

A collage of 18 photographs illustrating the circular economy. The images show a mix of products (shoes, bags, clothing), retail environments (storefronts, shelves), and waste management processes (recycling facilities, landfills, and a large pile of colorful plastic waste).

Sustainable Consumption Guide

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Why is sustainable consumption important?

We only have one Earth, but we are currently using the resources of 1.7 Earths. Worldwide consumption and production exploit the natural environment and its resources in destructive ways. In many countries, the economic and social progress of the last century has caused environmental degradation. The global population is predicted to reach 9.7 billion by 2050¹, and if we keep consuming at this rate, we will need the resources of 3 planet Earths to sustain our lifestyles².

In 2021, Earth Overshoot Day – the date in any given year when humanity’s demand for ecological resources exceeds what the Earth can regenerate in that year – fell on 29 July. We are using more resources than the Earth can sustain. The COVID-19 pandemic offers us an opportunity to reverse current trends and change our consumption patterns to create a more sustainable future, both for ourselves and for generations to come.



What can I do to help?

Gen Z (that’s you if you were born between 1997 and 2015) are adopting more sustainable behaviours than any other age group³, which is very exciting news!

Becoming a sustainable consumer is about [refraining, reducing and reusing](#) (in that order). Here are three easy ways to start your sustainability journey at Oxford:

1. Follow us on social media @OxfordEnvSust.
2. Sign up to our monthly newsletter for events, news and ideas for how to get involved.
3. Join the [Oxford Carbon Challenge](#) in your college.

Take a look at the topics below for specific information and advice.

Plastic

Try this short exercise– look around you and name ten items made of plastic. It will probably take you less than 20 seconds to find them.

Plastic has a lot of good qualities. It is very easy to manipulate, very light and it enables affordable sterilised single-use items for medical purposes. But plastic is also now a major hazard to our ecosystems.

What's the problem?

Between 1950 and 2015 we made a total of 7.8 billion tonnes of plastic globally – more than a tonne for every person alive today⁴ ! On a per-capita basis, Brits rank second in using the most plastic, just behind Americans⁵.

In 2017, the UK reused or recycled 46.2% of the plastic packaging we produced. This put us well ahead of the EU's minimum requirement at the time of 22.5%. However, more than half of the plastic waste the British government says is being recycled is sent overseas. In the last two years, Turkey has become the primary destination for UK plastic waste, ending up in landfills, incinerators, as litter or being dumped illegally. In June 2021, Turkey banned these imports, only to repeal this ban on PET plastic imports the next month.

We need to take responsibility for our own plastic waste.

The British Plastics Federation (2021)⁶ recommends that to achieve a circular economy we need to have zero reliance on exporting our waste for burning or disposal in landfills, increase our recycling rate and burn less waste to produce energy. The UK government is expected use the new [Environment Bill](#) to set legally binding targets to reduce single-use plastic by 50% by 2025 and introduce mandatory corporate reporting on plastic reduction.

What can I do to help?

You can find some easy wins to reduce your plastic consumption below. We recommend further reading to find solutions that fit your lifestyle, including [further tips to reduce plastic](#).



Fashion

"Buy less, choose well, make it last."

Vivienne Westwood

What's the problem?

The high-speed hyper-consumption of today's fashion industry has been dubbed 'fast fashion'. Around 20 new garments are made each year for everyone on the planet⁷, so it is not surprising that the fashion industry is responsible for 10% of global greenhouse gas emissions⁸. If current trends continue, the industry will triple resource consumption by 2050⁹.



Generation Z (those born between 1997 – 2015) are the most likely age group to make decisions on what to buy based on values and principles (personal, social, and environmental)¹⁰.

What can I do to help?

You can find some easy ways to be a sustainable fashion consumer below. We recommend further reading to find solutions that fit best into your lifestyle including visiting [Oxford's charity shops](#), trying Fairtrade cotton apparel, creating a [capsule wardrobe](#), [restyling an old t-shirt](#), [wearing the same dress for 100 days](#), and creating a communal fancy dress box within your college.



