



Plastic and the Pandemic

Consumer priorities in a changing world

Foreword

The Grocer Vision

When the data for plastic use in 2020 is finally published it's likely to make for ugly reading. The coronavirus pandemic has induced two trends that run counter to efforts to reduce plastic use and waste: the shift from eating in pubs and restaurants to buying packaged foods to eat at home, and concerns about the safety of handling loose products such as fruit and vegetables.

Indeed, Covid-19 has reminded us of one of the key qualities that made plastic the grocery sector's go-to material in the first place: its ability to protect the products contained within.

Yet it would be a mistake to believe that the pandemic has weakened a collective determination to tackle the

"Governments, businesses and consumers are showing how much they still care about this critical sustainability issue"

scourge of plastic waste. As we reveal in this new The Grocer Vision report, in partnership with SC Johnson, governments, businesses and consumers are showing through their actions just how much they still care about this critical sustainability issue.

A UK tax on virgin plastic is now just a year from becoming reality. Deposit return schemes have been delayed but are still coming down the track as is reform of household waste collections.

Businesses, meanwhile, have been working hard to eliminate unnecessary plastic and ensure what remains is both recyclable and made as far as possible from recycled material. This is the low-hanging fruit: but we're also seeing businesses commit to deeper systemic change. Tesco has just announced plans to install recycling points at hundreds of stores where customers can deposit used crisp packets, films, pouches and other hard-to-recycle packaging regardless of where they bought them. Reuse and refill schemes are also moving into the mainstream, albeit at a careful pace.

Nor have consumers forgotten those images of choking turtles that generated such a visceral public reaction back in 2017. In an exclusive survey for this report, just 8% say plastic is now less important to them as a sustainability issue than before the pandemic.

Covid-19 may have dominated the headlines for the past 12 months, but without sustained and urgent action the crisis facing our planet risks becoming the next – and arguably greater – global emergency.

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A person is holding a cardboard box filled with fresh produce. The produce includes several tomatoes in clear plastic packaging, a cucumber, a loaf of bread, and other items wrapped in plastic. The person is wearing a dark polo shirt. The entire image has a blue tint.

“ If anything the pandemic has strengthened the resolve of the public to see a key sustainability challenge addressed ”

Chapter One

Plastic and the Covid-19 effect

The coronavirus pandemic has led to a surge in demand for plastic amid concerns over personal and product hygiene, but businesses and policy makers have not wavered in their determination to tackle a critical issue.

This time last year, as Covid-19 spread across the UK, so too did positive stories about plastic. From the life-saving potential of personal protective equipment (PPE) to the indispensable Perspex screens that helped protect supermarket workers against the spread of the virus, there was a real sense that the public war on plastic had ceased, at least temporarily.

Shoppers at Tesco switched from loose to pre-packed fresh produce which they felt was safer, according to then chief executive Dave Lewis¹. Starbucks turned away customers who had brought their own reusable cups based on an “abundance of caution” over the possible hygiene risks².

Estimates of single-use plastic consumption rocketing 250% or 300% during the early days of the pandemic were wide of the mark, according to the British Plastics Federation³, but there is little question that volumes spiked significantly following lockdown.

Yet fears that Covid-19 could see businesses deprioritise efforts to tackle plastic waste have proved unfounded. “If anything there’s been an acceleration in the targets being announced and in innovations put on the market,” explains

Susan Hansen, a packaging expert at Rabobank.

As The Grocer reported in July⁴, packaging manufacturers, supermarkets and brands all began hammering home the message that Covid-19 was no more than a blip in their steady progress towards achieving their own sustainability commitments.

Tesco and Asda have both launched major initiatives to drive reusable packaging models in the past 12 months. Brands have also registered significant progress in eliminating problem plastics and replacing virgin plastic with recycled content, in line with UK and global voluntary commitments. “We want to do as much as we can as quickly as possible,” says Tony McElroy, who leads sustainability campaigns at Tesco.

Nor have consumer attitudes towards tackling plastic waste softened; if anything the pandemic has strengthened the resolve of the public to see a key sustainability challenge addressed. In an exclusive survey of 1,000 people carried out for this report by Harris Interactive in January, one in three (33%) said plastic pollution has become more important to them since the Covid-19 outbreak with just 8% saying it is now less important.



Since the Covid-19 outbreak, has plastic pollution become more or less important to you as a consumer compared to before the outbreak?

8% Plastic pollution has become **less** important

59% No change in importance

33% Plastic pollution has become **more** important

“ The priorities of manufacturers and retailers: to reduce plastic, incorporate more recycled content into products and trial innovative reuse schemes, have not changed dramatically ”



How does plastic pollution compare in importance to other environmental issues?

- 21% It's the most important environmental issue
- 75% It's one of many environmental issues of equal importance
- 4% It's the least important environmental issue

More than one in five (21%) say it remains the most important environmental issue to them with 75% reporting plastic pollution as one of many issues of equal importance.

Plastic 'foodprints'

This may in part be due to the ubiquity of plastic during the pandemic. Confined to their homes and unable to eat out, grab lunch on-the-go or a takeaway coffee, many households will have generated more packaging than ever before, much of it used to protect food and drink.

High volumes and often short usage phases make food and drink packaging highly visible – both in homes and in the environment – more so than household products which take longer to use meaning consumers may feel they get “more value” from the packaging, says Fiona Thompson, sustainability consultant at Ricardo Energy & Environment.

The impact of the pandemic on total packaging volumes isn't yet known – sales of home cleaners and hand sanitizer, for example, have also soared – but what we do know is that higher volumes of FMCG packaging are being recycled. In the first lockdown, local authorities reported a 20% jump in

recycling while Veolia, one of the major collectors, reported a 10% rise in kerbside plastics⁶. This reflects what consumers themselves are reporting. Polling by YouGov in January showed 28% of shoppers said their usage of disposable plastic had gone up during the pandemic.

It will take time for the full impact of the pandemic to filter through into data on plastic tonnages and usage. Covid-19 will inevitably leave its mark with dramatic shifts in consumer channels, most notably from foodservice to retail. The shift towards ecommerce and direct-to-consumer models has also impacted how products have been packaged and transported.

