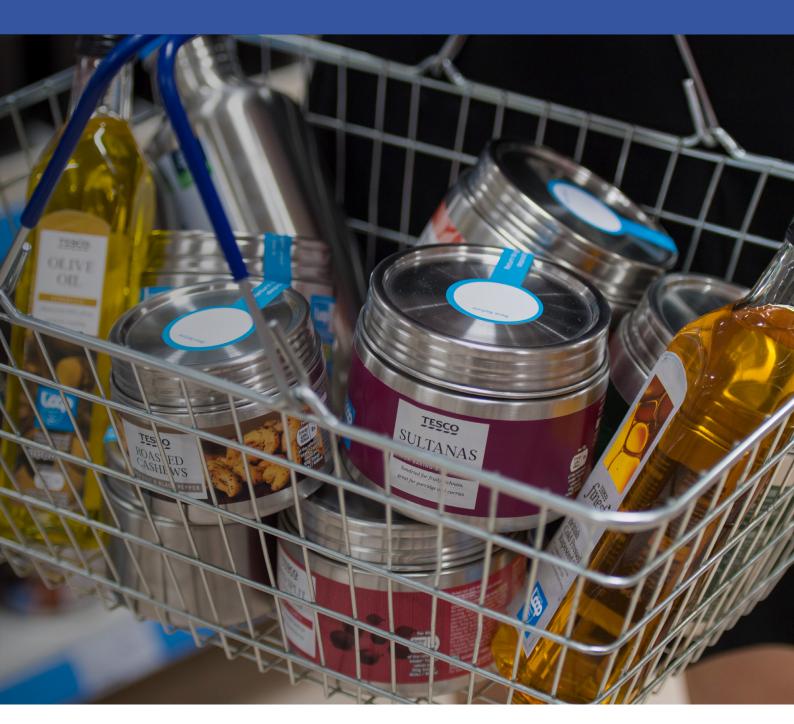
Use. Reuse. Repeat.

Sharing learnings on reusable packaging.

Tesco Reuse Report 2022





Contents.

A MESSAGE FROM ASHWIN PRASAD, CHIEF PRODUCT OFFICER	03
1. INTRODUCTION	
Reusable packaging	05
Prefill	05
What has Tesco done so far	06
2. TESCO'S PARTNERSHIP WITH LOOP	
The in-store process	08
Our reuse learnings so far	09
3. THE FUTURE OF REUSE IN THE UK	
Scaling reuse in the UK	12



A message from Ashwin Prasad, Chief Product Officer.

As a food industry, we need to find ways to feed our growing population more sustainably – using less land and fewer natural resources. This is crucial if supermarkets are to retain the ability to serve customers affordable, healthy and sustainable food.

It's why we recently updated our business purpose to integrate an environmental imperative into what we do, with the aim of serving our customers, communities and planet a little better every day.

I know the cost of living debate is front of mind and we are doing everything we can to address this, however plastic waste remains the number one environmental concern for our customers. So, in line with our purpose, we have made significant progress in delivering our 4Rs packaging strategy – ensuring we remove plastic where we can, reduce it where we can't, reuse more and recycle what's left.

Since 2019, we have cut more than 3000 tonnes of packaging from our UK business and removed over 1.7 billion pieces of plastic. We've improved more than 2,000 product lines so we use less material, include more recycled content and make it easier for customers to recycle.

While we are proud of our progress, we acknowledge that there is much more still to do. To achieve the kind of transformational change required, we need to make progress on two fronts. Firstly, we must continue to explore areas in which we can remove plastic entirely from products, where it's not needed.

Secondly, we must identify and implement scalable packaging solutions. This report is concerned with the latter of these two objectives. Scalable reuse solutions will not only help eliminate plastic



waste and pollution, they can also help unlock a wide range of environmental benefits, including the conservation of natural resources which must go hand-in-hand with reducing greenhouse gas emissions.

