

# BRITA's position on reuse

Reuse is a topic close to BRITA's heart. Our products offer a reusable alternative to bottled water and enable the behaviour change needed to support a reuse culture. As a family business that deals with water every day, we understand and care deeply about the need to safeguard our planet and its valuable resources.

Ultimately, our aim is to offer customers, simple and straight forward, sustainable solutions. We are committed to helping them reduce their reliance on single-use plastic by offering them a more sustainable alternative and empowering them to reuse where they can.

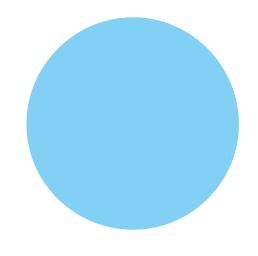
As a business, we continually work to improve our environmental performance. We are aiming to reduce 6.5 billion single-use plastic water bottles by 2025 and eliminate our use of virgin plastic that same year. BRITA products also help to support the circular economy by encouraging reduction and reuse of raw materials. In addition, our cartridge return scheme helps to ensure that at the end of their life, every part that can be recycled is, and the 1% that remains is sent to an Energy From Waste facility where it is responsibly incinerated to produce electricity, heat, or steam.

We prioritise reusing materials in our products and ensuring high-quality recycling over lesser forms of disposal.

"We want our product materials to live a valuable second life both for consumers and businesses."

As part of this we have committed to implement a dispenser refurbishment concept.

However, we know we still have a lot to do. That's why we are investing in product and packaging innovations to reduce our environmental impact and working closely with our charity partners, such as Whale and Dolphin Conservation, to combat environmental challenges more broadly.



# About this white paper

In this white paper we explore the definition of reuse and the various practical applications. Reuse is one of many crucial methods that can help us reach net zero and address challenges at all stages of the supply chain, from production to transport, through to consumption.

From different models of reuse, resell, repair as well as reclaim and repurpose, the many

reuse frameworks can be applied successfully to a range of sectors and product categories. To understand what best practice looks like and what drives real change successfully, we spoke to experts from the policy world and from both the non-profit and corporate sectors to understand what drives a 'reuse culture', and what more we – as a business – can do, alongside the Government, consumers and other actors in this space.

### Contributors



### **Barry Sheerman MP**

As Member of Parliament for Huddersfield for over 40 years, Barry Sheerman is longest serving Labour MP in the House of Commons. He now Chairs the Sustainable Resource APPG and spends time raising climate and environment related issues in Parliament.



### **Kristen Filice**

Kristen Filice is the Director of Net Zero Strategy for the non-profit organisation Zero Carbon Forum where she supports members to develop more sustainable business operations. She previously led eBay's UK sustainability programmes before going freelance.



### **Mary Creagh**

Parliament for Wakefield from 2005-2019, during which she served in a number of senior shadow cabinet positions and was Chair of the Environmental Audit Committee. Creagh is a visiting professor at Cranfield University and has given speeches for the OECD and Chatham House, she now specialises as an advisor on climate and environmental issues.



### Maya De Souza

Former London Councillor, Maya de Souza, is the Circular Economy Campaign Director at Business in the Community, where she works with businesses in making full use of circular economy solutions and support them in making transitions to net zero.



### **Natalie Fee**

Natalie Fee is an award-winning environmentalist, author and speaker In 2015, she founded City to Sea, one of the UK's fastest growing not-for-profit organisations which runs campaigns to stop plastic pollution.



### **Shauna Jordan**

Shauna Jordan is the Marine Project Manager for the Zoological Society of London, she has a wealth of experience in the environmental sector having worked across multiple areas including waste management and social impact investment



### **Pete Bradshaw**

Pete Bradshaw is the current Director of Sustainability at Manchester City Football Group, he is also a fellow at the Institute of Corporate Responsibility & Sustainability.

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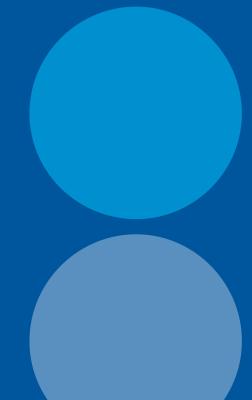
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# O1 The context

### What is reuse?

In its simplest form, reuse<sup>1</sup> is a waste management method that keeps products and materials in use again and again.

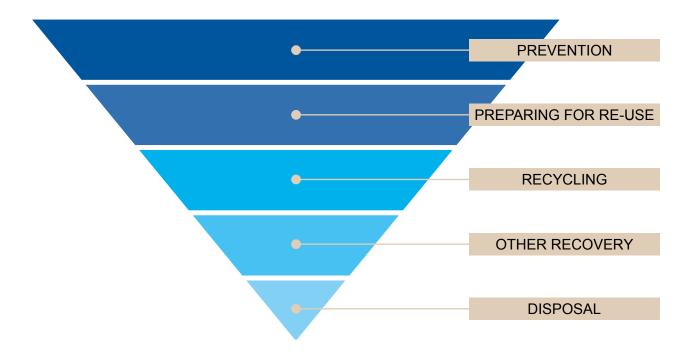
The idea of reusing things is nothing new. For millennia, access to new products - whether tools, crockery or any material - was limited by cost and scarcity. It is only in the last few centuries that mass production has become more common, and only in the last century with the development of materials like plastic that the issue of things not being reused has really emerged, whether that is single-use bottles or simply the packaging that wraps our groceries.

As a waste management method, reuse has been around since the waste hierarchy was first conceived. The hierarchy was first introduced in the EU Waste Framework Directive over 40 years ago² to rank different waste management options. It is based on a circular economy model and, critically, was introduced to try to counteract the take-make-waste model society had become so reliant on.

### As Kristen Filice, Director of Net Zero Strategy from the Zero Carbon Forum explains:

"The hierarchy is of course to first look at where we don't need things at all – excess purchases, unnecessary or too much packaging - and to dematerialise or reduce what we consume. Next is to make sure we're using what we have to its full potential, repairing and reusing as many times as possible. This is centred around the fundamental shift in mindset that there isn't an 'away' to throw things. Products generally have much longer, and more, lives than we give them."

### The Waste Hierarchy



A reuse culture is about embedding the ideas of reuse into business models and everyday actions, moving towards a take-make-reuse model. According to the Ellen MacArthur Foundation<sup>3</sup>, in order to disrupt the current linear system we must transform all elements of the take-make-waste model and work towards a circular economy, comprised of three principles:



1. Eliminating Waste and Pollution



2. Circulating products and materials (at their highest values)



Regenerating nature

This white paper focuses on the second principle of keeping products and materials in use, in order to minimise waste.