Policy pressure

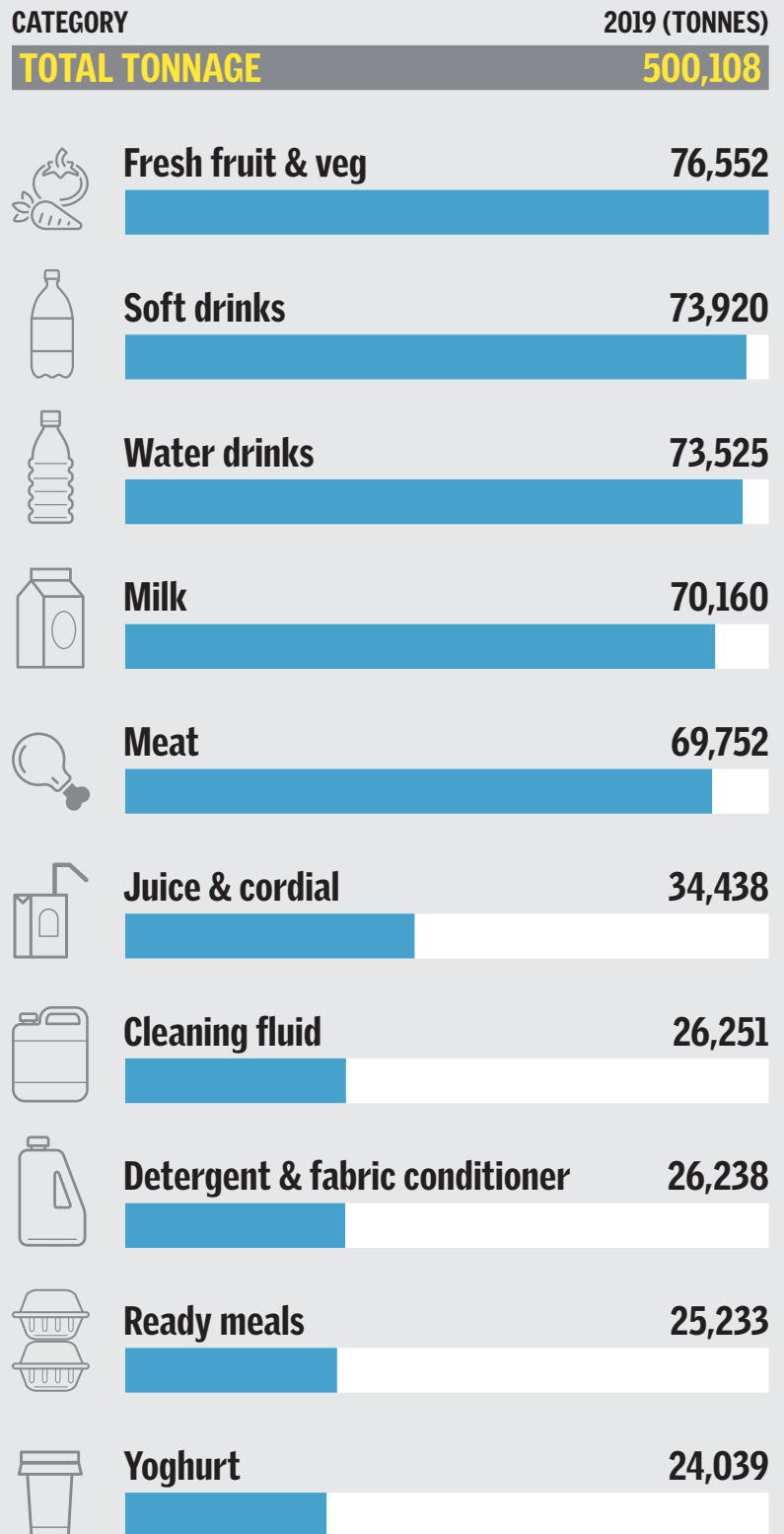
But the priorities of manufacturers and retailers: to reduce plastic, incorporate more recycled content into products and trial innovative reuse schemes, have not changed dramatically. At the same time, pressure from the public and policymakers is increasing. Companies are having to rethink every element of their product materials and packaging, explains James O'Neill, principal consultant at Proxima. In the UK, a £200 per tonne plastics tax due to be implemented in

April 2022, followed by a new extended producer responsibility (EPR) regime that will see producers pay the cost of collecting plastic waste, is set to cost grocery manufacturers and retailers an estimated £815m, according to Proxima.

Many will consider this a small price to pay to protect the planet amid some sobering statistics. “By 2050, the production and disposal of plastic could generate 56 gigatons of emissions, as much as 14% of the earth’s entire remaining carbon budget,” experts from the Centre for International Environmental Law (CIEL) reported in 2019⁷. With MarketWatch forecasting global plastic packaging market growth (CAGR) of 3.5% between 2019 and 2024, plans to expand production could make limiting temperature rises to below 1.5 degrees “impossible”, the CIEL experts said.

Research by Pew, meanwhile, showed that an estimated 11 million tonnes of plastic waste enters the ocean every year⁸. This will almost treble to 29 million tonnes by 2040 unless there is immediate and sustained action. “The problems are well known,” says Jacob Duer, president and CEO of the Alliance to End Plastic Waste. “Now it’s about solutions.”

Top 10 UK grocery categories by plastic packaging



Source: Valpak²³



“ There has been an almost industry-wide move away from black plastic, much of which can't be identified at recycling plants and therefore isn't recycled ”

Chapter Two

Plastic progress: where are we now?

Consumers are divided over the progress they see on plastic waste. Businesses have made significant strides in certain areas but experts believe the grocery industry is still a long way from achieving circularity.

When asked if retailers and brands are doing a good job to reduce plastic consumers are evenly split in their views: 34% say progress is poor or very poor, 31% say it is acceptable and 29% believe it to be good or very good. Opinion is similarly split over the job retailers and manufacturers are doing to educate consumers on plastic waste with 34% saying poor or very poor and 26% good or very good.

Recent updates on progress against voluntary commitments in the Ellen MacArthur Foundation (EMF) new plastics economy and Wrap UK Plastics Pact show some signs of success. The EMF reported significant improvement in two key areas: the incorporation of recycled content in plastic packaging, and the phase out of the most commonly identified problematic items, such as PS and PVC packaging, undetectable carbon black pigments, and single-use plastic bags and straws. However, it reported limited progress on increasing recyclability of plastic packaging and reducing the need for single-use packaging altogether.

Wrap, meanwhile, said although there was progress in the areas of packaging redesign, reuse and refill trials and the

removal of non-detectable black plastic at scale, urgent action is required to make flexible plastic packaging widely recyclable in the UK¹⁰.

The elimination game

Manufacturers have focused a lot of their attention on ‘lightweighting’ and stripping out ‘problem plastics’. Understandably, materials and items like polystyrene, PVC and straws are being targeted since these are set to be banned or penalised under new government regulations.

There has also been an almost industry-wide move away from black plastic, much of which can’t be identified at recycling plants and therefore isn’t recycled.