Through this report we want to be transparent and set out what we've learned through our pilots with the reusable packaging experts, Loop. It is a partnership that has seen us trial both a dedicated online shopping service that delivered products prefilled in durable reusable packaging and a scaled, in-store pilot across ten of our UK stores.

For a prefill packaging proposition to succeed as a genuinely accessible and affordable option in the long-term, it will need scale. It will be needed to become second nature for customers across many different retailers. And it will be much easier and more efficient logistically if everyone operates it in a common way, especially if we develop and share a common infrastructure for customers to return used containers.

Our sincere hope is that our whole industry can learn from our experiences as much as we have.











The need for sustainable packaging

Packaging is a vital issue for the food industry. It serves a number of important functional benefits, such as protecting products, safely transporting food to homes and reducing food waste. However, it can also have a negative impact on the environment, and therefore it is vital that food businesses, including retailers such as Tesco, act to address the issue.

Public awareness of the issue of plastic waste has risen sharply in recent years. The BBC's Blue Planet II documentary showed how devastating plastic can be when it ends up in the environment, and that the proliferation of "single-use plastic" has gone too far.

Since then, UK shoppers have viewed the impact of plastic waste as the priority sustainability issue to tackle. And they look to retailers and government to lead the way. Initiatives have been set up to cut plastic use and ensure that packaging materials become more recyclable, with customers responding well to changes that make recycling easier and more accessible.

It has been estimated that the UK uses nearly 2.5 million tonnes of plastic packaging each year¹. Data from WRAP, a non-governmental

organisation that promotes a sustainable future, shows that around half of the total was recycled in 2020². Experts and campaigners argue that while there is a need to improve recycling rates, a sustainable reduction in packaging materials should be achieved by a combination of removing materials outright and rapidly increasing the switch to reusable alternatives³.

We agree that while we should continue to do everything we can to drive removal, reduction and recycling to minimise impacts of the current system, new approaches are needed.



Sources:

- ¹ 2022, House of Commons Library, UK, www.assets.publishing.service.gov.uk, available to read here
- ² 2021, WRAP, UK, www.wrap.org.uk, <u>available to read here</u>
- ³ 2021, Greenpeace, Netherlands, www.greenpeace.org.uk, <u>available to read here</u>





Reusable Packaging

Reuse is about using an object or packaging more than once without breaking down and re-manufacturing it. This entails collecting and simply cleaning the packaging before reuse, and requires durable packaging materials that can withstand multiple cycles of collection, cleaning and use.

If done correctly, reusable packaging is better than recycling because it does not continuously need materials and so reduces the amount of materials used for packaging. Reuse requires significantly less energy, for collecting and cleaning packaging, than would be needed to recycle the packaging.

Reuse greatly reduces the risk of waste if there is an incentive for customers to return packaging. So while recycling is preferable to incineration or landfilling, it should really be the second priority after reuse.

Reuse models have of course been used in the past – for example, milk bottles being returned to the milkman – but not at scale for decades. Compared to how supermarket customers have become accustomed to shopping, reuse is perceived as less convenient, requiring new behaviour and additional time and effort.

The drive for efficiency and convenience has delivered some significant benefits for customers. However, we are now increasingly aware of the environmental cost of single use plastics, so we need to review these reuse models and establish how to make them efficient and convenient as well as sustainable. From a business perspective, reuse is a new way of operating, complicated by the reality that the infrastructure that can support reusable packaging get to scale is still in its infancy.

Crucially, reuse models need to be affordable. Customers who are shopping products in reusable packaging are still seeking the great value Tesco offers in other parts of our store.

Prefill

Prefilled packaging is form of reuse where the product is provided pre-packed in high-quality durable reusable packaging for the customer. The customer will either find the packed product on the shelf or delivered to their door. This model means it is just as easy for people to shop for products in reusable packaging as it is to shop for those in recyclable packaging. However, it requires customers to return the packaging for cleaning after each use.