Packaging

Think back to the last time you received an item you'd bought. Was it wrapped in unreasonably large and excessive packaging? This can be very frustrating as consumers, especially as we then have to get rid of this packaging somehow.

What's the problem?

Packaging is everywhere. It has its advantages – it prolongs the shelf life of food items, reduces item breakages, and it is really convenient and often very cheap.

The global packaging industry relies heavily on plastics. In fact, packaging accounts for nearly 70% of UK plastic waste, and much of it isn't recyclable.

As well as the packaging itself, the carbon emissions associated with delivering a parcel can be surprising. Research from Southampton University found that in just six days, 275 delivery vehicles visited one hall of residence (that's 14–18 visits daily) and sometimes the same driver returned several times a day¹¹! A standard delivery for a non-food item produces 181 grammes of CO₂¹² compared to walking or cycling into town and buying the item in person.

What can I do to help?

You can find some easy ways to reduce the impact of packaging below. We recommend further reading to find solutions that fit your lifestyle. Some possibilities include refusing bags and hangers if given the choice; ordering jointly online with your friends or student reps; reusing or recycling envelopes, bubblewrap and bags; buying in bulk when appropriate, and using a collection locker to avoid failed deliveries.



Food

Food is a contentious topic, with many aspects to consider including culture and societal norms. Many of us are not ready to take the plunge into vegetarianism or veganism. Don't worry, it's still possible to reduce your meat consumption and have a positive impact on the planet.

What's the problem?



Our food choices have a big impact on our carbon footprint. There are massive differences in the greenhouse gas emissions of different foods: producing a kilo of beef emits greenhouse gases equivalent to 60 kilo of CO₂, while a kilo of peas emits just 1 kilo¹³. For most foods, the bulk of emissions result from land use change and processes at the farm stage. Transport is a small contributor to emissions (usually less than 10%). This means what you eat is far more important than where it traveled from.

Food production is responsible for a quarter of all greenhouse gas emissions¹⁴ with 6% of these emissions coming from food which is never eaten. To put this in context: that's around three times the global emissions coming from aviation. Or, if wasted food were a country, it would be the world's third largest emitter. If we want to clamp down on food waste, it is vital that we buy, prepare and store the right amount of food, especially fresh fruit and vegetables which spoil easily. We need to stop buying more than we can eat and not be afraid of "ugly" produce that is perfectly edible.

What can I do to help?

You can find some easy ways to reduce the impact of food consumption on the planet below. We recommend further reading to find solutions that fit your lifestyle. You could explore this [interactive graph of carbon emissions per food item](#), use this [climate change food calculator](#), make sure you are using the [food waste bin](#) provided by the council, freeze your leftovers, [reduce your food waste](#) and use apps like [Olio](#), [Oddbox](#) and [Too Good To Go](#).



Resource Use

Natural resources like air, energy, water and biodiversity need to be managed sustainably for the benefit of people everywhere. A truly sustainable resource does not degrade environmental quality.

What's the problem?

We need natural resources for our prosperity and well-being, but we're using them up faster than they can be replaced. By 2050, if we follow our current path, we will be extracting five times more resources than we do today.



Energy

In your hall of residence you could save 25kg of CO₂ per room per year just by switching off lights when they aren't needed. Over the same period, switching electrical items off at the plug could avoid CO₂ emissions equivalent to driving 130 miles in a petrol car.

As for laundry, the most carbon-intensive part of dealing with our dirty clothes is drying them off, due to electricity-gobbling tumble dryers. Lowering the temperature of the wash combined with air-drying could make a big difference. If one load of laundry a week was washed on a cold cycle rather than warm or hot, each household could reduce its carbon footprint by 23kg a year.

Water

The Earth is often called the blue planet, yet less than 1% of water is fresh water available to us. It is a scarce and precious commodity. The average person in England and Wales uses 143 litres of water per day.

In most houses with a gas boiler in the UK, the main cause of water-related emissions is not large white-goods, but the kitchen sink. Keeping the tap running constantly would release around 157kg of CO₂ per year, while the average dishwasher produces 142kg of CO₂, a washing machine generates 118kg, and the bath 103kg. (However, in a newer home the shower is the water-using device with the highest emissions.)