Retailers have been pressing ahead with their own packaging reduction initiatives. Tesco says it has removed one billion pieces of plastic from its business, while Sainsbury’s wants to halve its plastic use by 2025. “It’s deliberately stretching,” says Claire Hughes, Sainsbury’s director of product and innovation, of the target, because “we want to encourage others to follow.”

From a baseline of 120,000 tonnes in 2018, Sainsbury’s removed 4% (4,500 tonnes) from own brand and branded

Overall, how well do you think the UK grocery market (supermarkets, grocers and food retailers) is performing in its attempts to reduce plastic waste?



How good a job are retailers and manufacturers doing to educate consumers on plastic waste?



“ We won’t be able to remove all plastic. It’s a brilliant material in some respects and can be recycled ”

Claire Hughes, Sainsbury’s director of product and innovation



What practical steps would you most like to see retailers and manufacturers take to reduce plastic waste, if any?

- 57% Reduce the overall amount of packaging used
- 54% Increase use of recyclable, reusable or compostable packaging
- 54% Eliminate single-use plastic
- 48% Increase use of packaging made from recycled content
- 47% Eliminate non-recyclable black and dark plastic
- 6% None of the above

primary plastic packaging in 2019. Changes are trialled with the help of suppliers and feedback from customers. “We don’t yet know how we’ll get there on all of it,” says Hughes, but the fact the target spans branded and own label is crucial: “If we can do things at the same time it makes things easier.”

McElroy at Tesco says the retailer’s plan is “to reduce all packaging to an absolute minimum and make sure all the packaging we can use can be recycled”.

Traffic light transparency

Tesco has produced a list of preferential materials for its own brand suppliers¹¹. Those considered easy to recycle are categorised as ‘green’ while those considered hard to recycle are ‘red’.

Suppliers are also singling out specific materials for action. SC Johnson has started to identify alternative technologies to replace problematic materials that are difficult to recycle or cannot be recycled such as multi-layered films and shrink sleeves.

In the US, SC Johnson is partnering with communities to accept plastic film within their residential recycling programmes to help increase recycling rates for Ziploc brand bags and other plastic

film items. In Europe, soiled plastic film is washed and converted into pellets, where it can be melted down for other uses. SC Johnson is building on this concept in the US, working with partners to use the recycled plastic pellets for rubbish bags.

Transparency over plastic has improved markedly in recent times thanks in part to supermarkets having more data and better insight on their packaging than ever before. Some, like Iceland, have started publishing this data in the form of plastic ‘footprints’¹².

It all sounds impressive but NGOs are proving hard to please. Greenpeace has been tracking progress on plastic across UK multiple retailers since 2017 and suggests strategies to eliminate single-use plastic “remain at an early stage of implementation”. The UK’s 10 biggest supermarkets put 896,853 tonnes of plastic packaging onto the market in 2019, slightly less than 2018 but slightly more than in 2017¹³.

“We won’t be able to remove all plastic. It’s a brilliant material in some respects and can be recycled,” says Hughes at Sainsbury’s. Indeed, plastic can produce lower carbon emissions than alternative materials such as steel

and glass and can reduce food waste by prolonging shelf-life.

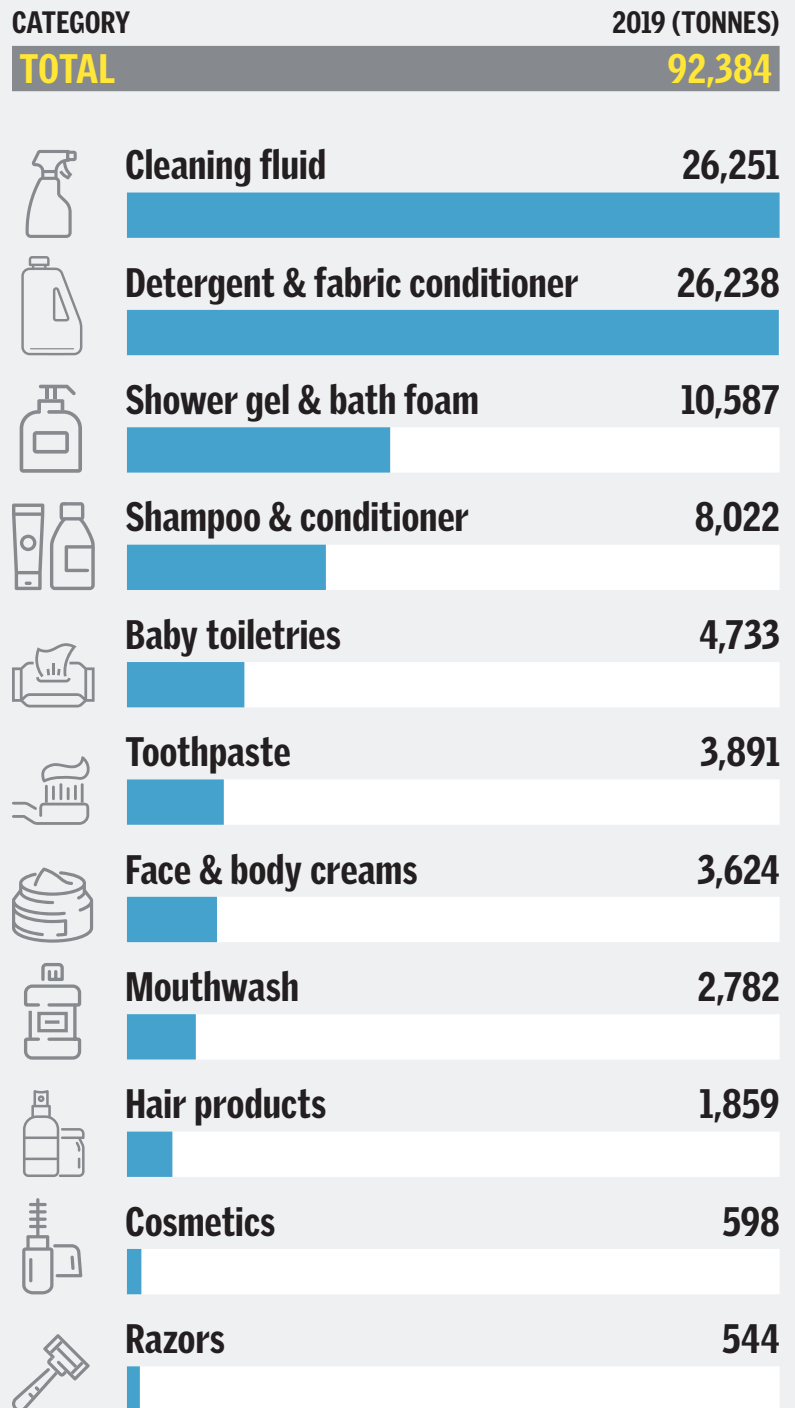
Intent on content

Reducing the overall amount of packaging used is the number one action consumers want to see from industry, according to our survey. But much also rests on ensuring what's left is recyclable, compostable or reusable and then actually recycled, composted or reused. "We are a long way from circularity," says Mark Hilton, head of sustainable business at consultancy Eunomia.

