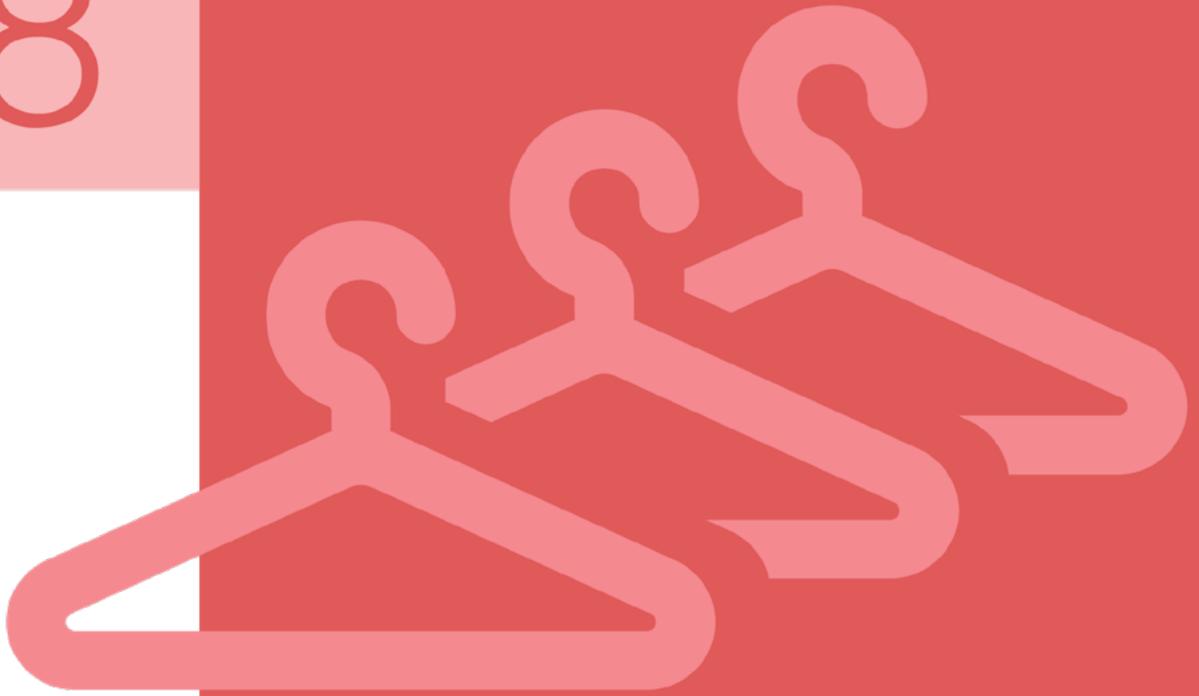


8



Action 8

Slow down fast fashion

*This Action is one of eight in the report, “**Together We Can: 8 Habit changes for below 2°C**”, where all references and the disclaimer can be found. We recommend you read the full report to see how you can make a bigger impact.*

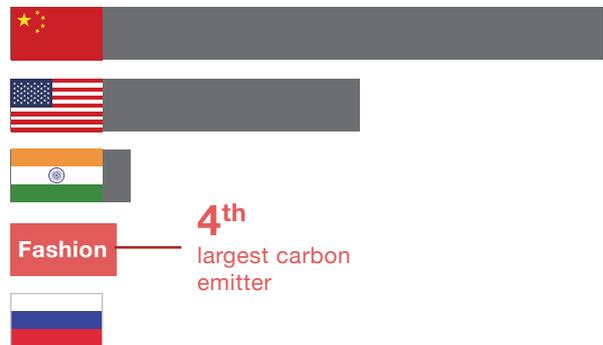
SAY NO TO CARS
FLY LESS
WATCH ELECTRICITY BILLS
CHANGE ONLINE HABITS
RETHINK DIETS
CUT FOOD WASTE
TWEAK ONLINE SHOPPING
SLOW DOWN FAST FASHION

Action 8: Slow down fast fashion

Why we chose this...

- If the fashion industry were a country, it would be the 4th largest emitter of carbon dioxide behind China, the US and India. And as of 2015, fashion's CO₂ emissions are even more than that of international aviation and shipping's combined. So, while coal, oil, and the energy sector in general have been called out as the bad boys of climate change, fashion has been flying under the radar. But that needs to change.
- The most intensive part of the industry is by far the production and treatment of raw materials like cotton, leather, polyester and cashmere. A 250-gram white t-shirt, for example, emits more than 2 kg of carbon and uses almost 2,500 litres of water during production (see below).