## Why recycling shouldn't be our first choice

Beyond the waste hierarchy - which remains a technical concept, not well known by the general public - the phrase 'Reduce, Reuse, Recycle' has permeated around the world and is a popular slogan for waste reduction or prevention by businesses and governments alike. The 'reuse' element - which can include refilling bottles and containers, finding ways to mend old electronics or give furniture a new lease of life - is recognised by many as one of the most effective at reducing negative impacts on the environment.

As set out by Barry Sheerman MP, Chair of the All-Party Parliamentary Group on Sustainable Resource: "If we're serious about climate change and global warming then reuse is one of the most important concepts we must consider."

This is because other methods further down the waste hierarchy, such as recycling, aren't enough to address the current environmental crisis. That's not to say it is worthless - recycling can help reduce waste disposal and transform useful materials into new products - but it can be expensive, energy-intensive and logistically complicated to achieve. Nor is it widely in place. According to A Plastic Planet, a global movement

to turn off the plastic tap, only 9% of plastic was recycled in the UK in 2018<sup>4</sup>. At the moment, only a fraction of global plastic waste gets recycled, according to a report by the World Economic Forum and the Ellen MacArthur Foundation<sup>5</sup>. Only 2% is "effectively recycled"; that is, converted into an equally useful item rather than "downcycled".

Recycling has a multitude of requirements from suitable infrastructure to the right consumer behaviour and understanding to put products and packaging into the right bin in the right way, as well as the recyclability of the materials or products themselves. If just one of these three requirements isn't met, recycling doesn't happen. According to Greenpeace's latest report, The Big Plastic Count, 62% of the pieces of plastic recorded in the count are either not collected or poorly collected for recycling by UK local authorities, and likely to end up in landfill or incinerated<sup>6</sup>.

Shauna Jordan, Marine Project Manager at the Zoological Society of London, backs this up. "At present, responsibility sits with our local authorities to recycle," she explains. "But there is evidence that many items entering the system aren't being recycled, and are instead ending up at incineration plants, landfill or overseas. We're at an environmental tipping point - the planet cannot continue to cope with the disposal culture we have. We need to turn things around - and quickly. Creating large-scale systemic change to shift our culture to refilling is vital."

One solution, advocated by some, is to ban the most polluting products. For example, regulators in the EU have cut the use of single-use plastics under the EU Single-use Plastics Directive (EU SUPD). But as **Natalie Fee, Founder of City to Sea** points out, bans aren't always a realistic solution.

"We can't solve the plastic pollution problem without a rapid and revolutionary approach to reusable and refillable packaging," she says. "There are some sources of plastic pollution we could simply ban, France for example has recently banned plastic packaging on some fruit and vegetables, but there are many areas, such as the food-to-go sector, where we need to creatively introduce and normalise reusable packaging as an alternative to polluting single-use plastics."

### Why does reuse matter?

### Global context

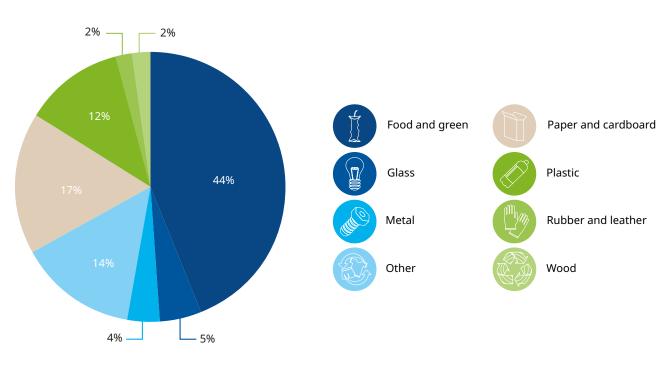
The Intergovernmental Panel on Climate Change (IPCC) has issued stark warnings about the state of our planet's survival in each of their three reports. According to the Working Group 1 report<sup>7</sup>, the global temperature increase from pre-industrial times is likely to breach 1.5C the Paris Agreement's most ambitious pathway - by 2040. This is set against concurrent global trends such as unsustainable consumption of natural resources and land and ecosystem degradation8. As such, the UN recognises the need for change in Goal 12 of its Sustainable Development Goals - ensuring sustainable consumption and production patterns. In this, the UN has set a target that by 2030 we will substantially reduce waste generation through prevention, reduction, recycling and reuse9.

Excessive waste is understood to be contributing to these global trends. According to The World Bank, plastic accounts for 12% of global waste composition [figure 1].

### The economic cost

Reuse also has a role to play in cost saving for households across the globe. In light of rising inflation and the resultant cost of living crisis currently facing the UK, for example, many have seen their disposable income squeezed. While not neglecting the upfront cost incurred when investing in reusable products such as a reusable water bottle versus its plastic equivalent, reusable products remain more sustainable and cost-effective in the medium to long-term, saving the consumer from buying a new product, often that is single-use. For example, tap water at home costs an average of 0.1p per litre compared to 65p per litre for bottled water<sup>11</sup>. Many stores will also offer discounts for using reusable products. For example, in 2018 Starbucks introduced a 'latte levy' which added a 5p charge to any hot drink purchase in a paper cup in the UK. Meanwhile, customers using a reusable cup received a 25p discount off their drink to encourage reducing paper waste<sup>12</sup>. It is also worth noting that not every item that is reusable is more expensive upfront: for example, items of clothing or technology - reuse is a choice made when it comes to their disposal rather than an active decision affecting purchasing.

Figure 1: Global waste composition



### The plastic problem

Plastic pollution is frequently called out by NGOs as a global concern, with an estimated eight million tonnes of plastic entering the marine environment every year<sup>13</sup>. This figure continues to grow with the rise of the plastic industry<sup>14</sup>. In the UK, the plastics industry has a £27 billion turnover, up 18% since 2009. This now sees the UK, producing 1.8 million tonnes of plastic products<sup>15</sup>. The United Nations Environment Assembly (UNEA) President Espen Barth Eide said, "plastic pollution has grown into an epidemic" after heads of state, environment ministers and other representatives from 175 nations, endorsed an historic resolution at the UN Environment Assembly in Nairobi in March to end plastic pollution, and forge an international legally binding agreement, by the end of 2024.

A recent study, Message in a bottle - The shocking impact of plastic pollution on whales and dolphins and how we can reverse it, by Whale and Dolphin Conservation (WDC) and supported by BRITA UK, reveals that plastic not only pollutes our ocean, affecting more whale and dolphin species with every year, but it also exacerbates climate change. According to WDC's study, plastics have been found to seriously impact the health of whales and dolphins, both of which are crucial allies in the fight against climate change, with one whale equating to thousands of trees in terms of carbon capture<sup>16</sup>.