When it comes to washing ourselves, it is obviously important to maintain good hygiene, but replacing a daily bath with a three-minute shower could save about 212kg CO₂ per year.

Product use

Many industries are facing a backlash against cheaply made products that do not last. There is a growing appetite for long-life guarantees – from the promise of the 30-year jumper to the rise of shopping sites dedicated to products designed to last a lifetime.

Despite advances in technology in recent decades, the average life span of many electrical products we buy and use in daily life is actually lower than it was 20 years ago¹⁵.

Many consumers have complained that goods don't last long enough, then can't be fixed in the home. From July 2021, UK manufacturers are now legally required to make spare parts available to people buying electrical appliances. The new rules aim to extend product lifespans by up to 10 years and benefit the environment.

Summary

As consumers, we can play our part by considering the lifespan and impact of the products we buy, and how we use energy and water at home, and by talking to friends and family about our buying decisions.

What can I do to help?

You can find some easy ways to use fewer resources below. We recommend further reading to find solutions that fit your lifestyle. Ideas could include joining [the Oxford Carbon Challenge](#), exploring the [Recycling A-Z guide](#), finding yourself [one song for the shower](#), turning your radiators off when you leave the room, switching to energy-efficient lightbulbs, considering a refurbished electronic device, reporting any leaking taps to your student reps, buying rechargeable batteries, acquiring house plants rather than air fresheners, using a washing up bowl, only boiling as much water as you need, putting lids on pans when cooking, and taking the trains or bus to go home for the holidays rather than driving; doing this will cut your journey's emissions by two-thirds.



Cosmetics and personal care

Sustainability in beauty is increasingly becoming a consumer priority across the globe, with many choosing to buy fewer plastic items and expecting brands to make their products more sustainable. This expectation is pushing beauty brands towards new sustainable innovations, such as waterless beauty, upcycling, carbon neutrality and reusable or refillable packaging.

What's the problem?



The global market for cosmetics and personal care products was worth \$128.9 billion in 2018. By 2024 this could reach \$165.9 billion¹⁶. This will lead to significantly more waste generation and environmental harm, unless brands change their ways.

One problematic beauty ingredient is Oxybenzone – a chemical often found in sun creams, which is harmful to coral reefs. Hawaii banned suncreams containing Oxybenzone in January 2021. Another example are face wipes and wet wipes. 47% of us admit to using these regularly, and most varieties containing plastic. Many wipes are flushed down the toilet, causing 93% of blocked UK sewage pipes.

Air pollution is another aspect to consider. Perfumes, hairsprays and deodorants can pollute the environment as much as car emissions in the form of 'volatile organic compounds'¹⁷.

Conversations about feminine hygiene and their ecological impacts aren't spoken about. Some believe that the taboo surrounding menstrual periods has stunted the development of new products in the sector with few or no innovations for over 80 years. Conventional sanitary pads are up to 90% plastic with tampons also containing plastic in every element. Reusable menstrual products have been around for decades, but it is estimated only 13% of women in the UK use them, and just 3% use them exclusively¹⁸. You can even get organic, plastic-free and flushable tampons and pads!

Only half of Brits recycle their bathroom waste, compared to 90% with kitchen waste, because it is inconvenient. Despite most personal care packaging being technically recyclable, this requires specialised systems – it is not recycled through local kerbside recycling.

From excessive plastic packaging to harmful chemicals, the beauty industry has a long way to go – but hope is in sight. According to recent research, 66% of UK female beauty buyers aged 16–24 want more information about which products are environmentally friendly. There have already been changes, including a ban on harmful microbeads and plastic-stemmed cotton buds in 2019.

What can I do to help?

You can find some easy ways to reduce cosmetics and personal care use on the planet below. We recommend further reading to find solutions that fit your lifestyle. These could include reading about [Plastic-free toiletries](#), putting a recycling bin in your bathroom, looking out for take-back schemes

when recycling products, and giving away items that don't work for you rather than throwing them away.



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