

## Can a cup save the planet?

ONE

Exploring opportunities for reusables in hospitality and foodservice





### **Can a cup save the planet?** Exploring opportunities for reusables in

Exploring opportunities for hospitality and foodservice

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# **Executive summary:** Why do we need to tackle packaging?

"Waste disposal costs are going through the roof, storage space for bins is at a premium, and customers can't stand packaging. Everybody hates waste, and we need to eliminate single-use items wherever possible." Paul Anderson, managing director, Meiko UK

Amid apocalyptic headlines about environmental catastrophe and climate change, there is overwhelming evidence that consumers want action. And packaging - especially plastic - is a particular sore point:



Meanwhile, UK and European legislation regarding single-use is becoming increasingly stringent. That's the bad news.

its discarded food

packaging

The good news is that ending the reliance on single-use packaging is win-win. Our research found:

48

of people want restaurants and takeaways to take responsibility for providing convenient reusable packaging

think restaurants and takeaways should urge their suppliers to use reusable crates and containers

would use a cup or food container supplied by a restaurant if they could drop it in a collection point after use

1<sub>IN</sub>5 would use a particular restaurant or takeaway if it offered reusable packaging

There is also plenty of evidence that reuse schemes can work:



return rates have been achieved in settings as diverse as KFC and Bupa's corporate offices, and from Goodwood and festivals to hospitals and cafés

5 Life cycle analysis has shown reuse can reduce environmental impacts in as little as five uses compared to single-use

Reuse schemes can be cost-efficient, and even save money

We'll look, in this report, at the challenges. Will compromising convenience create pain points for customers that put them off purchasing your products? What are the solutions that work for the high street, for food-to-go, and for closed-site environments such as



contract catering and events? If you supply reusables to customers, how are cups and containers collected, washed and redistributed? We'll look at the solutions. We'll look at the role of collaboration, how to scale, and whether we should embrace packaging standardisation. Does it damage brand identity if you don't have your own packaging? How can we change behaviour to make reuse the new norm? And what are the innovations - such as warewashers that clean and dry 15,000 cups an

hour, or the apps that track where containers are and reward users for their loyalty?

We'll also examine the advantages of working with competitors and introducing reuse in supply chains. And we'll look at the benefits: building reputational value, evolving new business models and saving the planet - one cup, container or crate at a time.

Reusables can engage customers, reduce waste and contribute to carbon reduction targets. So let's find out how to make them happen.



### What we know

#### The problem with packaging



**44**<sup>%</sup> of waste in the oceans is takeout plastic bags and wrappers, food containers and cutlery, plastic and glass bottles, and cans

> Source: Nature Sustainability, 2021<sup>th</sup>

Current levels of resource use, including plastics, are "incompatible with the climate agenda... even when pushing recycling and decarbonization to the extreme," notes Zero Waste Europe and Eunomia.<sup>5</sup> "The only way to respect the 1.5°C of the Paris agreement is by reducing plastic use by 75 per cent by 2050."

Plastics are responsible for 3.4 per cent of global greenhouse gas emissions.<sup>6</sup> Ninety per cent of those emissions arise from their production and conversion from fossil fuels. "Closing material loops," suggests Zero Waste Europe, "could reduce this footprint substantially."

Circular systems do that by preventing resources – such as packaging made of plastic, glass, metal, paper, card and bamboo - becoming waste. The longer a material is used in one form, the lower its economic and environmental impact. This is because the energy and resources required to make the item are paid back over multiple uses. Footprint's Reduce, Reuse, Recycle report shone a light on a hospitality and food service industry that is committed to using sustainable packaging, but struggling to find and fund sustainable solutions. The industry must collaborate to



**79**<sup>%</sup> of plastic ends up in landfill or out in the world Source: Plastikatlas, 2019<sup>3</sup>

9% Only 9% of plastics are recycled globally Source: OECD, 2023<sup>4</sup>

deliver reuse at scale, concludes the Footprint Drinks ESG Trends Report 2023. And research for the Footprint *Sustainability Index 2023* indicates that, while there is support for reusables, there are not yet the underlying structures to support widespread adoption.

Policy pushes are on the way. Single-use plastic plates, trays, bowls, cutlery and balloon sticks, and certain types of polystyrene cups and food containers, are now banned from sale in England. Confusingly, they can still be used when they are pre-filled or used for pre-packaged food. But the overall movement is away from single-use

- and more rules will come as deposit-return and extended producer responsibility schemes take effect across the four nations.

Pressure is also being felt from Europe. EU member states are required to align with communitywide waste goals, including a permanent reduction in the use of particular single-use plastic items. This is taking shape in different forms. For example, in Germany, reusable packaging alternatives must be offered for all takeaway food and drink. France has banned single-use plastics in restaurants. In the Netherlands, disposable cups in the workplace are banned and, from 2024, dine-in meals will not be allowed to be served in disposable packaging.

#### How do reusables compare with disposables for climate impacts?



Reusables compare well with disposables for climate impact. In hospitality and foodservice, reusable packaging typically reaches a breakeven point that compares to the impact of singleuse at around five to 10 uses. This is despite being sturdier, and therefore requiring more materials, as well as needing washing and, potentially, transporting between outlets and cleaning facilities.

Of papers reviewed by Zero Waste Europe, 72 per cent indicated that the environmental performance of reusables is better than that of single-use.7 A UN metaanalysis of life cycle assessments

"There is demand from customers for reusable solutions because many of them have aggressive net zero targets. Sustainable packaging has moved beyond a campaigning point - it's now an action point." Josephine Liang, cofounder,

(LCA) for cups concluded that - when used repeatedly with responsible washing practices, powered by renewable energy -"reusable cups are the clear choice."8

Cauli Ltd

Inevitably, the benefits vary according to which disposable products (e.g. plastic, paper, compostable, bioplastic) and reusable products (e.g. plastic, melamine, bamboo, glass, china) are being compared.



Many plastic reusables, for example, are made of recyclable polypropylene or polycarbonate. These are washable between 300 and 500 times, and the climate impacts compared to disposable equivalents - can break even within a handful of reuses. Life cycle analyses undertaken for the University of Sheffield's Many Happy Returns project found reusable plastic hot drink cups break even after six uses.9 Meanwhile, an LCA conducted for Heineken indicated a breakeven

point of 10 uses for items such as reusable cups.10 Even a reusable cup with the highest environmental impact (made of steel) surpassed the best-performing single-use equivalent (recycled polypropylene) after 25 servings.

Reusable packaging specialist Cauli's takeaway containers can be used more than 400 times before being fully recycled. Compared to single-use aluminium equivalents, they reach breakeven point after four uses, or nine uses compared to expanded polystyrene.<sup>11</sup>

In practice, reusables are often used many times beyond their breakeven point. In a three-month trial, the average CauliBox was used more than 40 times. And the company's closed loop system in which packaging is collected, washed and reused, eliminating waste - reduces up to 92 per cent of CO2e.12 (Cauli Ltd shares its LCA on request.)

Even accounting for washing and embodied impacts, research indicates that, in the long term, reuse is better environmentally - and cheaper. "The greatest environmental savings are made when reusables are part of return schemes," notes one contract caterer who has introduced reuse schemes. "When customers rinse their own cup at a sink, they can use litres of water, which wastes water and the energy to heat that water. But return schemes - which utilise commercial warewashers - use just millilitres. The innovations in washing are dramatic."

