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ten full-sized, flat wine bottles in a compact case, rather than just about four regular, round glass ones, means a loaded pallet could carry 1,040 bottles of wine, not just 456.

Sustainable packaging is simply the future, says Santiago Navarro, chief executive and co-founder of Garçon Wines. "The round wine bottles, we know and like, have been around since the 19th century, but are no longer fit for purpose. We offer a 21st-century wine bottle which is spatially efficient, lightweight, durable and sustainable," he says.

"The strength and low weight of the bottle also mean the bottles need considerably less secondary packaging to move safely through the supply chain."

Awarded the Waitrose Way Treading Lightly Award for green supply chain, anti-mosquito business Incognito is another consumer-facing champion of upstream sustainability.

As well as researching renewable sugarcane alternatives to traditional plastic, the company ensures all back-end packaging is from sustainable cardboard, uses green bubble wrap and shields its own paper for reuse as recyclable fill.

"We put in requests to fulfilment houses for green packaging and delivery," explains managing director Howard Carter. "We also put pressure on third-party manufacturers." Greening can be about where, as well as what, though. Mr Carter adds. "Some companies may have a delivery that goes to the warehouse first and then to the fulfilment house. What we've done is to locate the warehouse in the fulfilment house. This closed loop means fewer journeys," he says.

In 2010, Lucozade Ribena Suntory invested some £70 million to bring bottle production onsite with Logoplaste, at its Gloucestershire factory. This also completely removed the need for transportation, so reducing supply chain emissions. So, as well as high-profile initiatives such as distributing 30,000 Lucozade Sport Ooho seaweed capsules at the London Marathon, much of the greening still goes on behind the scenes.

Lightweighting, for example, is a key part of the global brand's journey: towards ensuring 100 per cent of its plastic packaging is reusable, recyclable or compostable by 2025, says Michelle Norman, director of external affairs and sustainability.

"In January, we lightweighted the best-selling 500ml Ribena bottle, which removed 325 tonnes of plastic from production every year. Now the bottle is also undergoing a redesign to ensure it is fully compatible with bottle-to-bottle recycling," she says. Innovation comes in many shapes and sizes, literally, and even the smallest change can have a big impact, explains Patrick Browne, director of global sustainability at UPS.

"We encourage customers to focus on right-sizing, using the minimum amount of packaging to achieve maximum protection," he says. "There's less cardboard, obviously, also less packing material, which helps reduce waste. Right-sizing enables us to better optimise space in our trucks and deliver more each trip."

## SUSTAINABILITY

# The race to sustainability starts in the supply chain

From wine through the post to sports drinks in seaweed, packaging is visibly going green. However, there is a secondary sustainability story behind your sugarcane insect spray or bamboo toothbrush that too often goes untold

Jim McClelland

**S**ustainable packaging and its impact on the more or less eco-conscious consumer. However, trade and wholesale supply chains also generate volumes of secondary packaging waste and recycling.

What happens upstream is vital and the significant percentage of UK packaging waste involved offers real business prospects, says David Wilson, UK managing director of Vanden Recycling.

"Back-of-store recycles form a large part of packaging material collected and reprocessed, with advantages over post-consumer waste," he says. "These include concentrated tonnage in known locations, the opportunity to capture

as a single stream, plus an interested party incentivised by rebate or reduced cost."

Furthermore, warehousing, storage, shipping and logistics can influence and even dictate the formats finding their way into consumer bags and hands or business offices and shops.

This supply chain hinterland also feeds the booming omnichannel retail and home-delivery markets, where consumers are receiving, sometimes returning, but not always reusing or recycling, industrial-grade packaging.

A seemingly simple solution to reduce both the amount of secondary packaging and number of associated vehicle movements is to maximise the load potential, by weight

or volume. However, the biggest obstacle is the lack of a sector standard, says Stuart Milligan, doctoral researcher at the University of Bath School of Management.

"Smaller pallet loads tend to be produced as manufacturers and retailers are not joined up with regards to handling and storage," he says. "A standardised approach would result in greater synergies."

Green strategies may also reap economic benefits. "There will be low-hanging fruit which will yield both a reduction in packaging and financial savings. The challenge will come when the quick wins have been realised and retailers then have to invest to redesign their processes," he adds.

