

A photograph of a stack of cardboard boxes and a yellow envelope on a wooden table. The boxes are brown and have black tape. One box has two upward-pointing arrows on its side. The envelope is yellow and has a white label. The background shows a window and a wooden chair.

The stuff of life

consumption, consumerism
and protecting the planet

Researched and written by Dr Jane Beasley and Sarahjane Widdowson
of Beasley Associates Ltd on behalf of SUEZ recycling and recovery UK

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Executive summary

The stuff of life

From the moment we are born, we are surrounded by ‘stuff’ – some of it essential for life, some necessary for comfort, some passed down through tradition and some, well, some that is just ‘stuff’.

We’re increasingly being overwhelmed by stuff we just don’t need and this is having a detrimental impact on our environment. As a major economy, the UK’s production and consumption has a disproportionate footprint on earth systems and biodiversity¹, and despite accounting for only 1% of the global population, the UK is historically the world’s fifth-largest contributor to greenhouse gas emissions².

Our desire to consume also has a material impact on the countries where the resources are sourced and on the people that manufacture the goods we consume, and increasingly where post-consumer materials are sent for recycling or remanufacturing. In a time of economic pressures and a cost-of-living crisis, buying things we just don’t need is also having a significant impact on our pockets. This report examines who, what and why we consume.

It provides some simple examples of the types of interventions consumers, businesses and government can make to reduce unnecessary consumption and make better choices in three life scenarios where there is the potential to make a meaningful impact – ‘home life’, ‘weekly shop’ and ‘leisure time’.

Addressing our consumption habits in a manner that is neither preachy, judgemental or feels insurmountable, but rather empowers individuals, communities, producers, manufacturers and policy makers to work collectively to bring about change, is a challenge. Information about what and how to consume can be conflicting or easy to misinterpret. In addition, greenwashing is increasing as brands jostle for market share or make tokenistic ‘feel good’ gestures. As a consumer, it can be difficult to know what the ‘right’ choice or action is.

Collective effort is required to effectively turn down the heat – it is not on one group or one sector to make all the changes, it’s about collective action, building confidence and leading the way. It’s not about banning things we enjoy or love doing, it’s about realising opportunities and rethinking our relationship with ‘stuff’.

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¹ Jennings, S., McCormack, C., Stoll, G., (2021), Thriving within our planetary means, WWF and 3Keel

² WWF-UK, (2021), COP26@ The UK’s 2030 Climate Target to Cut Emissions

Steps we can take to reduce consumption

Government

- ↪ Change the narrative around consumption
- ↪ Take a systemic approach to change
- ↪ Lead by example

Business

- ↪ Review your business model
- ↪ Give consumers meaningful choices
- ↪ Stop giving away free 'stuff'

Consumers

- ↪ Be a conscious consumer
- ↪ Recognise that changing habits takes time
- ↪ Use your voice and vote with your feet

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Introduction

Beasley Associates Ltd have been commissioned by SUEZ recycling and recovery UK to consider the challenge of consumption and consumerism and propose ways in which we can consume more sustainably.

Global consumption patterns are having a significant and ongoing detrimental impact on our environment, our health and our financial wellbeing. Therefore, considering ways we can change how we do things – at policy, production, or individual level – is crucial.

This report is the culmination of research into our behaviour, considering why and how we consume and the impacts this is having. Three scenarios which reflect different consumption-based activities have been used to explore the changes we can make and proposals for future action have been put forward.

Context

The challenge of overturning or even disrupting an economic model – where consumer desire to be more sustainable has never been greater but simultaneously, as consumers we want (rather than simply desire) more than what we need, and the state (in its broadest sense) demands we consume to support our economy – cannot be solved by a single measure or approach. However, incorporating systematic changes in our everyday lives and working together can bring about positive environmental benefits. The challenge of disrupting our traditional consumption habits is significant, but in short, consumers, businesses and government all have a role to play.

What's the issue with consumption?

Our relationship with material things starts early and has become part of our identity, more so in the Western world, where we over consume as entire nations each and every day. The result is we are increasingly being overwhelmed by stuff we just don't need, using resources at a rate that cannot be sustained – according to latest projections of population growth, the equivalent of almost three planets will be required to provide the resources needed to sustain current lifestyles³. In 2020, the UK actual individual consumption (AIC⁴ – an indicator that describes material welfare of households) was 13% higher than the EU27 average.

Everything we consume has an impact on our environment and often a material impact on the countries where the resources are sourced and on the people that manufacture the goods we consume, and increasingly where post-consumer materials are sent for recycling or remanufacturing. As a major economy, the UK's production and consumption has a disproportionate footprint on earth systems and biodiversity⁵, and despite accounting for only 1% of the global population, the UK is historically the world's fifth-largest contributor to greenhouse gas emissions⁶.

In Annie Leonard's seminal work 'The Story of Stuff'⁷ she highlights just how much 'stuff' is wasted during the extraction, production, packaging and transportation of the stuff we buy, and quotes figures from North America where just 1% of the stuff running through the system remains in use after six months.

In a climate emergency, we cannot continue to do the same things over and over, we need to come together to change the narrative.

Understanding the nature of consumption, the decisions we all make and the impact this has on some of the biggest environmental challenges we are facing today is crucial if we are to find ways that we can all act more effectively, working together to turn down the heat.

³ https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf

⁴ AIC consists of consumer goods and services consumed by individuals. This is irrespective of whether these goods and services are purchased and paid for by households, by non-profit organisations or by government (such as health and education) <https://www.ons.gov.uk/economy/inflationandpriceindices/articles/actualindividualconsumptionperheadintheuk/2020>

⁵ Jennings, S., McCormack, C., Stoll, G., (2021), Thriving within our planetary means, WWF and 3Keel

⁶ WWF-UK, (2021), COP26@ The UK's 2030 Climate Target to Cut Emissions

⁷ https://www.storyofstuff.org/wp-content/uploads/2020/01/StoryofStuff_AnnotatedScript.pdf Statistic taken from Natural Capitalism by Paul Hawken - Home | PaulHawken



Understanding consumption and consumerism

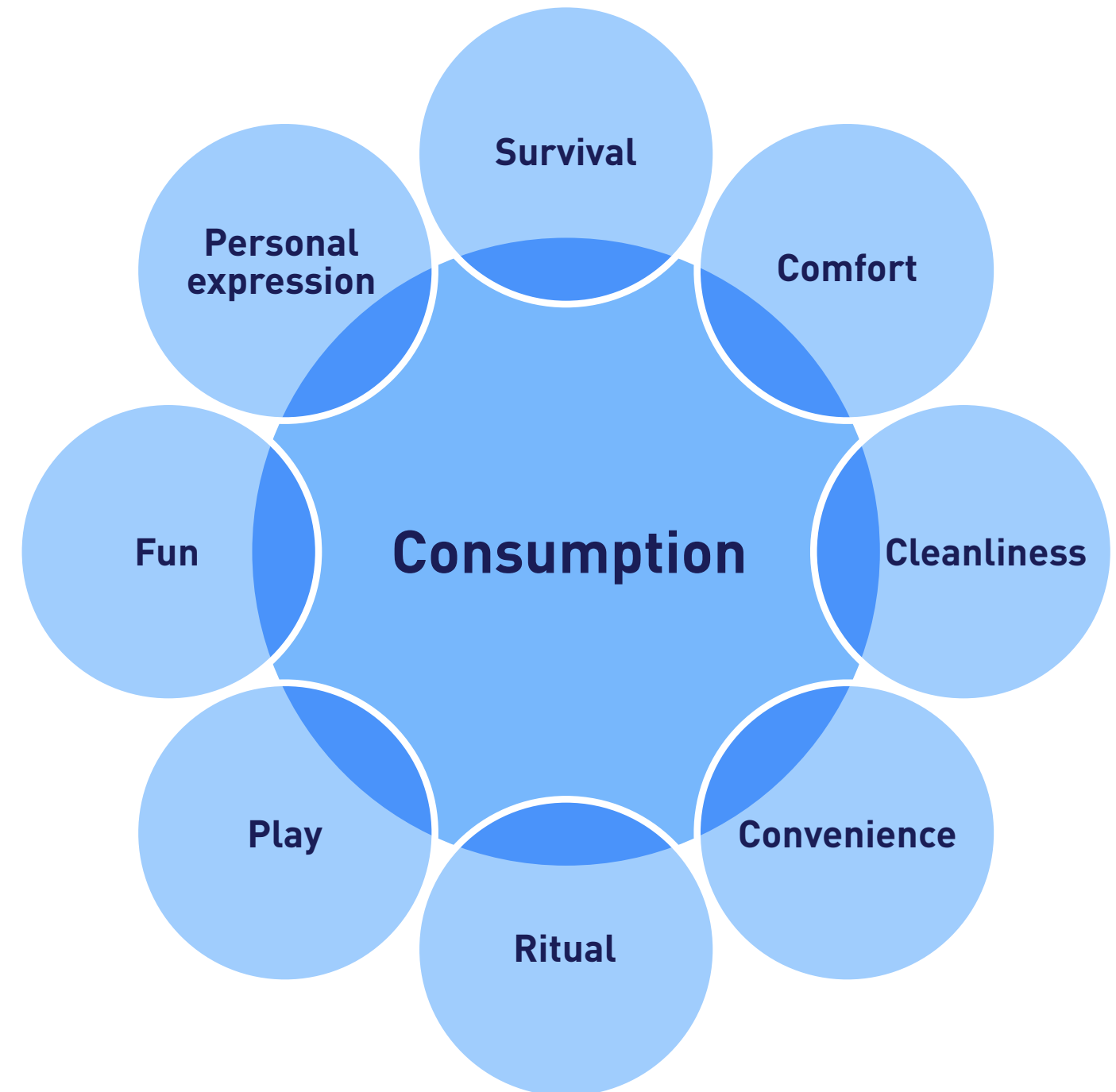
Why do we consume?

The reasons we consume are both simple and complex. We consume to survive at its most basic level, but we also consume for fun, personal expression and comfort amongst other things.

We are all consumers, and identities, politics, the economy and the environment are crucially shaped by what and how we consume⁸. Advanced economies live or die by their ability to maintain high levels of spending, with the help of advertising, branding, loyalty schemes and consumer credit – but to what ultimate impact when the cost of goods fails to reflect the true cost of their production or when the goods we consume quickly reach end of life?

Consumption beyond meeting basic needs to sustain life started to emerge with the more well-off sectors of society between the 19th and 20th century, but took a hold and became more mainstream following the second world war⁹. A perfect storm emerged. Firstly, advancements in communication through radio and television allowed advertisers to appeal to the desires and aspirations of the population in their own homes. Secondly, this was coupled with an economic and political need for people to buy things, not because they required them, but because they support the capital model for growth.

Figure 1: Reasons why we consume



⁸ Trentmann, Frank (2016) Empire of Things: How We Became a World of Consumers, from the Fifteenth Century to the Twenty-First. London, UK: Penguin.

⁹ <https://www.bbc.com/future/article/20210120-how-the-world-became-consumerist>

What can we learn from history?

History tells us that we have always consumed, but the way in which each society does so, shifting from consumption for survival through acquiring goods for other needs and desires, differs. Conspicuous consumption has been a running theme throughout history, but it's only this century when we've become overwhelmed with stuff. You could say that we're only just starting to learn the lessons of over consumption – or we've only just started to listen to the concerns of those who have identified this problem.

The UN Rio Earth Summit in 1992 developed a blueprint for environmental protection and from this grew the UN Sustainable Development Goals (SDG) which were adopted in 2015. SDG12 – responsible consumption and production – contains specific consumption targets which nations should be working towards, including reducing food waste and rationalising inefficient fossil-fuel subsidies that encourage wasteful consumption. There's still a lot to do, but conversations about over consumption are now becoming more mainstream and we're starting to recognise that we, all of us, need to do better.

¹⁰ Considered to be those born between 1997 and 2012

¹¹ Source: <https://dma.org.uk/article/is-gen-z-the-most-profitable-consumer-group-in-the-uk> <https://www.mckinsey.com/industries/retail/our-insights/the-influence-of-woke-consumers-on-fashion>

¹² <https://www.weforum.org/agenda/2022/03/generation-z-sustainability-lifestyle-buying-decisions/>

¹³ Considered to be those born between 1965 and 1980

¹⁴ <https://www.experianplc.com/media/latest-news/2018/the-formidable-40s-high-earning-high-spending-generation-x-are-largest-contributors-to-uk-economy/>

¹⁵ Considered to be those born between 1981 and 1996

¹⁶ Considered to be those born between 1946 and 1964

¹⁷ <https://dma.org.uk/article/is-gen-z-the-most-profitable-consumer-group-in-the-uk>

Who are the biggest consumers?

Generation Z¹⁰ is emerging as the largest consumer group by size, representing 40% of all global consumers¹¹. It is an eclectic group who are digital savvy and can be challenging to define in terms of their purchasing behaviour. However, they are adopting more sustainable behaviours than any other demographic, putting sustainable choices above brands in their purchasing decisions¹², and are setting trends and shaping the market. Whilst their spending power may be variable, they are influencing their Generation X¹³ parents in their purchasing behaviours. It is worth noting that in the UK, Generation X are considered to be the most influential consumers, earning, spending and contributing more than any other demographic¹⁴. Millennials¹⁵ and Baby Boomers¹⁶ on the other hand still have a considerable impact in terms of purchasing power, particularly in terms of luxury items and premium products.

The 'market' considers one of the most 'profitable' groups of consumers in the UK to be those who are moving home. On top of money spent on the purchase itself, a further £13,000 is typically being spent on home furnishings, in addition to DIY, windows and doors, floors and service provision. It is estimated that this group is bringing £12 billion into the UK economy each year; this represents around 3% of GDP¹⁷.

What influences our purchasing decisions?

Regardless of the purported growth of more thoughtful and ethical consumption (as evidenced by increasing sales in organic goods, and second-hand sales through sites such as eBay and other platforms), the UK remains a mass consumer society.

The main factors which influence purchases are expansive (as seen in figure 2), but include price, quality, design, brand and brand loyalty, and environmental benefits¹⁸.

Being aware of what influences our purchasing habits means that if change is required, we can use appropriate levers and motivators to bring about that change, whether it's at consumer, producer or policy level.

