



Food Waste in Hospitality

A guide to cutting waste, saving
money, and helping the planet



In partnership
with the SRA

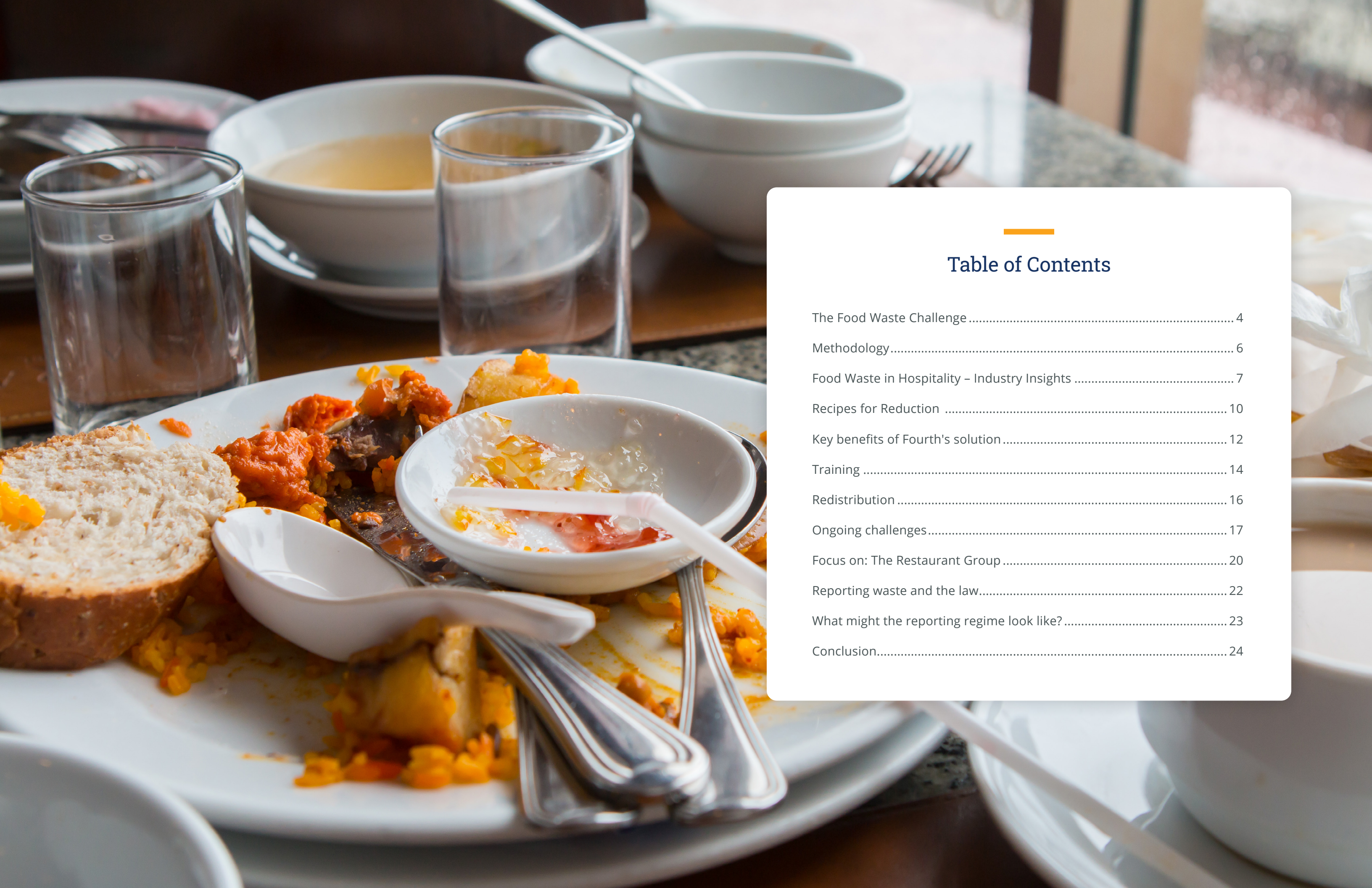


Table of Contents

The Food Waste Challenge	4
Methodology	6
Food Waste in Hospitality – Industry Insights	7
Recipes for Reduction	10
Key benefits of Fourth's solution	12
Training	14
Redistribution	16
Ongoing challenges.....	17
Focus on: The Restaurant Group	20
Reporting waste and the law.....	22
What might the reporting regime look like?	23
Conclusion.....	24

The Food Waste Challenge

Food waste is a major climate, commercial and community issue. The scale of the problem is immense; the potential prize on offer to hospitality and foodservice operators, through serious reduction, is equally huge.