While cost bumps might be a commercial reality, sadly good communication is not, notes Robert Lockyer, chief executive and founder of Delta Global, innovators in luxury packaging. "Retailers must be more open to options that may cost a little more, while prepared for consumer reaction to rising prices. If we accept a general rule that it will cost more to go green initially, but less in the long term, those who drive change will benefit from customer loyalty," he says. "Ultimately, for change to happen, the retail industry must get better at informing customers."

In the meantime, costs head upstream, says Seb Gauthier,

**“**The average consumer still has little awareness of the early stages of the supply chain

**01** Lucozade Ribena Suntory distributed 36,000 Lucozade Sport Ooho's edible seaweed packaging to runners at the London Marathon

**02** Ten full-sized, flat wine bottles from Garçon Wines take up the same space as four regular, round bottles

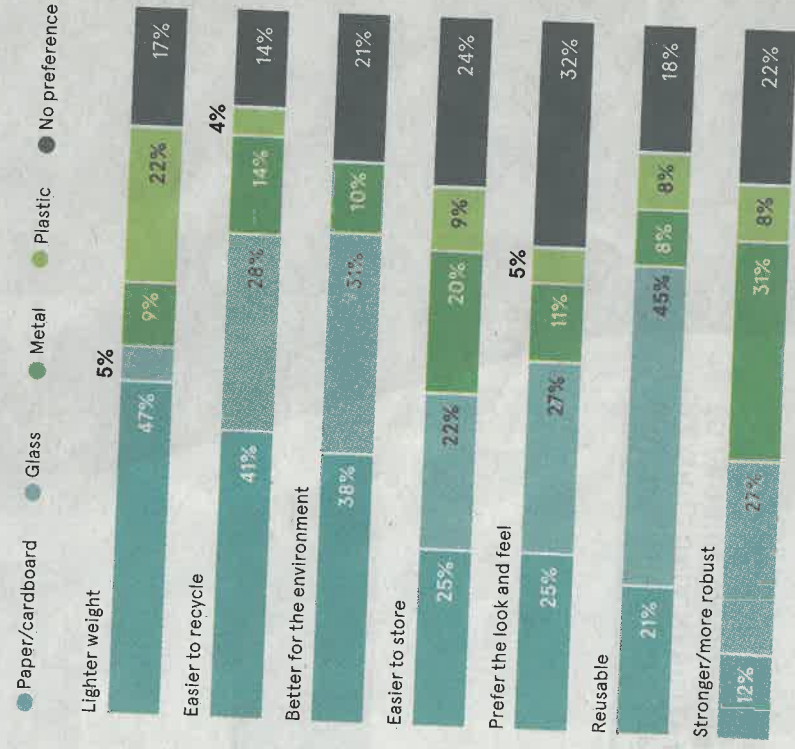
founder and director of bamboo toothbrush subscription company BlueRock. "The average consumer still has little awareness of the early stages of the supply chain, so positive consumer behaviour cannot be relied on to absorb the cost. The initiation of greening early-door secondary supply chains will therefore likely come in the form of tax breaks and other incentives," he says.

The good news, though, is that innovation also flows upstream. Not content with pioneering an award-winning 100 per cent recycled PET (polyethylene terephthalate), letterbox-friendly flat wine bottle, Garçon Wines is turning its attention to secondary packaging and logistics too.

Designed in collaboration with DS Smith, the Garçon Wines 10 Flat Bottles Case will significantly cut carbon emissions and costs. Fitting

### PACKAGING INDUSTRY HAS TO CONTENT WITH A MULTITUDE OF CONSUMER PREFERENCES

Which materials consumers prefer based on the following factors (%)



Percentages may not equal 100 due to rounding

Two Sides/Toluna 2018

Switching to reusable transport packaging is an eco-friendly alternative to shipping with single-use cardboard boxes.

Last year, for instance, TerraCycle worked with UPS to test a customised, durable and reusable tote for their groundbreaking Loop initiative, designed to reduce single-use packaging of everyday items, such as shampoo, detergent, even ice cream.

Shipping with reusables is already practised by several European hospitals and healthcare companies. It lowers costs over time, reduces waste and saves on recycling, so multiple benefits are possible, says Ester Van den Bossche, UPS temperature true packaging solutions manager, Europe.

"Large-volume shippers within a closed-loop or managed open-loop system might consider using reusable transport packaging such as pallets and crates,

totes or bins," she says. "These items can be used for shipping or for storage and transportation."