Event Cup Solutions says it has brought the first certified carbon neutral reusable plastic cup to market. Its One Planet, One Chance reusable cup system supplies cups and food-to-go containers for stadiums, arenas, venues and festivals. The company has driven

#### WHAT WE KNOW

down impacts by increasing its network of washing points, with two additional regional plants opening in 2024 (to reduce transport emissions), electrifying its fleet and investing in the most energy, water and detergent-efficient warewashing equipment.

Using carbon reduction specialist ClimatePartner to calculate its greenhouse gas (GHG) impacts, verify and certify its carbon reduction plan, Event Cup Solutions is also able to report back to larger clients on the impact of specific events or venues, such as Goodwood Motorsport and Horseracing and Aston Villa (see Removing over 1 million cups).

Transport is a key consideration when evaluating environmental performance. Often, reusables must be moved to be washed and redistributed. Yet they have still been found to have a lower impact than single-use, when transported distances shorter than 1,200km.<sup>13</sup>

Reusables suppliers are partnering with their competitors for transport and washing. These partnerships have reduced transport miles - by increasing the proximity of washing and distribution hubs - and often offer economies of scale.

#### Do solutions already exist?

Reusables tend to fall into two main categories:

- business-to-consumer (B2C): customer-facing
- business-to-business (B2B): supply chain and back-of-house

#### **Business-to-consumer (B2C):** customer-facing

Glass and ceramic are the traditional reusable solutions for customers consuming food and drink in restaurants and some closed-site environments. However, purchase costs and concerns such



as breakages, weight and the need for customers to carry food and drinks easily make them unsuitable for takeaways, festivals, events and stadiums. Polypropylene, often used instead for reusables, is sturdy and heat-resistant, and does not contain harmful plasticisers.

- Customer-facing reusable offers are evolving all the time. Early adopters have partnered with suppliers to create and test bespoke, cost-conscious solutions that address the challenges of different environments. These include: 1. the simple switch – disposables are swapped for reusables that are owned and washed by the operator on-site. Typically used in closed-site environments such as offices and education
- 2. rental services products (often generically branded) are shared across catering, quick service, event and restaurant brands, and tracked using QR codes and/or radio frequency

"Our trials identify how to fulfil the needs of each particular client or customer through creating reuse solutions that work."

Sam Lawes, head of FM procurement UK&I, Sodexo UK&I

identification (RFID) chips. They

are collected on-site, or at shared hubs, which customers can easily find or locate online, via apps or through QR codes. They are washed - at participating outlets or by an external provider - then redistributed. Some reusable suppliers offer part or fully managed rental services, which include container rental, delivery, collection, washing, assistance with container collection, outlet stocking and replenishment, and marketing support

3. sign-up schemes - typically managed via apps, these track individual customers' use and return of reusables, using QR codes and RFID chips. Such schemes enable loyalty points to be awarded, and for the nonreturn of rented containers to be identified, and potentially, charged

Overall, the reuse model is evolving from operators purchasing reusable packaging to renting it. That's driven in part by the innovative approach



of providers such as Event Cup Solutions. Traditional business models are based on repeat sales, so suppliers have little incentive to help their clients retain assets. But new models are based on rental partnerships, with suppliers supporting customer engagement and return.

"We measure our success on retention because we are focused on keeping cups in circulation and being reused," explains Event Cup Solutions sales director John Reeves. "If we help our clients reduce the number of cups being lost, we save them money." The company has also achieved high retention by "taking the customer on the journey". Clear messaging on the cups tells the customer what to do with them, supported by on-site branding and animated GIFs that can be used on screens and social media.

**Business-to-business (B2B):** supply chain and back-ofhouse



Estimated value captured by tortilla manufacturer Mission Foods through using reusable crates with RFID<sup>14</sup>



Average uses for Marks & Spencer reusable crates before they need to be repaired or recycled<sup>15</sup>

Sharing standardized, reusable packaging - for delivery and for products themselves - addresses logistics waste, according to the Ellen MacArthur Foundation.<sup>16</sup> For example, when products and shipping containers are standardised and modular, space is not wasted. Consequently, more items can be delivered in each shipment.

Reuse systems, the foundation concluded, bring "further benefits including reduced carbon footprint, less product damage, and optimized inventory management". Examples include returnable assets such as crates and pallets, pallet lids (to replace the shrink-wrap that is wrapped around pallets of goods to keep them together and protected in transit), bulk containers, bags and tote bags.

Pub company and brewer Greene King has partnered with a supplier of returnable crates, totes and pallet lids. This has helped to reduce the use of shrink-wrap by over 3,400kg and removed over 100,000 cardboard boxes.

But how do reusables in the supply chain compare to single-use for their environmental impacts? Again, results vary according to each LCA but typically show that, over their lifespan, supply chain reusables offer significant benefits.

For example, using the GHG Protocol PAS 2050 standard, an LCA of fruit and vegetable crates found a reusable plastic crate has just over a third of the emissions of a standard cardboard box. Sturdiness, and its ability to be tracked via RFID, means the reusable crate protects more products from damage, is easier to handle, and optimizes inventory management.17

Reusable plastic crates for vegetables and fruits are

#### WHAT WE KNOW

environmentally beneficial compared to single-use crates after just three reuses, concluded research by Tua et al, 2019.<sup>18</sup>

However, the high impacts of production mean that reuse only really begins to pay off when the crate is used more than 20 times. An LCA by Del Borghi et al, 2021, showed multi-use plastic crates have better environmental performance if there is a recovery system that allows them to be reused at least 50 times.<sup>19</sup>

And operators are finding returnable assets better. "They're easier for us to work with," says Mike Hanson, director of sustainable business at WSH. "They take up less room, they're stackable, and they're lighter."

Return on investment is also good, says Daniel Stretton, supply chain lead at Greene King, with the average payback on investment for some of the pub chain's schemes coming in at around one to two years. After this, the savings in packaging purchase and disposal begin to be realised. There are also savings in other areas; for example, in time spent building or flattening cardboard boxes.

"Delivering mixed fruit and veg orders in reusable crates instead of cardboard buffet boxes has enabled us to save about 2.5 million boxes - about 450 tonnes of cardboard – a year," says Emily Pinkney, sustainability manager, Sysco GB. "This works for large orders we can deliver at the end of the run [without compromising route optimisation], so the truck is empty and we can ensure there will be no cross-contamination when backhauling the empty crates. If we can find other ways to resolve hygienic backhauling, this will be key to unlocking greater uptake of reuse in the supply chain."

#### Put back-of-house at the front of change

To eliminate disposables from commercial kitchens, No Mise En Plastic has a manual that outlines how to replace everyday items with reusable options; such as replacing baking paper with silicone baking mats, and sealing containers with lids instead of clingfilm. Silicone lids, such as those produced by Flexsil-lid, provide an airtight cover for gastronorm trays and steam pans. Chefs tend to use gastronorms to store food, so - suggests Alma Rose chef Edward Barker - products such as jams or sauces, which typically come in tubs, could instead be supplied in gastronorm-shaped containers. Kitchen teams could then wash them and reuse them. Drinks on tap is another way to reduce waste. Moving to wine on tap enabled bar chain Albion & East to virtually eliminate bottle waste. Transporting wine in tankers rather than bottles, then putting it into kegs in the UK, halves the carbon impact. Both the weight and amount of packaging are reduced considerably: glass bottles are heavy, which increases transport costs and carbon emissions, and many bottles end up in landfill rather than being recycled. In addition, the bottling process

is extremely resource-intensive: it

#### Carbonating drives PepsiCo's strategy

Packaging accounts for approximately 20 per cent of PepsiCo's GHG emissions – and, despite being fully recyclable, polyethylene terephthalate (PET) is the biggest contributor.<sup>20</sup> The drinks giant aims to sell one fifth of its beverages via reusables by 2030.<sup>21</sup> And its SodaStream system - available commercially and direct to consumers - will help to eliminate nearly 200 million virgin plastic bottles globally by 2025. Each reusable flavour canister and refillable bottle can replace the equivalent of 1,282 disposable bottles,<sup>22</sup> creating carbonated drinks such as sparkling water, flavoured water, Pepsi and Sprite.