A report published by WWF and Tesco in 2021, [Driven to Waste](#), found that the volume of global food waste was one billion tonnes larger – almost double what was previously thought – and that approximately 40% of all food grown goes uneaten.

Zoom in closer to home and the numbers are no less eye-watering. The environmental cost of food waste in the UK is 20m tonnes of CO₂e – equivalent to the annual emissions of 3.5m cars. This volume of waste is unconscionable, especially at a time when, according to government figures, 5m people are living in food poverty.



40%
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uneaten



3.5m
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The hospitality and foodservice sectors do not, of course, shoulder full responsibility. However, the more than 1m tonnes of food it does waste – enough to fill the Shard more than 10 times each year – is a blight on the sector.

It also presents an enormous opportunity, especially when you consider that 75% of this waste is avoidable. With the cost to the sector a staggering £3.2bn a year, or around £20,000 per site, the economic incentive is plain to see.

With food waste accounting for about 10% of global greenhouse gas emissions, there's a serious environmental dividend on offer too. If the sector achieves the 25% reduction target by 2025, as set out in WRAP's Food Waste Reduction Roadmap, it will also slash carbon emissions by 900,000 tonnes.

In this report, we examine hospitality's progress on food waste since 2010, charting where and how it's succeeded, using a combination of smart technology and creative human behaviour, as well as where it's stumbled.

The report also looks at the industry's plans for continued progress and its attitude towards mandatory segregation and potentially more challengingly, reporting. We also consider whether legislation is the only way to achieve full and open reporting, given the response to the existing voluntary regime.



10x
Fill The Shard
more than
10x each year



75%
75% of waste
is avoidable



10%
Food waste
accounts for
roughly 10% of
global greenhouse
gas emissions

Methodology

To do this, The Sustainable Restaurant Association (SRA) surveyed a dozen of the UK's best-known restaurant and pub groups, representing 2,300 sites across the country. Each business was asked to share their food waste practices around the key topics of separation, monitoring and reduction, as well as details on the reduction methods they've adopted.

Additionally, interviews were conducted with four businesses for a deeper dive into their bins: Nando's, Pizza Hut Restaurants, The Restaurant Group and Wetherspoons. These interviews provided an opportunity to gain greater insight into the ongoing challenges to reduce waste as well as gauge opinion on the prospect of mandatory reporting. Additional expert input has been provided by Martin Bowman, Senior Policy and Campaigns Manager at Feedback, which is working to transform the food system, and Tom Mockridge, Strategy Director of Paper Round, a waste management business.



Food Waste in Hospitality – Industry Insights

Following the passing of the Environment Act in November 2021, all hospitality businesses will, from 2023, be required to separate their food waste from general waste and have it collected separately. The businesses we surveyed represent 2,300 sites and all of those said they are already complying with this stipulation.

However, when it comes to measuring food waste and understanding where it originates from, only 20% of those surveyed are currently dividing their food waste into different streams. That means that 80% can't say precisely what proportion of their waste is prep, spoilage or plate waste, making it much harder to identify the key culprits and sticking points.

There is a real sense that an industry already short on staff and stretched for time is reluctant to increase workloads, thereby adding to the pressure on operations.

The four businesses who provided more in-depth interviews all rely on their food waste contractor for a total food waste figure, as do 90% of all those surveyed. Pizza Hut Restaurants recorded a total of 8,200kg per site in 2019, and TRG recorded just less than 11,800kg per site. At Wetherspoon's the figure was 3,600kg per pub per year.

While they may not be physically separating and measuring the different waste streams, these businesses are able to work out their 'operational' food waste by



20% of those surveyed already separate waste into detailed streams



80% can't say precisely what proportion of their waste is prep, spoilage or plate waste

Industry Insights Continued

calculating the difference between what is purchased and served. This then allows them also to put a figure to their plate waste.