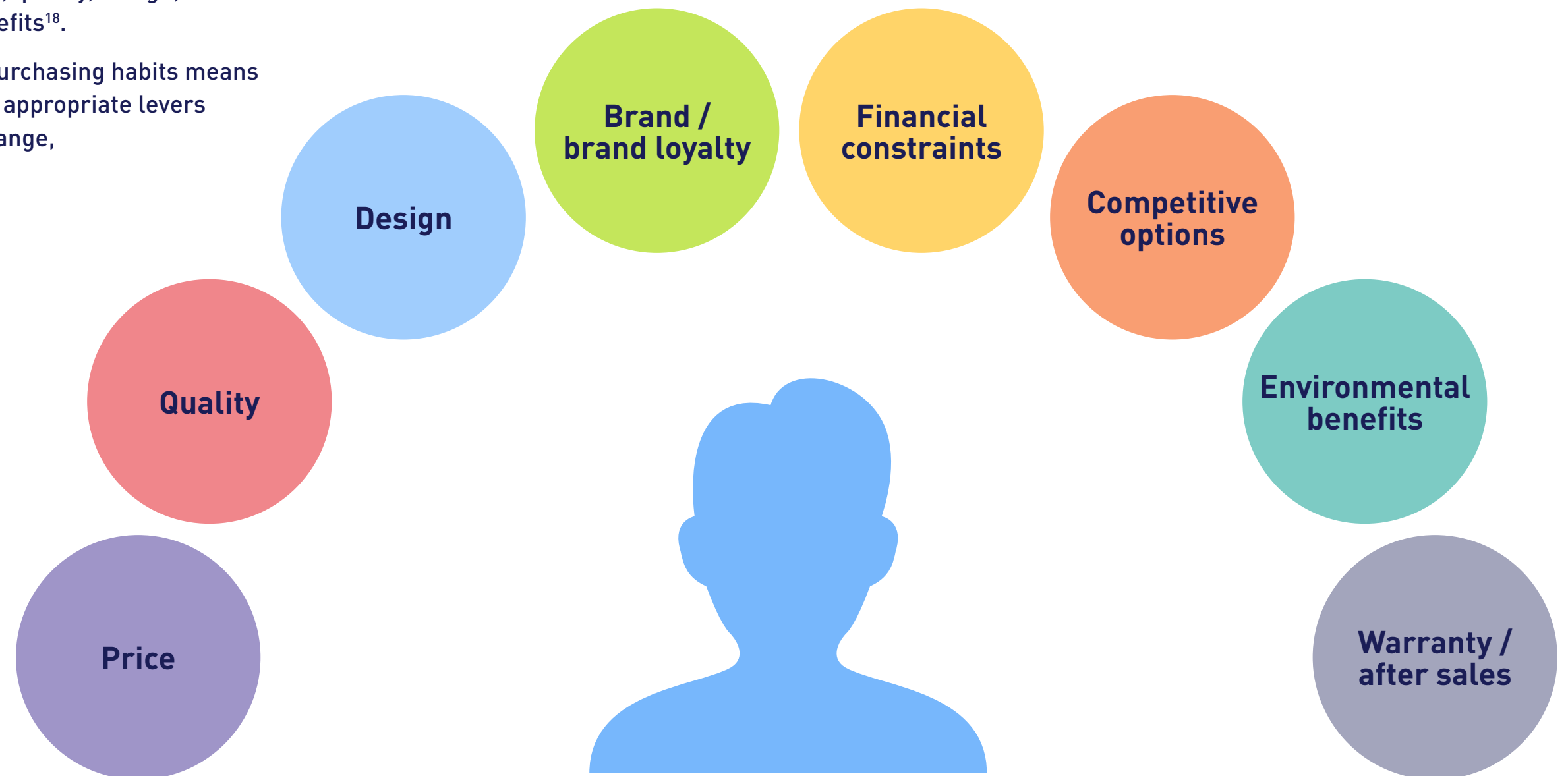


Figure 2: Factors which influence purchasing decisions

¹⁸ <https://santandertrade.com/en/portal/analyse-markets/united-kingdom/reaching-the-consumers>

What do we spend our money on?

More than 50% of our spending in the UK goes on four main categories of items: food; housing and fuel; transport; and recreation¹⁹. This is a UK average and will vary between socio-economic groups, but also depending on other societal circumstances.

The energy crisis, war in Ukraine and Brexit are contributing factors to the cost-of-living crisis and may mean that food, housing, fuel and transport are even more pronounced.

Looking at this in more detail, figure 3 illustrates what proportion of our household consumption expenditure is spent on specific products and services.

Figure 3: Proportion of household consumption expenditure in the UK²⁰



¹⁹ <https://www.moneyhelper.org.uk/en/blog/everyday-money/how-does-your-household-spend-compare-to-the-uk-average>

²⁰ https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE5

How do we purchase?

Post COVID, we have seen a change in how we purchase, with more of the population shifting from in-person to online purchasing behaviour. Recent Google research²¹, testing the attitudes and behaviours of 5,000 people across the UK, provided evidence of changing shopping behaviour and concluded that online consumer shopping is here to stay. Ease and convenience were often cited across all groups interviewed as justifications for their preference for online and it is clear that new habits have formed and we are seeing permanent shifts in behaviour.

Aligning these shifts in behaviour with our social media habits (refer to figure 4) and the potential this brings to be constantly bombarded with marketing and purchasing opportunities, it's very clear how challenging it is to change our consumption behaviour.

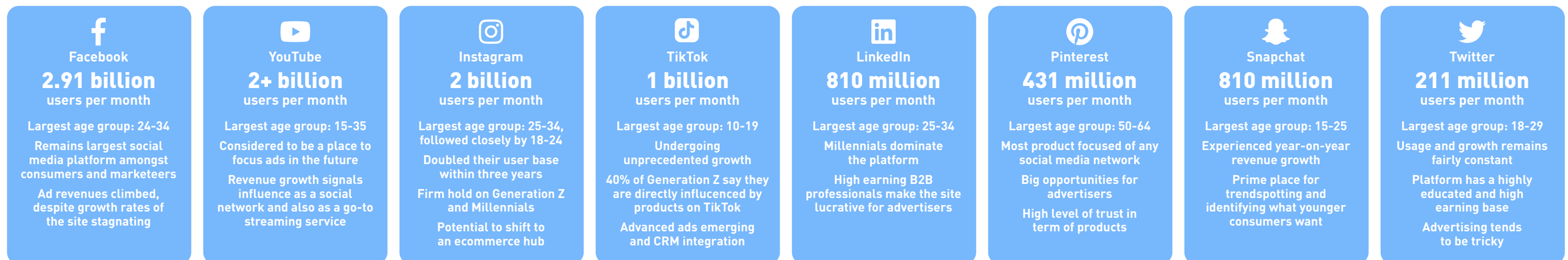
Research has shown that social media plays a huge part in purchasing power when targeting Generation Z consumers who are very willing to buy products and services via social media and they tend to be more impulsive buyers than Millennials²². Whilst Millennials have grown up through some significant tech changes such as the wider use of the public internet and the smart phone, Generation Z has never known anything else²³ – as the demographic that has increasingly significant purchasing power, online access to products and services is not only expected, but also a normal aspect of their consumer behaviour.

All is not bad news however in terms of consumption and consumerism, as sharing platforms are also gaining popularity – nearly one in five UK households use the Nextdoor app and its marketplace function to sell and share second-hand items²⁵. This shift to sharing platforms is still minimal compared to mainstream consumption, but tapping into this resource to change the way we traditionally consume represents a real opportunity.

Online platforms such as eBay have seen an increase in searches using key words such as 'upcycled', 'second-hand' and 'repair kit', and recent surveys conducted by the site found that 20% of respondents claim they buy more second-hand goods now via eBay than they did two years ago. Other platforms – such as Vinted, Facebook Marketplace and Gumtree – have all been positively rated as popular second-hand online marketplaces²⁶.

**There are now more phones
on the planet than people²⁷**

Figure 4: Reach and marketing potential of social media platforms²⁴



21 <https://www.thinkwithgoogle.com/intl/en-gb/consumer-insights/consumer-trends/pandemic-consumer-behaviour-changes/>

22 <https://www.jcdecaux.com/blog/focus-gen-z-raising-bar-retail>

23 <https://www.wundermanthompson.com/insight/the-purchasing-power-of-millennials-and-generation-z>

24 <https://sproutsocial.com/insights/new-social-media-demographics/>

25 <https://about.nextdoor.com/gb/>

26 <https://www.which.co.uk/news/article/second-hand-online-shopping-boom-what-buyers-and-sellers-should-know-ada7k2j6lQSm>

27 GSMA | The Mobile Economy - The Mobile Economy



Consequences of current consumption and consumerism

“You cannot get through a single day without having an immediate impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.”

— Dr Jane Goodall

What are the biggest issues?

As discussed, we know we are overconsuming and we know that we are surrounded by 'stuff', much of which is in excess of what we need but is rooted in who we are and how we behave. So, what's the problem? What are the big issues associated with our consumption-based lifestyles?

We are in a climate emergency. The evidence associated with climate change is broadly considered to be irrefutable in terms of extreme weather conditions that are becoming a more common occurrence across the globe.

As reported by the recent IPCC study²⁸ into impacts, adaptation and vulnerability as a consequence of climate change, unsustainable consumption and production is highlighted as playing a significant role in terms of the challenges we are facing.

The impacts of climate change are devastating and wide ranging, including biodiversity loss²⁹, land degradation and social inequalities (refer to figure 5).

Figure 5: Effects of climate change³⁰



A significant contributor to climate change are greenhouse gas (GHG) emissions, and around two-thirds of global greenhouse gas emissions are linked to household consumption, specifically our transport options, our food choices and our housing³¹.

In addition, thinking more broadly about environmental concerns, between 50% and 80% of total land, material and water use is also linked to household consumption. Mobility, shelter and food are the most important consumption categories impacting our environmental footprints³² (refer to figures 6-9).

These are often the more challenging behaviours to manage in terms of resourcing the change in behaviours and attitudes. It is worth noting that our environmental 'footprints' are unevenly distributed across regions, with wealthier countries generating the most significant impacts per capita. Conversely, it's often countries with the least wealth that bear the brunt of high levels of resource extraction combined with exploitation of people to manufacture the goods we consume.

In terms of the UK, consumption is responsible for emissions of more than 800,000 TeqCO₂ (equivalent tonnes of carbon dioxide) per year, with household consumption rates averaging at 13 TeqCO₂ per capita per year, which is not sustainable³³. This includes all direct impacts (such as the fuel we use when we drive our cars) and indirect, or secondary, impacts from producing the goods and products that we buy. We are in the top 10 of worst offending countries across the globe in terms of our carbon footprint per capita.

²⁸ IPCC (2022), Climate Change 2022: Impacts, Adaptation and Vulnerability

²⁹ As reported by the Environment Agency in its recently published report 'Working with Nature', which states that the "effects of consumption in wealthy countries on loss of biodiversity and habitats elsewhere in the world must not be overlooked".

³⁰ <https://www.metoffice.gov.uk/weather/climate-change/effects-of-climate-change>

³¹ Diana Ivanova, John Barrett, Dominik Wiedenhofer, Biljana Macura, Max Callaghan and Felix Creutzig (2020), Quantifying the potential for climate change mitigation of consumption options, Environ. Res. Lett. 15

³² Diana Ivanova, Konstantin Stadler, Kjartan Steen-Olsen, Richard Wood, Gibran Vita, Arnold Tukker, and Edgar G. Hertwich, (2015), Environmental Impact Assessment of Household Consumption, Journal of Industrial Ecology

³³ As reported in the data set to accompany the research paper: Diana Ivanova, Konstantin Stadler, Kjartan Steen-Olsen, Richard Wood, Gibran Vita, Arnold Tukker, and Edgar G. Hertwich, (2015), Environmental Impact Assessment of Household Consumption, Journal of Industrial Ecology

Total impacts across consumption categories (UK) ³⁴

- Direct 'Shelter'
- Direct 'Mobility'
- Indirect 'Shelter'
- Indirect 'Food'
- Indirect 'Clothing'
- Indirect 'Mobility'
- Indirect 'Manufactured products'
- Indirect 'Services'

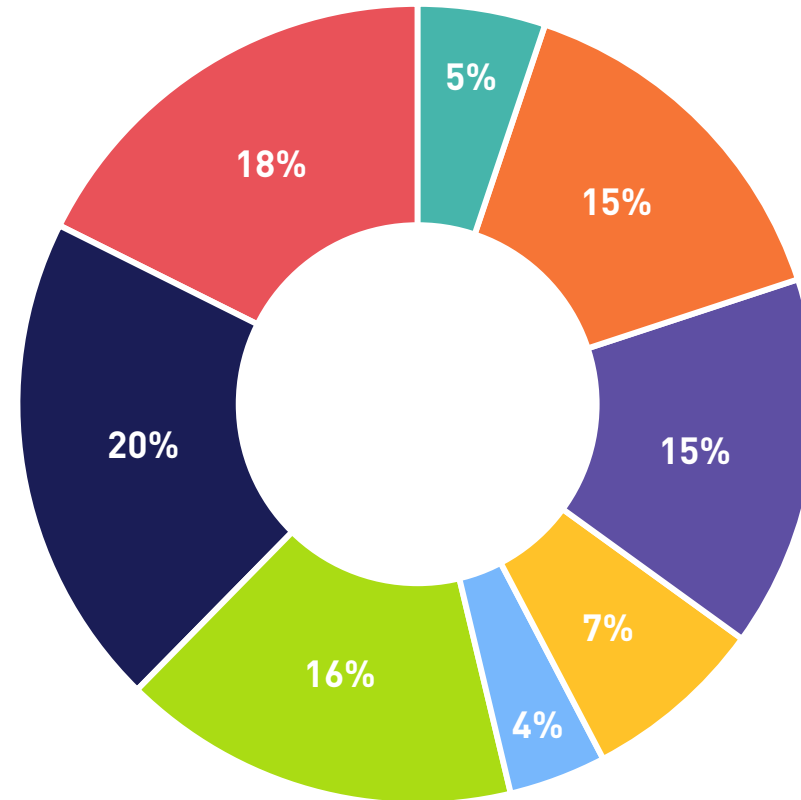


Figure 6: UK carbon footprint (Kg CO₂ eq.)