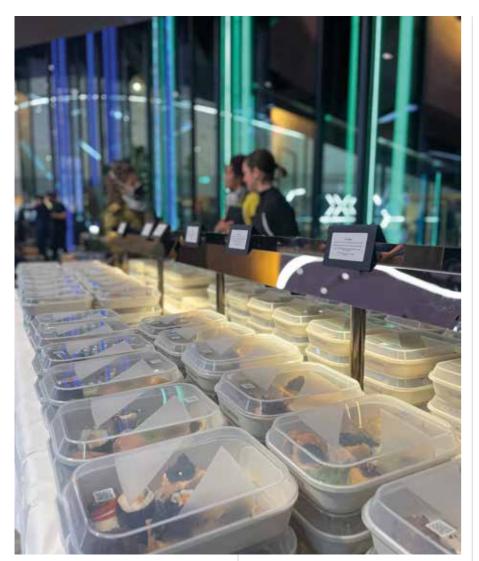
includes bottles, corks, foils, labels, boxes and pallets.

The reusable kegs can go straight back to the supplier to be refilled. And having the wine on tap has, the chain believes, removed 25,000 bottles from its business per annum. Meanwhile, gin is distilled in-house via demijohns and decanted into bottles to go behind the bar. Albion & East plans to add vodka to the repertoire.

#### How are reusables tracked?

To reduce the admin burden for staff and customers, reuse systems use QR codes and RFIDs for tracking. Such systems can be largely contactless, with scanners tracking large numbers of items simultaneously.

In customer-facing schemes, customers typically pay for their purchase, such as a beverage in a reusable cup, along with any deposit or levy. At the end of use, the consumer drops the cup in a collection point, and scans a QR code. In some systems, an integrated RFID code acknowledges its return, enabling any deposit to be returned. The RFID code also shows from which vendor and brand the cups have come, so their stock of clean cups can be replenished.



### "New technologies will continue to transform the ease of tracking."

Ashley Robb, director, **Green Gain Ltd** 

Loyalty schemes – typically administered via apps – operate on the same basis, and work well for venues that customers visit regularly. They typically avoid deposits and signing-up fees, but charge penalties if reusables aren't returned within a set number of days, and are designed to integrate with existing point-of-sale till systems.

This removes customer pain points while facilitating tracking and return. Technologies being applied in retail, such as the 'just walk out' system that enables Amazon Fresh to track what customers buy without scanning goods before they leave the store,<sup>23</sup> also offer promise in reducing pain points - and consumer inconvenience - in reuse systems.

"We're working towards technology that feels seamless for the consumer, but allows us to track items and allows each user to see how much CO2e they've saved by using the scheme," observes Cauli Ltd's Josephine Liang. "When reuse is simple and rewarding, there is no reason to use single-use." Modern monitoring systems are

also facilitating reuse in the supply chain, enabling returnable assets such as pallet wrappers, crates and totes to be tracked around the system. "We're currently trialling an asset-tracking solution, which I'm pretty excited about," shares Daniel Stretton of Greene King. "The technology has really moved on. The tracking tech will help to prevent crates going missing as sites become accountable for what has been delivered to them."

#### What are the costs?

# £30,000

Potential annual savings for average NHS hospital

Costs depend on the singleuse option being replaced, but - depending which model is employed - reuse schemes can be low-cost, cost neutral, or even cost-saving. That should reassure those alarmed by the Foodservice Packaging Association's announcement that England's single-use plastics ban would cost members more than £100m per year.24

The Ellen MacArthur Foundation concludes that replacing 20 per cent of single-use plastic packaging with reusable alternatives "offers an opportunity worth at least US\$10 billion".<sup>25</sup> According to NHS Supply Chain,<sup>26</sup> "a switch from single-use sets [including plastic cutlery, plates and polystyrene trays] to a reusable type could save the average NHS hospital 50-100 tonnes CO<sub>2</sub>e a year, equivalent to around 185,000 car miles, and could mean potential savings of £30,000 per year." Meanwhile, Cauli Ltd clients

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report saving £4,000 to £100,000 per annum.

When purchasing or topping up existing collateral, the investment is typically paid back (and washing costs mitigated) by foregoing the costs of purchasing, and disposing of, single-use equivalents. Utilizing cutlery, crockery and glassware that the site already owns can be simple and cost-effective (see Back to basics leads to 100 per cent success).

At a BaxterStorey corporate client location, using an honour system, employees were served food prepared on site in reusable plastic bowls, boxes and pots. Over 18 months, these were used around 50 times each. And when purchasing costs were compared, reusables cost 60-69 per cent less than disposables for takeaways.

Reuse rental and loyalty schemes tend to come with ongoing costs for the restaurant or caterer, such



"One café owner said it cost her 38 pence to buy a single-use soup container. She only charged £2.20 for her soup. Our reuse scheme will save her business money."

Ashley Robb, director, Green Gain Ltd

as per-use charges or fees for lost stock. These can be offset against avoided single-use purchase costs and waste disposal charges, or balanced out by scheme levies, unclaimed deposits and wrapping reuse charges into food and drink prices. And to keep pricing transparent and predictable for operators keen to introduce reusable schemes, some providers offer fully managed services with fixed upfront costs.

#### **Removing over 1 million** cups

At Aston Villa's ground, fans pay a micro 10p deposit for each cup. This is refundable on return of the cup or can be donated to the Aston Villa Foundation. The scheme is "about creating savings", says John Reeves, from the club's reuse partner Event Cup Solutions.

**Event Cup Solutions** recommends avoiding logos because they impact on return rates. Using a non-branded solution has generated thousands for Villa's charitable foundation since its launch in 2022. "Fan feedback is positive," Reeves says. "They get a better quality cup and returning the cup generates revenue for a charity that means something to them. The club has achieved savings as a result of reduced waste in the concourses, making cleaning up after a match quicker. This has cut labour and waste disposal costs."



# What are the opportunities?

"Reusables drive more people to eat in the restaurant – this increases the customer experience and engagement with that brand."

Paul Anderson, MD of Meiko UK and chair of the Foodservice **Equipment Association** 

#### **Build reputational value**

29% hate single-use food and drink

packaging

% think badly of a restaurant or takeaway brand when they see

its discarded food packaging

want restaurants and takeaways to take responsibility for providing convenient reusable packaging Source: Footprint/Vypr research 2023

Packaging provokes strong responses. As shown by our UK survey, waste is a pet hate for people in the UK. Customers, clients and staff typically dislike it, despite its flexibility and functionality, and our research found nearly half of people in the UK want restaurants and takeaways to take responsibility for providing convenient reusable packaging.

"Our customers are really pushing us, saying, 'Why are you giving us lots of disposables?" shares one industry insider. Another notes, "Our research shows customers really care about recycling and waste." And they want to hear about it too: Footprint research found that 69 per cent of the UK public want to know how pubs and bars are tackling plastic and packaging waste.