Developments in technology, such as **Fourth's Purchasing and Inventory Management Tool**, give knowledge and power to businesses. The cloud-based technology enables operators to monitor all stock within the business and order in a timely fashion to help keep waste down. Tracking the consumption of ingredients across all menus enables businesses to see precisely what food items are needed and when they might need replenishing, thus reducing operational waste. Inputting wastage also allows them to keep a close eye – and therefore work to reduce – what is going to waste before and after service.

Between 2010 and 2019, Pizza Hut Restaurants recorded an 80% reduction in operational food waste from 1.5% of sales to 0.3%. The Restaurant Group has succeeded in squeezing its operational waste to such an extent that plate waste now accounts for 80% of its total food waste, way above the overall industry average of about a third.



Pizza Hut Restaurants recorded an **80% reduction** in operational food waste from 1.5% of sales to 0.3%.



Plate waste now accounts for **80% of The Restaurant Group's total food waste**

Just under half of those surveyed said they conducted regular food waste audits. One in five was doing this manually. Despite evidence to show that businesses that have employed smart measuring systems typically reduce their waste by 15%, just one of the businesses surveyed is currently using this technology. Cost and the strain on resources are the two main barriers, operators report.

With 40% of respondents currently unaware of the cost of food waste to their business, it's perhaps unsurprising that more haven't set, let alone achieved, more ambitious targets. One business revealed how much food waste is costing it. The bill for food stock losses is £7.8m and food waste collections are costing the business £1.2m a year.

Nearly two thirds (60 percent) said they have no committed reduction targets in place. It should be said though, that this hasn't prevented them from taking serious steps to reduce their waste. In fact, 90% say they have taken action and there are some compelling and credible examples of serious reductions laid out in the following pages.



Less than half of those surveyed said they **conducted regular food waste audits**



40% of respondents are currently **unaware of the cost of food waste** to their business



Nearly 60% said they have **no reduction targets** in place

Recipes for Reduction

When it comes to reducing levels of waste, operators have employed a range of techniques to drive down what is ending up in their bins, principally involving technology, staff training and redistribution.

Food and drink are a significant cost for any hospitality business. It's equivalent to around a third of all sales, with only labour costing the industry more.

With global food prices soaring by 30% among other rising costs, all businesses should be keen to reduce waste.

The benefits of getting on top of the surplus will be felt in the kitchen, throughout the business and the wider world.

Technology

The growth in smart stock management, purchasing and EPoS technology has provided operators with tools to drive efficiency, putting a serious dent in operational waste. 60% of respondents are currently using tech solutions, such as ordering systems or inventory monitoring platforms, to help reduce food waste.



Cut waste, save money, help the planet

With food and drink prices soaring, reducing waste will have a major impact on your bottom line as well as helping the environment. Here's how you can keep on top of waste with Fourth's **Purchasing and Inventory Management** solution.

The Fourth Way

Technology can help customers overcome these challenges. Fourth's specialist hospitality solution gives operators a cloud-based inventory, recipe engineering and supply chain management service.

The system captures and analyses business data across all operations and team processes, allowing you to make decisions that improve inventory, recipe and menu management, costs, supply chain efficiency, and reduce your overall waste.

MacromatiX

Order Details
Restaurant 1

Orders

Search Items...

ITEMS IN ORDER

ALL CATEGORIES

MANAGE COLUMNS

ACTIONS

ORDER #	SUPPLIER	DELIVERY DATE	COVER UNTIL	ITEMS IN ORDER	ORDER TOTAL	TAX AMOUNT	TOTAL AMOUNT
Draft	BIDVEST-SA	7/07/2021	13/07/2021	15 (53 Cases)	\$1,615.35	\$26.27	\$1,641.62