The good news is that things are moving in the right direction. In 2019, the amount of recycled content used in plastic packaging by global packaged goods and retail companies signed up to EMF's commitment grew 22% year-on-year. There is much more work to do, however, with post-consumer recycled content standing at just 6.2% against a 2025 target of 25%.

In the household products category, the likes of SC Johnson and Unilever, along with health and beauty brands Natura Cosmetics and L'Occitane en Provence all managed impressive jumps in recycled content in the latest EMF progress report.

Non-food plastic packaging by volume



Source: Valpak²³

“Manufacturers of traditionally hard-to-recycle products are taking steps to develop more sustainable solutions”



Which grocery items do you think are in need of the most urgent attention with regards to reducing plastic pollution?

74%	Food packaging
52%	Plastic bags
44%	Household products
30%	Loose fruit, vegetable and bakery bags
16%	Clothing
6%	None of these
1%	Other

This aligns with the concerns of consumers. Almost one in two shoppers (48%) want to see more recycled content in packaging. In a recent government consultation, 53% of respondents said recycled content should be stated on packaging by law⁴.

Non-food products certainly have an advantage in this respect: they don't have to meet tough food-grade safety criteria and potentially can mop up some of the lower grade plastic on the market. Suppliers like SC Johnson and Childs Farm are already using lower grade 'ocean-bound' plastic that is collected before it is lost to the environment.

Still, hitting 100% post-consumer recycled (PCR) material will be no easy task. Childs Farm has introduced 100% post-consumer recycled content PET (polyethylene terephthalate) bottles and has achieved 100% PCR on the pumps in its Farmologie range for adults. The plastic tubes that form part of the pump mechanism, however, are trickier. "It's incredibly challenging," says Joanna Jensen, Childs Farm founder and chairman who notes that the most PCR content currently available for tubes is 70% and sourced from Poland.

To reduce the need for new pumps,

some brands have started selling products such as handwash in pumpless bottles with the intention that people reuse the pump from their old bottle.

Cool to collaborate

In household and personal care, much of the focus from manufacturers has been on increasing the use of PET, HDPE (high density polyethylene) and PP (polypropylene) bottle-based applications given they are the most widely recycled.

Manufacturers of traditionally hard-to-recycle products are also taking steps to develop more sustainable solutions. Colgate, for example, has introduced a recyclable toothpaste tube, made from HDPE.

Companies are also increasing recyclability by removing disruptors to recycling and innovating to allow substitution with recyclable materials. L'Occitane en Provence is testing solutions to enable the removal of multilayer materials used for its eco-refills and tubes, and is also improving the separability of packaging for its B2B products.

SC Johnson, meanwhile, has begun eliminating carbon black plastic from all packaging sold in the UK, including Raid Aerosol caps, Kiwi Shoe Care Aerosol,



deodorizer and cleaner. The company has also recently developed new perforated sleeves for its trigger bottles, which can be easily removed by consumers, helping to increase recyclability. Shrink sleeves that cover plastic bottles typically have low melting temperatures so they may contaminate and can cause clumping of the recycled flakes.

Work of this nature requires close collaboration along the supply chain. Brand owners are visiting sites run by major recycling firms like Suez so they understand the technology being used and the processes packaging goes through. Companies really are moving from talking about what they will do to actually doing it, says Ricardo's Thompson.

There are knock-on effects, too, with recyclers gaining confidence to invest in domestic infrastructure to recycle more plastic here rather than export it overseas.

There is more to be done however. Across EMF's global signatories 65% of plastic packaging in 2019 was reusable, recyclable or compostable – up just 1.3% on 2018. "... fundamental decisions and bold action are required to make them recyclable at scale, or to move away from them altogether," EMF noted.

SC Johnson tackles ocean-bound plastic

In 2018, SC Johnson announced the start of a partnership with Plastic Bank, an organisation working to fight ocean-bound plastic waste and poverty. The programme has a target of opening 509 plastic collection points by 2022 around the world in Indonesia, Thailand, Philippines and Vietnam – four of the five countries that contribute most to ocean plastic – and Brazil.

The collection points are expected to collect 30,000 metric tonnes of plastic over three years, the equivalent of preventing approximately 1.5 billion plastic bottles from entering waterways and the ocean. Local residents who collect plastic waste and bring it to a collection point receive payment for the plastic in the form of digital tokens.

To-date, SC Johnson has utilised 10,000 metric tonnes of ocean-bound plastic to create new packaging using 100% recycled ocean-bound plastic

bottles in products such as Mr Muscle Platinum Window & Glass Cleaner and Windex. As the amount of recovered plastic increases, SC Johnson will continue to incorporate the plastic into other product packaging.

"Experts believe at least 8 million metric tonnes of plastic end up in the world's oceans every year and that by 2050, oceans could contain more plastic than fish by weight," says Alan VanderMolen, senior vice president and chief communications officer, SC Johnson.

"We are committed to addressing plastic pollution, and are equally very proud of partnerships like this because it is a unique collaboration, supporting both the improvement of recycling infrastructure in communities, whilst bringing economic opportunity to families living in poverty."



“ Around one in five people said they had started recycling or were recycling more of their toiletries, cleaner and detergent bottles and aerosols ”

Chapter Three

Cracking the plastic challenges

Despite some impressive early results there is a long way to go before businesses can declare success in achieving their voluntary plastic commitments. Removing known barriers to progress will be a key next step.

Supermarkets play a pivotal role in consumer consumption of plastic, with the influence and buying power to set the pace of change, for example through packaging innovation, improved product design, delivery systems based on reuse models and shorter, more sustainable supply chains.

But in our survey it's manufacturers that are thought to be most responsible for reducing plastic in grocery, ahead of government and retailers. Only 12% of respondents said consumers themselves are most responsible.

So, where are the current blockages and what's been the impact on progress?

The confused consumer

Shoppers' hands have been tied slightly by the amount of plastic packaging that still isn't recyclable or recycled. And their well-meaning efforts have been hampered further by unclear labelling. Wrap's 2020 recycling tracker report shows aerosols, plastic cleaner and detergent bottles, and plastic toiletries were all in the top ten items that people put in the general rubbish despite them being collected by their local council¹⁵. As Sainsbury's Hughes suggests, packaging is front of mind in the kitchen but

in the bathroom it's less so. There is also "quite a bit of myth busting to do", adds Paula Chin, materials specialist at WWF, with chemicals perhaps viewed as toxic, thus rendering the packaging unrecyclable in the eyes of the end user.