Partner insights



"The evidence builds a picture of an ocean awash with plastic; from whole fishing nets, discarded boats, crates, and food containers, down to bottles and packages, to trillions

of tiny pieces; plastic that has broken into smaller fragments but not vanished; the ubiquitous, infamous 'microplastics.' These plastics affect whales' and dolphins' ability to feed, digest, navigate, breathe, breed and migrate...

Nobody wants a world without whales and dolphins (they are our allies in combating the climate crisis), no one wants an ocean brimming with plastics of all kinds; where the volume of plastic and the speed it enters the ecosystem far, far outstrips nature's ability to absorb and break it down." <sup>17</sup>

Many of the well-known reuse strategies target plastic waste due to the impact outlined alongside the use of unrenewable fossil-fuels in its manufacture. And with single-use plastic products being extremely prevalent in daily life, if greater numbers of consumers moved to reusable and refillable products, it would potentially make a big difference. In addition, if more businesses reshaped businesses models to encourage consumers to reuse and reward those that do, alongside government regulation pushing businesses in this direction, we would be on track to a more circular society.

### It's not all about plastic

Although plastic is frequently highlighted as a source of pollution, many other materials and products are also contributing to similar problems – for example textiles and electricals. Several initiatives have been introduced to reduce the waste for sectors that are centred around these. In 2013, the world's first certification scheme to promote the reuse of used and waste electrical and electronic equipment (UEEE and WEEE) was launched by the UK Government<sup>18</sup>. More recently, UK resources charity WRAP launched its Textiles 2030 initiative which sets targets to ensure "more clothes are sold for reuse than new" and offers its own "reuse and recycling signatory pack"<sup>19</sup>.

As Filice of the Zero Carbon Company states, "we need to do better. If not for the planet and humankind, building resilience into your processes requires understanding and acknowledging the finite nature of resources on which your business depends, impacts of water use and land conversion, biodiversity, and climate change. It makes business sense."



Reuse comes in many forms - from a simple item like a reusable water bottle which you refill yourself, to a more complicated model such as the "milkman model" where products and containers are collected to be refilled again by the service provider.

What's clear, is that interventions to promote reuse have proved effective. In this section, we detail some examples of where reuse has been embedded, what this has looked like, and the impact this has had.

### The power of refill

City to Sea's Refill campaign is a great example of driving behaviour change and fixing a potential barrier to reuse. The award-winning campaign connects people to places they can eat, drink and shop via an app that highlights 'refill stations' in their location, facilitating people making sustainable drinking choices. Refill also encouraged businesses to sign up to show their commitment to plastic reduction.

The plastic bottle is one of the most littered single-use plastic items. Planet Patrol - an environmental non-profit organisation – recently published a new study looking at litter in the UK. The research showed plastic bottles to be one of the top ten items littered. 14,427 items collected for the study were associated with the beverage industry, and 4,282 (29.7%) of those were plastic bottles<sup>20</sup>. Equally, the environmental impact of bottled water on the planet has been found in one recent study to be up to 3,500 times greater than that of tap water<sup>21</sup>.

Natalie Fee told us, "the campaign is designed to normalise refill and reuse behaviour. Anyone can download the free Refill app to tap into a global network of places to reduce, reuse and refill. From a coffee on your commute, to drinking water on the go, or even shopping with less plastic, Refill puts the power to go packaging free at your fingertips. We now have more than 280,000 Refill Stations accepting reusables globally and almost 400,000 app downloads."







Another successful behaviour change campaign to inspire more people to refill was the #OneLess movement, led by the Zoological Society of London (ZSL). #OneLess was set up in 2016 as an experiment to turn the tide against single-use plastic within a complex urban setting. It worked with businesses, policymakers, innovators, and communities to spearhead a change in the way Londoners drink water – from carrying single-use plastic water bottles, to refilling and reusing.

"The name - #OneLess - was adopted as an antidote to the huge and depressing numbers of plastic bottles in circulation. There are up to 13 billion tonnes already in the ocean - how do you deal with 13 billion tonnes? But, if you refill, that is one less bottle that will join the problem it's a solution, it's manageable, we can all do it and have an impact," Jordan told us. "The fact that Londoners each use 175 bottles per year shows the power of individual action, but also how that could be readily amplified through making change in your sphere of influence, such as family, friends and work colleagues. It was designed to trigger ideas about living the change you want to see; being smart; 'every little helps'; every journey starts with a first step; everything we do touches the ocean."

A tangible impact can be shown from the #OneLess campaign, including the #OneLess Pioneer Network of 90+ organisations removing five million single-use plastic water bottles and nine million single-use plastic items from supply chains. One in three Londoners surveyed also reported being more likely to stop buying single-use plastic water bottles after seeing their 'Hello London, Goodbye Ocean Plastic' campaign<sup>22</sup>.

Another example of reuse in action and how this can be achieved by businesses on a large scale can be seen in Loop, the global reuse platform. Loop was launched at the 2019 World Economic Forum and has since expanded to supermarkets across the world. Loop collects empty packaging to be professionally cleaned and refilled, before arriving back in the stores for the next customer. The packaging is designed bespoke to each product's branding to be long lasting.

In the UK, Loop partnered with Tesco in 2021 to introduce a Loop Reuse Station at selected stores. **Ken Murphy, Tesco Group CEO**, said at the time: "We are determined to tackle plastic waste and one of the ways we can help is by improving reuse options available to customers." <sup>23</sup>



Through the partnership, shoppers were able to buy a wide range of food, drink, household, and beauty products in reusable and durable packaging. To do this, shoppers temporarily place a 100% refundable deposit to borrow the packaging, drawing on the insight that shoppers only ever want what's inside. To make the process as easy as possible for consumers, there is a Loop Deposit App which gathers data via a QR code on the container and also a returns bag to allow consumers to bring back multiple containers in one go.

The trial ended this year, with Tesco citing that "while the potential is huge – and we should all be excited about a solution where packaging can be used and reused in a circular system – the implementation challenge is equally significant."<sup>24</sup>

Tesco's Responsible Sourcing Director Giles Bolton highlighted that a refill model can work for businesses: "What's clear from our trial is that a prefill model of reuse has strong potential and can be set up to offer customers the ease and convenience they expect. While it is very disruptive to usual ways of working, we've also seen it's possible to adapt supply chains working in partnership with suppliers to maintain the quality and availability that customers rightly demand."