Items

Prev

1

Next

CODE	DESCRIPTION	UNIT	QUANTITY	ON ORDER	ON HAND	FORECAST
506062	BACON SHORT CUT	CN-360 EA	<input type="text" value="2"/>	1	-0.28	2.1
504967	CONTAINER 110GM	CN-1000 EA	<input type="text" value="2"/>	1	-0.25	2.14
502309	CUTLERY PACK (towel,spoon,serviette,straw)	CN-500 EA	<input type="text" value="3"/>	2	-0.62	4.36
505706	EGGS FRESH (Breakfast)	CN-180 EA	<input type="text" value="4"/>	0	0.72	0
506861	GRAVY MIX	CN-13.68 KG	<input type="text" value="1"/>	1	0.08	1.28
504907	GREASEPROOF SM	CN-4800 EA	<input type="text" value="1"/>	0	0.5	0.72
504528	HASH BROWNS	CN-168 EA	<input type="text" value="2"/>	0	0.1	0.07
505252	OIL FRYING CANOLA (WA/NSW/SA) MSM	CN-15 KG	<input type="text" value="28"/>	21	-10.69	37.68
505833	SALT SEASONED (CHIPS)	CN-10 KG	<input type="text" value="1"/>	0	0.43	0.89
502439	SAUCE DIP BBQ	CN-200 EA	<input type="text" value="2"/>	0	0.28	1.46
502442	SAUCE DIP TOMATO	CN-200 EA	<input type="text" value="1"/>	0	0.69	0.72
500635	SAUCE MAYO	CN-15 KG	<input type="text" value="1"/>	1	-0.11	1.69
505772	STRAWS WRAPPED	CN-2500 EA	<input type="text" value="1"/>	0	0.49	1.24

Item Details

Last Order

Usage Per Thousand

Min

Max

Taxable

Build To

Conversion Rate

Usage Per Thousand Factor

28/06/2021

21/06/2021

14/06/2021

7/06/2021

1

1

1

0

Previous Orders

Date

Quantity

28/06/2021

21/06/2021

14/06/2021

7/06/2021

1

1

1

0

Key benefits of Fourth's solution



Recipe and Dish Insights

Monitoring the consumption and popularity of dishes across all menus and wastage will allow you to refine and perfect recipes. These can then be shared on the system with all of your sites, reducing collective waste in the process.



Tracking

Fourth's robust forecasting and tracking shows you exactly what dishes are selling and when they are popular across the week. Being able to accurately measure demand in advance helps to ensure that the right quantities are ordered every single time.



Stock control

By monitoring stock levels and supporting just-in-time mobile ordering you can replenish stock without items sitting on the shelf, taking up space and going out of date.



Compare costs

The system gives you access to a wide number of approved vendor options so you can keep on top of pricing and ordering.



Easy ordering

Improve ordering speed with mobile functionality, using automated processes to eliminate incorrect deliveries and inaccurate invoices.



Understanding waste

By entering back-of-house wastage into the system you can keep a complete record of your wastage values – and see where this can be improved. Additionally, the solution supports full integration with point-of-sale systems to accurately track front-of-house waste too.



Menu Engineering

Take full control of your menus to automatically calculate optimum portion sizes, margins, costs and purchasing strategies. Get a full understanding of product throughput, under utilised lines and opportunities, as well as key supply chain considerations like pack-size requirements.



Analytics

Fourth's detailed and easy-to-understand procurement and inventory analytics dashboard gives you all the information required to track critical KPIs – such as sales, inventory, menus and transactions – to inform key supply chain decisions and take immediate action to reduce wastage and improve margins.

Training

A skilled, motivated and engaged workforce can be a powerful weapon against waste. Informing and educating teams about the true value of food, how to avoid wasting it and how best to dispose of what can't be used can reap rewards.

Our survey shows that 60% of businesses provide staff with some form of training on food waste reduction. Examples of the different types of training, cited by respondents, include segregation of waste, menu design, knife skills, and front-of-house communication with customers on ordering and offering them the chance to take leftovers home.

Kitchen staff at Pizza Hut Restaurants are trained using precise recipes, designed to ensure total consistency of look, taste, waste and cost. Each restaurant is given food waste targets that are attributed to their P&L.



Waste contractors have a part to play in this, too. Typically, a contractor would offer a customer training having identified that their general waste bins are overly heavy. Food waste weighs more than general waste and restaurants have to pay an over-weight charge whenever those bags are overfilled.