"Packaging carries a small carbon impact in comparison to the total life cycle of the product," observes Ashleigh Taylor, head of environment, Compass Group UK&I. "But it is very visible to the customer, who is increasingly aware of the environmental and social impact of single-use items." Packaging choices are seen as a litmus test for a business's sustainability credentials and integrity. If a brand says it's doing

great work to reduce its negative impacts on people and the planet, but customers see a lot of waste, they lose trust. The upshot is that branded single-use packaging might be more reputationally damaging than generic reusables.

"Before we moved to reusables, we couldn't empty the bins fast enough," shares one group executive chef from a major contract caterer. "They used to overflow with disposables that barely had time to get dirty before the contents were consumed and they were chucked into a bin. That needed to stop. It was so wasteful."

Customers are also drawn by reusable packaging. "Our reuse model was born of frustration," explains Anshu Ahuja, cofounder of DabbaDrop, a curry delivery service that uses reusable containers. "As a busy working parent, whenever I ordered takeaways, the packaging made me feel awful and guilty.

"We have many strong sustainability sells as a plant-based, planet-minded takeaway, delivering healthy dinners in reusable boxes by bicycle. But the zero packaging and health angles are what really resonate with our customers. To customers, the reusable dabbas (tins) are a major selling point."

A look on TrustPilot backs this



"We're talking to operators globally about reuse; many see the benefits straightaway, and new regulations are also forcing change."

Paul Anderson, MD, Meiko UK and chair of the Foodservice **Equipment Association** 

up: many reviews rave about reuse credentials. And operators are finding the interest in reusables is being backed up by action. "People are voting with their feet by adopting our reuse scheme and that's the best feedback we can get," observes one contract caterer.

#### **Develop new business** models

For sellers of disposables, reusables may seem a threat. The paper/board industry is already squaring up for an information war about which option is greener and more costeffective. Operators in the eatingout sector are also wading in, as seen with McDonald's' controversial No Silver Bullet study.27

However, forward-thinking companies like Bunzl Catering Supplies recognize the opportunities presented by embracing reusables. They are looking to support existing customers and develop new revenue streams. "We are committed to understanding where reusables will operate effectively and conveniently for our customers," observes Bunzl sustainability director Justin Turquet. "We want to continue to grow and strengthen

our relationships with our clients by enabling caterers to find reusable solutions that meet their needs."

Businesses can achieve this in two ways. The first is by understanding the relative environmental and cost impacts of different products.

The second is by partnering with technology specialists, warewashers and the reuse industry to create a joined-up offer. "We can show our customers that we horizonscan," says Bunzl's Justin Turquet. "We identify options to help them deal with evolving legislation and customer expectations. It's not about one product or another, but about providing the best fit-for-purpose, sustainable solution."

Waste management companies are also keen to understand the



Bottled water brand Belu knew that introducing a filtration and reusable bottle system might cannibalise its own sales, but – as Nolan Wright, director of supply chain operations, observes - the shift to reusables was coming; if Belu didn't evolve, it would lose market share anyway. Better to be a trusted partner to guide, advise and supply existing - and new - clients.

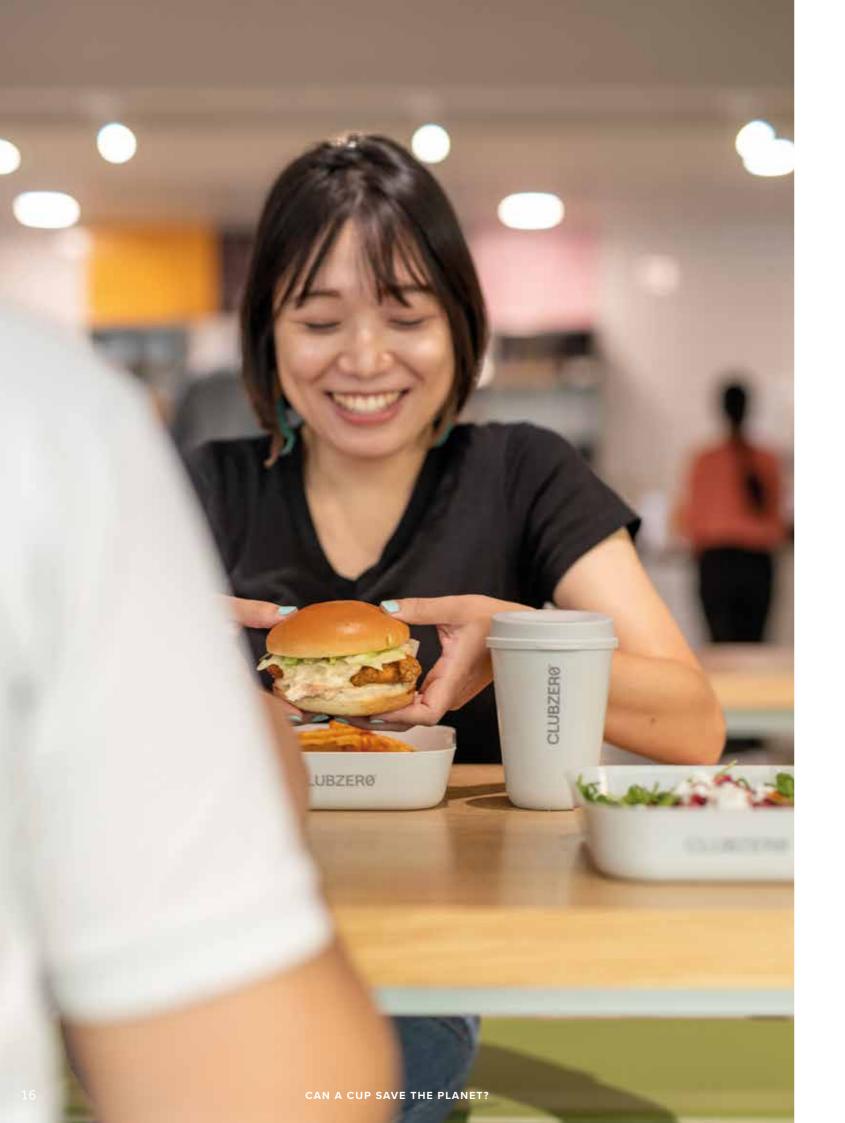
Customers were also won over by the brand's environmental credentials. It has invested in water stewardship projects and given 100 per cent of net profits to WaterAid; its lightweight, high-recycled-content bottles produce fewer emissions than conventional packaging; and Belu has achieved a 59 per cent reduction in greenhouse gas emissions since 2010.<sup>28</sup>

space, develop their offer and collaborate. Zest Recycle conducts single-use plastic audits to help customers identify hotspots and



#### **Complementary not competitive**

potential reuse solutions, such as replacing condiment sachets with dispensers, and providing glasses for water stations.



# What are the perceived **barriers** – and can they be overcome?

'The evidence and technology are already there - we just need to make reuse more mainstream. This will bring it to scale and make it more costeffective."

Justin Turquet, director of sustainability, Bunzl Catering & **Hospitality Division** 

#### Collaborate, scale and standardise

"To make the economics work for returnable packaging and maximise the environmental opportunity, collective action is vital," concludes the Ellen MacArthur Foundation in its report *Scaling returnable packaging.*<sup>29</sup> This requires three interconnected elements: scale and shared infrastructure; packaging standardisation and pooling (see Forego logos to avoid losses); and high return rates (see Change behaviour).