CWR FASHION VS. ENERGY-RELATED CO₂ EMISSIONS OF COUNTRIES IN THE WORLD



Source: CWR, Pulse Of The Fashion Industry 2017 Report, IEA © CWR, 2022 all rights reserved

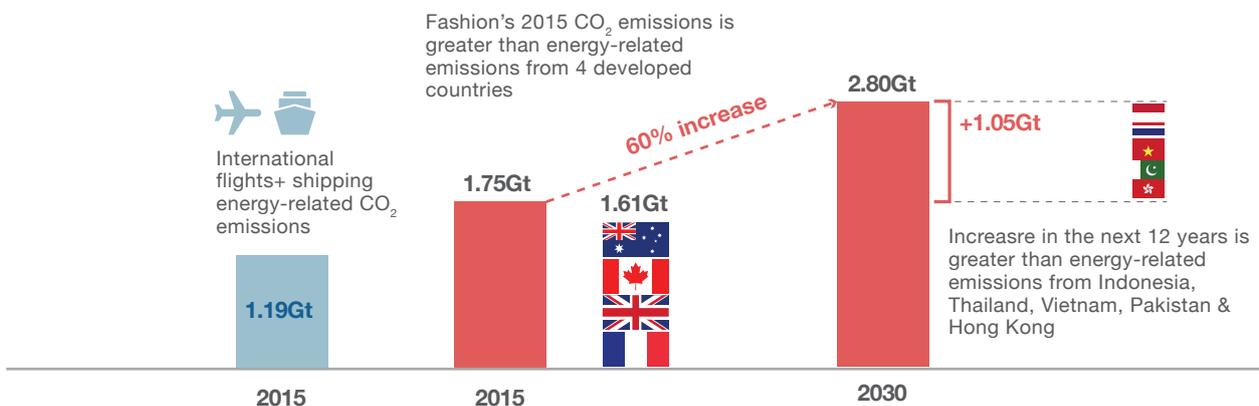
CWR THE EMISSIONS & WATER USED FROM 1 COTTON T-SHIRT



Source: CWR, BBC article "Can fashion ever be sustainable?" Mar 2020, Water Footprint Network, USEPA greenhouse gas equivalencies calculator
*Whiter cotton t-shirt with a weight of 250g
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- Worryingly, fast fashion – which is exacerbating the problem by stepping up the pace of design and production - is still growing rapidly and therefore, so are the emissions from the sector. By 2030, the industry's carbon emissions are set to grow by 60% to 2.8 MtCO₂e (from 2015 baseline).¹⁹⁴ That's the equivalent of adding the combined emissions from Indonesia, Thailand, Vietnam, Pakistan and Hong Kong in 2015, highlighting the need for deep cuts.

CWR FASHION'S SHOCKING CURRENT & FUTURE EMISSIONS



Source: CWR, Pulse Of The Fashion Industry 2017 Report, IEA © CWR, 2022 all rights reserved

- The fashion industry is also thirsty, dirty, extremely wasteful and addicted to plastics and oil. Globally, an estimated 92 million tonnes of textile waste is generated each year and this is expected to jump 50% over the next 15 years¹⁹⁵ (see boxes below).

Fashion is very thirsty

It's not just about carbon, the fashion industry, especially fast fashion, is very thirsty. The industry currently uses around 79 billion m³ of water per year, which is 2% of all freshwater extraction globally, and is more than one tenth of the water used by all types of industry.

The fashion industry relies on water throughout the production process for textiles and garments. The raw materials phase is particularly water intensive. Cotton, a key fashion staple, uses 12.5 bathtubs of water (as shown on the previous page) but then there is also the water pollution issues from the pesticides and fertiliser used to grow the cotton. As for a pair of jeans, they take 50 bathtubs of water to be produced. The Aral Sea in Central Asia has shrunk to just 10% of its former volume, largely due to irrigation for cotton farming.

As for some of the other natural fibres like leather, cashmere and wool, since they come from livestock, they are also very water and carbon intensive.