Campaigns appear to be cutting through. The Wrap tracker survey, for example, showed around one in five people said they had started recycling or were recycling more of their toiletries, cleaner and detergent bottles and aerosols. However, the survey also showed that 50% of households dispose of one or more items in general rubbish that could have been recycled. Others are a bit too keen: 82% put one or more items in the recycling that are not accepted locally. On average 3.5 items are placed incorrectly in recycling, which is up from 3.1 in 2019. Toothpaste tubes are a particular problem, with 22% of households trying to recycle them.

Recycled or not recycled?

So what can be done? Clearer labelling is an obvious place to start. Last year, consumer group Which? assessed a basket of toiletries in which 12 of the 20 products failed to provide clear labelling, yet "most of them" were partially or wholly

Do you typically find the labelling on products of whether the packaging is recyclable (or not) clear or unclear?

6%	Very unclear
26%	Somewhat unclear
24%	Neither clear nor unclear
36%	Somewhat clear
7%	Very clear

Who do you think is most responsible for ensuring the UK grocery market reduces its contribution to plastic pollution?

39%	Manufacturers
26%	Government
18%	Retailers
12%	Consumers
4%	None of these

“ A label won't do it alone. The biggest determinant of whether people recycle something or not is whether they've done it in the past ”

Jane Bevis, OPRL executive chair



Would you welcome the introduction of a charge on all single-use plastic items?

50%	Yes
31%	No
19%	Don't know

recyclable¹⁶. This included a L'Oreal Elvive conditioner and Listerine mouthwash. Others, like a Carex handwash and Radox shower gel, offered clear instructions.

In our own survey, 43% of people said current labelling on whether a product can be recycled is clear or somewhat clear, while 33% were confused by it. The move to a binary (recycle/don't recycle) on pack-recycling scheme (OPRL) is designed to make things easier for the public. The scheme is flourishing, supported by 93 of The Grocer's top 100 brands and more than 600 members, but it remains voluntary.

The UK government is considering introducing a mandatory labelling requirement. Nine in 10 (90%) respondents to its consultation on EPR thought this was a good idea.

Still, consumer habits will be tough to break. Brands will need to work hard to communicate changes as they move more of their portfolio into recyclable packaging.

“A label won't do it alone,” says OPRL executive chair Jane Bevis. “The biggest determinant of whether people recycle something or not is whether they've done it in the past.”

Recyclability challenge

According to Greenpeace, the UK's 10 largest grocery chains reported that 74% of own-brand packaging was widely recyclable in 2019, up from 66% across the seven retailers that provided information for the first report, in 2018. Brands achieved 60%.

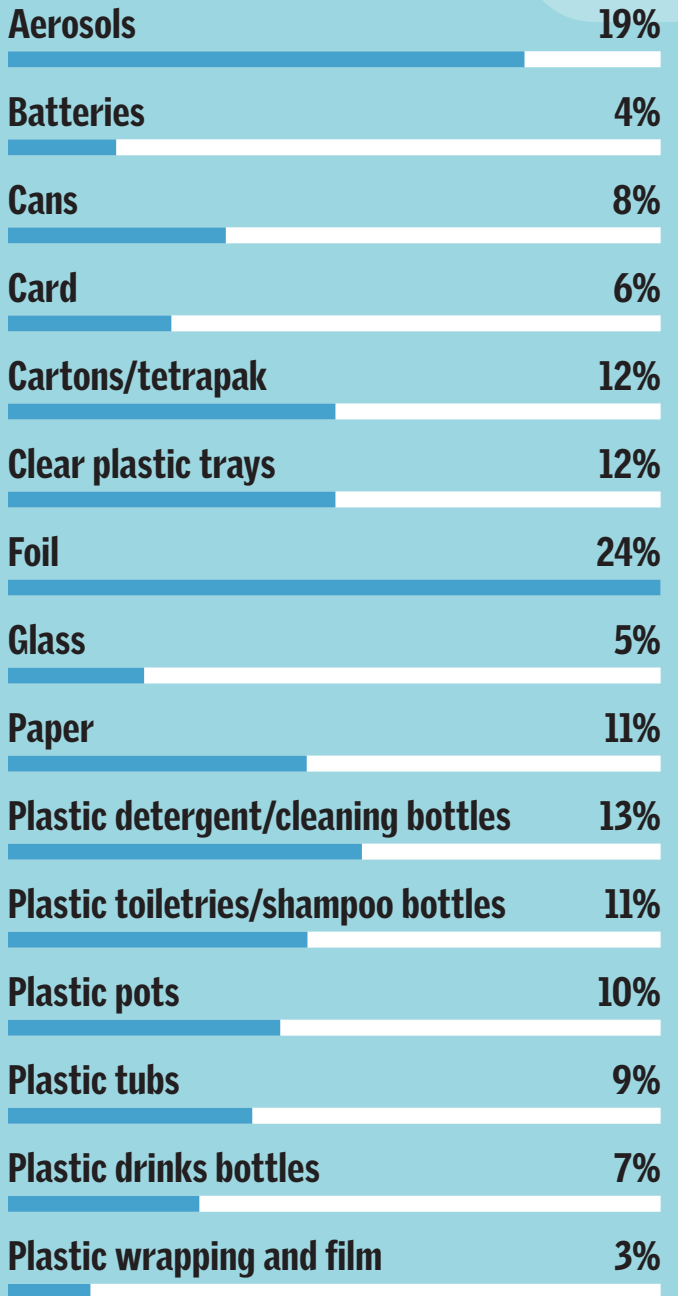
Across EMF's FMCG signatories, 64% of plastic packaging is already recyclable, while of the 36% left 7% needs incremental changes (for example a change in colour), while 29% requires innovation away from the packaging or scaling up of waste infrastructure.

Some brands have switched away from plastic entirely, an easy but potentially costly move both financially and environmentally (if alternative materials cannot be recycled), while others are rolling out 'naked' products that come without packaging.