"There have been plenty of reuse trials," notes Stuart Chidley, cofounder of reuse-packaging platform Reposit. "But they're not typically aligned to a long-term

vision. So while there are successes, these become expensive stabs in the dark. If we can all agree on an aligned, long-term vision – in the next one to five years - we could be running lots of coordinated pilots that are additive. In this way, we could transform infrastructure and change behaviour to make reuse the norm.

"Through WRAP, we've been "We want to move beyond

speaking to a real cross-section of brands: AB InBev, Costa, Coca-Cola, Tesco, Sainsbury's, Amazon, Unilever. And there was a lot of agreement that businesses want to collaborate to define a system, a commitment and an ambition. short-term fixes. No one wants to do another £1 million trial that doesn't go anywhere. Whereas if everyone puts in £100,000, and there's 50 businesses, you can look for transformational innovation.

#### Agitating for action

Passionate insiders within hospitality and food service repeatedly express the desire to collaborate and build traction. "There are about 30 venues up and down the country, and we all belong to the Association of Event Venues," enthuses Olympia London's catering manager Abbey Short. "People are nervous of collaborating but, together, we could make reuse happen in our industry. How amazing would that be reputationally?"

We can develop holistic solutions. And the risk is shared among stakeholders, rather than pilots that work in isolation."

Collaboration needs to include all actors, including the research community. For example, the University of Sheffield's Many Happy Returns project<sup>30</sup> brings together initiatives that unpick all sides of the single-use issue, including consumer reactions to reusable packaging, the role of language in encouraging reuse, and the technical and scientific aspects of reusables. It aims to work closely with manufacturers, designers, brand owners, retailers and policy makers to drive business and behavioural change, by providing evidence, business models, and the materials to make change happen.

"It's important that we join lots of disciplines together," says Dr Rachael Rothman, of the university's Department of Chemical and Biological Engineering. "Because, to be sustainable, it's not just about the environment. It must be easy for people to engage with it, or they won't do it. And it must be economically beneficial. People won't engage with something if it costs more, even if it might be better for the environment. Only by bringing all those aspects together can we find the best reuse system that people will engage with, and that is better for the environment, and that is cheaper."

Caterers and their suppliers are also thinking collaboratively to reduce supply chain waste. "We have the ability and the desire to influence what's coming in, and going out, of the business," notes Sodexo's Sam Lawes. "We can work with our clients and suppliers to think how to prevent waste in the first place, in our catering operations and our facilities management.

"We work with our logistics and distribution partners on warehousing. To maximise the efficiency of moving goods and products, and reduce emissions, we ensure full loads. But we're also asking: how can we close loops and return the packaging?"

For reuse to happen at scale, operators and industry must come together, agrees Greene King supply chain lead Daniel Stretton. "We're doing lots to introduce reuse but we need more partners, more industry collaboration, and knowledge and data-sharing. With so many competing priorities for businesses, it can be difficult to prioritise circularity but it's important that people do so.

"For example, we're working on a returnable asset project with multiple suppliers. But we've got to buy that asset, and it's a substantial

upfront cost. Commitments such as the one we have made to the Science Based Targets initiative help, because we can demonstrate how reuse initiatives will contribute to those targets."

#### Change behaviour

said they would use reusable cups or containers if they were supplied by venues

What stops you using reusable cups or food containers?

I forget to bring my own

Nothing - I usually use a reusable cup or container

I don't want to carry my own

I don't want to deal with a dirty cup/container afterwards Source: Footprint/Vypr research 2023

The acceptance of reusable pallets, beer kegs, casks and shipping crates, and the historical success of reusables such as glass milk bottles, shows that – with the right infrastructure and environment - reuse can be the accepted norm. And reuse providers like CLUBZERØ and Event Cup Solutions have certainly achieved success, with return rates of around 95 per cent.

So reuse appears to be a norm people will embrace - if it's made easy. Our research indicates that almost half (47 per cent) of people are willing to use reusable cups and containers if they are supplied by the vendor and can be dropped in a collection point.

Environmental charity Hubbub found 38 per cent of consumers worry that reusables might not be hygienic, while 26 per cent are put off if they're damaged or scratched.<sup>31</sup> Our research also found that 15 per cent are put off by having to deal with a dirty cup or container afterwards. Projects like Many Happy Returns<sup>32</sup> are helping to address these concerns by testing plastics for wear and tear: establishing how resistant they are to scratches and stains, how that impacts hygiene, and at what point of wear a customer will reject a reusable product.

Combined with detailed LCAs, and analysis of purchasing, of use and of the language that resonates with - or turns off - consumers, reusable packaging can be designed to work functionally and be accepted by consumers.

Reuse systems also tend to work "fantastically well", says Matt Kennedy, founder of circular solutions specialist Again, when they "plug into places and behaviours that already exist, like customers placing packaging in a bin on the kerbside".<sup>33</sup>

#### Challenge the 'convenience at all costs' mantra

said single-use takeaway packaging makes them feel guilty Source: Footprint/Vypr research 2023

A greater understanding of the climate crisis is leading to lifestyles being reappraised. The "convenience is king" mentality is changing as there is greater understanding of what can be gained from more engaged behaviours.

"Consumers are becoming more conscious of their environmental impact and are actively seeking sustainable alternatives," says Meiko marketing manager Mark Roberts. "The use of reusables is becoming a cultural norm, with individuals and communities adopting them as part

of a broader movement towards

sustainability." Using reusables may not be as convenient as throwing a disposable cup in the nearest bin, but it can be richly rewarding. The pang of guilt at seeing a disposable item join an overflowing bin is replaced by the halo effect of supporting the reuse of a valuable material – an action that may be rewarded by a discount or other benefit.

"People feel pride in participating," says Safia Qureshi, founder and CEO of CLUBZERØ. "The experience can be enjoyable and rewarding. Even something as simple as dropping your container off can be positive: the moulded openings that ensure items are put in the right place can tap into the fun of childhood games of slotting items into the correspondingshaped spaces."



"We are going to have to sacrifice some convenience across multiple aspects of our lives," advocates Juliane Caillouette Noble, managing director of the Sustainable Restaurant Association. "Because convenience at all costs is what got us into this mess in the first place." But the inconvenience can be minimal. Well situated collection points, automated tracking (see How are reusables tracked?), userfriendly apps and loyalty schemes which don't add complicated steps to purchases and which include clear instructions - can spell reuse success. In the long term, there will be scalable, standardised systems (see Collaborate, scale and standardise) with shared collection infrastructure.

#### Sorting headaches solved

Customers are notoriously poor at sorting used packaging correctly. However, a smart tableware and bin system created by 1Less offers a user-friendly, deposit-free solution. Customers put used cutlery and containers - along with any waste - into smart bins located around venues. RFID tags enable the bin to identify 1Less dishware and a sorting mechanism separates it from other waste items.

#### Shift to a reuse culture



of people in the UK think more needs to be done to make it easier to choose reusable food and drink packaging<sup>34</sup>

Scale and shared infrastructure are vital to the successful shift from a throwaway to reuse-centred culture. As Scaling returnable packaging notes, "Sharing infrastructure, such as collection, sorting, cleaning and transportation, provides economies of scale."

Shared collection systems reduce friction and create behavioural norms by providing "customers with a consistent and streamlined experience. Having to separate packaging and interact with multiple collection streams could be a barrier for customers."35

"The UK can leapfrog ahead if we get collaboration across industries: foodservice, beverage, beauty, personal care, home care, food packaging, coffee cups, etc," notes

"The more customers we get, and the more partnerships we create, the more efficient we become as a business – both commercially and environmentally."