### **Industry insights**

When interviewed by BRITA in 2021, Jenny Costa, CEO of Rubies in the Rubble, described how their business model works: "Our model for restaurants is we sell ketchup in bulk with a branded pump, and glass bottles with labels screen-printed with our story, on the background that the ketchup is made with surplus fruit and that this bottle will be washed and reused for up to 100 times, so it goes through the dishwasher and is used again. That was always our model for out of home. Restaurants loved it, they bought into the sustainability story and this closed loop economy.

"In the hospitality industry especially there can be a lot of waste... in terms of plastic and single-use packaging our products are addressing the need to utilise what you've got and use it to the full."

### Resell, rental and repair

Resell and rental platforms are also notable examples of reuse models in action. They are extremely diverse and cover a whole range of products including cars, clothing, machinery, electronics and more.

Reusing old clothes is nothing new, of course; many of us will have worn hand-me-downs as children from older siblings, and charity shops have been selling what are now known as "preloved" goods for decades. But, perhaps in response to the explosion of fast fashion and the damage this is known to be doing to the environment, the fashion industry in particular has taken the resale and rental models forward as a solution to the industry's stark environmental impact, with sites like ThredUp and Depop online marketplaces for second-hand fashion growing significantly in recent years. According to ThredUp, the second-hand market is expected to grow by 127% by 2026 - 3x faster than the global apparel market overall<sup>25</sup>.

The popularity of resale alludes to the benefit that you don't have to sacrifice quality or accessibility in order to attain the products you need. Second-hand clothing and furniture is also an easy way to save money - even if you prefer more expensive brands. This is becoming more mainstream, and may even be considered trendy<sup>26</sup> - 18- to 34-year-olds have double the number of second-hand pieces in their wardrobes than those over 55<sup>27</sup>. In fact, demand for pre-loved clothing has soared thanks to eBay's partnership with UK reality TV show 'Love Island'28, and a star from the show has now been announced as the first ever eBay preloved ambassador<sup>29</sup>. For those not interested in purchasing second-hand clothing, clothing rental companies provide a reuse model where you rent instead if purchase such as My Wardrobe HQ. We're seeing this model in other sectors such as transport (including bicycles and cars).

Repair is another popular model that has been introduced in more businesses. The new 'fix-it culture' encourages businesses and individuals to repair, refurbish or upgrade products. A leader in this space is the Repair Café, which has over 1,500 outlets across the globe, and features tools and materials to help individuals repair or refurbish clothes, furniture, appliances, bicycles, crockery, toys and more. The café also has onsite specialists present including electricians, seamstresses, carpenters and mechanics.

Selfridges is one retailer reinventing retail with new shopping models to help close the loop on waste. They offer multiple shopping experiences with circularity at the heart – from refilling beauty products, renting outfits or buying pre-loved. You can also have items repaired in-store and upcycle garments such as wedding dresses and denim.

Selfridges do more than just provide these services; they engage their customers on why these models are important and embed them as part of the shopping experience. The aim is to shift mindsets by using their platform to involve and inspire shoppers, offering an ongoing opportunity to stage a brave conversation with their entire community around the climate crisis, the future of shopping, and the part we can all play in co-creating a better future.

Not only have individual organisations like Selfridges jumped into resale and repair models, but many new businesses have popped up over the last few years linked to increasing popularity among consumers. Companies like Dotte, a resale collective made up of 16 independent and sustainability-minded kidswear brands. have expanded in response to increased demand, with M&S being one of Dotte's most popular brands listed on the marketplace. Little Loop is another children's clothing rental business which addresses issues around babies and toddlers rapidly outgrowing clothing, as well as clothing made for seasonal periods. The concept was designed to stop the huge amount of clothing being wasted after only being worn for a short amount of time, whilst removing the 'inconvenience' of having to sell on old items.

# Consumer attitudes towards reuse

Recent years have seen significantly greater public and media focus on the environment and the role of individuals in adapting behaviour to respond to challenges. In that light, there is some evidence of consumers being supportive of embedding a reuse culture into society, so that they can continue enjoying their favourite products without feeling like they are contributing to the climate crisis.

As Jenny Costa, CEO of Rubies in the Rubble, a business that makes condiments using ingredients that would otherwise go to waste, told BRITA in a 2021 interview, consumers are looking for change at the moment and brands they can buy into. "They want a treat that is a feel good, guilt-free treat," she says. "Buying into sustainability showcases you care about quality, value the planet and your business has a triple bottom line."

Consumer understanding of the problems with not having a reuse culture has also grown in the last five years, according to **Kristen Filice**.

"Consumers are becoming more aware of the environmental impacts of single-use containers, cosmetics, excess packaging, and general use of virgin raw materials," she says. "There's a moral compass kicking in along with greater education and awareness, and customers expect better alternatives on the market. Your business shouldn't leave customers with a guilty conscience. There are increasing numbers of other businesses they can move their custom to, who provide options customers feel good to be a part of."

It's also something that people can easily build into their daily routines and habits, as noted by **Barry Sheerman MP**, which makes it easier for them to be on board with. "Reuse is a great hands-on idea that local people can actively do which really makes a difference," he says.





Successfully embedding a reuse culture into society will take a commitment to behaviour change, good communication from governments and businesses, and legislation and regulation to secure greater buy in, as we explore more in section 4. But implementing reuse culture across society could bring a myriad of benefits, both environmentally and economically.

Kristen Filice explains, "when it comes to business models currently relying on fast consumption and high sales volumes of short lifespan products, this is just not sustainable from a business perspective. We can't have businesses based in operations that rely on processes that can't be carried out forever. The impact of our current economies is using 2.7 Earths."

Filice also argues that "all sectors could benefit from embedding reuse. Every industry has big opportunities."

### **Environmental benefits**

### 1. Physical reduction of waste

For decades, we've created a global economy where products enter the market for one use only, then all too frequently pile up as waste in landfills or pollute the natural environment. It's a simple equation. Fewer single-use items equals less waste. The World Economic Forum (WEF) reported that reusing just 10% of plastic packaging will stop almost half of plastic waste from entering the ocean, the equivalent of at least seven million tonnes of plastic<sup>30</sup>.

The reduction of physical waste would sit alongside a decline in pollution levels. If we see a reduction in the production of waste due to reusable goods, it stands to reason we will see a reduction in pollution in our local environments. The benefits of a clean environment would mean habitats are better protected, species could flourish, and there could be more sources of food for wildlife, fewer hazards, and cleaner water<sup>31</sup>.

As **Shauna Jordan** explains, the benefits wouldn't just be limited to land. "Switching to a reuse culture is one of the most effective things that we can do to support a healthy ocean," she says.