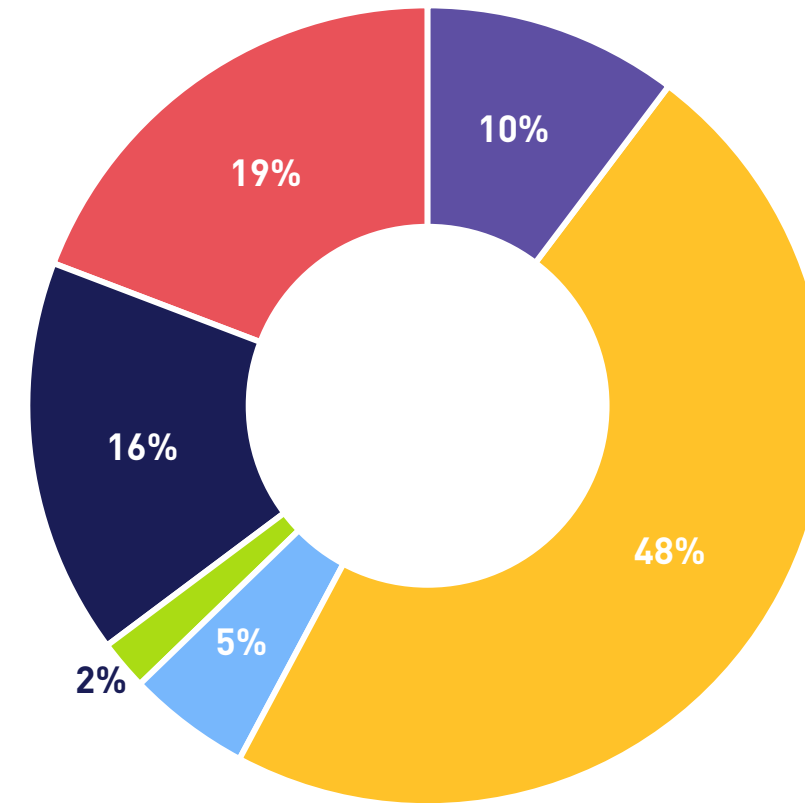


Figure 7: Land footprint (km²)

Acknowledging that between 60-80% of impacts on the planet come from household consumption, if we change our consumption habits, this will have a drastic effect on our environmental footprint.

In addition, purchasing 'better' in terms of changing to low-carbon alternatives presents a real opportunity to reduce our greenhouse gas emissions, positively impact climate change, and at the same drive forward new industries and employment opportunities, create new revenue streams for the economy and ultimately play our part to turn down the heat.

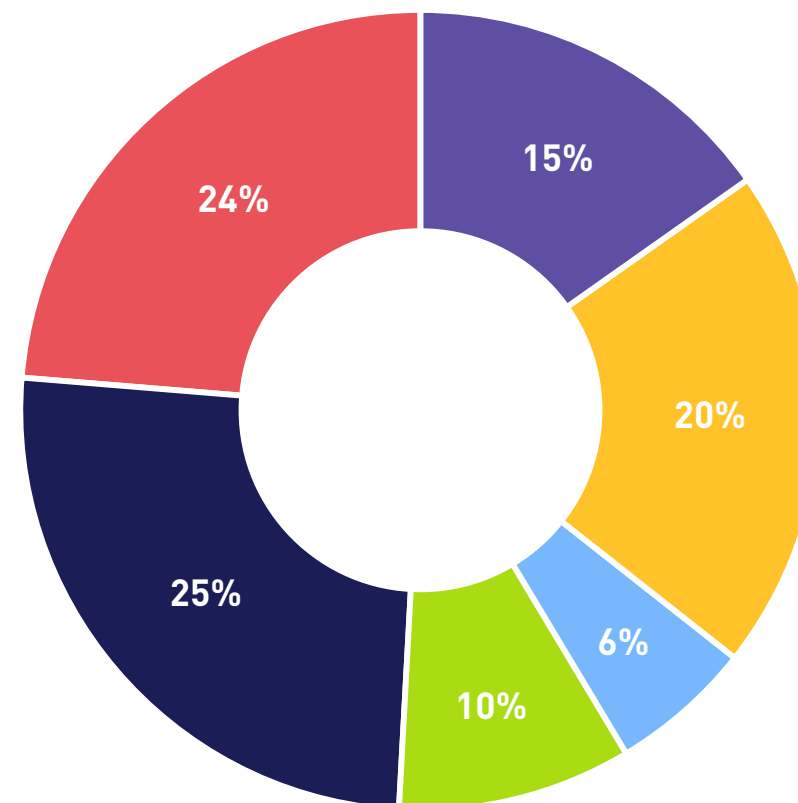


Figure 8: Material footprint (kt)

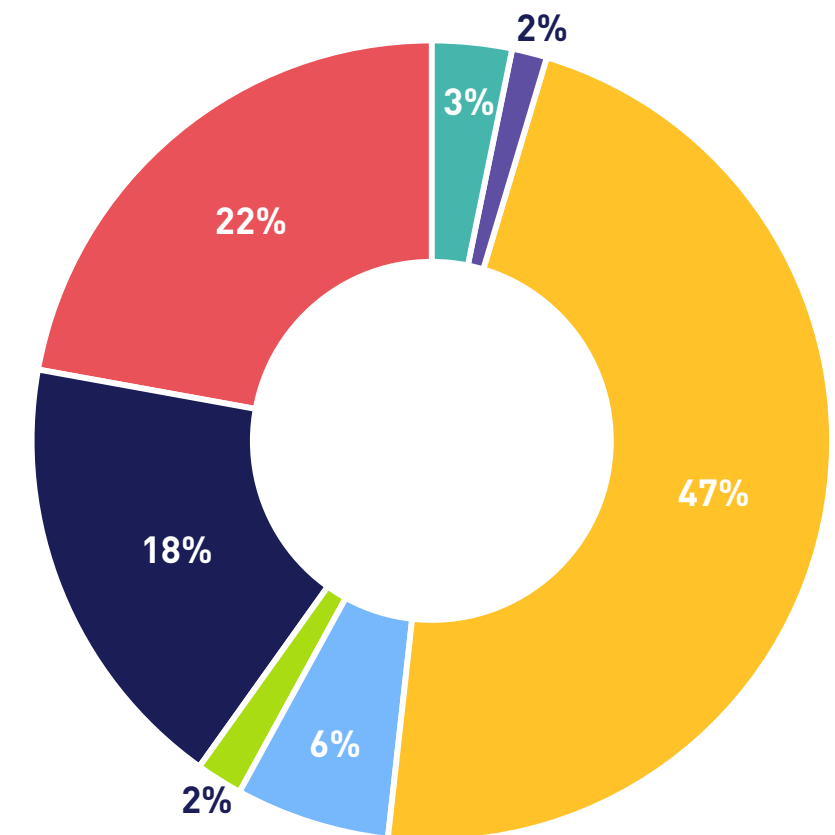


Figure 9: Water footprint (Mm³)

³⁴ Diana Ivanova, Konstantin Stadler, Kjartan Steen-Olsen, Richard Wood, Gibran Vita, Arnold Tukker, and Edgar G. Hertwich, (2015), Environmental Impact Assessment of Household Consumption, Journal of Industrial Ecology

How difficult is it to change our behaviour?

There are a couple of key considerations when thinking about behaviour change. Firstly, we need to have a clear understanding of the barriers to the desired behaviours. Deloitte undertook a recent survey³⁵ into environmental behaviour and whilst they reported an increase in the number of people who have adopted a more sustainable lifestyle, including for example repairing an item rather than replacing it or buying second hand, they also identified what people felt were the main barriers to making a change – three reasons outranked others for not embracing more sustainable choices (figure 10).

Figure 10: Main barriers to adopting a more sustainable lifestyle



Other reasons given included a lack of belief that a more sustainable lifestyle would make a difference and that it's too complicated or too difficult to make different choices.

Availability of different choices and those choices not being convenient or too time consuming were also identified as barriers.

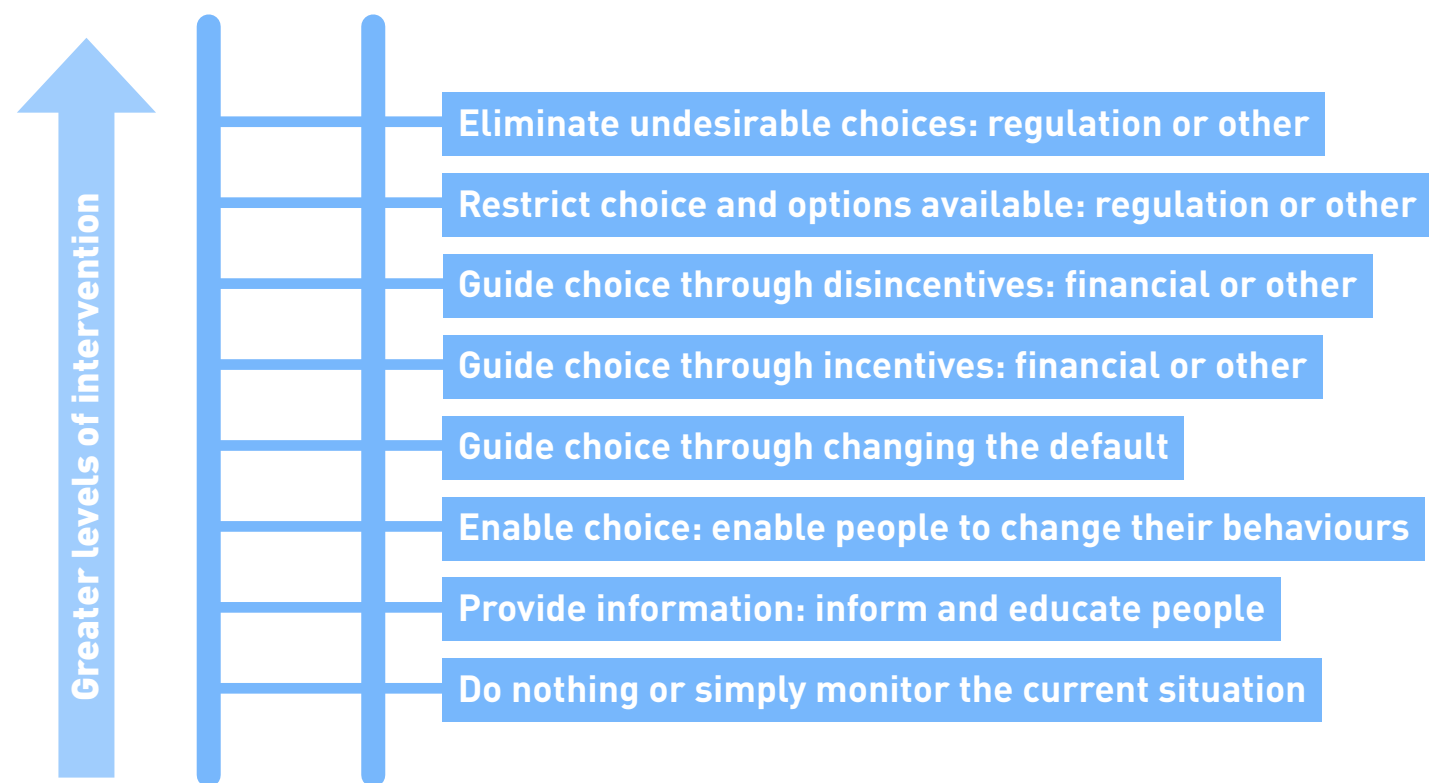
So, the question remains as to how do we get to a place where we are consuming only the things that we need and buying new is a last resort, as illustrated in figure 11, the Buyerarchy of Needs.

Figure 11: Buyerarchy of Needs³⁶



³⁵ <https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html>

³⁶ Credit to Sarah Lazarovic (<https://www.sarahl.com/>) for the illustration

Figure 12: Nuffield 'nudge' ladder approach³⁷

The greater the change in behaviour that is required, the greater the levels of intervention needed to bring about that change (figure 12). Providing information to inform and educate will certainly help address one of the key barriers in terms of lack of information, but it will not necessarily overcome issues related to cost or lack of interest in doing things differently. Enabling or guiding choice through policy interventions can be a mechanism to bring about change. For example, normalising re-use through policy stipulating that large retailers are required to provide refill opportunities, as is currently the case in France and is soon to be the case in Spain, could be an interesting driver. Austria are mandating beverage packaging re-use quotas which should see more beer, water and other drinks available in reusable packaging by 2025.

Incentives or disincentives in terms of availability of alternatives, pricing support, removal of options to force a response in those not necessarily interested, may also be required to bring about behaviour change.

Another consideration when thinking about how we change behaviour is to look at what will motivate consumers to do things differently. Quantifying the carbon impact of our lifestyles has become increasingly popular in recent years, with toolkits to help us measure our footprints and identify ways to live more sustainably. Whilst for some who are striving to reduce their average carbon footprint from say 13 TeqCO₂ per year³⁸ to 5 TeqCO₂ per year, knowing the impact of any steps they are taking is important. However, for others the numbers may feel difficult to put into any context and some of the steps required to make a dramatic impact on our personal footprint may feel out of reach. For example, what does 'living a 5 TeqCO₂ per year lifestyle' really mean? And whilst reducing air travel and living car free can make a significant impact on our personal carbon footprint³⁹, if these options are difficult to deliver in the short term, they may disincentivise other actions which when quantified makes comparably less difference to our overall footprint.

From a resource point of view, consuming services rather than purchasing goods – such as the use of streaming services for music rather than buying CDs or records – involving policy makers and producers to widen this approach to other product types and services and ensure the alternatives are cost effective, convenient and accessible, may on the face of it appear to be comparatively small scale in terms of carbon mitigation⁴⁰. However, when scaled up and rolled out across communities, the potential impact could be significant and be more appealing (and doable) in the short term than living car-free lives.

³⁷ Nuffield Council on Bioethics 'Intervention Ladder'

³⁸ <https://howbadarebananas.com>

³⁹ One less flight (long return) may reduce between 4.5 and 0.7 (mean of 1.9) TeqCO₂/cap, while taking one less flight (medium return) between 1.5 and 0.2 (0.6) TeqCO₂/cap.

The two options have a median reduction potential of 1.7 and 0.6 TeqCO₂/cap, respectively. Living car-free has the highest median mitigation potential across all of the reviewed options at 2.0 TeqCO₂/cap, with a range between 3.6 and 0.6 TeqCO₂/cap.

