable basis. More
new cartons.
fect example of the circular economy”,
Mr Hitchin describes this as a “per
material. "They are renewable, they come
in the packaging

"Packaging materials are chosen based
biodegradable lining barriers increasing
packaging is now cartonboard, with new
a particularly important growth area.
and the fast food industry is becoming
in general," he says.
Mr Hitchin concludes: "The industry
local authorities from Romania to Lebanon
from local authorities, making it impossible
to improve the environment, has
towards cutting environmental impact.
there is a clear case of usefully
commercial feature

"You could argue that the Chinese
strategy, which was introduced to improve
the environment, has already had the
opposite effect," says Kevin Hill, chief
of The Recycling Association. "The
Chinese government is changing its
strategy, which was introduced
earlier this year. It is time consumers
valued their packaging more.
"The public do not want to see our
health and environment director at the
next step is to recycle more in
this market and create a localised,
low environmental footprint.

"The key is for the recycling
industry to evolve along with
the market for non-recyclable materi-
als.

"Exports to Taiwan, which is not
a member of the European Union,
are growing please visit www.procarton.com

"The bottom has well and truly
fallen out of the market. In the UK,
the paper prices were at £20 a tonne
new, some even blamed Northern
the council could lose £2 million
to recycling material, according to the
Local Government Association, another
to the end of this year. Unsurprisingly,
the sudden influx. We are
in the recycling sector, which is
joint UK-China study confirmed
the need to improve current waste
design for recyclability; for instance,
recycling system can cope with,
new EU regulations. "We need to
call for action on the producer
responsibility, which is linked to the
export this into China, which contravenes
WTO trade rules."

"The strong message from recent
even the country's poorest residents.
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RACONTEUR.NET

A new solution to the problem of the plastic waste head-on

Watermelons, strawberries, and Smarties

Global cultural differences can influence, or even dictate changes in design, packaging to reflect consumers’ demands.

E ven considering buying a bought a gift-wrapped watermelon – how would you feel about it? The question is a simple one that could determine whether or not your gift-wrapped watermelon is ever actually eaten. A gift-wrapped watermelon, after all, is not just a simple piece of fruit. It is a gift that is wrapped in a beautiful package, designed to make the gift look more special. It is a package that is designed to be opened, not thrown away. It is a package that is designed to be enjoyed, not just thrown in the trash.

It is the same with any other gift, whether it be a book, a piece of jewelry, or a bottle of wine. The packaging is just as important as the gift itself. It is a reflection of the thoughtfulness and care that went into the gift, and it is a way to show that the giver truly cares about the recipient.

But what if the packaging is not designed to be opened? What if it is designed to be thrown away? What if it is designed to be ignored? This is the question that many of us are facing today. The problem of plastic waste is a growing concern, and it is one that we all need to take seriously.

According to the United Nations, there are over 8 billion tons of plastic in the world’s oceans, and this number is growing every day. This is a problem that affects everyone, and it is one that we all need to work together to solve.

There are many different ways to address this problem, and one of the most promising is packaging. Packaging can be used to bring back a product to its original state, or it can be used to make a product more attractive. It can be used to make a product more sustainable, or it can be used to make a product more disposable. It can be used to make a product more durable, or it can be used to make a product more fragile.

But the question remains: is packaging the solution to the plastic waste problem? Or is it just a band-aid solution that will ultimately make the problem worse?

The answer is that it depends. If we design packaging that is both functional and sustainable, then it can be a solution to the plastic waste problem. But if we design packaging that is only functional, then it will ultimately make the problem worse.

So what can we do? We need to start by designing packaging that is both functional and sustainable. This will require a lot of research and development, but it is a necessary step towards solving the plastic waste problem.

It is important to remember that plastic waste is a complex problem, and it will not be solved by one solution. It will be solved by many different solutions, working together to create a more sustainable future.

In the end, the answer is: it depends. We need to work together to design packaging that is both functional and sustainable, and we need to work together to create a more sustainable future.
Watermelons, strawberries, and Smarties

Global cultural differences can influence; or even dictate, design changes in packaging, reflecting local consumer demands.

**Ingrid Ishawa**

E ven considering buying a had- never-swallowed strawberry, blueberry or orange before, would you consider them in packaging? As packaging design evolves and goals around sustainability, health and convenience needs continue to diversify, cultural environments have an influence. With food, wine, and pharmaceuticals, there are cultural variations and expectations which are hard to understand.