"Making this change will immediately reduce the enormous chemical and physical pollution that plastic causes, choking our land and ocean, killing wildlife, threatening human health and exacerbating climate breakdown." Natalie Fee adds, "reuse has the potential to remove billions of items every year, to ease the pressure on our overburdened waste and recycling systems and to hugely reduce the amount of plastic that ends up in our natural environment."

### 2. Wider carbon impact

Reuse isn't just about preventing waste postuse. The production of goods often happens in carbon intensive environments<sup>32</sup>. From the factories producing items, to oil and fossil fuels used for energy and production, and the extraction of the raw materials, including deforestation. The production of new materials and goods releases an infinite amount of harmful CO<sup>2</sup> at every stage of the supply chain, and minimising this will be key to meeting our environmental goals. The need for fewer products through a circular economy with reuse at its heart will support this.

"From a carbon, net zero perspective, there are a lot of benefits [of reuse]," clarifies **Filice**. "Businesses are responsible not only for the energy and emissions associated with their own raw material extraction and production processes, but also for the ultimate usage and disposal of the product by their customers. Creating products that are built to last, to be reused, to be passed on, and to have multiple uses and lives, means fewer raw materials, or materials at all, need to be extracted. It means lower energy emissions and costs through their own direct production funnels."

To take one example, single-use coffee cups produce an inordinate amount of waste that could be mitigated by using reusable cups. Product-testing company Intertek measured the environmental impact of producing, using and disposing of all types of single-use coffee cups and found that the typical disposable cup requires 0.58 litres of water to produce and has a carbon footprint equivalent to 60.9 grammes of carbon dioxide<sup>33</sup>. By simply switching from single-use cups to reusable ones you can save a significant amount of water and CO<sup>2</sup>.

Maya de Souza, from Business in the Community, sums it up. "Looking from the climate perspective to begin with, the potential carbon savings for reuse compared to recycling and other parts of the waste hierarchy is significant."

### **Cost implications**

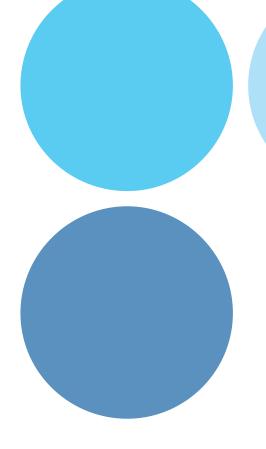
In the UK, we are currently facing a cost-of-living crisis. Energy, goods, and food prices have all spiralled following the COVID pandemic and the war in Ukraine. The rate of inflation, representing the change in prices for goods and services, continues to grow above the Bank of England's targets, and is expected to keep rising this year<sup>34</sup>. And consumer price inflation, looking at the rate at which the prices of goods and services bought by households rise and fall, is also growing, squeezing household incomes further. According to the Office for National Statistics, 87% of adults in the UK reported an increase in their cost of living in April 2022<sup>35</sup>.

On a macroeconomic scale, there are likely to be benefits of reuse. According to a report by McKinsey and the Ellen MacArthur Foundation the circular economy would allow Europe to grow resource productivity by up to 3% annually, generating a net economic benefit of €1.8trn by 2030³6. Likewise, in the UK it has been shown that shifting to a circular economy could increase resource productivity by 3% annually, generating £10bn in GVA and 200,000 new jobs by 2030³7.

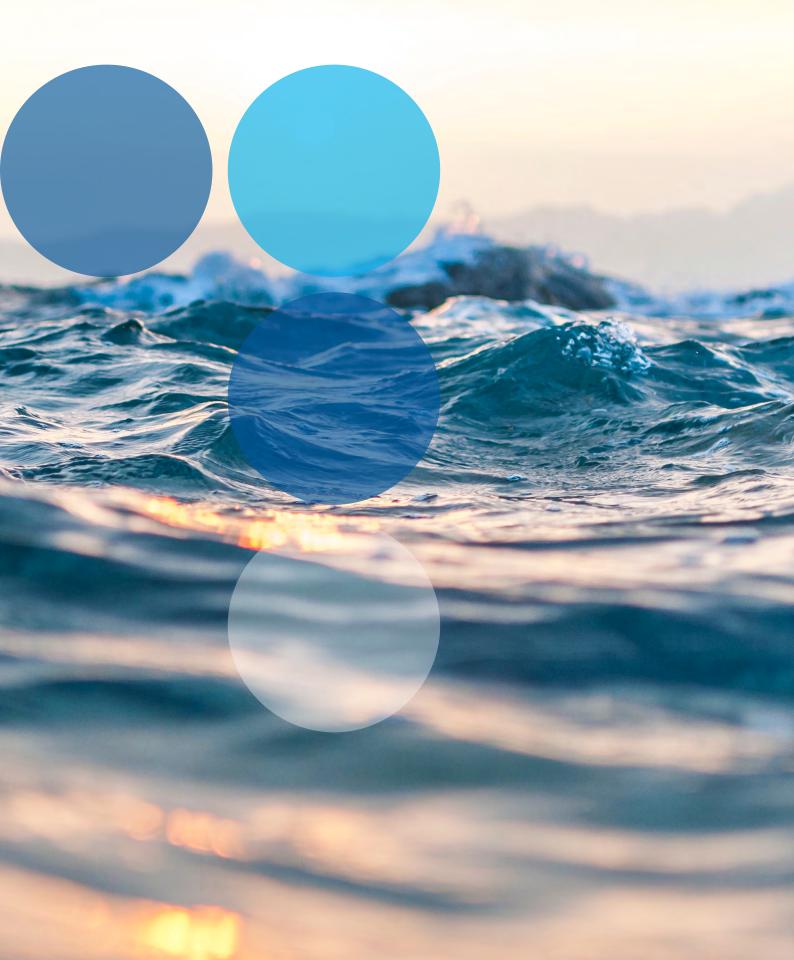
### **BRITA** insights

Recognising the initial investment in the purchase of a BRITA water filter, in the medium to long-term filters remain the more sustainable and cost-effective alternative to buying bottled water without compromising on taste. This is predominantly true for those who prefer the taste of bottled or filtered water, and also satisfies on the go needs.

Prolonging the life of goods is also beneficial for individuals and businesses. Machine longevity is positive to both planet and pocket. With the correct care and maintenance of equipment, prolonged life means less waste, and less waste means less impact on the planet. Looking after machines also means not having to purchase a new appliance as often or face costly down time for machine repairs. Taking the hospitality industry as an example, taking steps to maintain machines by using a professional water filtration system will reduce limescale build-up and keep machines in use for longer.



# 04 The challenges



Rolling out a successful, widespread culture of reuse requires cross-industry, NGO and government collaboration alongside significant consumer behaviour change. As a result, there are multiple challenges and barriers that are currently holding us back.