Source: Diana Ivanova, John Barrett, Dominik Wiedenhofer, Biljana Macura, Max Callaghan and Felix Creutzig (2020), Quantifying the potential for climate change mitigation of consumption options, Environ. Res. Lett. 15

⁴⁰ Consumption of services instead of goods has a median mitigation potential around 0.3 tCO₂eq/cap.

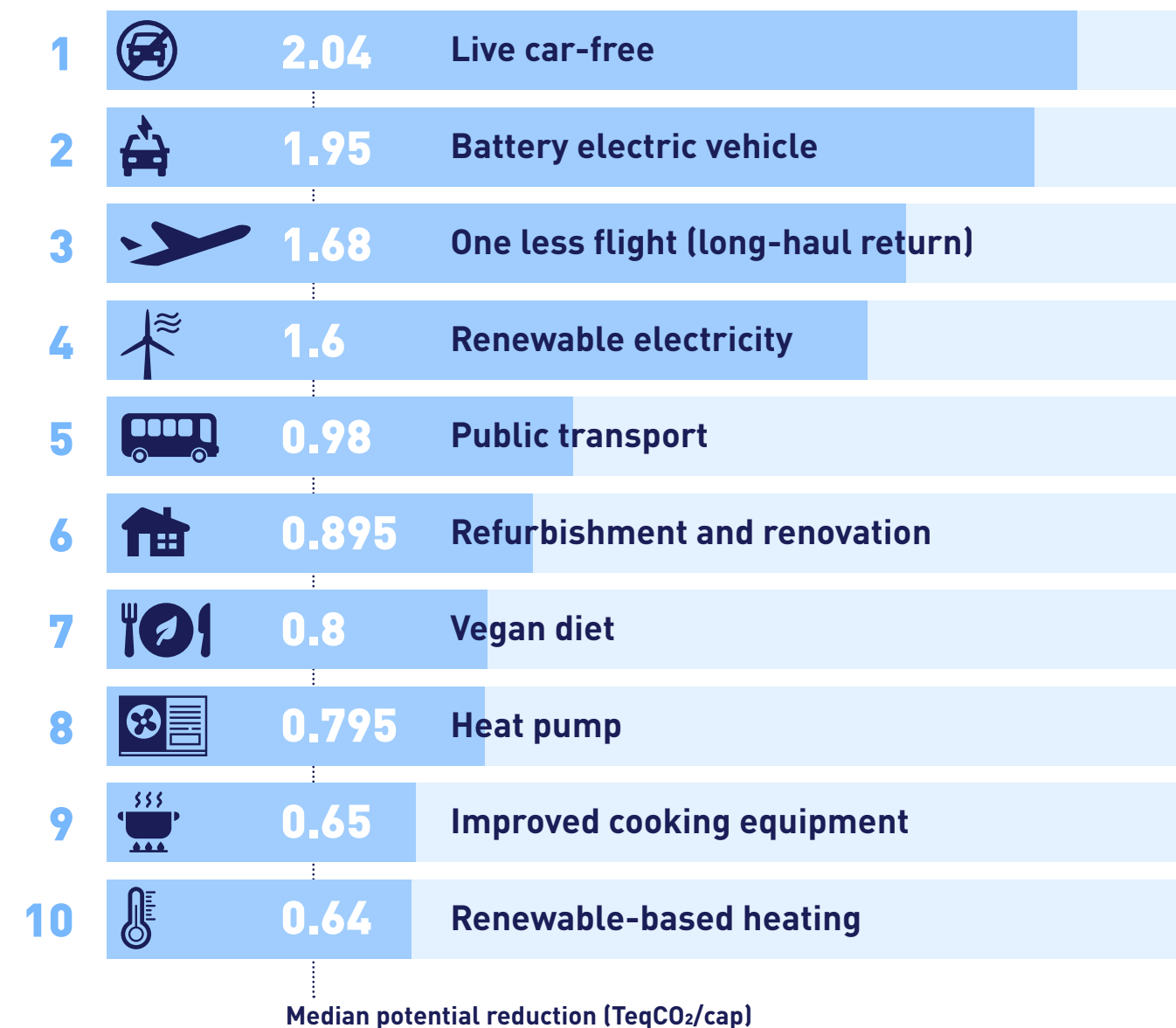
Source: Diana Ivanova, John Barrett, Dominik Wiedenhofer, Biljana Macura, Max Callaghan and Felix Creutzig (2020), Quantifying the potential for climate change mitigation of consumption options, Environ. Res. Lett. 15

We need to be clear that as consumers each of us will be motivated in different ways and, for some, quantifying and measuring action to reduce our carbon footprint may not be a motivating factor. Social benefits from changing consumption behaviour – for example, by recognising the association of fast fashion with poor working conditions and low levels of pay – may be the stimulus required to drive a behaviour change towards more durable products, re-use or renting options and ultimately a reframing of how we view clothing. For others, it may be about saving money and in the current cost of living crisis this could be a significant stimulus. For example, raising the profile of sharing libraries to access tools, sports equipment, children’s toys etc. rather than purchasing new products might be all that is needed to enable some consumers to act differently. Environmental benefits may be an added bonus rather than a main driver, but that’s less important if the end goal of reducing consumption is achieved.

Sandra Goldmark, Senior Assistant Dean of Interdisciplinary Engagement for the Columbia Climate School, considers that the tools people employ to change any habits, such as food or exercise, can be applied to consumption, and stresses the importance of showing people the positive activities they are already engaged in (and which can therefore be built upon). She states “...a lot of people already love buying used items in certain categories. So, if you can just explain to them the incredible impact of shifting your ‘stuff diet’ from new to used, they might be like, ‘Wow, I’m already doing that.’ And then it becomes a question of turning up the volume on certain behaviours and turning down the volume on other behaviours”⁴¹. Obviously, for some products groups such as high value items like cars, buying second-hand is already normalised behaviour for a lot of us. Extending the thought process that second-hand is not second best for a wider range of products will help in normalising behaviours.

Taking this approach can build personal confidence and ensure that behaviours can feel achievable. Simply presenting a top 10 list of climate change actions (see figure 13 as an example), can sometimes be a disincentive to do anything if there is a lack of appetite for some of the big hitters identified in a quantified list and it can feel as if any other action is not going to be enough.

Figure 13: Top 10 options for reducing your carbon footprint⁴²



It is important to recognise that actions may feel small but collective actions and collective responses can serve to influence those in our immediate circles (such as family and friends) and also go much wider and set trends which producers and retailers will want to pay attention to. For example, calls for repair potential and requests for services rather than products etc. could open up significant changes in the retail and manufacturing sectors across multiple products and brands. Collective actions can also drive policy changes through demonstrating the obvious demand for government to help make it easier to scale up a particular behaviour change.

⁴¹ <https://news.climate.columbia.edu/2020/12/16/buying-stuff-drives-climate-change/>

⁴² <https://environment.leeds.ac.uk/faculty/news/article/5471/global-study-uncovers-best-ways-to-change-consumption-to-cut-carbon-footprint>



Using policy to bring about change and ensure opportunities are available to do things differently can also be an effective tool, but it does require national and or local government to lead the way. For example, formalising refill, as has been done in France (and is shortly to happen in Spain) through policy, as indicated earlier in this section, can nudge behaviour in the right direction by pushing the system to change and enabling collective behaviour to change with it.

An extensive suite of targets, measures and interventions, to reduce waste associated with consumption and getting people to think about their buying habits, is in place in France and for supermarkets of a certain size, a target has been set of 20% of sales areas to be devoted to products without primary packaging, including sale in bulk, by 2030⁴³. This aims to allow customers to buy dry food products – such as pasta, cereals, beans and rice – using their own reusable containers, reducing or eliminating the need to use single-use packaging. This policy was a result of a recommendation from the Convention Citoyenne pour le Climat⁴⁴ and in direct response to a need to reduce resource use and prevent waste. Whilst ad hoc approaches to refill have been in place across the UK, led by producers or retailers, with variable success, no widespread response is yet in place.

Using public sector buying power more effectively can also help stimulate changes in behaviour by mainstreaming more sustainable consumption practices or stimulating innovation. In the UK, any organisation in the public sector is required to adhere to national procurement policy⁴⁵ which states that consideration should be given to national and local priorities including tackling climate change and reducing waste, when procuring products and services. Given the size of public spend in the UK on goods and services from external suppliers, estimated to be around £284 billion a year⁴⁶, defining and demanding more sustainable products and services could make a significant impact on consumption practices. This level of purchasing power also has the potential to stimulate market development and innovation and demonstrate leadership across sectors.

There are a range of toolkits available to promote sustainable and more circular procurement, such as the one produced by the Local Government Association⁴⁷ which aims to support delivery of relevant local priorities such as targets to achieve ‘net zero’ or be ‘carbon neutral’ and reduce consumption and waste. It’s not immediately apparent how well utilised these toolkits are or how effective they are, but they have the potential to provide a valuable resource to those with procurement responsibilities.

Regulating for changes to product design, such as repairability, is another measure that can start to lower the barriers for consumers and stimulate a change in behaviour. Clear and effective information on products, so that consumers can make an educated choice, could also be a nudge to support behaviour changes.

So, we know changing behaviours can be tough, but a combination of information, incentives and enabling policy should help to create a systemic change in consumption related behaviour.

43 <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000043956924>

44 [French] Citizens Convention for Climate

45 National Procurement Policy Statement, Cabinet Office, June 2021 – https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/990289/National_Procurement_Policy_Statement.pdf

46 <https://www.instituteforgovernment.org.uk/summary-government-procurement-scale-nature-contracting-uk>

47 LGA Sustainable Procurement Toolkit – https://www.local.gov.uk/sites/default/files/documents/Sustainable_Procurement_Toolkit_1.pdf

Changes we can make

“The consumption society has made us feel that happiness lies in having things, and has failed to teach us the happiness of not having things.”

— Elise M Boulding



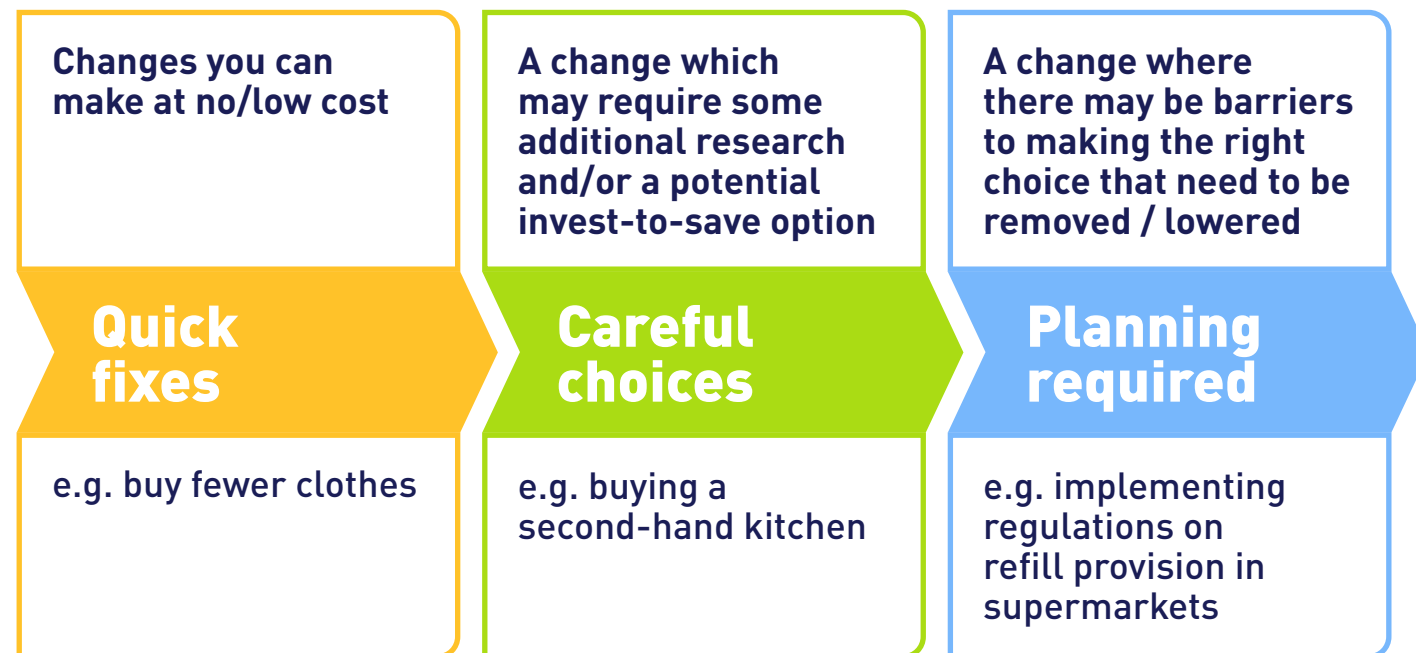
Change can be difficult and existing habits hard to break. To try and provide some clarity in terms of what’s possible, we’ve looked at opportunities to reduce consumption in three life scenarios:

↪ **Home life** ↪ **Weekly shop** ↪ **Leisure time**

For each of the scenarios we’ve looked at common areas of high spend and have provided an indicative carbon emission associated with it to highlight the scale of the challenge. The carbon emissions data has come from a number of (hyperlinked) sources and details the carbon footprint of the product – i.e. the direct and indirect greenhouse gas emissions. Where the approach differs, we’ve added a footnote.

We’ve then provided a list of potential interventions that could be considered. The interventions fall into three broad categories for consumers (figure 14).