Reusability sometimes trumps even reduction because, if we reduce packaging to the point where products are being damaged, we score an own goal, says Debbie Hitchen, director and circular economy lead at consultancy Anthesis.

"Some stores have started transporting fruit and veg in stackable plastic crates that go straight onto the shelf. You might think old cardboard boxes were better because they are easier to recycle, but it turns out that the plastic crates protect well and are returned to be reused over and over," she points out.

The secondary success story is not always obvious, but it is essential for delivery on sustainability goals, in every sense.



Garçon Wines

# Natural choice for sustainable packaging

As consumers demand greater sustainability in packaging, a major beverage carton manufacturer is going "Way Beyond Good" with a bold ambition to put more into the environment and society than it takes out

**S**ustainability of packaging is an increasingly hot topic with Sir David Attenborough's *The Blue Planet* TV series sharpening the focus on pressing environmental challenges such as plastic waste in our oceans.

Three quarters of consumers now say the environmental impact of a product's packaging affects their purchasing decisions and 90 per cent want packaging to be easily recyclable, according to latest figures from the 2018 *European Consumer Packaging Perceptions Survey* of 7,000 shoppers.

Food and drink are the products people purchase most frequently and packaging options here range from metal cans and glass bottles to pouches, plastic bottles and more. Thanks to their main ingredient – renewable paper board made from wood – cartons are the natural choice when it comes to reducing environmental impact.

Independent assessments of the life cycle of beverage cartons show they have lower environmental impact than many other types of packaging for a range of products, including long-life food: UHT milk and non-carbonated soft drinks. In fact, the life-cycle carbon footprint of a carton is between 28 per cent and 70 per cent lower than the alternatives, and cartons use 41 per cent to 68 per cent fewer fossil-fuel resources.

But one leading systems and solutions provider for aseptic carton packaging is going further: SIG has set a bold ambition to go "Way Beyond Good".

"Sustainability has been increasing in leaps and bounds in recent years, but we want to take it further," says Martin Herrenbrück, the company's president and general manager for Europe. "Our ambition is to work with our partners to create a net-positive food supply system

that will nourish a growing global population while contributing more to society and the environment than we take out.

"We set out to become a net-positive company three years ago and we've already achieved some significant milestones on this journey in the way we source our raw materials, make our products and run our business."

SIG now offers its customers a menu of features that they can use to improve the credentials of its packaging in the eyes of consumers. These range from the option to put the FSC® (Forest Stewardship Council®) label on any SIG pack to using polymers linked to 100 per cent forest-based materials.

"More and more of our customers are taking up solutions like combiBloc EcoPlus and SIGNATURE PACK," says Mr Herrenbrück. SIG's combiBloc EcoPlus is 82 per cent renewable and requires 28 per cent less CO<sub>2</sub> to produce than conventional cartons in the same format. Its innovative design eliminates the aluminium layer by using an ultra-thin polyamide layer to protect the flavour of the food or drinks that the packaging contains.

SIGNATURE PACK 100 is the world's first aseptic carton linked to 100 per cent renewable plant-based materials, via an innovative mass-balance approach that supports the use of renewable feedstock in mainstream polymer production. It has up to 66 per cent<sup>2</sup> lower life-cycle carbon footprint than the company's standard packs. Meanwhile, combiBlocRS, the new standard structure for SIG's cartons, has saved more than 4,850 tonnes of polymer since it was introduced in 2016.

FSC® C020428  
SIGNATURE PACK ISO\_LCA CB-100732  
from March 2018. Available at [www.sig.biz](http://www.sig.biz)



**Consumers increasingly want to feel good about the food and drink they buy, and that includes the way it's packaged**

SIG is also helping to tackle concerns about plastic straws with the world's first market-ready alternative for use with aseptic carton packs. "Our paper straw solution is helping customers meet the urgent demand from stakeholders to cut out plastic straws amid growing concerns about their impact on the environment and particularly on the world's oceans," says Mr Herrenbrück.

"Consumers increasingly want to feel good about the food and drink they buy, and that includes the way it's packaged. We're helping our customers meet this demand with more sustainable product innovations as part of our ambition to go "Way Beyond Good" for the environment and society."

To find out more please visit [www.sig.biz](http://www.sig.biz)



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