### Cost and trust

As highlighted by **Maya De Souza**, "there are two main barriers to reuse, which are trust and cost. Trust is about how you know that the thing is good quality, particularly things like electronics and second-hand child car seats. Cost is about logistics and process for example the cost of repairing something or replacing a part."

In the specific example of refilling rather than buying new, trust also links to concerns around hygiene, with regards to public facilities and packaging reuse. In 2018, Keep Britain Tidy and BRITA UK published their report Water, Water, Everywhere which found that 59% of those surveyed were concerned about the cleanliness of public water taps, fountains and dispensers<sup>38</sup>.

More broadly, the upfront cost for reusables can deter people from using those products over single-use alternatives. In City to Sea's recent study, it was found that 40% of people believe that zero-waste or plastic-free options are always more expensive, and two thirds believe supermarkets and brands aren't doing enough to provide affordable refill or packaging-free options<sup>39</sup>. On the other hand, people have been shown to be more responsive to charges for single-use items versus discounts for reusable items. For example, the impact of the plastic bag charge was significant, with a reported 83% reduction in bag usage<sup>40</sup>.

However, even though the evidence is there, charge incentives don't appear to be as easy to enforce. In 2018, MPs on the Environmental Audit Committee called for 25p to be charged on top of the price of a hot drink<sup>41</sup>, as concerns grew over coffee cup wastage. However, the Government at the time did not take on this recommendation.

Mary Creagh, Cranfield University Professor and previous Chair of the Environmental Audit Committee explains, "this recommendation was about trying to taper off and reduce the amount of single-use plastics going into the environment. There is a massive litter problem, the cups are littered everywhere, and the local authorities are paying to clear it up so you end up outsourcing the environmental damage."

Despite this, coffee chains have taken it upon themselves to introduce charges for single-use cups - Starbucks coffee chain became the first in the UK to trial its own charge of 5p in 35 selected London branches, in a three-month trial conducted in association with environmental charity Hubbub.

Maya De Souza also points out that "...there is still a perception barrier [to reuse] to get over. We need to make reuse feel like more of the norm. A lot of reuse is top end for example vintage clothing. It needs to be made more accessible."

### Convenience

Convenience is another barrier limiting the adoption of reuse. Only 49% of people surveyed in Water, Water Everywhere were comfortable asking for their reusable bottle to be refilled, even when they had made a purchase or planned to make a purchase from the business, however, if they were able to help themselves without asking staff this was more likely to aid the uptake of reusable bottles (73%).

Natalie Fee said, "we know that a cornerstone of behaviour change is that of convenience and we know that the reuse and refill sector still needs more innovation to make it as easy, affordable, and attractive as it's single-use rival. This will be addressed in part by 'pre-fills' where consumers purchase something in reusable packaging that has already been filled for them (and normally pay a deposit on the packaging to ensure it is returned)."

What's known as consumer's expectations of "hyper convenience" can be an issue. Companies have continued to optimise and streamline services so that it is easier than ever for people to consume products at a minimum effort and time. In the current fast-moving take-make-waste economy, we can purchase every product and service available without leaving the house. And when we do, we can venture out with nothing but our phones and return with an array of products, having consumed food and drinks beverages along the way. This involves no planning ahead, no bag to carry and no sacrifice on quality or time, except that of making the purchase.

Single-use packaging and items are a part of this system, and it requires a shift in behaviour and thinking to overcome how consumers and business approach consumption.

But the barrier doesn't stop there. Maya de Souza pointed out, "it's a journey we still need to go on and there are barriers such as convenience. Even in car sharing, companies need to be sure local authorities are providing parking spaces. Another thing that comes up with reuse is space and storage space. Where you want to share things, in dense and urban areas cost of land is expensive. This means household waste recycling centers don't all have space for reuse."

# Unintended environmental consequences

In specific circumstances, switching to reusables can incur a higher carbon footprint, especially when the infrastructure doesn't already exist to support successful reuse models.

For example, when thinking about how to introduce reuse solutions you have to consider if it is financially and environmentally sustainable in the long-term. This includes looking into how the systems work – do they need collecting and washing? What is the water and energy use involved? What infrastructure is required? Does it fit it into existing processes, or does it require new processes?

Pete Bradshaw, Director of Sustainability at Manchester City describes the company's experience in turning to reuse models: "The business got rid of single-use plastic cups and went to reusable cups as alternatives... Overall this wasn't successful - we found that on match day we were shipping 32,000 cups to be washed to Bristol and then brought back again, sometimes twice a week. The sustainability piece was good as we weren't creating singleuse plastic waste but the transport issues to make this happen was expensive and had a higher carbon footprint... The volume of washing needed for 30,000 cups was very high. You have either got to invest in a significant onsite washing facility, which you'll only use 30 times a year or rely on another facility. And unless in every region or city they have a big cup washing facility, clubs all over the country are having to ship cups to Bristol. This was part of the journey, and we learned from that. We investigated whether to build a wash facility and how else it can be used."

Understanding the full consequences of a product or process is incredibly important, and can help you choose an option that has a smaller footprint overall. Mary Creagh explains, "you could do a Life Cycle Analysis of keep cups and look into the metal, and embodied carbon that goes into them, and could construct an argument that they have a higher embodied carbon footprint than the paper/plastic cups they replace. But they are unlikely to end up in the environment, which is the difference. People are likely to keep them forever, whereas people with single-use coffee cups are likely to leave them on a park bench where they end up in the environment."

It's also important to note that barriers vary across sectors and situations which makes any 'one size fits all' approach deeply flawed. However, the suggestion that a barrier to embedding reuse culture can be unintended consequences should not be understood as a reason not to encourage reuse, but as further motivation for a whole-systems change that locks in the benefits.





In light of the benefits set out earlier, the key question is how can we overcome the barriers to reuse and encourage broader uptake of this across all sectors of society?

What's clear is that just lecturing the public will not work; it's got to come from a place of information and education, to encourage gradual, positive behaviour change. As **Kristen Filice** points out, "your business shouldn't leave customers with guilty consciences. Increasingly, there will be other businesses they can move their custom to, who provide options customers feel good to be a part of."

# The power of positivity and hope

Instead, it's about positive messaging. Speaking about #ReturnToRefill, launched by City to Sea after the lockdown to encourage people back to reusables, **Natalie Fee** referred to the need for "a renewal of confidence, a return to refill, where we all, consumers and businesses alike needed to get back to the levels of refill we achieved prepandemic and build from there."