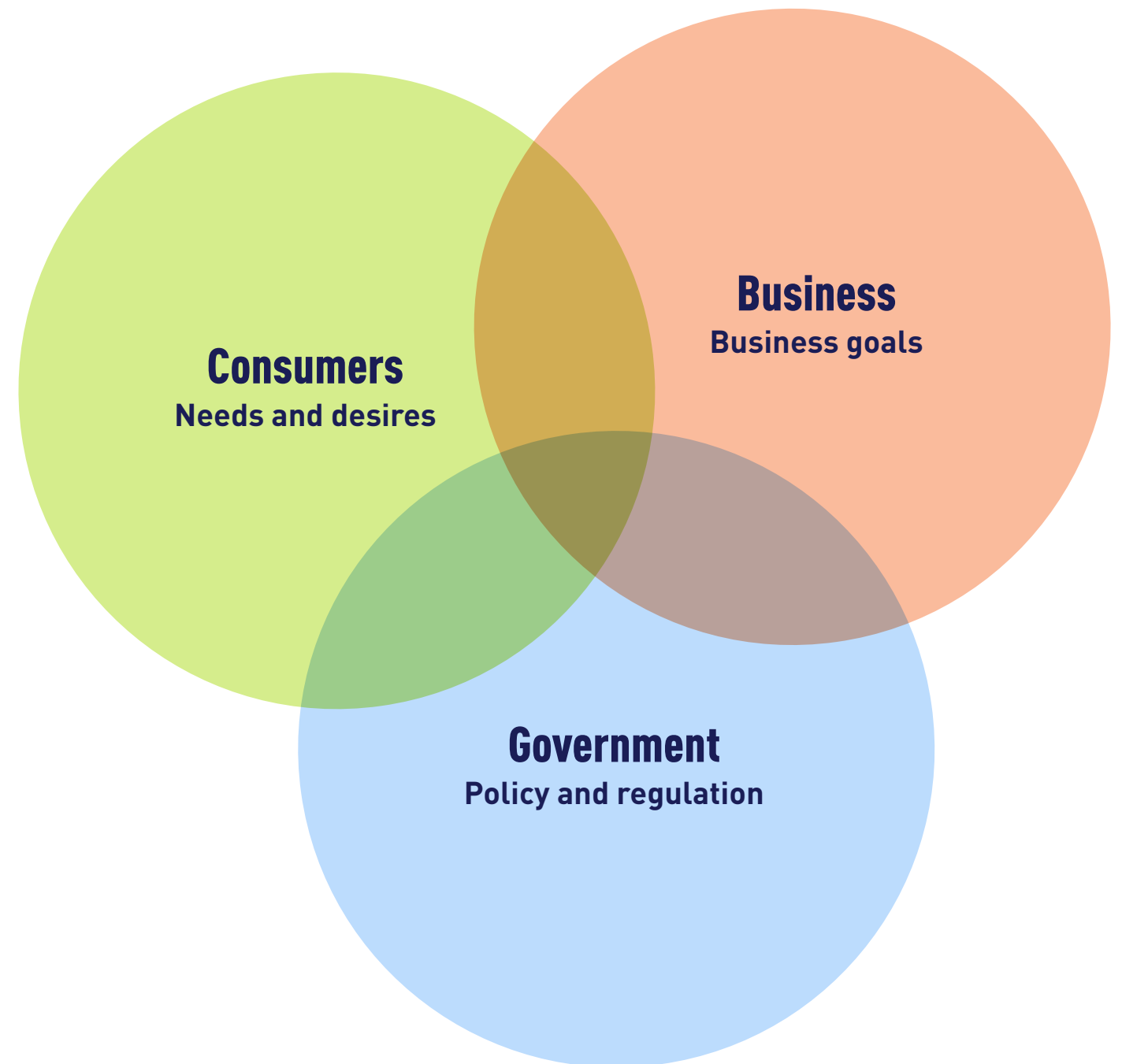
Figure 14: Categories of intervention at consumer level



To make a change we need to understand the spheres of influence around consumption (figure 15).

As consumers, we have some choices about what we can and cannot buy, though this is often influenced by business (brands and retailers) and government.

Figure 15: Spheres of influence





The Edelman Trust Barometer⁴⁸ measures feelings of trust on an annual basis. From their 2022 survey, they discovered that:

- + 58% of people will buy or advocate for brands based on their beliefs and values.
- + Nearly one out of two survey respondents view government and media as divisive forces in society.
- + Business' societal role is here to stay – people want more business leadership, not less. 68% of respondents expect CEOs to shape conversation and policy around global warming and climate change.
- + Business is expected to lead, as trust in government continues to spiral downwards – however, business cannot do this on its own and must work with all institutions to foster innovation and drive impact.
- + 52% of people stated that business is not doing enough to address societal problems, including climate change.

We are influenced by brands and we trust them (even more than non-governmental organisations and government), but we need to remember that often a brand's purpose is to sell us stuff – stuff that we might not need. According to the Trust Barometer, 77% of respondents trust their employer, which could provide a significant opportunity to influence from within an organisation.

Consumers have the power to not buy goods and to provide feedback to brands and government on changes they'd like to see. Local and National Government have the opportunity to drive substantial change through regulation, policy and by leading by example. People power can influence this – for example, the consultation on a plastic packaging tax in 2019 received 162,000 responses⁴⁹, highlighting the strong public interest in action in this area. This was a record response rate at the time. The most recent consultation on deposit return systems received 208,269 consultation responses⁵⁰, the vast majority of which (207,089) were from the public and environmental campaign groups.

Consumers shouldn't underestimate the power of their voice and actions, and brands and government should recognise that they have the ability to reduce consumption and deliver substantial environmental benefits by approaching things differently.

48 2022 Edelman Trust Barometer | Edelman – <https://www.edelman.com/trust/2022-trust-barometer>

49 Plastic Packaging Tax (high-level consultation) - Defra - Citizen Space – <https://consult.defra.gov.uk/environmental-quality/plastic-packaging-tax-condensed-consultation/>

50 <https://www.gov.uk/government/consultations/introducing-a-deposit-return-scheme-drs-for-drinks-containers-bottles-and-cans/outcome/introducing-a-deposit-return-scheme-drs-in-england-wales-and-northern-ireland-executive-summary-and-next-steps>



**We spend on average
£13,016.89 in the
first year of moving.**

Home life

The COVID-19 pandemic has seen us focus more time and effort on our home life, with increasing numbers of people working from home, buying pets, investing in redecorating or even moving to a property with a garden or to a more rural area.

Working from home

We spent on average **£1,075⁵¹** revamping remote workspaces to make them feel more homely. Furniture, paint, lighting and wall art were the most cited purchases.

620kg CO₂e⁵²
New 16" laptop

Fast fashion

UK consumers buy more new clothes than any other European country and throw away **over a million tonnes per year⁵³**. We spent **£68.2 billion** on clothing and footwear in 2021.

19kg CO₂e⁵⁴
Men's cotton jeans



Moving house

We spend on average **£13,016.89⁵⁵** in the first year of moving.

1. Painting and decorating £805.31
2. New furniture £1,251.63
3. Flooring £1,014.06
4. Gardening £875.44
5. General maintenance £925.11

53,000kg CO₂e⁵⁶
New build house

Pets

According to the PDSA, **52% of UK adults own a pet⁵⁷**. Up to **65% of dogs are obese or overweight⁵⁸**. Expenditure on pets and related products (excluding vets) reached an annual value of **£8.3 million** in 2021⁵⁹.

770kg CO₂e/yr⁶⁰
Average dog

51 <https://www.travelodge.co.uk/blog/news/adapting-working-home-rise-bedoffice>

52 <https://howbadarebananas.com/>

53 <https://committees.parliament.uk/work/654/fixing-fashion-follow-up/>

54 <https://howbadarebananas.com/>

55 <https://www.propertyreporter.co.uk/finance/ow-much-does-the-average-brit-spend-on-their-new-home-within-the-first-year.html>

56 <https://howbadarebananas.com/>

57 <https://www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/uk-pet-populations-of-dogs-cats-and-rabbits/>

58 <https://www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/paw-report-2022/diet-and-obesity>

59 <https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/bulletins/consumertrends/latest>

60 <https://howbadarebananas.com/>

Home life – example interventions

How can we reduce consumption at home? There are some quick fixes that would allow us to reduce our consumption (and associated carbon emissions) without a lot of effort and also bring wider benefits such as financial savings. The big wins will come with planning, but it's worth considering what we could all do in our daily decision making. All of the items here have the potential to reduce greenhouse gas emissions through using less resources and wasting less.

Consumer

| | Maximise the life of goods already in circulation | Potential financial savings | Invest to save option | Time saver | Social benefits |
|--|---|-----------------------------|-----------------------|------------|-----------------|
| Quick fixes | | | | | |
| Donate goods and buy second-hand / refurbished goods including IT and furniture for redecoration / house move. | ✓ | ✓ | | | ✓ |
| Wear your clothes more, repair, and buy fewer clothes prioritising pre-loved when you do. | ✓ | ✓ | | ✓ | ✓ |
| Careful choices | | | | | |
| Review your pet's food and weight at its next check-up and ensure appropriate portion sizes. | | ✓ | | | |
| Lease your DIY tools, use tool libraries or borrow from a neighbour, avoiding the need for an expensive upfront investment. | ✓ | ✓ | | ✓ | ✓ |
| Investigate rental agreements for home office and other equipment including leasing second-hand IT equipment and personal items such as mobile phones. | ✓ | ✓ | | | |
| Get advice on DIY, including redecoration, from a professional to reduce waste (such as tester pots), hire essential tools – e.g. Speedy at B&Q. | ✓ | ✓ | | ✓ | |
| Planning required | | | | | |
| Insulate your house and use recycled materials where possible. | | | ✓ | | |
| Plan a low carbon refurbishment by using reclaimed materials, durable fittings and lower carbon products such as lightweight or low carbon plasterboard. ⁶¹ | ✓ | | ✓ | | |
| Use a pet service such as 'BorrowMyDoggy' to walk dogs or look after a friend or neighbour's pet rather than rushing to buy one. | | ✓ | | | ✓ |

⁶¹ Plasterboard is carbon intensive, therefore lightweighting reduces material and carbon. There are also new products on the market that are low carbon alternatives.



There are also measures which can be taken by businesses (brands and the retailers) and policy makers at local and national level which could support us as consumers in making ‘better choices’ and changing our consumption habits.

Business – Brands and retailers

| Intervention | Example |
|---|---|
| Investigate and develop alternative service models. | Provide a subscription/rental service for items such as occasion wear or school uniforms as part of a core business model. |
| Design for re-use, repair and durability. | Clothing and electrical products are designed to be repaired/upgraded to extend their usable life. |
| Explore the use of rental agreements, subscription services and interest-free payments for high-cost/high-durability items. | Home office equipment, quality shoes, white goods and other high value items made more accessible by changing the business model. |
| Landlords – invest in second-hand furniture and don't require tenants to strip carpets unnecessarily at end of tenancy. | Furnish accommodation using good quality second-hand goods. Require end of tenancy floor cleaning or consider alternative flooring options. |

Government and local authority

| Intervention | Example |
|---|---|
| Explore and offer fiscal incentives to encourage re-use, repair and renovation – e.g. zero VAT rates for renovation including insulation. | Aircraft repair and maintenance is zero rated for VAT, new builds are also zero rated however the installation of renewables has a 5% VAT rating. |
| Provide policy support for alternative business models. | Set targets for percentage of re-use required, provide policy support to address high start-up costs. |
| Deliver targeted communications support and signposting for re-use/refill and signpost on hyperlocal sites, such as Next Door. | Work in partnership with local organisations, lead by example, implement corporate re-use/repair options for uniform, install refill points etc. |
| Facilitate sharing libraries. | Identify spaces within public buildings, e.g. libraries and council buildings, for sharing libraries, provide support and investment where appropriate. |
| Review internal procurement policies to identify opportunities to reduce consumption. | Identify high spend categories to view options for using alternative business models. Provide refurbished equipment and furniture as standard for both offices and staff working from home. |

Home life – case studies

Love Islands’ preloved fashion partnership with eBay UK — a match made in heaven?

Love Island audience demographics⁶² – which lean heavily towards Generation Z and Millennials – are big consumer groups and illustrate the potential importance of the 2022 season’s brand partnership with eBay UK and their Preloved range. Contestants on the show wore second-hand clothing instead of new pieces. This was a significant change of direction for Love Island, who has previously partnered with, or been associated with via contestant deals, fast fashion brands such as I Saw It First, Boohoo, Pretty Little Thing and Asos⁶³.

The show’s executive producer, Mike Spencer said: *“As a show we strive to be a more eco-friendly production with more focus on ways in which we can visibly show this on screen.....We aim to inspire our demographic and show that there are incredible finds to be had and how sharing is, in some small way, caring”*⁶⁴.

In the deal, eBay had presence on itv.com and Love Island’s social media channels throughout the duration of the show and viewers could explore eBay’s preloved fashion via the ‘Shop the Show’ tab on the official Love Island app and get access to Islanders through eBay’s social content, direct from the villa.

Did it work? Well, as with most things, responses on social media appear to be mixed and advertising during the programme continued to promote fast fashion, which is a challenging message for some viewers⁶⁵. Analysis showed that the brand collaboration gave eBay a significant short-term spike in terms of online interest, but there hasn’t necessarily been a correlation between search interest for Love Island leading into search interest for eBay, as has been seen with previous partnerships⁶⁶. It’s worth noting that prior to the show launching, research from eBay this year revealed that those aged 18 to 34 have the highest average percentage of second-hand clothes in their wardrobe (22%), nearly double that of over 55s (12%).

In addition, in the last year, searches on eBay for preloved clothes have multiplied eightfold, with Generation Z in particular driving the re-commerce trend, as 80% confirm that they have recently bought second-hand goods⁶⁷. According to Thredup⁶⁸, the second-hand market is expected to grow 127% by 2026 – three times faster than the global apparel market overall. They report that second-hand displaced nearly one billion new clothing purchases in 2021.

Other brands are recognising the appeal of preloved sales, with many partnerships with third party online markets or investing in their own resale or rental initiatives and it’s not just brands typically appealing to Generation Z consumers. French Connection, for example, has recently set up its own rental service, frenchconnectionrental.com, enabling customers to rent clothing from its current collections rather than buy outright⁶⁹. It’s a case of ‘watch this space’ as other brands recognise the value of offering an alternative business model.



⁶² <https://yougov.co.uk/topics/entertainment/articles-reports/2019/07/29/what-kind-person-watches-love-island>

⁶³ https://www.huffingtonpost.co.uk/entry/this-is-what-people-think-about-love-island-ebay-clothes_uk_62a99c8de4b06169ca927058

⁶⁴ <https://www.itvmedia.co.uk/making-an-impact/ebay-becomes-love-islands-first-ever-pre-loved-fashion-partner>

⁶⁵ https://www.huffingtonpost.co.uk/entry/this-is-what-people-think-about-love-island-ebay-clothes_uk_62a99c8de4b06169ca927058

⁶⁶ <https://www.chargedetail.co.uk/2022/07/08/has-the-ebay-and-love-island-partnership-actually-worked/>

⁶⁷ <https://www.itvmedia.co.uk/making-an-impact/ebay-becomes-love-islands-first-ever-pre-loved-fashion-partner>

⁶⁸ <https://www.thredup.com/resale/>

⁶⁹ <https://econsultancy.com/ebay-love-island-sustainable-fashion-mainstream/>



Home life – case studies

Rethinking re-use – scaling up and maximising opportunities

A partnership arrangement between Greater Manchester Combined Authority (GMCA) and SUEZ is optimising re-use in the Greater Manchester area and bringing wider social benefits that go beyond keeping valuable products in use for longer.