With the retailer having responsibility for cleaning and refilling, the system is easier and more attractive to customers than a conventional supermarket refill station. It is also a tidy and hygienic system, removing the need for multiple people to touch, scoop and pour food into containers, which in turn prevents spillages and food waste throughout the store and in the home.

This model places responsibility on the industry rather than the customer, but it does have an advantage going into in-store and online supermarket delivery models. We believe all these reasons mean it has greater potential to scale than in-store refill.











What has Tesco done so far?

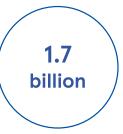
Since 2019, we have been tackling the impact of plastic waste through our 4Rs strategy – to remove packaging where we can, reduce where we can't, reuse more and recycle what's left. Where packaging can't be removed, we are working with suppliers to reduce it to an absolute minimum.



with improved packaging through 4Rs strategy



tonnes of packaging removed from our business



pieces of plastic removed from our UK totals

2002

Launched biodegradable packaging trial on organic fruit to reduce waste and respond to customer concerns over packaging on organic produce

2006

Became the first supermarket to reward customers for reusing carrier bags by giving them a green point on our loyalty Clubcard scheme

2018

First retailer to publish the breakdown of our packaging data

Announced our ambition for a closed loop packaging system where packaging is designed to be used, reused, collected and then recycled or repurposed

Launched our in-store <u>reverse vending scheme</u> for plastic bottles and customers able to bring their <u>own containers</u> to our fresh meat, fish and cheese counters

2020

Partnered with Loop to launch an <u>online shopping service</u> that delivers products only in reusable packaging, later extending our partnership with Loop into ten Tesco stores, offering customers products in reusable packaging

Eliminated the use of hard-to-recycle materials from our CE packaging $\,$

Introduced the <u>first recycled food grade soft plastic packaging</u> from materials returned by customers

2025

Our packaging will be fully recyclable

All paper and board used will be 100% sustainable

2000

Won the Queen's Award for Enterprise for our use of reusable plastic crates (green trays) to replace cardboard boxes and other packaging in transport

2005

Became a signatory to the <u>UK Government's 2005 Courtauld Commitment (WRAP)</u>

2014

Worked with WRAP to redesign our produce packaging to include hints and tips to help customers reduce food waste at home

2019

Launched 4R strategy - remove, reduce, reuse and recycle

Introduced detectable black plastic on core lines in Ireland

Worked with all suppliers to assess the size and suitability of all packaging as part of our ranging decisions

Eliminated the use of hard-to-recycle materials from our UK packaging, as defined within our <u>preferred material list</u> published in 2018

2021

2022

 $\underline{\text{Launched recycling points for soft plastic in store in the UK and Ireland}\\$

Reverse vending machines introduced to all large stores in Slovakia $\,$

First entire categories to have 100% recyclable packaging in Central Europe (household, noodles pasta rice and produce)





TESCO in partnership with Loop

For many years, products and packaging moved only in one direction – from farms or factories to retailers, on to customers' homes and never returned. Transforming this so that packaging can be returned and reused requires a new way of behaving and operating. It requires a closed loop.

Reusable packaging company, Loop aims to meet exactly this need. As the leading global innovator in reusable packaging systems, it is working to transform the packaging of groceries and consumer goods from 'disposable' materials to durable, reusable materials that are collected, cleaned and refilled multiple times.

Loop support a prefilled packaging model that addresses a lot of the barriers and challenges of in-store refill. It's easy for customers, avoids spillages and waste in store, and is more efficient for a retailer than in-store refills. This makes it better designed to work at scale.

Between July 2020 and June 2021, we ran an online pilot with Loop. Customers across Britain were able to order 150 grocery products in reusable packaging from Loopstore.co.uk and have them delivered to their doorstep. Prefilled products were delivered to over 500 different UK postcodes. Branded and Loop own-brand products were made available in reusable packaging, including sauces, yoghurts, soaps, cereals, moisturisers, chocolate and washing detergents.