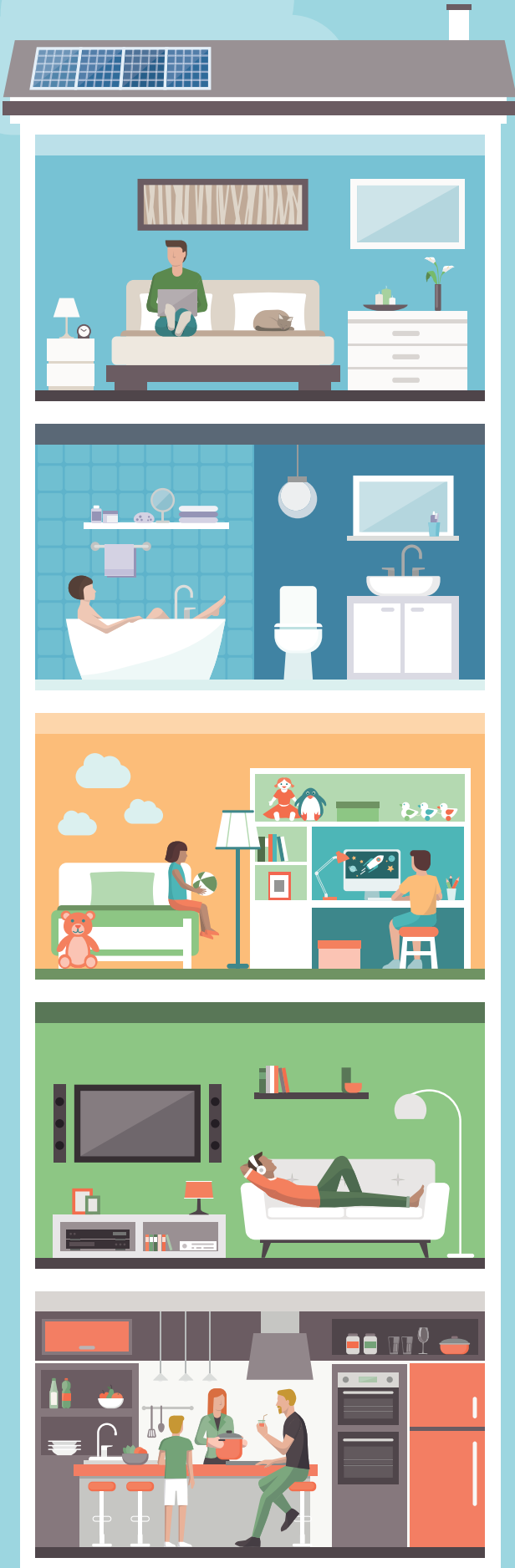
Removing packaging in its entirety won't work for every product but it does play well with the public: 54% of survey respondents said they would like to see businesses eliminate single-use plastic entirely in order to reduce plastic waste and 57% said they would like to see a reduction in the overall amount of packaging used. Over half (54%) also want to

To recycle or not to recycle?

Percentage of households who put items in the general rubbish when they are collected for recycling (2020)



Source: Wrap¹⁵



“ We need all shoppers to ultimately come on this journey, including those who cannot afford increases to their basket price ”

Susan Thomas, senior director for commercial sustainability, Asda

To what extent would you be willing to pay more for supermarket products which use 100% recycled plastic over those which use virgin plastic?

14%	Very unwilling
14%	Somewhat unwilling
27%	Neither willing nor unwilling
32%	Somewhat willing
13%	Very willing

How much more would you be willing to pay for supermarket products which use 100% recycled plastic over those which use virgin plastic?

12%	Up to 1% more
33%	5% more
24%	10% more
12%	20% more
14%	50% more or above
5%	Don't know

see an increase in recyclable, compostable and reusable packaging.

The price of progress

For Nusa Urbancic, campaigns director for Changing Markets, there is still too much focus on recyclability and lightweighting. This is the low-hanging fruit, or what consultants at McKinsey have termed “no-regret moves” – actions that can be taken with “close to zero impact on operating cost or capital expenditure needs, functionality or attractiveness of the packaging”¹⁷.

Others are holding out hope for a silver bullet innovation. Chemical recycling, where plastic waste is turned back into base chemicals and chemical feedstocks, is one such emerging technology. In October, UK Research and Innovation announced £20m funding, along with £65m of industry investment, for four cutting edge chemical recycling plants¹⁸. Eunomia’s Hilton, however, warns businesses should not see technologies such as chemical recycling as “a panacea”.

McKinsey says businesses need to be more “aggressive”, in response to both public pressure and new policies. Suppliers are looking at transformations in their systems that require tens of

millions of pounds in capital expenditure as polymers are switched, formats are changed and the trickier material loops – for example recycled content for food grade and flexible packaging – are closed.

But who pays for it? One in two consumers (50%) would welcome a charge on all single-use plastic items, while a similar proportion (45%) are willing to pay more for supermarket products that come in 100% recycled content packaging rather than virgin plastic. Most, 57%, would pay 5%-10% more for these products although around a quarter (28%) wouldn’t pay more.

Changes at Asda, including the refill trial at its Middleton store in Leeds, have all been anchored in the chain’s ‘greener at Asda price’ proposition. “We need all shoppers to ultimately come on this journey, including those who cannot afford increases to their basket price,” explains Susan Thomas, Asda’s senior director for commercial sustainability.

“Once we’ve removed the price barrier, we next need to remove other barriers to customer adoption including awareness, visibility and clarity of the product benefits.”



Budging behaviour

Many of the changes made to packaging so far have been almost invisible to shoppers – removing superfluous plastic, for example, or increasing the recycled content. The challenge now is to disrupt their behaviour, but gently. As Sarah Greenwood, packaging technology leader at the Grantham Centre for Sustainable Futures at the University of Sheffield, puts it: “How do we understand their willingness and then how do we intervene?”

Buyers and progressive brands are looking at how to sequence the changes needed “without crashing the system”, explains Asda’s Thomas. An immediate, wholesale move from single-use packaged products to refillable options would be unviable both logistically and commercially, but concentrated products could provide a stepping stone for consumers.

Sainsbury’s Hughes suggests it’s a “balancing act” but consumer demand has tipped in favour of new ideas. “There’s quite a bit of innovation you could do in household and non-food,” she explains. “Some of it may have been tried in the past but now the timing might be right.”

Time to concentrate

Moves to concentrate products into miniature bottles and packs could bring huge savings to businesses – in terms of both cash and carbon. Greenpeace estimates that categories including household cleaning, detergents and softeners have a plastic reduction potential of 80% through the adoption of concentrate and refill systems. Some 40,000 tonnes of plastic could be saved.


There are other benefits, too. Transportation costs would fall with companies not having to move vast quantities of water across the country. Greenhouse gas emissions also tend to decrease. “You can cut plastic pollution and carbon emissions at the same time,” says Sara Wingstrand, EMF programme manager for innovation.

Eco cleaning products start-up Neat says it has eliminated single-use plastics by producing plant-based cleaning concentrates

in small glass containers and refillable aluminium spray bottles that consumers top up with water. “We need solutions that are a radical step-change in reducing single-use plastic,” says Neat co-founder Ryan McSorley.