One of the challenges with re-use is ensuring that products are kept out of the recycling and waste stream and are accessible for purchase. Essentially, items donated by the public at household waste recycling centres need to be optimised in terms of their resale potential.

The Renew network in Greater Manchester – consisting of a Renew Hub in Trafford Park, which sorts, repairs, upcycles and catalogues items for onward sale, and three Renew shops providing accessible and convenient physical sales space – is reframing re-use opportunities at scale. Data has shown that more than 500 tonnes have been taken to the hub to be sorted into items for sale or repair and 360 tonnes of pre-loved items (a total of 47,000 individual items) have been sold in the three Renew shops, giving these items a new lease of life and providing good-quality items at a low cost for residents. In addition, more than 65 tonnes have also been donated direct from the hub to various charities across Greater Manchester, offering furniture packs at little to no cost to those most in need.



The Renew Hub provides jobs and training opportunities through dedicated repair pods targeting specific product ranges – such as white goods, electrical items, furniture and bikes – and the cataloguing of items for resale allows for increased accessibility through the recently launched click and collect service.

Use of designers and skilled artists opens the door for bespoke products to be upcycled from preloved items, optimising the value of items for resale.

Partnership arrangements are in place with charities and like-minded businesses to run the repair pods, and training development is an optimum part of the delivery, developing skills for the green economy. More than 20 jobs have been created to date and new roles are opening up as the network expands its operations.

To raise the profile of re-use, the Renew Hub includes a multi-functional event and community space, and a visitor experience run by the Recycle for Greater Manchester education team delivering sessions focusing on reduce, reuse and recycle.

All the money from the Renew shops goes back to the communities of Greater Manchester as part of a social value commitment from SUEZ, with a minimum guaranteed contribution of £100,000 given to the Greater Manchester Mayor's Charity and £220,000 to the Recycle for Greater Manchester Community Fund. The fund has supported 21 community organisations across Greater Manchester to date, focused on re-use or recycling projects in their local areas – the most recent round of funding had more than 60 applications. Previous projects which have benefited range from a food bank on wheels, home composting with harder to reach communities, textile upcycling with men at risk of suicide and zero waste supermarket free starter packs.

Home life – case studies

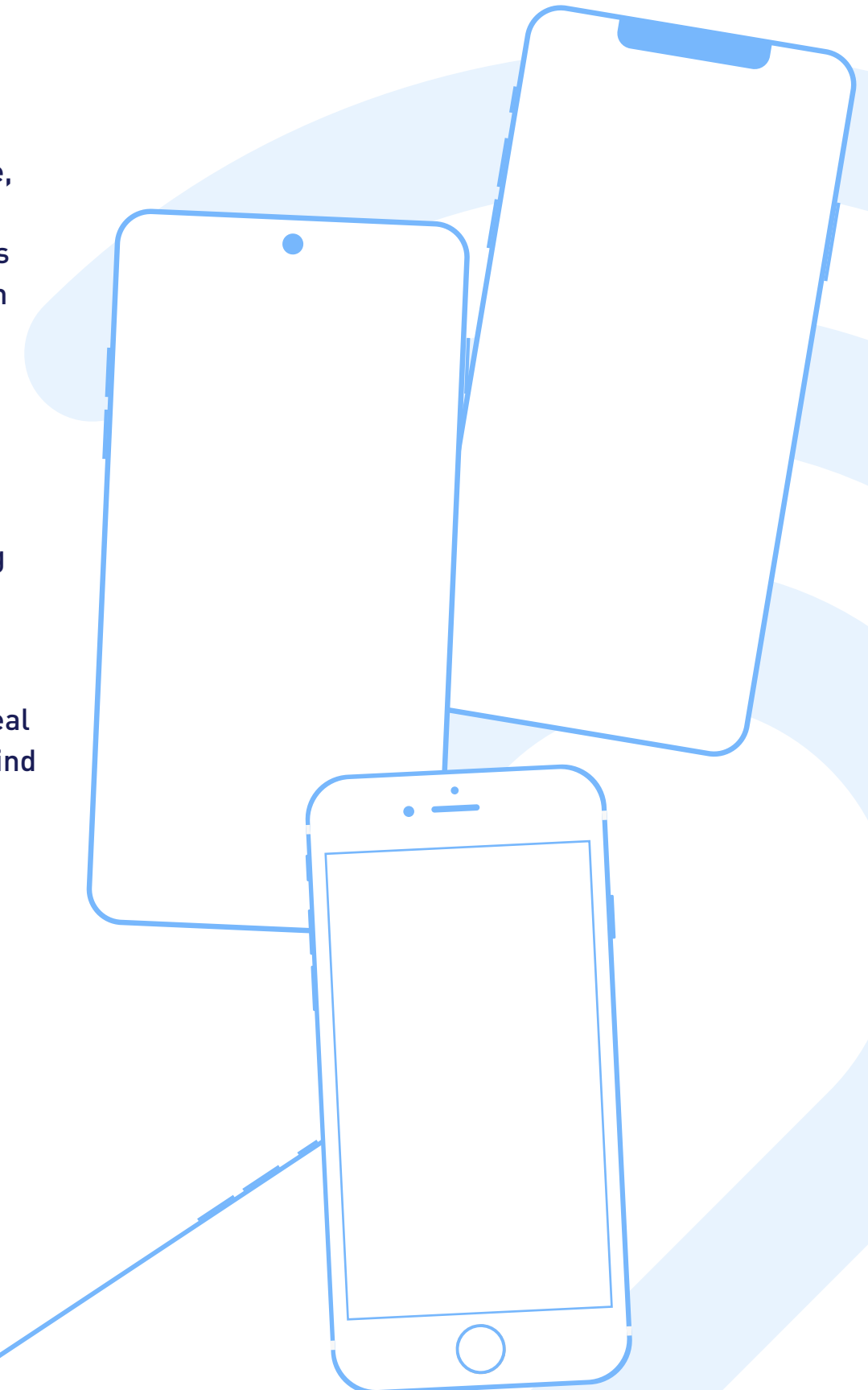
Subscription business models and the second-hand tech market

Between 2016-2020, used smartphone sales grew by a compound annual growth rate of 26% in North America and 20% in Europe. For the next five years, the used smartphone market is expected to grow three times faster than the new smartphone market⁷⁰. With millions of smartphones in circulation and the significant carbon footprint of electrical items, the second-hand electronics market has an important role to play as we push towards ambitious carbon goals across the globe.


Founded in 2007, MusicMagpie is one of a number of online organisations who have positioned themselves in the buying, selling and renting market of used tech products. Initially focused on pre-owned CDs, buying from and selling to consumers, today, it considers itself to be a leader of re-commerce in the UK and US in the circular economy of consumer technology, books and disc media.

MusicMagpie emerged on the market selling online via Amazon and eBay, with a limited physical presence, though the organisation now sells through its dedicated online stores in the UK and US. The model is straightforward, with consumers able to sell their own unwanted tech items and/or buy or rent second-hand items direct from the store.

The potential to rent smartphones is a relatively new venture, coming onto market in October 2020 in response to significant growth in the subscription economy and in recognition that affordability is driving usage of second-hand products. Smartphone rental offers consumers the opportunity to lease rather than purchase a second-hand phone, with no upfront costs and very competitive monthly fee, with the added appeal of an annual upgrade and warranty to give peace of mind and address any reliability concerns consumers may have around second-hand smartphones.



⁷⁰ <https://www.entrepreneur.com/article/412449>



The weekly shop is an area where we can make some immediate 'quick wins' by shopping around, being conscious about spend and trying reuse and refill.



Weekly shop

The weekly shop is an area where we can make some immediate 'quick wins' by shopping around, being conscious about spend and trying reuse and refill.

Daily essentials

In UK households, we waste 6.5 million tonnes of food every year⁷¹, 4.5 million of which is edible. This represents about eight meals per household each week⁷².

88kg CO₂e⁷³
Weekly shop

Single use

According to estimates⁷⁴, England uses 1.1 billion single-use plates and 4.25 billion items of single-use cutlery – most of which are plastic – per year, but only 10% are recycled upon disposal.

0.480kg CO₂e⁷⁵
Litre bottle of water



In the bathroom

We spent £30.4 million on personal care in 2021⁷⁶. The average disposable razor is used 6-9 times before it's discarded. 11 billion wet wipes are used every year⁷⁷, 163 wet wipes for every person.

7.6kg CO₂e /yr⁷⁸
Menstrual items

Coffee

We drink 95 million cups of coffee⁷⁹ in the UK each day. 80% of UK households buy instant coffee for consumption at home. 80% of people who visit coffee shops do so at least once a week, 16% daily.

0.662kg CO₂e⁸⁰
Takeaway latte

71 <https://www.lovefoodhatewaste.com/why-save-food>

72 <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>

73 <https://howbadarebananas.com/>

74 <https://www.gov.uk/government/news/plans-unveiled-to-ban-single-use-plastics>

75 <https://howbadarebananas.com/>

76 <https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/bulletins/consumertrends/latest>

77 <https://www.mcsuk.org/what-you-can-do/campaigns/swimming-in-wet-wipes>

78 <https://www.zerowastescotland.org.uk/research-evidence/carbon-impacts-menstrual-products>

79 <https://britishcoffeeassociation.org/>

80 <https://howbadarebananas.com/>

Weekly shop – example interventions

How can we reduce consumption as part of our weekly shop?

Cutting down on food waste is the biggest action here, whether we're cooking for family and friends or catering for an event. Actions as simple as taking a bottle of water out with you can instantly cut consumption and spend.

Again, all of the items here have the potential to reduce greenhouse gas emissions through using less resources and wasting less.

| Consumer | Maximise the life of goods already in circulation | Potential financial savings | Invest to save option | Time saver | Social benefits |
|--|---|-----------------------------|-----------------------|------------|-----------------|
| Quick fixes | | | | | |
| Make use of the freezer to cut down on food waste. | | ✓ | | ✓ | |
| Use apps such as Olio to share surplus food with neighbours. | ✓ | ✓ | | | ✓ |
| Make a shopping list to mitigate against food waste, only buy what you need. | ✓ | ✓ | | ✓ | |
| Shop online if you need to take the car to do the shopping. | | ✓ | | ✓ | |
| Careful choices | | | | | |
| Use zero waste shops to buy your goods using your own refillable containers, cutting out single-use packaging. | ✓ | ✓ | | | |
| Planning required | | | | | |
| Investigate reusable menstrual items and razors and other refillable bathroom products. | ✓ | ✓ | ✓ | | |
| Use reusable cloths (such as cheeky wipes) instead of wet wipes. | | ✓ | ✓ | | |
| Plan purchases (and meals), try not to impulse buy – the average family of four can save up to £60/month according to www.lovefoodhatewaste.com . | ✓ | ✓ | | ✓ | |

Again, there are also measures which can be taken by businesses, the brands and the retailers, and policy makers at local and national level, which could support us as consumers in making ‘better choices’ and changing our consumption habits.

Business – Brands and retailers

| Intervention | Example |
|---|--|
| Offer, support and promote re-use/refill options for a broad range of products. | Join existing schemes such as Refill and offer dedicated space for refill options, from cleaning products to food and drink. |
| Limit buy-one-get-one-free / 2for1 offers. | Offer alternative discounts which don't stimulate over consumption, such as point schemes linked to more sustainable choices. |
| Events – don't over order, provide excess food to a surplus food redistribution organisation. | Use organisations such as Plan Zheroes to distribute surplus food. Request attendance confirmation to reduce over ordering. |
| Remove best before dates on appropriate items to reduce food waste. | M&S and Waitrose have followed other supermarkets by scrapping best before dates on fruit and vegetables to cut down on unnecessary wastage (July 2022). |

Government and local authority

| Intervention | Example |
|--|---|
| Implement policy to require refill/re-use. Develop best practice guidance for business and public sector initiatives. | France/Spain regulations on floor space dedicated to refill for large supermarkets, Austria for packaging re-use. |
| Extend single-use plastic bans to other single-use items where it's considered unnecessary or alternative options are available. | Single-use plastic straws and coffee stirrers are amongst a range of items targeted globally by policy changes and some countries are going further and banning plastic wrapping on fruit and vegetables. |
| Link communications on cost of living with reducing waste and consumption. | Local or national campaigns or utilising social media engagements to promote the use of 'leftovers' to help to reduce costs and save food waste. |
| Local authority licencing – promote/specify re-use and refill for events and venues. | Work with licencing, trading standards and environmental health teams to identify potential barriers to re-use/refill and to specify refill options for events, markets etc. – e.g. deposit return schemes. |

Weekly shop – case studies

Optimising re-use instead of single use

Single-use items – such as plastic water bottles, coffee cups and takeaway containers – are amongst the most littered single-use packaging items we consume on a day-to-day basis. They use valuable resources in their manufacture, contribute to global warming and can be challenging to recycle, so often end up in landfill or incineration. So much effort is required to manage something that is designed to be used just once.

Refill is attempting to normalise re-use as an alternative for consumers, to make it as easy as possible. The Refill campaign, run by City to Sea, was launched in 2015 and aims to connect consumers to places they can eat, drink and shop without having to consume single-use packaging. Businesses, community buildings, transport hubs, can all sign up to become a refill station. They advertise this on their premises and also by appearing on the Refill app. The app is map based and allows users to search their location for nearby refill stations. To date, there have been 300,000 downloads of the app, 274,000 refill stations have signed up and it operates across 10 countries. They estimate that 100 million single-use bottles have been saved from entering the waste stream in 2019 as a result of Refill campaign⁸¹.



More recently, Refill has teamed up with Loop, a global reusable packaging platform. Loop aims to provide convenient, scalable and accessible re-use options across a wide range of brands and products to enable refillable versions of conventional single-use products. Loop is currently available in the United States, United Kingdom, Canada, Japan and France and is expanding to Australia, and has partnered with 200 consumer product companies and more than a dozen major retailers.