John Reeves, sales director, Event **Cup Solutions** 

Stuart Chidley of Reposit. "If it's all in one system that's recognisable to the consumer, you have the same experience when you're at an event, when you're in Costa, when you're returning beer bottles that you bought in Tesco, and when you're returning beauty or personal care product packaging to Boots. You get a much bigger bang for your investment buck. Whereas if there's one system for foodservice, one for beverages, one for coffee and one for beauty, you need multiple times the investment and the consumer has to engage with multiple systems."

Complementary systems appear workable as reuse schemes are taking off in other areas. Tesco ran a year-long pilot on 200 products with refillable packaging specialist Loop.<sup>36</sup> Organic food supplier Abel & Cole is piggybacking off its model of having customers return secondary packaging to achieve 65 per cent return rates for its prefill – rather than refill – range. The consumer returns the empty containers to Abel & Cole, who clean and refill them, ready for sale again.

Meanwhile, Marks & Spencer is rolling out its initiative of selling homecare products - such as washing-up liquid - in reusable containers to more stores and more



product lines.<sup>37</sup> Customers pay an initial £2 deposit, redeemable as a voucher for another purchase when they return the container.

#### Harness closed sites to change norms



#### reusable return rates achieved

Operators in closed-site environments play a key role in introducing reuse concepts and normalising reuse behaviour. This means that contract caterers

- who typically operate in such environments - have a particular responsibility to help change norms. And the good news is, it's working. Consumers are getting into the habit of returning containers, as evidenced by the 95 per cent success rates achieved by returnable packaging specialist CLUBZERØ for clients such as Just Eat, CH&CO and Barclays and the 96 per cent achieved by Event Cup Solutions for some of its clients.

"Our primary focus for packaging must be on removing single-use," shared one contract caterer. "Starting in campus-style environments, but looking to expand."

Corporate catering and office food delivery systems also show

"It's our responsibility to influence not just our operations, but also our clients and the industry. This isn't something we want as a differentiator: we want the industry to follow, to up the expectation and the options available."

Sam Lawes, head of FM procurement UK&I, Sodexo UK&I

promise: they can bring restaurants, business-focused food delivery apps and reusable providers together to create circular infrastructure.

CLUBZERØ's partnership with food delivery platforms such as Just Eat for Business allows large corporate clients to opt into reusable packaging for their breakfast, lunch and dinners, saving millions of single-use items ending up in landfill. Once customers have finished, CLUBZERØ collects, washes and redistributes packaging ensuring it is used again and again.

It's trickier to implement schemes in open environments, says Rosie Rayner-Law, sustainability business partner at contract caterer CH&CO. But hybrid environments such as city-centre-based university campuses, where semi-regular customers move fluidly on and off site - can be tackled through signup schemes that charge if items aren't returned.

"We've found the sign-up app can be a barrier to uptake, but using it ensures a low loss rate, with little risk to us as the operator," says Rayner-Law. "We're always exploring ways to drive uptake, including

working with CLUBZERØ to have student ambassadors on site and running promotions at key points of the academic year." Getting the system up and running at one of the caterer's university sites has been time-consuming, admits Rayner-Law, but another advantage of using CLUBZERØ's reusables service is that it doesn't require CH&CO to provide manpower or machinery for washing the crockery. Initiatives such as these, while not perfect, create a test bed on which to resolve issues such as customer engagement, hygienic backhauling, washing and sorting (the latter being especially important for clients who use branded reusables). And establishing reuse in closed-site environments drives changes to cultural norms, which will encourage the wider adoption of reusables. Once customers become accustomed to using reusables in schools, universities and workplaces, that behaviour will become the norm and ripple out from those environments. This will create compliance with reuse schemes, and demand for them, as customers will want to know why they can't reuse on the go.

#### Which drink option would you choose?

No drink - put off by charges and deposits

£1 deposit

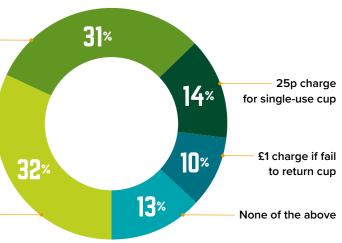
#### **Tailor charges and incentives**

In high trust, regularly visited environments - such as workplaces - providing reusables for free is very effective. Reusable tableware, for example, is supplied through sign-up schemes (which, as with CauliBox and CLUBZERØ, may charge a penalty if items are not returned) or even handed out freely without deposits or tracking.

"Trusting our customers to be responsible for reusable items has been integral to the success of our trials."

Sam Lawes, head of FM procurement UK&I, Sodexo UK&I

"No site that is closed to the public, like offices, should need to use disposables," advocates Rosie Rayner-Law of CH&CO. "Reuse can work - either with specially designed options or plates and mugs - but it's dependent on customers being educated, motivated and supported to engage and return." (See: Back to basics leads to 100 per cent success.)



Source: Footprint/Vypr research 2023

#### WHAT ARE THE PERCEIVED BARRIERS?

#### Back to basics leads to 100 per cent success

Healthcare provider Bupa and caterer Gather & Gather united to achieve 100 per cent reusable usage in a year by replacing disposals with crockery.<sup>38</sup> The change was introduced gradually through a series of nudges that earned customer acceptance more effectively than simply mandating the removal of disposal cups:

- the charge for a disposable cup was raised from 25p to 45p, with half the proceeds (£10k) going to charity
- the catering team actively told customers they could take their cup or plate outside or back to their desk
- serving staff changed the default to crockery, using prompts such as "In a cup?" and "On a plate?"
- if asked for a single-use container, staff split a clamshell in two and served the food in one open half. This meant having a disposable provided no advantage over food served on a plate
- customers put their dishes on trolleys on each floor, with the onsite cleaning crew brought on board by highlighting their key role in collecting and cleaning the crockery

#### **High turnover = charge**

Sites with high numbers of infrequent visitors - such as events and attractions - typically incorporate charges into the food or drink prices, or charge a levy or deposit that is refunded (or donated to charity) when the item is returned. A trial by Zero Waste Scotland at one Scottish business achieved a 95 per cent reduction in the use of disposable cups when it ran a deposit scheme and charged 20p for disposables.<sup>39</sup>

There are signs, however, that the industry is moving away from deposit models because of the friction they can cause. The One Planet, One Chance reusable cup system identifies deposits as a major reason for onsite customer complaints. Avoiding them therefore reduces a major pain point, especially as venues are increasingly cashless environments, and tracking and returning deposits and collateral can be an administrative challenge.

#### Provide clear instructions and feedback on how taking part is helping

"Asking customers to do the right thing, and giving them clear direction and the facilities to do so, enables high retention - like the 96 per cent we've achieved in horse racing environments," says John Reeves of Event Cup Solutions. "Deposits are the model of yesteryear. We've been able to demonstrate that other ways to incentivise the customer to return cups are much more successful and effective."

Event Cup Solutions losses fell from 11 per cent to 3.6 per cent for its horse racing clients. That success was achieved by clearly communicating and guiding the

consumer through a simple fourstep process, advertised around the venues:

1. Buy your drink

2. Enjoy your drink

3. Return your cup

4. Don't take your cup home This messaging was reinforced on the cups themselves.

"At BaxterStorey, we've found that clearly communicating what you have to do and the impact it has is key to making schemes a success," says Mike Hanson, WSH. "We tell people, 'It works like this: take, enjoy, return, repeat ... and this is how many disposable cups you've helped us save this month."