When you do get used packaging back from the consumer and into recycling plants, and then back into the supply chain? Packaging, that all doesn’t look that different if you zoom in. The idea is there, in all its forms.

In 2016, the global packaging market was estimated at €143 billion. Taking into account packaging materials, the recycling rate in the European Union is 37% and provisions for consumers to recycle are being introduced. The reduction in packaging waste is an important consideration for businesses.

With the growing awareness of the impact of plastic waste on the environment, there has been a shift towards more sustainable packaging solutions. This has led to the development of new packaging materials, such as biodegradable and compostable options.

**James Drake-Brockman**

We have to understand it through other people’s eyes, rather than carrying assumptions from our own cultural expectations.

Plastics are super material in many ways, genuinely solving environmental and societal problems. Society is now turning to a solution into a problem, says Klöckner Pentaplast’s (KP) global sustainability director Luanda Edwarbds.

Recycling plastic myths

Plastics are super material in many ways, genuinely solving environmental and societal problems. Society is now turning to a solution into a problem, says Klöckner Pentaplast’s (KP) global sustainability director Luanda Edwarbds.

Recycling plastic should be the answer, not seen as the problem

Food waste in Europe is up to $100 billion per year, with up to 15% of the world’s food produced never eaten. It is a significant problem that needs addressing.

The problem with food waste is that it is often not visible or tracked. However, the impact of food waste is significant, with up to 40% of global food production being wasted. This waste has environmental, social, and economic impacts, contributing to food insecurity and poverty.

Encouraging sustainable packaging practices, such as reducing packaging waste and using recyclable materials, can help address this issue. This includes implementing effective recycling systems, improving consumer awareness, and promoting sustainable consumption habits.

It is crucial to address the issue of food waste to ensure sustainable and equitable outcomes for all.

**Luanda Edwarbds**

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Reimagining the future of labelling and packaging with sustainable design

Georges Gravanis, president of Avery Dennison’s Label and Graphic Materials Group, reveals how a collaborative industry approach coupled with the company’s materials science capabilities and other innovation in sustainable design are driving positive change in the labelling and packaging of consumer goods.

When evaluating consumer trends toward sustainable shopping, it’s clear that sustainability has become a much more important issue for customers over the past few years. In a survey conducted by Rethink Research, 69% of European consumers believe companies should be doing more to address sustainability issues. This is a significant increase from 2017, when 58% of European consumers agreed that companies should be more sustainable.

How have consumer attitudes towards sustainability changed?

Consumer demand for more sustainable products and services is driving companies to assess their supply chains and production processes more holistically. The focus on sustainability extends beyond the products themselves to include the materials used to make them, the production processes and the packaging used to transport them. This trend is driven by a growing awareness of the environmental impact of waste and the need for companies to reduce their carbon footprint.

What products do you have that will help reduce overall waste, increase recyclability, and reduce robotic arms for use in the packaging process, achieving in days and weeks what previously had taken months. However, the main challenge for 3D printing is to ensure that the final product is comparable with mass-produced items.

Sustainable packaging

Sustainable packaging remains high on the list of corporate sustainability initiatives. It is a key component in building stronger brands and reducing the environmental impact of packaging. The use of sustainable materials, such as paper and biodegradable plastics, is becoming increasingly important as consumers demand products that are better for the planet.

Reprint from PKN Packaging News

PKN Packaging News
Reimagining the future of labelling and packaging with sustainable design

Georges Gravani, president of Avery Dennison’s Label and Graphic Materials Group, reveals how a collaborative industry approach coupled with the company’s materials science capabilities and other innovation in sustainable design are driving positive change in the labelling and packaging of consumer goods.

How have consumer attitudes towards the recycling of labelling and packaging materials changed?

A very significant shift has occurred when it comes to our thinking about sustainable design. Consumers are more aware of the impact of waste on the environment and they expect brands they purchase from to be good corporate citizens and fully transparent about the sustainability of the product we are buying.

What sustainability objectives does Avery Dennison have?

We have a number of goals that we are working towards, including increasing the amount of recycled content in our products, reducing our carbon footprint, and improving the overall recyclability of the packaging across the supply chain. We are also working on improving the labelling and packaging for perishable goods, reducing food waste, and improving the efficiency of our printing processes.

How can Reimagine Tech make a difference?

Reimagine Tech is a platform where brands can come together to share ideas and solutions for sustainable design. It’s a community-driven initiative that brings together companies across the supply chain to drive innovation and sustainability in the labelling and packaging industry.

What is Reimagine Tech?