It is also worth highlighting the emergence of zero waste shops on the high street – selling everything from fruit and vegetables, pasta, rice and dry goods to household cleaners and toiletries – all minus single-use plastic packaging and all promoting and advocating refill and re-use. There are conflicting reports as to the number of zero waste shops that have come into being over the last few years, but it's in the hundreds and continuing to rise. Supermarkets have also recognised the appeal of the refill revolution. Waitrose, Ocado, Morrisons, M&S and the supply-chain company CHEP have joined a refillable grocery partnership and plan to roll out unpackaged options in-store by the end of the year⁸².

The organisations are part of the Refill Coalition group, run by Unpackaged, a company that runs refill stations in stores, including Planet Organic, and in some independent local farm shops. It's worth noting that trials of refill stations in some branches have shown that items are on average 10-15% cheaper when sold loose – this could enhance the appeal of refill to those who are not motivated for environmental reasons, if the financial benefits are made more evident.

These are examples of collaboration and partnership between business and organisations who are willing to support a different way of consuming, and who are aiming to lower the barriers to re-use by increasing knowledge and accessibility.

81 <https://www.citytosea.org.uk/campaign/refill/>

82 <https://www.theguardian.com/environment/2022/mar/02/refillable-groceries-uk-shopper-waitrose-morrisons-refill-stations-plastic-waste>



Weekly shop – case studies

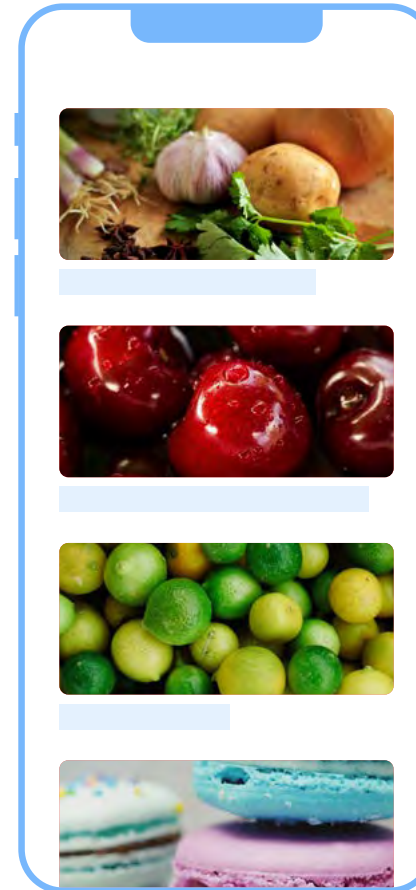
Tackling food waste one app at a time

In food waste action week in 2021, WRAP highlighted the significant environmental challenges posed by food waste, which globally contributes between 8 and 10% of total greenhouse gas emissions⁸³. WRAP stated that if every UK household stopped wasting food for one day, it could do the same for greenhouse gas emissions as planting 640,000 trees per day, which equates to around 230 million trees per year.

With 6.6 million tonnes of food waste coming from our homes each year in the UK, at a cost of £14 billion, in addition to food waste from the commercial and hospitality sector, any efforts to reduce this waste stream will potentially make a significant impact on our environment, our wallets and business costs.

One solution that is gaining traction is the use of app-based platforms whose aim is to match need with supply. There are now a large number of apps (and websites⁸⁴) on the market that can support with the reduction of food waste from apps that provide ‘leftovers’ inspiration, such as Supercook⁸⁵, to ones that connect surplus food with potential recipients.

Olio, founded in 2015, provides users with a means to share locally any unwanted food, whether this is items getting close to best before dates, excess food or unwanted gifts. Through partnerships with catering, hospitality and retail businesses, Olio can direct surplus food into the local community. The model is simple, people simply share photos of food that might otherwise go to waste on the app and neighbours can come around and pick it up for free, and the Food Waste Heroes Programme collect and redistribute food from commercial operations. Olio now has over five million users of the app and recent investments aim to accelerate its international expansion plans and growth of the Food Waste Heroes Programme⁸⁶.



Too Good To Go has a slightly different approach, targeting consumers who are looking for a bargain in their local area providing them with a platform to pre-book a bag of food from their favourite stores and restaurants at a significantly reduced cost. Thousands of businesses are registered on the app – from high street coffee shops, cafes and restaurants to supermarket chains – and users of the app need to be relatively opened minded, as what is available can be very variable and you need to get in quick as stock moves fast. Pre-selecting your favourite businesses and focusing your search on whether you are looking for dinner options, groceries or are just happy with a ‘magic bag’ of surprises helps users focus their search. From the launch of the app in 2016 until the end of 2020, 56.6 million meals, which would have been destined for treatment and disposal, have been sold at much reduced costs to the consumer.

Both apps bring substantial benefits to businesses, reducing their own carbon footprint and costs associated with waste food, and for users there is the opportunity to reduce your own food waste through the Olio app and access food for free, or at a much-reduced price, via Too Good To Go.

83 <https://wrap.org.uk/media-centre/press-releases/wasting-food-feeds-climate-change-food-waste-action-week-launches-help>

84 <https://www.lovefoodhatewaste.com/recipes>

85 <https://www.supercook.com/>

86 <https://techcrunch.com/2021/09/05/food-sharing-app-olio-raises-43m-series-b-as-the-world-switches-on-to-the-food-waste-crisis/>

Weekly shop – case studies

WWF basket metric to track progress of retailers towards environmental goals

Although initially developed with Tesco in 2019, following pledges made at COP26, WWF is now working with an additional four supermarkets (Sainsbury's, Co-op, Waitrose and M&S) to halve the environmental impact of UK baskets by 2030. Focused on a sample of some of the most regularly purchased food items in our shopping baskets (including household staples such as bread, milk, meat, fish and fruit and vegetables), the WWF basket metric provides a mechanism to track progress made in seven priority areas, specifically: climate; deforestation and conversion; diets; agricultural production; marine; food waste; and packaging.

UK-wide basket outcomes and retailer progress measures are set out in the metric and the accompanying blueprint provides details of specific actions in relation to each of the priority areas, including minimum expectations and target setting, measurement and reporting, action and collaboration along the supply, innovation and investment and advocacy to government.

The development of this approach with the retailers and the commitments they have made to reduce the environmental impact of commonly bought goods is in direct response to the challenges posed by the food chain – including land, water and resource use, biodiversity loss, and emissions caused in transportation and packaging. All five retailers are required to report annually to WWF and publicly report on actions taken.





Two of the reasons we consume are for comfort and pleasure, and our leisure time is central to this.

Leisure time

Two of the reasons we consume are for comfort and pleasure, and our leisure time is central to this. Small changes and approaching opportunities with a ‘can I try before I buy?’ attitude can help to reduce consumption.

Let’s get active

UK consumers spent **£145 million on recreation and culture in 2021⁸⁷**. **61.4% of the population⁸⁸** claim to be active every week. It’s estimated that **over three million bikes were purchased in 2021⁸⁹**.

174kg CO₂e⁹⁰
Average new bike

Entertaining

We spent **£11.7 billion on restaurants and hotels⁹¹** in 2021. 2019 spend for a night out was around **£70⁹²**. **More than 1%⁹³** of the national carbon footprint is from our use of hotels, pubs, cafes and restaurants.

1.65kg CO₂e⁹⁴
Bottle of wine



Time for a holiday

Although figures vary, **on average female consumers spend £245⁹⁵** on clothes, accessories and toiletries for their holiday.

80–200kg CO₂e
Clothes and shoes

Kids’ party

The **average kids’ birthday party costs £320.50⁹⁶**, with a further **£175.80** then spent on birthday presents. It’s estimated that **75% of all toys⁹⁷** produced worldwide are made in China.

40–400kg CO₂e
Books, toys

87 <https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/bulletins/consumertrends/latest>

88 <https://activelives.sportengland.org/Result?queryId=35296>

89 <https://www.bicycleassociation.org.uk/news-press/uk-bicycle-supply-in-2021>

90 <https://view.publitas.com/trek-bicycle/trek-bicycle-2021-sustainability-report/page/5>

91 <https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/bulletins/consumertrends/latest>

92 <https://www.bbc.co.uk/news/business-50821110>

93 <https://howbadarebananas.com/>

94 <https://howbadarebananas.com/>

95 <https://www.sunshine.co.uk/news/how-much-do-you-spend-on-your-holiday-wardrobe--83.html>

96 <https://www.vouchercloud.com/resources/cost-of-childrens-parties>

97 <https://research.hktdc.com/en/article/MzA3ODUwOTUx>

Leisure time – example interventions

Utilising the sharing economy and trying new approaches are at the heart of the interventions for leisure time activities. We know that the big carbon savings are around travel, but there are quick and easy activities such as reuse and refill which will help make an impact. As with the previous scenarios, all of the items below have the potential to reduce greenhouse gas emissions through using less resources and wasting less.

| Consumer | Maximise the life of goods already in circulation | Potential financial savings | Invest to save option | Time saver | Social benefits |
|--|--|------------------------------------|------------------------------|-------------------|------------------------|
| Quick fixes | | | | | |
| Ask for a 'doggy bag' if you're out at a restaurant and want to take your leftovers home to enjoy another day. | ✔ | ✔ | | | |
| Ask for pre-loved birthday/Christmas gifts or consider limiting the number of gifts per family member – e.g. each person buys for one other rather than for everyone. | ✔ | ✔ | | ✔ | ✔ |
| Careful choices | | | | | |
| Invest in reusable decorations and share with your neighbours. | ✔ | ✔ | ✔ | ✔ | ✔ |
| Challenge norms – do you need to provide a party bag? Can you provide reusable plates and cups? Could you gift a plant or some seeds? | | ✔ | | | ✔ |
| Lease goods (e.g. hiking equipment, bikes – Brompton allow the use of Klarna, Ride now pay later). | ✔ | ✔ | ✔ | | |
| Hire your holiday wardrobe or borrow key pieces from friends. | ✔ | ✔ | | ✔ | ✔ |
| Planning required | | | | | |
| Try before you commit. Lots of leisure activities allow you to try something before investing in the required kit – anything from musical instruments to electric bikes. Apps such as fatlama.com also provide insurance for items rented. | ✔ | ✔ | | ✔ | ✔ |

As with the previous scenarios, there are also measures which can be taken by businesses, the brands and the retailers, and policy makers at local and national level, which could support us as consumers in making ‘better choices’ and changing our consumption habits.

Business – Brands and retailers

| Intervention | Example |
|--|--|
| Offer lease/rent options for expensive goods. | Photographic equipment, gym equipment, golf, events equipment can all be hired rather than bought. |
| Use apps to save food waste and plan menus to incorporate leftovers. | For hospitality businesses, adopt the ‘target, measure, act’ approach championed by Guardians of Grub. Use apps such as Too Good To Go. |
| Form partnerships and collaborations with other organisations to reduce waste and optimise resource use. | Partnerships between restaurants and food waste apps or food banks and charities benefits both consumers and retailers. |
| Don’t give away free promotional items at events. | Use other ways to raise brand awareness that don’t involve unnecessary consumption – e.g. digital promotions. Use reusable events equipment and marketing items – e.g. display stands. |
| Offer guests options to borrow/hire equipment whilst on holiday. | Equipment could range from sports and games – e.g. bat and ball games – through to umbrellas and wet weather gear. |

Government and local authority

| Intervention | Example |
|---|--|
| Local authorities work with local charities and sports clubs to offer easy access to sports and activities that require specific equipment/kit. | Sport England and National Lottery provide funds to make sport more accessible. Ping Pong Parlours – Table Tennis England take over vacant shop units and provide free access to ping pong tables and instructors. |
| Provide BBQ and shelter points in parks to reduce the consumption of single-use BBQs and purchase of gazebos. | Investing in outdoor equipment will encourage greater use of shared spaces and reduce consumption of some single-use items, such as BBQs. |

Leisure time – case studies

Music Broth – Sharing the love of music

Music Broth is a social enterprise, giving a second life to musical instruments and providing the opportunity for people to be musically creative through an affordable, accessible hire service.

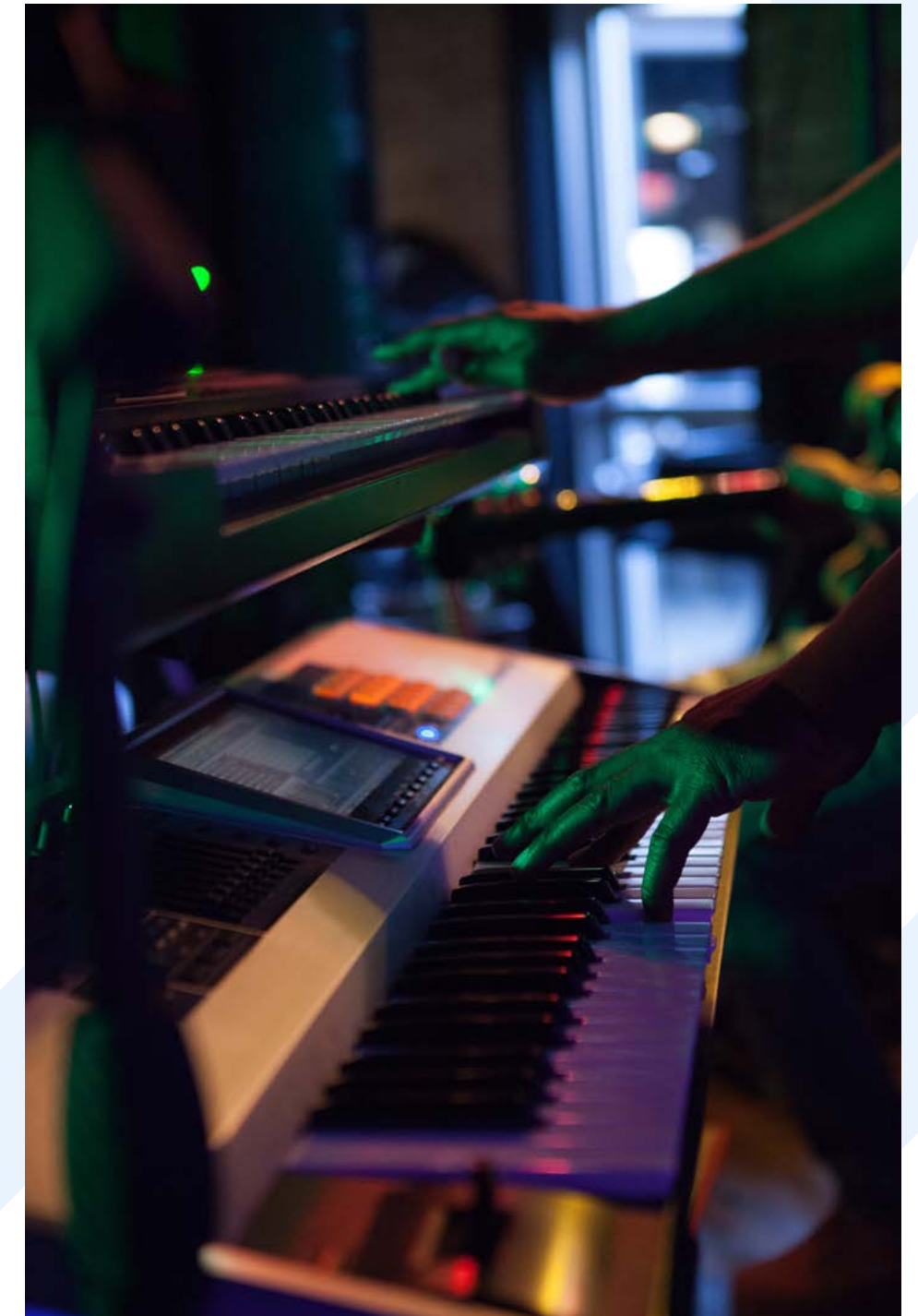
Operating from a base in Glasgow, but with an extended reach, Music Broth has taken the traditional lending library approach and applied it to what can be expensive and resource intensive products. Items are donated, reviewed, catalogued and repaired if required. In exchange for a monthly or annual fee, members of the library can effectively hire a wide range of musical instruments and equipment.