Source: Common Objective – Water Issue, Water Footprint Network, BBC article, “Can fashion ever be sustainable?” Mar 2020

Fashion is also very dirty

Fashion is also highly polluting. According to WWF, cotton accounts for 24% and 11% of the global sales of insecticides and pesticides respectively. Not only this, untreated wastewater is still often dumped into water sources near textile factories. While those in Europe and US wear their brand new garments, the dirty byproducts are left in already water-scarce countries like China, India and Pakistan.

What's more, fashion can even affect our health. As uncovered by the Greenpeace Detox campaign across the 2010s, fashion products can actually contain high levels of toxic and hazardous chemicals. These include alkylphenols, which is toxic to aquatic life and an endocrine disruptor; azo dyes which can be carcinogenic; and even heavy metals like mercury and lead.

Given all this on top of the carbon and water impacts, it is more than time to end fast fashion and to change the entire fashion industry into a circular and more sustainable model.

Source: CWR article “Dirty Thirsty Wars – Fashion Blindsided” by Debra Tan, Sept 2014, WWF-HK Ecological Footprint Report “Reduce, Rethink: Change the Way We Live” (2019), Greenpeace Report “Destination Zero: seven years of Detoxing the clothing industry” (2019)

Is your t-shirt exploiting cheap labour?

And if fashion's carbon intensive, thirsty and dirty ways were not bad enough, there is more bad news on the social front. As fast fashion is built upon cheap prices for consumers, it essentially operates a “race to the bottom” to find the cheapest labour. This has an obvious negative impact on worker welfare and a spotlight was shone on this in 2013 when 1,134 workers died in an overcrowded garment factory collapse in Dhaka, Bangladesh. Many organisations are working to increase transparency with the ultimate aim to eradicate exploitive labour, but recent reports show progress is slow.

Source: BBC article “Dhaka building collapse: Factories and buyers” May 2013

New fashion habits

We have selected two habits that people can adopt to have a big climate impact – buy less clothes and wear them longer. We have chosen these because they are impactful and easily achievable and there is sufficient scientific research available to calculate emission cuts. Commentator and comedian Hasan Minhaj highlighted these two actions in a segment of the award-winning Netflix show Patriot Act in 2019 ('The ugly truth about fast fashion').

We have made these two actions more specific by identifying the number of clothing items and the length of time before buying another item so we can calculate emissions saved. We have set these levels as we believe they are relatively achievable.

1. Buy 1 fewer pairs of jeans and 3 fewer t-shirts a year. While a t-shirt is carbon intensive (2.1 kgCO₂e), a pair of jeans is even more so, emitting 33.4 kg of CO₂e (low end as this is from efficient production).¹⁹⁶ So, if you bought one fewer pair of jeans and 3 fewer t-shirts, you can save 39.7 kgCO₂e. This is as much GHG emissions as driving a passenger car from Sapporo to Hokkaido.

 **CWR** GHG EMISSIONS SAVED PER PERSON FROM BUYING FEWER CLOTHES A YEAR



Source: CWR, BBC article "Can fashion ever be sustainable?" Mar 2020
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2. Extend the life of a pair of jeans and 3 t-shirts by 9 months. It's not just about buying less clothes, wearing your clothes for longer – instead of discarding or replacing them – can also help the climate. By just wearing one item of clothing for 9 months longer, a person can reduce their carbon footprint by up to 30%.¹⁹⁷ If you do this for one pair of jeans and 3 t-shirts, you can save 11.9 kgCO₂. This is as much GHG emissions as charging a smartphone 1,530 times. It should be noted that the data source does not specify about washing during the 9 month period, which would obviously impact this.