Tom Mockridge, Strategy Director at Paper Round, explains: "You have to make it really easy for people – bullet proof simple or it just won't work. Then you also have to look to the leadership of the business to help create a culture where it matters, and this behaviour is expected."

WRAP's Guardians of Grub campaign is focused on training front- and back-of-house staff, empowering them to reduce the amount of food thrown away in their businesses. A suite of free materials is available for businesses, including how-to guides, posters and a calculator to record changes made, enabling them to tackle the issue from the ground up.



Redistribution

Just before the pandemic, many foodservice businesses were succeeding in diverting large quantities of surplus food via a number of different redistribution channels.

Technology had a big part to play, with apps like Olio and Too Good to Go offering restaurants a sort of digital secondary market for food they couldn't sell. In the case of Too Good to Go, they have helped more than 18,000 businesses to reduce their food waste so far, helping 7.9m people find and save food that would otherwise have been thrown away.

Others opted for a more analogue approach. Pizza Hut Restaurants partnered successfully with Food Donation Connection and Wetherspoons with FareShare. Meanwhile Nando's ran its own thriving scheme, No Chuckin' our Chicken, which in 2019 saw over 660,000 meals donated to good causes in its restaurants' communities.

The introduction of the Natasha's Law legislation on 1 October 2021, requiring all food outlets to show full ingredient lists with allergen labelling on pre-packed for direct sale foods, means there are now high operational barriers that need to be scaled in order to redistribute food. Brands are wary about passing the liability on to someone who is just trying to do the right thing.

With this challenge in mind, just one of the survey respondents is currently working with a redistribution tech platform, showing just how impactful the legislation has been at limiting success in this space.



Ongoing challenges

The pandemic has created fluctuating demand over the past two years. This, combined with unexpected closures, has resulted in vast volumes of wasted food.

Another keenly felt side effect of COVID-19 has been wholesale staff turnover. Any good intention, and indeed action, may well have been lost with the thousands of staff who left the industry since the outbreak of the pandemic in March 2020.

Help yourself waste

Buffets have long been identified as a source of waste, particularly fresh food buffets that must adhere to food safety laws, as stock needs to be regularly replenished which can promote high levels of wastage. Jonny Lockett, Sustainability Manager at Pizza Hut Restaurants, who operate a 'help yourself' salad bar, says: "Self-service should really be an optimum method to reduce plate waste, as theoretically, people can take only what they need to eat." Over the years they have successfully removed some of the most wasted items.



Waste data

With few of our surveyed businesses conducting regular audits themselves, the data they have to rely on for setting targets and reduction plans comes largely from their waste contractors.

Some question the accuracy of this, with one operator we spoke to questioned how much contamination was taken into account by contractors, saying: "If all of the bins were full of uncontaminated food waste and weighed, then at the click of a button we would know a precise figure for our food waste. That is an ongoing aspiration and conversation."

Instead, operators may be more likely to take measurements back into their own hands by utilising integrated systems, such as Fourth's, which has been developed specifically for the hospitality sector.

Customer expectation and how to change it

Many businesses are happy to cater for trends toward more sustainable dining habits, but struggle to take the risk on dictating change in such a fickle market. Jonny Lockett of Pizza Hut Restaurants lays out the dilemma clearly: "It's a fine balance between commercial and waste in terms of what you do to influence consumers. Commercially you have to provide a service. We're a value-led business and we don't dictate to our customers how they should enjoy their experience at the price point we charge. We'd like to get to the point where we can gently nudge to guide and influence from a societal point of view."

Supply chain

For all the good a single hospitality business can do to manage its food waste, it won't count for much if its supply chain is not aligned with its values. In order to truly get a grip on the issue, operators must work closely with their suppliers to ensure that each and every aspect of the supply chain is committed to cutting and monitoring waste. Digital solutions, like Fourth's inventory management tool, are a great way for businesses to do this, simplifying supply chain operations to make stock management and ordering activity more efficient. Crack waste further down the funnel and the hospitality sector will well and truly be standing atop a much smaller food waste mountain.

Plate waste – the toughest challenge

The financial rewards to be gained from reducing operational food waste have provided a powerful and effective incentive which, in large part, the industry has responded to positively and effectively.