Reimagine Tech is a platform that brings together companies in the labelling and packaging industry to share ideas and solutions for sustainable design. It’s a community-driven initiative that brings together companies across the supply chain to drive innovation and sustainability in the labelling and packaging industry.
**Business impact of being sustainable**

As more brands pledge to go green, what is the impact of using environmentally friendly packaging on all links in the supply chain?  

**WEIRD VELLA**

Increasing consumer power, driven by a need to look after the environment, has led to “green fatigue” in the packaging manufacture-to-shelfListening to the packaging strategies, and retailers, to rethink the environment. But how challenging is it to implement packaging solutions, and what can manufacturers do to simplify packaging design changes? There is no doubt it is increasingly important to be aware of what is happening in the packaging industry, he says. The Hilton hotel chain has committed to reducing its global environmental impact by half by 2030, which involves switching to new materials. But it will do so incrementally, he says, because sustainability is not seen as a one-size-fits-all solution. Mr Cakebread concludes: “There is no simple or easy answer.”

**Sustainability often goes hand-in-hand with cost reductions if it is implemented at the design stage to reduce packaging size and material use.**

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Whatever your packaging challenge, our experts are here to help you find the most cost-effective and sustainable packaging solution for your business. By choosing the most appropriate packaging options and materials, you can reduce costs and improve the environment. Contact us today to discuss your packaging needs and find the best solution for your business.

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**REVISED FIGURES 2017**

![Image](https://via.placeholder.com/150)

**Sustainability and cost-effectiveness**

If a company is looking to reduce its environmental impact, it should consider the sustainability of its packaging materials and the impact they have on the environment. For example, using biodegradable materials can help reduce waste and improve the sustainability of the packaging. However, it is important to note that sustainability is not just about reducing waste, but also about improving the overall efficiency of the packaging. By choosing the right packaging materials, companies can reduce their overall costs and improve their environmental impact.

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**RENEWED ENVIRONMENTAL INITIATIVES**

The packaging industry is increasingly focused on sustainability and, as a result, is exploring new and innovative solutions to reduce its environmental impact. Many companies are investing in the development of sustainable packaging materials, such as biodegradable polymers, and are also looking at ways to improve the efficiency and sustainability of their packaging processes. By working together with suppliers and customers, the industry is making progress toward a more sustainable future.

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**Good plastic or bad plastic?**

When choosing the most sustainable packaging material for a product, it is important to consider its lifecycle, from raw material extraction to end-of-life disposal. Biodegradable plastics, for example, can be composted and returned to the soil, whereas non-biodegradable plastics can take hundreds of years to decompose. However, biodegradable plastics can also be harmful to the environment if they are not properly disposed of. Therefore, it is important to consider the entire lifecycle of a packaging material when choosing the most sustainable option.

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**Reducing waste and environmental impact**

By choosing sustainable packaging materials and optimizing their design, companies can reduce waste and improve their environmental impact. For example, using biodegradable materials can help reduce waste and improve the sustainability of the packaging. However, it is important to note that sustainability is not just about reducing waste, but also about improving the overall efficiency of the packaging. By choosing the right packaging materials, companies can reduce their overall costs and improve their environmental impact.
As more brands pledge to go green, what is the impact of using sustainable packaging?

Brands such as Unilever, Greenpeace, Peace and Planet, WWF, and the One Ocean Project, as well as Iceland, have made pledges to reduce plastic waste by 2042, which have forced the UK government to eliminate single-use plastics. These promises are a win for a new generation of packaging materials that are recyclable or reusable by 2030.

There are timescales of up to 18 months, or longer for larger companies, to start small and roll out because the world changes so quickly and implementing something across all their outlets takes a long time, he said.

To manage the transition to more sustainable packaging, brands need to find new ways to reduce plastic waste and also need government support due to the lack of a market. However, most experts agree a national tax on plastics is likely to be created to incentivise change. Though there are numerous challenges, many of which are out of a campaigner’s control, there are also measures, effective ways for those involved to move more efficiently towards sustainability. After all, it is often said that every bad plastic is a missed opportunity, an aspect of circularity, which is often overlooked, according to Ms Coyle.

Mr Pamplin, technical director at consultancy ThePackHub, says it is one of the biggest mistakes to think packaging is a single issue. Sustainability is really multi-dimensional, according to Mr Pamplin, which may require some internal restructuring to make the changes happen.

Mr Pamplin says they need a new type of product to be introduced quicker it will be around 10 per cent because it will be more expensive. “There is no doubt it is increasing, but not at the rate needed to really encourage more strategic investments in packaging to affect this,” says Mr Pamplin.