Established brands are also looking at concentrates as a way to reduce plastic. In 2019, SC Johnson introduced a concentrated refill for its Mr Muscle line of cleaning products, a move the company said could reduce plastic use by nearly 80%. The company is also expanding concentrated refill options and refill trials with Ecover through Waitrose and Sainsbury supermarkets.

“Concentrated products and refill options offer an accessible choice for everyday cleaning that also reduces plastic waste,” says Alan VanderMolen, senior vice president and chief communications officer, SC Johnson.



“ There is nothing easier than single-use packaging so there needs to be a compensatory benefit which can be great design, better experience or lower cost ”

Chris Sherwin, sustainability expert, PA Consulting

Chapter Four

Beyond the pandemic: what comes next?

Actions to-date have largely tackled the low-hanging fruit. Future progress will require businesses to design new business models that have circularity at their core.

The grocery sector has made commendable progress in tackling plastic waste but the really hard work is yet to come. The Pew report estimated that of the 29 million tonnes of plastic that could flow into the oceans every year by 2040 existing commitments by government and industry will reduce this flow by just 7% because they focus on “specific items rather than systemic change”.

That 7% can become 80%, researchers said, but it won’t be easy. “We are coming to the end of the easy and obvious changes,” says Asda’s Thomas. “Now we are moving onto the changes that pose more difficult trade-offs.”

Change will need to take the form of more dramatic reductions in plastic packaging; huge investment in innovation, infrastructure and technology; switches to other materials including bio-based plastics where it makes sense environmentally; more plastic-to-plastic closed loops; and better design and roll-out of reuse and refill systems on a huge scale.

Green light for red tape

In the UK all eyes are on upcoming regulatory changes. The next round of

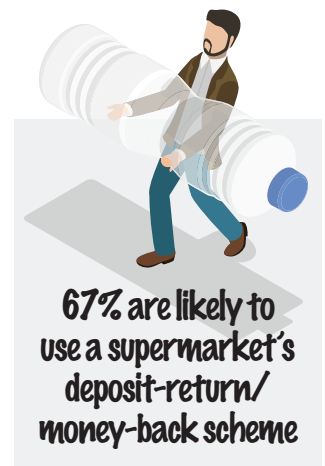
consultations on EPR, a deposit return scheme (DRS) and streamlined collection systems are due to be published any day now, but first comes the plastic tax.

Draft legislation was published in November⁹. From April 2022, a charge of £200 per tonne will be added to plastic, including compostable and biodegradable, that doesn’t contain at least 30% recycled content.

Recycled plastic has a carbon footprint that can be “up to four times lower than that of virgin plastic”, according to the UK government. And as more plastic is captured, treated and turned back into new packaging, demand for virgin material made from fossil fuels falls.

Some 20,000 producers and importers of plastic packaging will be affected by the new law, with the tax expected to unlock further investment in domestic recycling. Manufacturers are already “reaching into the waste sector and forming partnerships to [help] secure the recycled polymers they need”, notes Simone Aplin, technical director at Anthesis, a consultancy.

Whether there will be enough recycled content to go around is as yet unknown: Recoup, a recycling charity, believes reprocessing capacity will have to



How likely would you be to use a supermarket's deposit-return/money-back scheme for plastic bottles?

5%	Very unlikely
7%	Somewhat unlikely
21%	Neither likely nor unlikely
34%	Somewhat likely
33%	Very likely

“ There are high hopes for PEF, a plastic made from plants that has half the carbon footprint of its fossil fuel cousin and fits smoothly into existing recycling streams ”

Compared with the cost of a single-use plastic product, would you expect a refillable version of that product to cost?

- 30% More than the single-use plastic product

- 36% Less than the single-use plastic product

- 34% The same

How much more would you expect to pay for a refillable product compared with a single-use plastic version?

- 7% Up to 1% more

- 27% 5% more

- 32% 10% more

- 18% 20% more

- 11% 50% more or above

- 5% Don't know

double for there to be sufficient supply to meet demand²⁰.

Responsible production

The other driver of change will be EPR which in essence means that packaging with a higher environmental impact will become more expensive.

In this context: “The design and choice of material will be very important for businesses,” explains Ricardo’s Thompson. “They have enough clarity to start making changes to their packaging in terms of reducing volumes of non-recyclable materials and so on, but there is a lot of uncertainty about the modulated fee system [under EPR] and the cost implications this will have on their volumes.”

The government response to both Covid-19 and Brexit has put timelines for delivering its waste and resources policies under pressure. If packaging reforms are delayed until 2024 the target in Wrap’s UK Plastics Pact to achieve 30% average recycled content across all plastic packaging by 2025 will be “a stretch”, according to Libby Peake, head of resource policy at the Green Alliance think tank.

The government also wants to limit

exports of plastic packaging waste, which stood at 639,243 tonnes in 2019, to non-OECD countries²¹. Some campaigners want to see a complete ban on exports but that would add further pressure to a system that is already under a lot of strain.

Waste companies say the export ban needs to be coupled with a plastics tax that is gradually escalated to 50%. Felix Gummer, director at Sancroft, a sustainability consultancy says: “If we want to move faster on the circular economy – for environmental and economic reasons – then let’s encourage recycling to happen closer to home and create demand for that recycled content to be used.”

Dealing with all of our own plastic waste, valuing the material and reincorporating it into new packaging might currently seem rose-tinted, but the pandemic has forced a rethink in how long and complex some grocery supply chains are. The scramble for PPE and the recent squeeze on plastic supplies in Europe (which has sent prices soaring) looks likely to further incentivise alternatives to traditional supply chains²².

Meanwhile, alternatives to plastics derived from fossil fuels can drive down emissions. Compostable packaging can

offer potential for some products but can also present headaches for traditional recycling streams when compostables are mixed with other plastic polymers.

There are high hopes for PEF (polyethylene furanoate), a plastic made from plants that has half the carbon footprint of its fossil fuel cousin, has better barrier properties and “fits smoothly into existing recycling streams”, according to Tom van Aken, CEO at Avantium, which invented the material. Currently the target for PEF is the premium end of the market. “To reach price points that are competitive to PET we must reach higher production scale,” he explains.

Cost, quality and supply of recycled materials are perhaps the biggest issues facing brands, but the logistics of change and associated price tag still ripple through the whole supply chain. “The challenge is maintaining a competitive cost base especially when the solutions are sub-scale and not at mainstream adoption,” says Proxima’s O’Neill.