From September 2021 to June 2022, we conducted our in-store prefill pilot with Loop. Customers in ten pilot stores in the Midlands and East of England were able to buy 53 lines from popular brands such as Persil, Coca Cola, Heinz and Tetley Tea, as well as 35 own-brand essentials, prefilled and available in store as part of our reuse offer. Customers could simply add these products to their shopping basket as part of their shop, eliminating the need to bring their own containers or undertake the refilling themselves.

In both online and in-store pilots, to encourage customers to return the packaging, a refundable deposit was paid for each reusable packaging - refunded in full when customers return the packaging, via the Loop app. The packaging could be returned through a courier (for online) or directly to an instore collection point. The returned packaging would be cleaned, refilled and made available for the next customer.

Both the online-only and in-store trials were designed to be straightforward for customers so that they can shop in a similar way as for products in conventional packaging. Once the packaging is returned, Loop took care of the collection, transportation and cleaning while the product manufacturers took care of replenishment.



The in-store process







A key attraction of these trials was the potential for scale. For instance, if all customers in our ten pilot stores switched their ketchup, cola and washing up liquid recyclable products to the reusable Heinz Tomato Ketchup, Coca-Cola and Ecover alternatives, reusable packaging would be used more than two and a half million times a year. If scaled up to more stores and more products, the potential reductions in plastic packaging can be vast.



The Loop prefill offer was designed with customers in mind -

- Preliminary customer research was conducted to discover the right products for a shopper that might be receptive to reusing packaging.
- Prices were matched pro-rata with the original products.
- In an attempt to create a proposition that works throughout the country, we chose to put prefill in a range of locations that are broadly representative of UK demographics.
- Videos, signage and leaflets explaining the reuse process were displayed in store.
- Trained Tesco colleagues and Loop ambassadors were present in store to help customers understand the process.
- The range was designed to capture attention as part of a bespoke display.
- Emails that included money-off coupons were sent to customers in the stores' catchment areas, encouraging them to take part. Adverts were placed in the local media and geo-targeted ads ran on social media to further drive participation.



Our reuse learnings so far

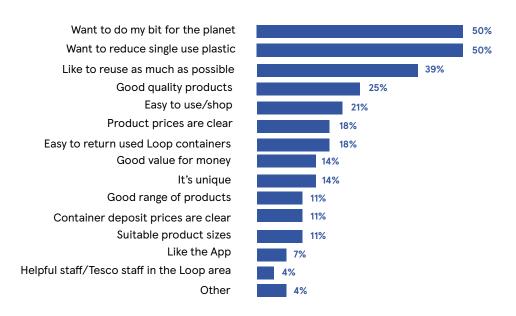
1. Many customers want to shop in reusable packaging

Our pilots proved that many shoppers want to buy products in reusable packaging. We met our targets for customer participation with thousands of customers having taken part and shown a willingness to shop in reusable packaging. More than 80,000 products were purchased over two years.

Results of our pilots confirmed that prefill shopping is most popular among a the small percentage of eco-conscious shoppers who are likely to adapt their day-to-day habits based on their environmental values. To successfully scale reuse we will need to work together as an industry to greater engage all sections of the population. Shopping prefill can be as convenient as for conventional packaging. However, we need to make it easier for customers to return packaging and reclaim their deposits.

Surveys tell us that the general public is yet to fully appreciate the differences and benefits of reuse over recycling. For reuse to scale, there needs to be a greater appreciation of the benefits it offers so that customers are more willing to adopt the moderate behavioural changes that will be required to make reuse packaging mainstream.

Customer motivation for buying reusable products at Tesco





2. Reuse can work for retailers and suppliers

Many of our suppliers participated in our prefill pilots with Loop. Twenty-five big brands put forward their products for the in-store partnership and this was matched with a range of our own-brand essentials. Suppliers have fed back their view that the Tesco / Loop prefill proposition was the most successful major UK reuse proposition that they have seen to date. The prefill option gives a natural opportunity for suppliers to differentiate their product and communicate the unique qualities of their products to customers.