“So is plastic really that bad?" asks Mr Cakebread. “It is very hard to give a single answer,” he replies. “Plastics have been demonised but sometimes they are the more sustainable option,” says Mr Cakebread. "I think we can all agree the material is there, it is just a matter of how it is used, and the perception of the material,” he adds.

Packaging professionals own admission. Inadequate supply of preferable packaging materials has resulted in the oversupply of other materials, such as biodegradable packaging, which can make it harder for investors to offer sustainable packaging.

Packaging affects the entire supply chain, from the material producer to the converter, to the brand owner and retailer, to the consumer again.

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It’s back to the future for past wrap

In the quest for an environmentally friendly circular economy what goes around comes around

NICK EAGEN

"Crowdfunding has completely changed the way environmentally friendly products are funded. The concept doesn’t have to be a big company these days, it can be any idea, a campaign, a designer from London, or a bunch of people working together to make something special in novel packaging," says Tom Pearson, the UK’s largest plastic bottle brand.

The concept is simple - people ask for donations for their project, and if the idea is successful and meets its fundraising target, the money they raised goes towards making the product.

It’s back to the future for past wrap

"Many companies are starting to think about the impact of their packaging. Take Clarity Environmental, who are developing sustainable packaging solutions that challenge traditional industries," says Caroline Jeffay, co-founder of Newcy, a design studio specialising in novel packaging.

The role of packaging is also changing in our lives with more eco-friendly options. Social media is increasingly shaping our purchasing habits - if there are strong grounds for action, then there will be a demand for sustainable packaging.

"It’s back to the future" for past wrap. If you want to make a change, but you don’t know where to start, crowdfunding is the way to go.

China has two imports of packaging waste earlier this year, and is also making efforts to recycle and re-use in local authorities. A recent contract where a company paid over £3 million for the right to dispose of packaging waste in China is an example of how the market is changing.

"The sector is now under a lot of scrutiny, and as businesses join the race to ‘green’ their packaging, there are new challenges emerging. We need an ecosystem approach," she says.

"The law of unintended consequences also looms large, if lots of different innovations are being tested at the same time," says Suvi Haimi, co-founder of Sulapac, a company specialising in innovative wood-based packaging. "There is a lack of clarity across local authorities. Much of the packaging is not biodegradable and consumers might care less about recycling, that means nothing at all.

"Yes, these are exciting times, but we need new innovations, and as businesses join the race to ‘green’ their packaging, there are new challenges emerging. We need an ecosystem approach," she says. Benjamin Punchard, global packaging insights director at Clarity Environmental, wants new products to be marketed as environmentally friendly, with consumers what these choices are.

"We hope the authorities, especially the EU, will clarify for consumers what is sustainable packaging solutions, and how to make the right choice. We need to educate consumers on what it means to be environmentally friendly. Bio-based packaging also takes up land to grow. Bio-based packaging also takes up land to grow.

"Some are hailing this as a ‘back to the future’ age of paper bags and recyclable glass bottles, reversing the switch to plastic packaging. We hope the authorities, especially the EU, will clarify for consumers what is sustainable packaging solutions, and how to make the right choice. We need to educate consumers on what it means to be environmentally friendly."
It’s back to the future for past wrap

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"Crowdfunding has completely changed the way environmentally friendly projects are funded. The creator doesn’t have to be a big company these days, it can be any entrepreneur or company, an individual from Tanzania making wool scarves, a filmmaker from California making a documentary, or someone from the UK, who is starting up a company to recycle plastic packaging. It’s back to the future for past wrap."

China has two importers of packaging waste and earlier this year it also stopped buying plastic waste from other countries. This is a big impact on the manufacturers, but it’s all being done in a rush. The authorities must be encouraged to work together, and the companies involved are working hard to meet these new challenges.

"The sector is now under immense pressure to take action fast, with retailers and manufacturers being forced to replace plastic packaging with wood and seaweed "sea" experts. The role of packaging is also changing, as more sustainable packaging solutions that challenge traditional industries, such as glass packaging, are now available. This is a new challenge for the industry."

Some are hailing this as a “back to the future” age of paper bags and recyclable glass bottles, reversing the switch to plastic packaging. The law of unintended consequences also looms large, if we don’t look at the bigger picture.

"We hope the authorities, especially the local authorities and governments, will be encouraged to work together, and the companies involved are working hard to meet these new challenges."
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