Ready for reuse

Another area where scale and cost is front of mind is reuse. The consultancy Packhub’s 2020/21 database shows refill/reuse launches were up



Deposit scheme dilemmas

A well-conceived deposit return scheme (DRS) for plastic bottles has the potential to drive higher volumes of clean plastic into the system. Scotland hopes to roll one out in July 2022 (delayed by a year due to the pandemic) but England’s is likely to be pushed back until 2024.

There are also concerns over the design of the English scheme with critics warning that plans for a fixed deposit of 20p would cause consumers to switch to bigger bottles rather than reduce plastic consumption.

Some supermarkets are already running their own DRS trials, offering recycling points at

hundreds of stores – in particular for the polymers and packaging householders can’t readily recycle at the kerbside such as flexible plastics.

Cosmetics retailer Lush is offering customers 50p for every piece of packaging they return to stores. This helps moves towards a system whereby customers understand they are ‘renting’ the packaging, Lush says.

It’s an astute marketing, commercial and environmental move, but will shoppers buy into it? Our research shows they might: 67% said they would use a DRS for plastic bottles and only 12% wouldn’t.

“Manufacturers are already reaching into the waste sector and forming partnerships to help secure the recycled polymers they need”

Simone Aplin, technical director, Anthesis

68% year-on-year. Some 56% of businesses signed up to EMF's commitment have planned reuse pilots (up 43% year-on-year), according to the 2020 progress report, but currently just 1.9% of the packaging used by global brands is reusable. "There is clearly an appetite for this," says WWF's Chin, "but it's not quite being pulled together in a whole sector approach."

Some of the supermarket schemes in the UK have received high praise. Asda's concept store in Middleton, Leeds, offers refills on everything from Kellogg's Coca Pops and own label pasta to shampoo, as well as Unilever's Simple and Radox personal care brands. The refill area is "a thing of beauty", says Asda's Thomas. But "we realise it can be a bit intimidating" especially for older customers, which is why store staff are on hand to help.

This is a big change in the shopping

experience and some customers are naturally nervous – which is one reason for using familiar brands in the trial. Tesco has a similar approach in its work with The Loop, which involves products being delivered to customers in packaging that is returned, cleaned and refilled again and again. "We wanted to offer popular products that are familiar to our customers," says McElroy. "The range of products continues to grow."

The Loop's results in the UK have been better than any other market. The explosion in online shopping during lockdowns will have helped. Convenience is also key. "Basically there is nothing easier than single-use packaging [so] there needs to be a compensatory benefit for consumers which can be great design, better experience or lower cost," says Chris Sherwin, sustainability expert at PA Consulting. "Reuse or refill generally doesn't work on altruism alone."

Reuse trials being run by the likes of Asda, Waitrose, Tesco and Marks and Spencer are proving popular with shoppers. But there is much still to learn: from the consistency of the products to the practicality of the process (spillages, for instance, are a common problem).

A price on plastic-free?

There are also commercial considerations for businesses. Sales can often be lower for reusables than the packaged items being replaced, while consumers are undecided over whether unpackaged products should be cheaper. Our survey shows shoppers were evenly split on whether they expected refill systems to cost more than single-use (30%), less (36%) or the same (34%).

All 130 plastic-free options at Asda's Middleton store have been priced in line or cheaper than comparable packaged products, but Thomas and her team



are now looking at ways to “communicate the value proposition more”. This could involve placing refills alongside packaged goods rather than in a dedicated section of the store. The latter is easier logistically but the former could well improve take-up if shoppers see the money they are saving.

EMF has estimated that, globally, replacing 20% of single-use packaging with reusable alternatives offers a business opportunity worth \$10bn. And yet it is still hard to overcome the linear way of thinking and working, says Hilde van der Vegt, zero waste and marketing expert at SUPZero in the Netherlands. Firms tend to invest on their own and create a small showcase, or they wait for others to make the first move. “Both are not ideal for the deep systemic change we need to make,” she says.

The mantra of many NGOs is that we can’t recycle our way out of the

environmental crisis. Systems have to change. But have retailers and brands got the message?

A reduction of total virgin plastic use of just 0.1% across EMF signatories for the latest reporting year shows how single-use plastic still underpins much of the grocery industry. In the UK, 987,000 tonnes of plastic packaging was placed on the market by grocery retailers in 2019, 4% more than in 2017²³. That figure is likely to spike further in 2020 due to Covid-19 and the shift to take-home grocery sales.

Yet there is a feeling among those interviewed for this report that we are entering a new phase in efforts to tackle plastic pollution. Yes, there are limitations to what can be achieved and by when but there is also a definite sense that the mood has changed. Two years ago there was chaos as the rising anti-plastic tide caught many

businesses off guard. Knee-jerk reactions involved switching materials, often without a thought for the unintended consequences.

Fast-forward to today and despite the impact of the coronavirus pandemic there is a more composed, considered and carbon-focused approach to the issues at hand. Images of choking turtles and unrecyclable crisp packets may remain front of mind for consumers but there is now a greater understanding of the nuance in this debate and a clear shift away from the reductive message that all plastic is bad and other materials are intrinsically better.

Finite resources, reduced dependency on oil, resilient and sustainable supply chains and truly circular economies are all being discussed. This is encouraging. But make no mistake, difficult trade-offs are coming, for supermarkets, for shoppers, for brands, and for all of us.

Conclusion

Plastic waste: our top environmental issue

The Covid-19 pandemic has without doubt had an impact on the plastics system, with the use of plastic increasing due to multiple factors, from more reliance on take-out meals which results in an increased demand for single-use containers, to an increase in single use medical equipment and PPE.

For many companies, a key challenge for tackling plastic waste is finding suitable alternatives to plastic packaging, alongside the associated issues with recyclability and the required recycling infrastructure. We believe it will take a combination of government regulation, consumer interest in sustainable products and innovation from businesses to solve the challenge. The forthcoming plastics tax, for example, could help accelerate necessary investment in recycling infrastructure.

In terms of opportunities, we are now at an inflection point where most people recognise that this is an important issue that isn't going away. At this moment, there is a significant opportunity for businesses to innovate and push themselves to be as creative as possible when it comes to sustainable products and packaging and educate their consumers as best they can.

We consider plastic waste to be the single biggest environmental issue for our company. SC Johnson has eliminated 2,575 metric tonnes of unnecessary or problematic plastic packaging since 2018, including 875 metric tonnes since last year.

We are constantly innovating and pushing ourselves to create more



Alan VanderMolen,
senior vice president and
chief communications
officer, SC Johnson

sustainable products and packaging, and that hasn't stopped over the last year. As we look forward, we will continue to push ourselves to do more to meet our ambitious commitments to increase our use of recyclable and reusable packaging, increase our use of post-consumer recycled content and eliminate problematic or unnecessary plastic packaging.

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