What's left is plate waste which presents operators with much less of a financial incentive. Businesses might also claim that it's impossible to control wasteful customer behaviour, generally involving over-ordering. There's also a widely held view that consumers are looking for value for money, and sometimes mistake quantity for quality.

For businesses that are doing all that they can to drive down waste, plate waste can make up more than 80% of their total food waste. Furthermore, only 20% of our survey respondents currently measure the issue specifically, leaving businesses unsure how to measure, report and reduce in a way that doesn't affect cash flow.

Martin Bowman, Senior Policy and Campaigns Manager at Feedback, rebuts business concern about consumer response to reduced portion sizes. He says: "It's possible to see why restaurants, for whom plate waste is the largest proportion of their waste, might lose impetus. On the basis that the food has already been sold, they're not losing money on it and they want to lure customers with generous portions. But evidence shows customers are not offended by smaller portions. So long as you're honest with customers they'll be happy to go along with changes."

Wetherspoons has enjoyed considerable success reducing waste, often using a simple technique – observation. A one size fits all approach meant dishes like fish and chips often resulted in substantial plate waste, particularly with older customers. Now this dish, and a range of other customer favourites are offered in smaller portion sizes. As well as reducing waste it provides customers with value for money, as they're not paying for food they can't eat.

Standing on the gantry and looking at what was coming out of the bins also enabled Wetherspoons to spot a regularly wasted item in its set breakfast – tomatoes. Since removing them, they've saved 6.5m tomatoes a year.

Focus on: ^{The} Restaurant Group plc

The Restaurant Group has succeeded in driving down its operational food waste through a mix of measures.

Food technologist Emily Hassett attributes a large part of the success to the company's long-term relationship with Fourth. "Our prep and spoilage waste are really well managed. For as long as I have been working here, we've used Fourth and that's meant that spoilage has never been a problem. Using their online stock and ordering system we're able to keep spoilage to an absolute minimum. At the end of every day, stock checks are made on the system which allow the teams to know what products they need to order for their next delivery.

"It removes points of doubt for the people ordering and allows them to know how much to order of what items and when, ensuring volumes are going in a straight line. It also helps manage stock in depot and limit it going out of date and assists in keeping the whole supply chain working smoothly with minimal waste."



With spoilage and prep waste reduced to a minimum, Emily and her colleagues were aware that this left one final stubborn waste stream: plate waste.

"Plate waste is really important to us. It's the toughest challenge in food waste as it accounts for 80% of our total food waste."

As signatories of WRAP's Food Waste Reduction Roadmap, The Restaurant Group has pledged to reduce total food waste by 50% by 2030 and without taking action on plate waste that target will be tough to meet.

"We knew that plate waste was the biggest contributor to our total food waste but finding out the cause and then identifying actions and implementing them, really does take time if you want to do it properly."

With help from the SRA, a plan was devised to identify the top wasted items across its Wagamama, Frankie & Benny's, Brunning & Price and Firejacks brands, followed by remedial action.

At trial sites for each brand, a two-week audit period saw kitchen porters separate and measure plate waste per service, while front-of-house staff provided daily reports on the most wasted ingredients and dishes. Reduction initiatives were designed for each brand to pilot across a total of 14 sites.

Emily says: "This process has completely changed the way we think about food waste and plate waste in particular. It's something you have to continuously monitor. It's a never-ending process and will be an ongoing priority for us, starting from the base recipes, menu development and new ingredients."



^{The}
Restaurant
Group plc

Emily Hassett

Food Technologist, *The Restaurant Group*

Reporting waste and the law

There has long been a view that only with accurate, transparent and comprehensive reporting will hospitality drive food waste down.

With the passing of the Environment Act in 2021, England is finally catching up with its devolved nation neighbours. From 2023, all hospitality businesses will be required to segregate their food waste and have it collected separately.

What though of reporting? Are we likely to see a sudden, wholesale reveal of food waste figures under the current voluntary regime or is legislation the best way to enable operators to publish their figures without fear of being individually exposed if they break cover one by one?

Operators shouldn't see reporting as a burden with no return. In fact, there are numerous benefits. Food waste often tops the list of consumer concerns, so being able to demonstrate that you're measuring, reporting and taking action is a great way to engage with customers.