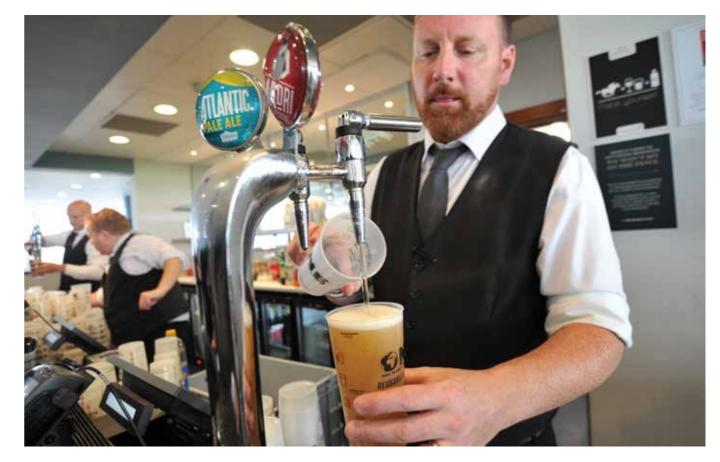
#### **Rewards boost sales**

University Hospital Crosshouse in Ayrshire gave staff free reusable cups, with disposables costing 10p more (with prices adjusted so that drinks prices didn't increase overall). Staff using reusable cups earned a stamp for a free tenth drink.

Consequently, reusable cup usage increased from one per cent to 43 per cent, reducing single-use cup consumption by 157 a day, or almost 60,000 a year. Meanwhile, hot drink sales increased by 10 per cent over the trial period.<sup>40</sup>

#### Forego logos to avoid losses

Logos equal higher loss rates. According to Event Cup Solutions, putting your logo on a cup could push your loss rate as high as 40 per cent, making reuse schemes expensive. Early adopter



### Loss rate **40 % → 5 %**

branded cup

generic cup

Goodwood found branded cups were pilfered as souvenirs when its scheme was launched in 2021. "It was the cheapest souvenir you could buy," explains Event Cup Solutions's John Reeves. "So what incentive was there for the customer to return the cup?" Meanwhile, McDonald's had to put bouncers on its doors to prevent theft when it trialled reusables in France, negating the environmental benefit and making the scheme costly.

In contrast, schemes using generic cups see loss rates of less than 5 per cent.41 "Customers aren't tempted to take generically branded items as souvenirs," Reeves notes.

"And our generic model is different because the cups feature clear instructions on what to do with them when the drink is finished." A dedicated on-site team washed, sorted and distributed the cups around Goodwood. And a simple, single-unit charge per cup allowed the site to build the cost of the service into the price of a drink. This new approach saw 300,000 cups used across three days, saving 3.7 tonnes of CO2e.

"Standardising packaging for certain product types [such as cups] can significantly increase the efficiency of sorting, cleaning and storing," notes *Scaling returnable* packaging. "[And] pooling packaging can dramatically decrease transport distances and the associated emissions and costs."

A challenge in high street reuse is needing different brands to use the same takeaway collateral. Typically, efficiencies are viable only if any cup, plate or bowl can be collected

at shared points and returned to any foodservice outlet. Many foodservice operators attribute their long-term success, at least in part, to decades of protecting their brand, which is reinforced through packaging. That's a major barrier to reuse because marketing teams kibosh schemes that don't conform to branding protocols.

"Branding can be great for messaging and brand awareness. However Compass Group UK&I has found this can increase the likelihood of items being kept by the consumer."

Ashleigh Taylor, head of environment, Compass Group UK&I

However, "Branding doesn't have to be a barrier," declares Juliane Caillouette Noble of the Sustainable Restaurant Association. "If we innovate to create the right dissolvable or removable stickers, items can be washed and returned in a shared system while still signalling to the consumer that it's the brand they love."

Generic products that are individually labelled have had success in other markets. In Germany, bottles are shared by the drinks industry, who buy what they need and add their own labels for each reuse.

Interactivity could also more than compensate, via mechanisms such as QR codes on removable labels. "Take 19 Crimes wine," suggests Sarah Greenwood, packaging technology expert at the Grantham Centre for Sustainable Futures. "You hold your phone up to the bottle, and you get a film of the convict on the bottle telling their story."

Corporate catering may be the branding exception. "We've found that printing the corporate identity on reusables can increase return rates," says Sodexo's Sam Lawes. "People feel a responsibility on behalf of their company to return the item, rather than disposing of it in the bin or taking it home." And as reusables are likely to be washed on-site, rather than off-site at a central hub, having logos doesn't create a sorting headache.

To ensure containers are returned, Event Cup Solutions's John **Reeves recommends:** 

- designing the reusable so it cannot become a souvenir
- ensuring return is easy
- keeping instructions clear, and printing them on the item and around the venue
- making collection points well situated

 use moulded openings at collection points so it's obvious what goes where (and what doesn't)

#### **Be patient**

For new behaviours to become habits takes time, repetition and consistency. So it's important to allow a settling-in period for staff and customers when reuse schemes are introduced. "There is likely to be a bedding-in period where people are getting used to it," notes Justin Turquet, Bunzl Catering Supplies. "So it is critical that the right comms are in place to ensure behaviour change is a success and it becomes the new normal."

"We saw customer numbers for the salad drop by about a third for the first few weeks we introduced the CauliBox system to the salad bar, but, slowly but surely, the numbers have returned," shares one contract caterer. "It also took time for staff to get into the habit of putting disposables out of sight, and to only offer 'crockery or CauliBox?' But, overall, sales in the restaurant over the whole period have stayed stable or increased."

#### Keep faith in food-to-go models

Food-to-go has been the hardest nut to crack for reusables. Retail environments are more challenging because customers can take packaging far away from the restaurant and collection points.



return rate for reusables trial at **KFC** Cologne



takeaway containers are used in the EU every year Source: University of Manchester, 2018

And corporate branding is integral to restaurant businesses, making generic reusables less appealing to high street brands. Such challenges have meant that early movers such as CLUBZERØ and Cauli Ltd have largely shifted to more controllable, closed environments, such as campuses and staff canteens.

McDonald's experienced some of the challenges. Its distinctive reusable packaging went viral when it was launched, but the fast-food giant says its efforts to increase reuse ahead of looming EU regulation have been faltering. According to a Bloomberg article,<sup>42</sup> the company's research suggests cups need to be reused 50 to 100 times to make them preferable environmentally to single-use products (considerably more times than the results of other LCAs suggest). And its trials of reusable cups in European countries found many of them simply disappear. Despite €2 deposits in Germany and €1 deposits in the Netherlands, only 40 per cent are returned in the former and 25 per cent in the latter. In France, the cups are used fewer than 29 times.