Reducing the costs of collecting and cleaning reusable packaging could be achieved by operating in a joined-up way across various retail and food service businesses - similar to retailers being supplied from the same farms or factories. Shared distribution, cleaning and refilling services for many different supermarkets, food service and catering could help deliver scale and cost-effectiveness more quickly than any single retailer can by going it alone.

Our pilots also suggest that it is possible for many brands to offer reusable packaging options with only minimal changes to their current production infrastructure and packaging. For instance, some current 'disposable' containers are durable enough to be cleaned and reused if there is a reliable process of returns – including labels to support returns and refunds, as well as a reliable packaging-cleaning supply chain. In such cases, it is possible to deliver reuse packaging without heavy investment in new production infrastructure.





3. In-store colleagues as ambassadors of reuse

Our colleagues in store played a key role in getting customers to take part in the prefill pilot. Many customers said they took part following their interaction with a trained colleague who was able to explain the reuse process and why it is better for the planet than recycling. Combined with the in-store visibility of the prefill stations, conversations with colleagues ensured customers actively considered taking part and reassured them that the process is straightforward. Two-thirds of customers who took part in the prefill pilot in store reported that they found the process easy.



4. A truly scalable proposition

With an offer of more than 200 products across our online and in-store pilots, our partnership with Loop has been one of the most ambitious reusable packaging propositions by a supermarket to date. It is the biggest Loop launch in any of its global markets, the biggest prefilled reusable packaging scheme seen in the UK, and into in-store and online supermarket delivery models.

Our modelling, based on data from our prefill pilots, shows the potential impact on single-use packaging if we can further improve and then scale up a prefill proposition. If rolled out to 400 stores across various retail chains, a prefill offer could be a viable business opportunity that replaces millions of pieces of recyclable plastic with reusable alternatives. This offers an additional tool in the fight against plastic waste.

As our in-store prefill pilot comes to an end, we are currently reviewing our learnings to enable us to develop the next stage of a scaled reuse offer. We want to work out how to build an even better proposition that can better integrate the operational complexities of a reuse proposition into our business and enable us to achieve greater scale, as more customers become ready for it.







Scaling reuse in the UK

We need more customers beyond the most eco-conscious, to make the switch to products in reusable packaging. To enable this will require a bigger range of products, competitive prices and a simpler process of returns. This demand will grow more sharply as the public develops a better awareness of the environmental benefits of reusable packaging.

A plan to scale reuse should therefore focus on the following four key areas:

1. Keep simplifying the customer experience

At present, shopping prefill products is almost as convenient as conventional, but it involves new behaviours of paying a deposit and returning the packaging for cleaning. Simplifying this further would increase customer adoption.

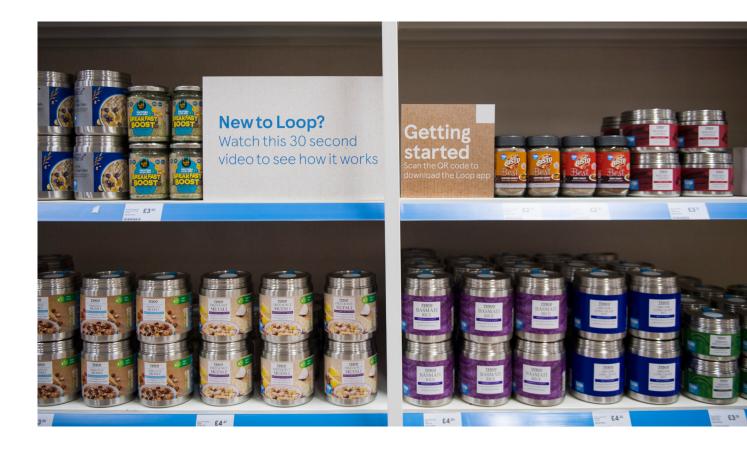
There are opportunities to further simplify the customer experience of prefill by:

- 1. Removing the need to download a stand-alone app to receive a refund of deposits,
- 2. Speeding up deposit refunds, or developing an alternative means to remind customers to return packaging without requiring a deposit payment,
- 3. Increasing flexibility and locations for packaging returns,
- 4. Locating in-store returns stations at the most convenient points for customers, and,
- 5. Ensuring packaging shapes are optimised for transport and to fit conveniently into the average UK household.