"#ReturnToRefill was our rallying cry to the café." pubs and restaurants to return to accepting reusables as we moved out of the COVID-19 lockdown," she explains. "In terms of behaviour change this was an exciting prospect as for many businesses and consumers they were being forced to change their habits and as such needed just a small amount of pressure to change their behaviours. The first step though was to remove any perceived barriers to people refilling - this meant ensuring ALL major coffee shops accepted reusable cups as we needed to ensure there was no doubt in consumer's heads that they could now return to refill. A successful online campaign petition and direct correspondence with the major coffee chains achieved this in a few months. The next step was to work to normalise the refilling behaviour again."

# Working together and engaging the public in the process

Empowering people to take them on a journey with you is central to this. **Pete Bradshaw** recollects that at one stage, swapping glass for beer to plastic "was seen as devil's work as no

one wanted to drink a beer out of the plastic pint". Eventually, that became the norm, and in time, with effective communication and education, moving away from plastic to reusable receptacles will be the norm too. When the club made the switch, they put out messaging around this to fans about why they were doing this and how they collect cups through the collecting tubes.

The uptake and engagement was incredibly positive. "We found that after half time, fans were not only putting their own cups in the tube but also going round and collecting them themselves. We have a 98% return on reusable pots. When we went to compostable pots, we branded them and explained why to fans. Fans were going straight to the composting bags rather than general waste bags. Talking to our fans group, it's not been a negative experience. When you give people the means to act sustainably, they will. Sometimes celebrating this is difficult as it gets lost in all the news of football - everything gets lost, but off the field fan surveys and premier league surveys shows that fans are proud of two things - the work we are doing in the community and the sustainability agenda. Fans do buy into this, but messages need to explain why and involve them in the story telling a little bit."

The club is now using compostable cups and trialling edible ones, with the former able to go in the same anaerobic digester that takes food waste and grass from the field. Again, it's about taking fans on the journey. "We have been very clear with fans and the wider workforce as to why this is happening," says **Bradshaw**.

Another great example of engaging the public and working together to solve a problem is the Salvation Army's clothes recycling scheme. At one of their warehouses in the UK, they use a government-funded infrared scanner to sort through donated clothing - of which they receive over 250 million items each year. The crucial element of this machine is that it can detect the type and colour of garments, identify if they are suitable to resell in charity shops or not, and sort them into wool, cotton, polyester and viscose. The items deemed unacceptable for resale are then sent to be turned back into yarn to be used to make new clothing. This is all part of a pilot scheme for a new vision of circular fashion, for which the Salvation Army, through the support of Government and the public, hopes to become the UK's first "fibre farm" for donated clothing.

Many items of clothing are made of material blends, which makes recycling the fabric back into yarn to be reused so difficult. Mary Creagh explains, "all materials have a carbon footprint. For example, cotton has water impacts, dyes have water, chemical processing and energy impacts. But the difficulty in fabrics comes into repurposing into yarn. It's difficult to take old garments and make them into fresh yarn."

### Simplicity is key

Perhaps vitally important to embedding reuse is making it as easy as possible for people to make changes. In 2018, BRITA and YouGov found that convenience was a key factor in preventing uptake of reusable bottles, with 23% not carrying one with them because it was 'inconvenient', and 63% reverting back to plastic bottles at transport hubs where carrying a reusable bottle was more complicated. In the last four years, reusable water bottles have increasingly become the norm, but at the heart of that shift has been investment in water fountains, as well as cafés and restaurants proactively offering drinking water refills, for example Pret A Manger installing drinking fountains in its cafés.

"The cornerstone of our Refill campaign also looks to address this ease and convenience question. Now, with a flick of finger shoppers can find hundreds of thousands of places they can eat and drink with less plastic. Innovations like this will bring down the barriers to reuse and refill," says Natalie Fee.

Another great example is Dixons Carphone, which has been taking customers' old products from their homes during the delivery of their new product since 2007. All home delivery distribution centres have a reuse partner which helps maintain efficiency in testing and cleaning secondhand products to then sell through outlets or donate. Another mechanism where businesses have made returning old products as easy as possible is when phone networks send prepaid envelopes for customers to return old handsets.

"A true reuse situation has to be something you can do that is easy, accessible and cost effective," says **Pete Bradshaw**.

"If we're going to say to the average football fan you need to do X, Y, Z differently at home - they will listen but you need to make it easy for them," says **Bradshaw**. He cites the example of the club trialling some environmentally friendly shower heads on site, only using 10% of water that other showerheads use. "Players haven't even noticed the difference and they cost very little to manufacture. With these showerheads, the average three-bed home can save up to £400 a year - so it's a win-win situation."

# Creating the right cost-efficient context

Convenience sits alongside cost, especially in light of current pressures on household budgets. "Sufficient infrastructure to reuse / refill in supermarkets is also key, and this service needs to be competitively priced," says **Shauna Jordan**. "As it stands, buying items in single-use packaging is both cheap and convenient, and whilst individuals are trusting local authorities to recycle their waste, motivation to switch towards reuse may be low."

Pete Bradshaw also explained how Manchester City took advantage of cost savings. "For fan groups, we identified the savings in terms of buying single-use plastic versus compostable cups which goes to the customer experience. There is also a practical benefit from savings accrued. At the bottom line it's costing a lot less to behave better for the planet and we can redirect savings to fan betterment." The cost point pertains to businesses as much as it does individuals. If an economic case for reuse can be made by sustainability managers, others in a business are naturally going to be far more amenable to enabling reuse or embedding reuse options for customers. "In every organisation it is going to come down to what the impact is that change can make - is it real and measurable? And also, the cost of doing this - does this make sense to the business? Understanding the environment and economic value, these two things have to go hand in hand," says Bradshaw. "Often it doesn't cost more money and actually costs less."

Evidence and research have a key part to play in delivering on the opportunities of reuse as explained by **Barry Sheerman MP**. "By putting in place sustainable practices like reuse, businesses can be more efficient. We could end up waiting a long time for government legislation, and it's important we keep on at the Government to make changes, but it's also very effective to get evidence from high quality research to prove not only does reusing save the planet but it can also be highly effective."

# The role of education and early intervention

Finally, exposure to education is important to give children the tools they need to tackle the current environmental crisis. Under its Sustainability and Climate Change strategy, the UK Government has committed to introducing climate-focused modules into the national school curriculum, to equip children with new ways to learn about the environment as well as encourage new skillsets and interest in careers in relevant sectors. Putting green issues at the heart of education was firmly on the radar at COP26<sup>42</sup>, and not only does educating children on the climate crisis help alleviate 'eco-anxiety' -60% of young people say they feel worried about the destruction of the planet<sup>43</sup> - but teachers are also seeking guidance on how to talk about the climate crisis effectively with children<sup>44</sup>. Tangible actions such as learning about reuse water bottles can help young people feel more in control and able to make differences in their own lives.