What might the reporting regime look like?

Many expect to see the consultation on mandatory food waste for the hospitality sector to be published by the Government in spring 2022, alongside its response to the National Food Strategy.

The proposals are expected to cover the size of business affected, the level of detail required, methods of enforcement and the timescale for introduction. Realistically, first reporting is unlikely to be before late 2023 at the earliest.

The level of detail operators are required to report could prove to be a serious sticking point. Campaigners advocate that more detail means more knowledge and more opportunities for reduction, but it's this deeper data dive that could well meet resistance from operators.



Conclusion

All the evidence shows that awareness of food waste and an overall intention to address it are widespread across foodservice and hospitality. There are, as this report spells out, many compelling examples of effective action too. Food waste remains one of the major sustainability issues facing the sector – environmentally, socially and economically.

The incentives for acting have never been greater. Reduce food waste and you save on a commodity that's price is rising by the week. Reduce food waste and reduce your carbon footprint at a time when the urgency to act is now. Reduce food waste and gain the loyalty and engagement of your workforce and customers.

There are reasons for genuine optimism. The interviews and survey conducted for this report show that there is undoubtedly an awareness, appetite and aptitude for driving down waste.

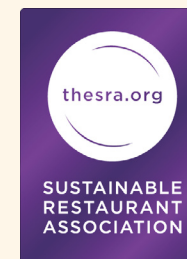
This report provides many excellent examples of the positive impact that technology, in the form of smart procurement and recipe platforms, has had. Systems such as Fourth's Purchasing and Inventory Management Tool enable close monitoring of stock, so operators can continue to develop recipes and menus that further drive down wastage.

The industry's more than two million strong workforce will continue to play a central role too. Operators are apparently aware of their potential to help but need to do more to engage them in the 'why' as well as the 'what', if they want to make the most of this, their greatest asset.

Like The Restaurant Group, more businesses should be accepting responsibility for their plate waste, thinking creatively about how to tackle it, seeking advice from expert organisations like WRAP and The SRA and, critically, be prepared to try something new, even if it means challenging preconceptions about consumer attitudes.

Waste contractors should also be used as a resource of expertise, advice and data, rather than just a vehicle for removing and (hopefully) recycling food waste. Increasingly, this is a service they are ready, willing and able to perform.

By doing all these things, hospitality and foodservice can set a gold standard for food waste reduction – meet the SDG 12.3 target, inspire diners, drive down costs and satisfy consumer demand.



About The Sustainable Restaurant Association

Since 2010 The Sustainable Restaurant Association (SRA) has been supporting hospitality and foodservice to tackle the complex and urgent problems facing the food system while enabling diners to make more sustainable choices when eating out. We aim to accelerate change towards a sector that is socially progressive and environmentally restorative by connecting progressive people and businesses both in the UK and across the globe through our Food Made Good programme. The Food Made Good programme consists of three distinct things: The Food Made Good framework which clearly defines what sustainability means for the sector, the accompanying Food Made Good Rating, the global gold standard for measuring progress across the industry, and finally the Food Made Good community, a global network of hospitality professionals sharing challenges, ideas, resources and solutions to fuel the progress of the industry.

About Fourth

Fourth provides end-to-end, best-in-class technology and services for the hospitality, leisure and retail industries. Its procurement, inventory, and workforce management solutions, coupled with a complete data and analytics suite, give businesses the actionable insights they need to control costs, scale profitability, improve employee engagement, and maintain compliance.

Since its merger with US-based HotSchedules, Fourth serves more than 7,000 customers across 120,000 locations globally.

Fourth works with multi-national companies across the hospitality, hotel, retail and leisure industries, including Leon, Burger King, Pizza Express, The Ivy, Soho House, Four Seasons, Corinthia Hotels, Travelodge, Jumeirah Hotels & Resorts, The Ritz, Selfridges, Holland & Barrett, TPRG, Fortnum & Mason, The Wentworth Club and Sodexo.

You have enough to do.

To learn how we can help simplify your back-office operations, boost efficiency and profitability, and improve your inventory management, give us a call.

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