Fortunately, others are committing to reusables - many successfully. KFC customers in Cologne sign up via an app and pay a small deposit that is returned when containers are brought back within 14 days.<sup>43</sup> The scheme has achieved 98 per cent success and items are typically reused within four days. Meanwhile, Burger King

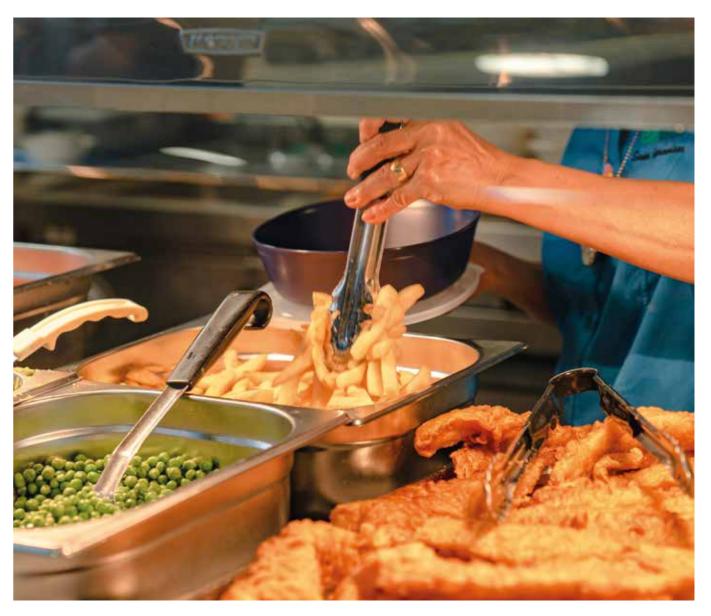
has become the first UK QSR to trial reusables.<sup>44</sup> At the pilot, in Ipswich, customers who order through the Loop app can pay a £1 deposit on a returnable container that is available for 10 Burger King products.

Ahead of a commitment to introduce reusables across its 4,000+ EMEA stores by 2025,<sup>45</sup> Starbucks is piloting reusable cups in several European cities. In London, it's charging a £1 deposit that is returned when the cup is brought back. Users also earn reward points and qualify for a 25p reusable cup discount.

Shared infrastructure and products (see Shift to a reuse



Another initiative brings cafés across Stirling together to offer



customers a £1 reusable cup. They can return it and be reimbursed, or be supplied with a fresh one, at any participating outlet.46

These rent-and-return schemes aim to overcome one of the barriers to reuse success: customers forgetting to bring their reusable containers with them. A UK study by Hubbub found that, although 69 per cent of people own a reusable cup, over a third (36 percent) don't use one every time they buy a coffee because they simply forget it.47 And our survey also found that forgetting to bring their own cup or container was the most common thing stopping people from using reusables more often.

#### **Take inspiration from** independent success

Independent takeaways increasingly deploy reusables with significant success. One is BBC Food and Farming Awards 2023 runner-up DabbaDrop. This sustainable service grew out of frustration with the packaging waste and poor health credentials of traditional local takeaways. Customers sign up to weekly or fortnightly deliveries that can be customised before each "drop". The food is delivered in reusable "dabba tins" - wrapped in colourcoded cloth that protects against spills and provides theatre when unwrapping and for the table and packed in a biodegradable bag. The cloth and bag can also be returned and reused. DabbaDrop estimates that, so far, the dabbas have prevented 203,370 plastic containers entering the waste stream.

"We've observed a significant increase in customer interest in reusable cleaning products. The demand is driven by growing environmental consciousness and a desire to reduce single-use plastic consumption."

Mark Roberts, marketing manager, Meiko UK

The Crafty Indian in Bradford encourages customers to buy tiffin tins at virtually cost price. These can be dropped off in the morning or the day before, so food can be delivered in them, or brought in when collecting food. Users earn a 10 per cent discount on their meal. This enables them to recoup their investment in the tin and provides an incentive to keep coming back. With 500 sold so far, The Crafty Indian says the scheme has proved popular with existing customers and attracted new ones. It has provided a great way to interact with customers, sparked social media engagement, and even featured on the BBC and in other press.

#### **Retrofit or invest in washing** facilities

Rental models negate the need

for many sites to have their own washing facilities. But for sites at which washing in situ is most appropriate, and for the reusables suppliers themselves, warewashers are evolving. This is important, because reusables - particularly those made of plastic - require different rack configurations, stacking solutions, detergent levels and programmes to ensure they come out clean, dry and quickly.

Existing undercounter machines can be made reuse-ready by swapping existing racks for special bottle racks, cup racks and hybrid racks, the latter designed for the flexible washing of reusable cups, bowls, lids and cutlery. For example, the Loose Cannon Brewery in Oxfordshire has a 'draught takeout' scheme, offering beers in reusable and returnable bottles and barrels. It's on course to wash about 30,000

bottles a year using the undercounter Meiko M-iClean UM GiO, which can wash up to 640 bottles per hour. And switching the bottom arm for a bottle washer adapter means the brewery can wash bottles during the day and glasses and plates from the bar in the evening.

For those investing in new kit, the government's Energy Technology List is accepting submissions from the manufacturers of commercial dishwashers, making it easier to identify the most efficient machines. New technologies are also improving cleaning quality. For example, Meiko's reverse osmosis strips almost all minerals, limescale and other problematic substances from the water to prevent residues on washware.

Machines that ensure items are dry enough to be stored are important, to prevent bacteria

Meiko's M-iQ Cup washer cools Compact undercounter models

and mould growth. "The largest challenge in the cleaning of plastics has always been the drying process, explains Sebastian Hainz, Meiko Global's Executive Vice President of Sales and Marketing, "because plastic is significantly worse at storing heat than, for example, porcelain, and dries very slowly."48 cups in a special climate zone that prevents moisture in the air condensing on the inside of the plastic. This means that, in virtually all cases, items can be stacked and packed away the moment they exit the washing and drying process. mean reusable-specific facilities do not have to take up too much room. But for those with space and with large volumes, flight-type dishwashers - like the reusablespecific M-iQ Cup - clean and dry



up to 15,000 cups an hour. Event Cup Solutions uses the system and reports 30 per cent savings on its labour costs, because fewer staff can wash more cups. There are even portable options, for machinewashing at events.

#### **Cleaning stations attract** customers

Cleaning stations that enable customers to wash their own cups can add value. Compact and efficient steam-cleaners – being trialled by Aggora, part of the Bunzl Group – completely clean and dry cups in 15 seconds. QSR operators predict that having such stations will be a reason for consumers to choose one outlet over another. They should also reduce the considerable amount of time that staff spend clearing disposables from tables and emptying bins.

### About this research

#### About this report

Footprint Intelligence was commissioned to write this report by Meiko UK. The research comprised in-depth, semi-structured interviews with foodservice experts and sector thought-leaders, surveys of over 1,000 UK consumers, desk-based research, involvement in industry events and forums, and comments and insight from opinion leaders linked to the industry.

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- Sarah Greenwood, packaging technology specialist, Grantham Centre for Sustainable Futures
- Stuart Chidley, cofounder, Reposit

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Vypr is a leading predictive consumer intelligence platform that combines research into behavioural science with a well-segmented consumer panel. Vypr works with retailers including The Co-op Food and Starbucks, brands like Weetabix and Müller, and large manufacturing groups such as Cranswick PLC and 2 Sisters Food Group.

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#### **Report team**

Report and research lead and copywriter: Amy Fetzer Research support: Chris Terry

#### **Footprint Intelligence**

The ever-shifting sustainability debate makes it vital for businesses to have accurate intelligence for informed decisions. Footprint Intelligence is Footprint Media Group's research and analysis division, helping companies develop successful strategies in the context of responsible business practices. Footprint Intelligence aims to drive, promote and share best practice by helping industry resolve pressing sustainability issues. It asks tough questions and finds answers. It uses research and industry insight to bring businesses together to identify solutions, opportunities, trends and challenges.

#### **About Meiko UK**

Meiko UK is a leading supplier of innovative warewashing technology with outstanding hygiene, reliability and wash quality, matched by sustainable energy and water performance. Whether it's washing crockery, cutlery, glassware or reusables, Meiko UK sets the new benchmark for hygiene, energy efficiency, value for money, breakdown repair and service.





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