This is something close to the heart of **Barry Sheerman MP** who told us that, "you've got to get people in local communities to be engaged in activities like reusing. A great place to start is primary schools, you want to teach children about reuse because they'll then go home and encourage their families to practice reuse too."

### Partner insights

Over the years, BRITA UK has been working with a number of third sector organisations on dedicated education projects as part of its longstanding commitment to sustainability. This has included working alongside Keep Britain Tidy to educate the next generation on the issues of single-use plastics, and bring their voice to the debate. The project looked to understand how children and young people interact with the issue of single-use plastics. As part of this they developed a report that concluded that 'giving children the information and tools to tackle the single-use plastics issue has motivated them to do so' and recommends similar activities be undertaken by teachers around the UK.

BRITA's latest work with charity partner Whale and Dolphin Conservation (WDC) draws on recent research that shows almost two thirds (70%) of children are worried about the future of the planet and three in five (60%) are concerned of the lasting damage single-use plastic pollution is having on sea animals.

As part of this campaign, BRITA commissioned a book to raise funds for WDC about fighting plastic pollution written by children's author and McFly bassist Dougie Poynter. The book, titled The Whale Watchers, is aimed at Key Stage 2 pupils and follows the story of Finn, who ends up on a rescue mission to save a whale who has become entangled in plastic. Readers join his journey of discovery, they learn about the role whales play in combatting climate change and their startling carbon capture abilities. They re-distribute nutrients across the seas, are essential to the marine eco-system and the production of phytoplankton, which produces over half of the world's oxygen - they are the rainforests of the ocean.

### **Policy**

The relationship between businesses and Government to make tangible change is crucial. As Maya Da Souza points out, "there is an interest in what businesses can do voluntarily, as the Government has limited resources for introducing policy, they often need product by product approaches, and policies can take time to develop... Collaboration is important, initiatives like Extended Producer Responsibility schemes where things are collected so that they can be reused and recycled are great examples of embedding reuse, but they require collaboration between business and government."

There are many ways for the Government to incentivise and work with businesses. Kristen Filice outlines that this is a two-way street. "At the end of the day, we need the right regulatory framework to incentivise the behaviours we need for a circular, net zero. regenerative economy. We need prices to reflect the real cost of items, we need hard legislation around corporate commitments, aggressive tax of non-sustainable businesses, regulatory responses and pricing mechanisms to control social and environmental innovation incentives, and transparency in reporting with mandatory social and environmental performance disclosures. Sure, we need incentives. But we need penalties as well."

The UK Government has set out its own action plans - the 25 Year Environment Plan and Clean Growth Strategy - seeking to achieve zero avoidable waste by 2050. In November 2021, it published its Resources and Waste Strategy Monitoring Progress Report addressing resource productivity, greenhouse gas emissions, waste production, waste treatment, waste crime, and the waste prevention programme<sup>45</sup>.

In July 2021, the Government's Right to Repair legislation came into force which set new ecodesign and labelling requirements for specified electrical products sold in Great Britain.

These requirements aim to increase producer responsibility, with manufacturers having a grace period of up to two years from 1 July 2021 to make spare parts available. The Government's research briefing states that, "ecodesign requirements can also facilitate progress towards a more circular economy through setting requirements with regards to resource efficiency.

This includes material consumption, emissions, pollution and waste generation, durability, repairability, recyclability and ease of material recovery."<sup>46</sup> Manufacturers have to make spare parts available for a minimum of 7 to 10 years after the product has been placed on the market. The aim of the legislation is to delay the end-of-life of electric products and prevent unnecessary waste.

Policy around reuse and other sustainable models can not only enforce change within a business, but can influence new markets and industries. As Mary Creagh explains, "look at the economic instruments available. For example, we have the plastics tax which came in April this year – any business that doesn't have 30% recycled plastic [in their packaging] has to pay a levy. This has created a flowering of innovation and investment in this country. If you start to embody sustainability in treasury policy, you immediately change the market dynamics. Because it gives business the confidence they need to invest."



Whilst reuse isn't perfect, it does a great job of providing a solution to extensive waste and resource exhaustion when other models in the waste hierarchy aren't suitable. For example, when reducing your consumption isn't an option due to the product's essential nature, or when infrastructure and education prevent proper recycling.

"The price future generations will have to pay for the current take-make-waste model is too high, with global warming damaging our Earth and rubbish suffocating our oceans, reuse offers one of the many answers to the questions we face about how to fix the problem."

Not only does reuse have environmental benefits by helping reduce waste and resource consumption, but it offers a cost benefit for the medium to long-term by reducing the need to buy products as frequently.

In practice, reuse takes place in many different forms which can be applied to multiple business models and lifestyles depending on the scenario. This white paper establishes that the refill model works well for products typically packaged in single-use plastic and gives power to both businesses and consumers to reduce their impact on the planet. While other models such as resell, rental and repair require further thought and organisation. These models can be used to address waste and resource issues across a whole range of sectors including Fashion, Electronics, Construction, Furnishings and more.

Whilst there are many benefits to reuse, there are also challenges preventing the realisation of an embedded reuse culture. Cost and trust are two key drivers of uptake, or lack of, while convenience is another barrier negatively influencing people and business decisions. There are several mechanisms outlined in section five to help tackle these challenges. So where are the opportunities for change?

For businesses looking to engage consumers in reuse, this includes reinforcing the benefits of reuse with positive and hopeful messaging. Businesses can also make an effort to engage the public in the process and work with partners for support with things like logistics. Another way to increase the uptake of reuse for both business offerings and consumer use is to make it as simple and accessible as possible. This includes designing products with reuse in mind from the start.

For individuals, another solution to drive behaviour change outlined in this white paper includes education and capability building. Equipping children with ideas to combat the climate crisis, such as reuse, can drive real positive change and provide hope in an unsettling world.

For policy, political guidance is a key pillar for change. Not only does the right climate-friendly policy enable businesses to make necessary changes, but it spurs innovation and enables confidence to invest in markets built on sustainable solutions – such as reusable bags, resale platforms, or other circular products. With the UK Government enforcing its own action plan, and other markets across the globe introducing innovation-led policy to drive circular economies and tackle extensive waste and unsustainable resource exhaustion, we hope to see reuse evolve to a bigger scale.

BRITA is dedicated to offering solutions for those who love great tasting water but want to reduce their impact on the planet and take part in the growing reuse culture in the UK. Find out more here.

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