 **CWR** GHG EMISSIONS SAVED PER PERSON FROM WEARING CLOTHES FOR LONGER



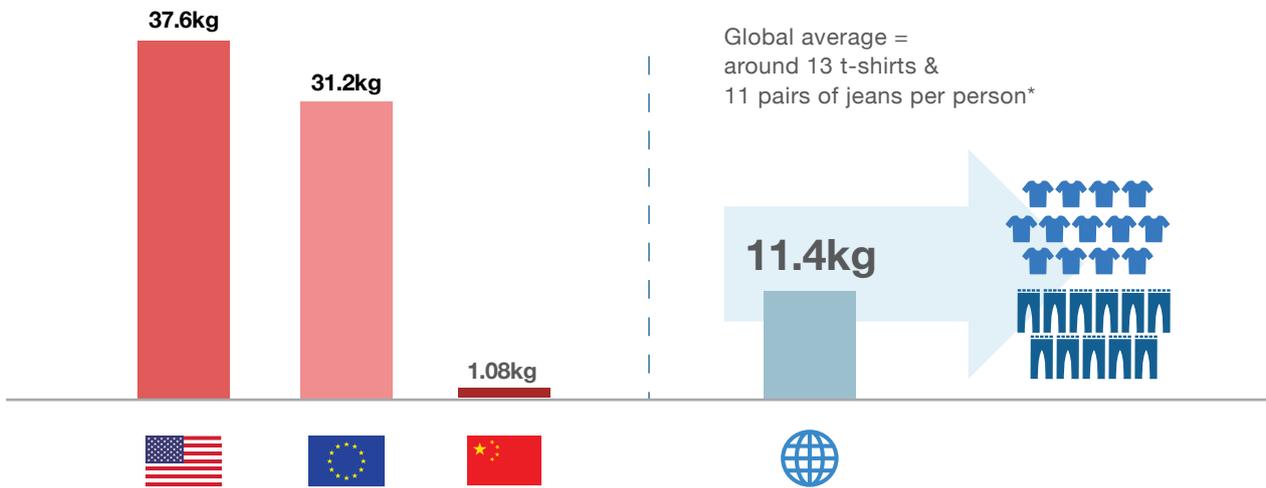
Source: CWR, BBC article "Can fashion ever be sustainable?" Mar 2020, WRAP report "Extending the life of clothes" Dec 2015, US EPA emissions calculator
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These two simple actions can help a person save about 52 kg of emissions. Beyond these actions are many more ways to do more to cut fashion emissions (see '4 ways to do more' below) and emissions from online shopping (see 'Action 7').

Together we can... cut up to 15 Mt of GHG emissions...

Europeans and Americans consume about three times more apparel than the average person each year, according to a report by consulting group Quantis in 2018.¹⁹⁸

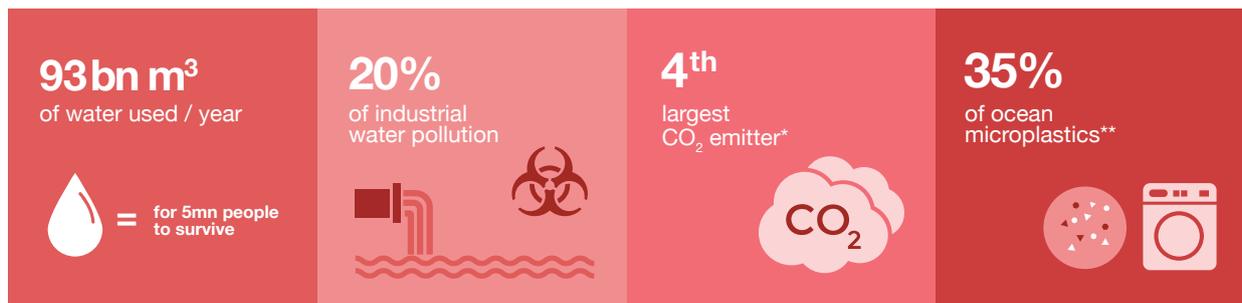
CWR ANNUAL APPAREL CONSUMPTION PER PERSON IN US, EU & CHINA COMPARED TO GLOBAL AVERAGE (2016)



Source: CWR, Quantis report "Measuring Fashion: Environmental Impact of the Global Apparel and Footwear Industries Study" (2018)
 * assuming that a pair of jeans weighs about 850g and a t-shirt about 150g
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The growth in American consumption has been particularly astounding: in 1980, the average American bought about 12 new pieces of clothing every year and now they buy 68 new pieces a year.¹⁹⁹