While there are some obstacles to overcome in terms of logistics and cleaning routines, online shopping potentially lends itself particularly well to prefilled packaging solutions, as the retailer can be responsible for delivering and returning the packaging.

Providing a simpler and engaging customer experience is a key role for retailers, suppliers and the wider industry.





2. Competitive Price

Currently, reusable packaging will often cost more to produce 'per unit' than disposable packaging. However, we know that most customers understandably do not wish to pay more for products in reusable packaging. At the current scale, our pilots showed that the cost of cleaning and prefilling reusable packaging can sometimes cost more than the actual product inside.

Economies of scale and improved efficiency will be key to getting to parity between reusable packaging and conventional single-use packaging. This will require improved processes by retailers and suppliers as well as investment by industry and potentially government, for reuse to become a commercially viable option that works at scale.

The investment required for reuse to achieve scale is significant as it requires retailers to operate with new processes and manufacturers to create new production lines. The cost of collection, cleaning and refill will need to fall so reuse becomes comparable to the cost of using recyclable packaging. At the same time, the current cost of living focus brings to the fore the need to control spending and ensure competitive pricing on refillable, durable packaging solutions.

In the short term there is a need for better labelling and communication to explain that a proportion of the price is a fully refundable deposit. NGOs, key opinion formers and retailers can play a key role in raising awareness.



3. Cultural shift towards reuse

Survey data tells us that customers often view reusable packaging as equal in environmental impact to recyclable packaging. Also, as some of the reusable packaging in our pilots has been identical to the conventional packs, some customers and colleagues couldn't tell the difference. This meant that the disruptive nature of reuse was even less appreciated. A better public understanding of the significant environmental benefit of reusable packaging is likely to make it more acceptable for customers to undertake the shift in shopping habits needed to make reuse mainstream.

Even when the environmental benefits of reuse are fully understood, success will only happen when a broad section of customers are prepared to return packaging for reuse. Behaviour change on this scale represents a material challenge to everyone involved.

Retailers and brands can help by increasing the visibility and impact of reuse packaging in stores and advertising. Reusable packaging needs to stand out in order to inspire customers and ensure they take notice.

Increasing public awareness of the positive impact of reuse over recycling is also a role for campaigners, experts, opinion formers and media. For instance, our pilots show that customers tend to prefer products in steel tins and would sometimes avoid durable reusable plastic packaging. This could lead to more packaging in energy-intensive and expensive steel tins than is necessary. In scenarios like this, the voice and credibility of opinion formers and NGOs will be needed to build consumer confidence in the fact that durable plastic packaging used as part of a credible reuse scheme will not end up as waste or in the environment.



4. Collaborating for success

Our prefill trial was made possible by the work of hundreds of people across more than 30 businesses, including 25 brands that supplied products in reusable packaging, courier companies transporting the products and the company responsible for cleaning the packaging. This built on the insights of experts and campaigners calling for reuse innovations and the entrepreneurship and vision of Loop.

For reuse to succeed as a mainstream proposition across the UK, this coalition will need to grow. Opinion formers and NGOs need to continue playing their role to keep reuse on the agenda, educate the public and advocate for reuse to become mainstream. The support of policy-makers will be crucial to foster the regulatory environment for reuse to scale. And investment will be required across the value chain to achieve economies of scale. Industry will need to continue to experiment with various reuse options and explore the most viable routes to scale.

One company cannot create a successful and scalable reuse proposition in isolation. Between us, we need to innovate and ensure we create a system that customers will find easy to use, and offers a range of products at great value with clear benefits for the planet. We hope this report will be useful to others also trying to figure out how to scale up reuse.