Starting from very modest roots in 2017, when co-founder and musician Felix Slavin inherited a small collection of musical instruments and working with Jen O'Brien came up with the idea of a sharing library with a difference, Music Broth has over 2,000 reused and restored musical items for sharing and have a network of volunteers to support with collections, deliveries, repairs and events.

During COVID, the library moved online and was supported by a delivery service to ensure that access to products was maintained – over 400 musical instruments were delivered to people's homes during lockdown⁹⁸. An additional feature of the organisation is the provision of music education, with workshops, events, community opportunities and online tutorials covering a range of creative music making.



As well as delivering a service which keeps products in useful life for as long as possible, retaining the value of stock already in circulation and removing the need for new products to be consumed, Music Broth provides social benefits through its involvement with other community support organisations.



⁹⁸ <https://socialenterprise.scot/music-broth-helping-music-play-on-tough-times/>

Leisure time – case studies

Bicycle benefits

Interest in cycling has been growing in the UK. The annual Sport England Active Lives survey has reported that there are 100,000 more people cycling every year across the UK and 41% of the population has ridden a bike in the past year. So, can we embrace the benefits of growth in this area whilst reducing consumption?

One example is 'Better By Bike', the official cycling website for local authorities in the West of England. Funded by Bristol City Council, Bath and North East Somerset Council, North Somerset Council and South Gloucestershire Council, it signposts charities to donate bikes to shops that will repair them, or you can loan a bike from them – standard, folding, E-bikes and E-bike conversion kits. This approach is not unique, many local authorities have similar schemes which are worth checking out.

Richmond Council offer a slightly different service, providing access to a community cargo bike scheme through 'Our Bike'. Once registration is complete, Cargo bikes can be hired for as little as £3/hr.

A well-known retailer, Decathlon, offer 'Second Life' kids' bikes at discounted rates (up to 40%).

All Second Life products are assigned a condition rating, from A to D, once they have been fully refurbished. The bikes come with the same original warranty and guarantees you would receive with a brand-new model.



Leisure time – case studies

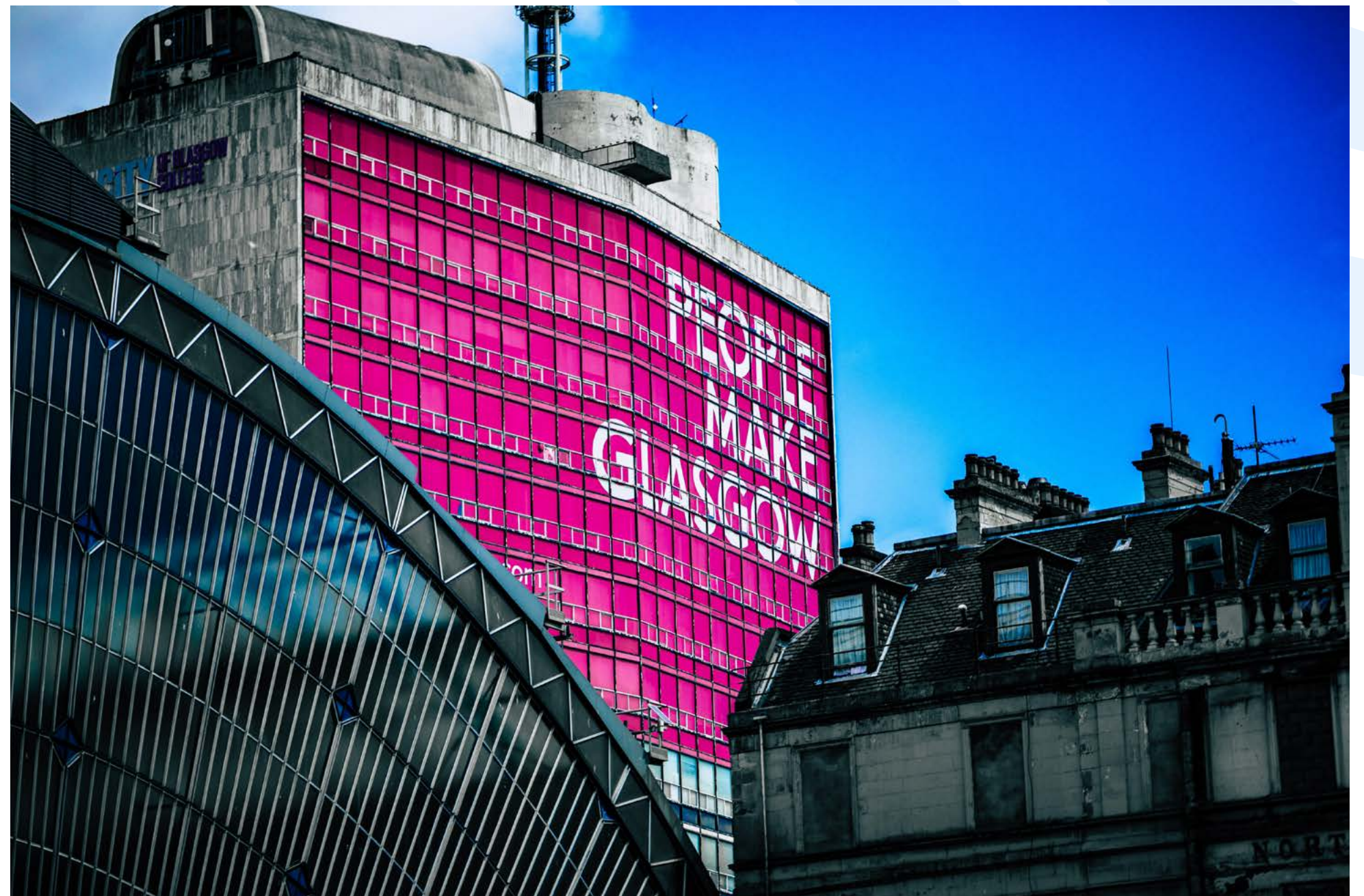
Changing the narrative

Zero Waste Scotland⁹⁹ has been successful in changing the narrative around consumption and its contribution to the climate crisis.

In September 2021, they launched a responsible consumption campaign with the message “everything we buy has a carbon cost” to encourage wider awareness of the carbon impacts of what we buy and consume and how this directly impacts climate change. Around four-fifths of Scotland’s footprint comes from the products and materials manufactured, used and thrown away. Research highlighted that only one fifth of Scots are fully aware of the negative environmental impacts of consuming new products and many think they are doing all they can to help climate change¹⁰⁰.

The campaign was informed by environmental evidence and analysis including the Material Flow Accounts model, which calculates the scale and nature of Scotland’s consumption. It does this by calculating all the raw materials used to make products and all the finished products consumed, whether made in Scotland or imported.

The campaign was taken to COP26 in November 2021, which was hosted in Scotland. It provided a global platform on which to communicate the links between consumption and carbon and the role of all stakeholders in reducing consumption.



⁹⁹ <https://www.zerowastescotland.org.uk/cop26>

¹⁰⁰ <https://zerowastescotland.org.uk/content/everything-we-buy-has-carbon-cost>

Moving forward

“You can’t buy yourself ethical”

— Aja Barber¹⁰¹

We need a collective effort to effectively turn down the heat – it is not on one group or one sector to make all the changes, it's about collective action, building confidence and leading the way.

It's not about banning things we enjoy or love doing, it's about realising opportunities.

How can we drive change and measure progress?

Whilst we all have our parts to play, it is important that government sets a clear direction of travel and policy levers are applied across the economy to make gains.

A number of governments around the world are moving in the right direction. For example, Scotland has recently consulted on a Circular Economy Bill¹⁰² which includes a range of proposals to address consumption challenges and introduce powers to support transition to net zero emissions. Sweden recently passed legislation in June 2022 which legally binds the country to reach net zero emissions by the year 2045 – they became the first country in the world to include consumption-based emissions within their climate targets¹⁰³. The Netherlands, Finland and Spain all have consumption reduction targets which aim to reduce the aggregate amount of material being consumed.

Other countries use a range of targets to drive circularity¹⁰⁴ and measure progress including material flows, resource use, GDP, trade flows and policy levers such as circular procurement. There isn't a perfect fit though and a basket of metrics will be required to fully measure progress, because we are a society of consumers and our economy is driven by consumption.

There are significant benefits to business and government that can be realised through the adoption of alternative business models. Reducing consumption should not be seen as a direct conflict to economic growth. Investment in re-use and repair for example can support local economies and encourage the much-needed development of green jobs and skills. As well as the obvious environmental benefits, these options can also provide direct financial savings for residents which are highly beneficial particularly in times of economic hardship.

Subscription-based services or leasing options can create closer customer relationships and enhance brand loyalty. Designing for longevity (as well as re-use and repair) can champion local, more traditional production methods rather than single-use imports where supply chain standards are opaque.

We need to diversify our approach, reduce consumption where possible, but also provide opportunities to make better choices.

¹⁰² The consultation ran from May – August 2022: <https://www.gov.scot/publications/delivering-scotlands-circular-economy-consultation-proposals-circular-economy-bill/>

¹⁰³ <https://www.government.se/articles/2021/03/swedens-climate-policy-framework/>

¹⁰⁴ https://www.zerowastescotland.org.uk/sites/default/files/Consumption_Reduction_Targets_Brief-Final.pdf

Steps we can take

This report contains a selection of interventions that government, business and consumers can take forward to reduce consumption.

The interventions are built on the following thematic principles:

Government

- + **Change the narrative around consumption**
there are other ways to boost the national and local economy, such as reimagining the high street and investing in re-use and repair to boost jobs and skills – diversification is key.
- + **Take a systemic approach to change**
consumption touches every department, service delivered and is a part of every policy developed.
- + **Lead by example**
implement circular procurement, take a 'refuse and rethink' approach to procurement considerations, followed by a re-use or service model, and develop a circular economy strategy with meaningful objectives.
Regulate to drive change.

Business

- + **Review your business model**
review the opportunities associated with a service-based or subscription model, or a refill alternative to the goods or services you provide.
- + **Give consumers meaningful choices**
support them to try alternative business models or refill versus single use, help them to get it right and form a habit which strengthens brand loyalty as well as providing environmental benefits.
- + **Stop giving away free 'stuff'**
even if it's an eco-bag. Don't encourage unnecessary consumption.

Consumers

- + **Be a conscious consumer**
pause and reflect on whether you really need that item before clicking 'add to basket'.
- + **Recognise that changing habits takes time**
reducing the consumption of items you really don't need and making alternate choices such as buying pre-loved will help. Take small steps to build better habits.
- + **Use your voice and vote with your feet**
businesses and government will change if enough people champion consumption reduction.

These points show that collective effort is required to effectively turn down the heat and ensure we can all embrace the opportunities and the benefits from rethinking why and how we consume, and work together to do things differently.

Taking action

Building on the collective effort required, there are many ways in which the principles listed can be applied. We've suggested a selection of activities that can make a meaningful difference across the three themes we considered: 'home life', 'weekly shop' and 'leisure time'.

This is not a definitive list, but designed to give an indication of action which could be taken forward.

Government

Examples

↪ Change the narrative around consumption

↪ **Weekly shop scenario:** Implement policy to require refill/reuse. Develop best practice guidance for business and public sector initiatives.

↪ Take a systemic approach to change

↪ **Home life scenario:** Use fiscal incentives such as zero VAT rates for home repair/renovation including insulation.

↪ Lead by example

↪ **Leisure time scenario:** Local authorities work with local charities and sports clubs to offer easy access to sports and activities that require specific equipment/kit.

Business

Examples

↪ Review your business model

↪ **Home life scenario:** Explore the use of rental agreements / subscription services / interest free payments for high-cost/high-durability items.

↪ Give consumers meaningful choices

↪ **Weekly shop scenario:** Offer, support and promote reuse/refill options for a broad range of products.

↪ Stop giving away free 'stuff'

↪ **Leisure time scenario:** Don't give away free promotional items at events, use other strategies to raise brand awareness.

Consumers

Examples

↪ Be a conscious consumer

↪ **Leisure time scenario:** Try before you commit. Lots of leisure activities allow you to try something before investing in the required kit – anything from musical instruments to electric bikes.

↪ Recognise that changing habits takes time

↪ **Weekly shop scenario:** It can be tricky to avoid food waste, so use apps such as Olio to share surplus food with neighbours.

↪ Use your voice and vote with your feet

↪ **Home life scenario:** Don't buy new DIY tools, instead lease tools, use tool libraries or borrow from a neighbour, avoiding the need for an expensive upfront investment.



SUEZ recycling and recovery UK
SUEZ House, Grenfell Road, Maidenhead, Berkshire SL6 1ES

www.suez.co.uk

 @suezuk  facebook.com/suezukofficial