CWR FASHION'S THIRSTY & DIRTY IMPACT



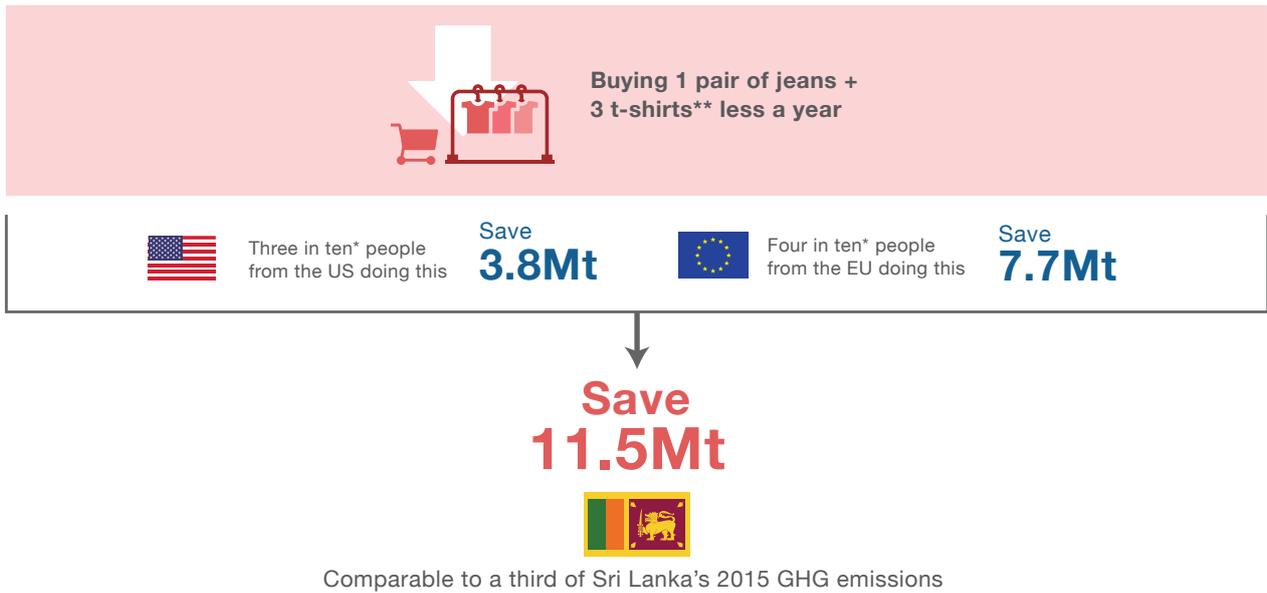
*If a country, fashion would be the 4th largest carbon emitter
 **Microplastics released from the laundering of synthetic fibres like polyester.
 Source: World Bank, UNEP, OECD, IUCN - various years.
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We estimate that willing individuals from the US and the EU who adopt the two new habits could save 14.9 MtCO₂e which is comparable to a third of Hong Kong's GHG emissions in 2015.¹⁵

1. Buy one fewer pairs of jeans and three fewer t-shirts a year

Various surveys have found that 29% of shoppers in the US are willing to pay more for sustainable fashion products. In the EU's Top Five fashion markets, 38% of shoppers take the fashion industry's social and environmental impacts into account when shopping.^{200, 201} In the absence of other data, we assume these respondents are willing to buy fewer clothes to tackle climate change. If this was done by roughly a third of Americans, amounting to 95 million people, almost 4 MtCO₂e could be saved. And if this was replicated by four in ten people in the EU, or 195 million people, almost 8 MtCO₂e could be saved. The combined impact of almost 12 MtCO₂e is equivalent to a third of Sri Lanka's greenhouse gas emissions in 2015 (see graphic on next page.)¹⁵

CWR CONSUMERS FROM US & EU CAN SAVE 1/3 OF SRI LANKA'S EMISSION BY BUYING FEWER CLOTHES A YEAR

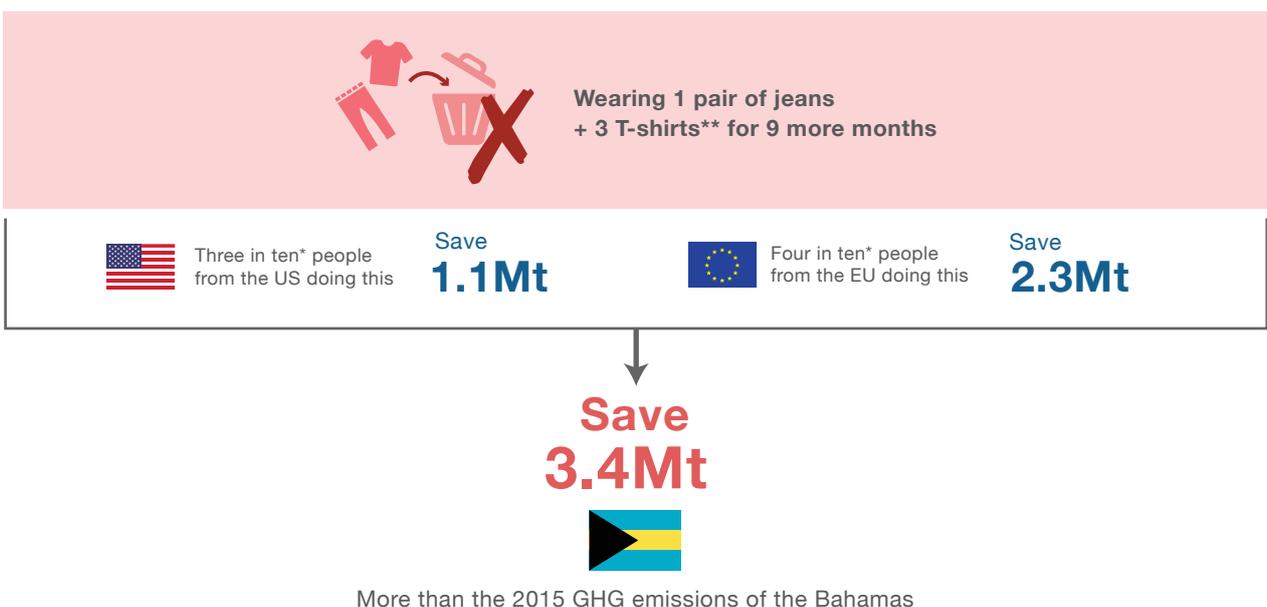


Source: CWR, BBC article "Can fashion ever be sustainable?" Mar2020, Fashion United article "1 in 3 consumers in Europe's largest markets consider sustainability when shopping" Nov 2018, Forbes article "Report Shows Customers Want Responsible Fashion, But Don't Want To Pay For It. What Should Brands Do?" Jun 2019, Worldometer population statistics, EDGAR emissions database
 * For the US, 29% of shoppers were willing to pay more for sustainable fashion products. For EU's top 5 fashion markets, 38% of shoppers take fashion's social and environmental impact into account when shopping. We assume these responders to be willing to buy fewer clothes for the climate.
 NOTE: US & EU chosen as they are the top consumers of fast fashion (see Quantis report)
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2. Extend the life of a pair of jeans and 3 t-shirts by 9 months

Currently in the US, clothes are only worn three times or less; and compared to 20 years ago, every garment bought is kept buy half as long.²⁰² Based on the surveys referred to above, we estimate that if roughly a third of the US population (totalling around 95mn people) did this, 1.1 MtCO₂e can be saved and if four in ten people in the EU did this (totalling around 195mn people) 2.3 MtCO₂e can be saved. The combined emissions of more than 3 MtCO₂e saved are equivalent to more than the GHG emissions of the Bahamas in 2015.¹⁵

CWR CONSUMERS FROM US & EU CAN SAVE MORE THAN THE EMISSIONS OF THE BAHAMAS BY WEARING CLOTHES FOR LONGER



Source: CWR, BBC article "Can fashion ever be sustainable?" Mar 2020, Fashion United article, "1 in 3 consumers in Europe's largest markets consider sustainability when shopping" Nov 2018, Forbes article "Report Shows Customers Want Responsible Fashion, But Don't Want To Pay For It. What Should Brands Do?" Jun 2019, Worldometer population statistics, EDGAR emissions database
 * For the US, 29% of shoppers were willing to pay more for sustainable fashion products. For EU's top 5 fashion markets, 38% of shoppers take fashion's social and environmental impact into account when shopping. We assume these responders to be willing to also buy fewer clothes for the climate.
 NOTE: US & EU chosen as they are the top consumers of fast fashion (see Quantis report)
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Ramping up to cut more carbon and water by washing clothes more efficiently

While fashion is highly carbon and water intensive to produce, its emissions and water use do not end there. Because the more we wash clothes the more we are adding to the clothes' carbon and water footprints.

A load of laundry washed at 60°C and dried in a combined washer-dryer emits 3.3 kg of CO₂, comparable to a 13km drive in a passenger car.^{100, 121} As for water, University of Michigan research has shown that the average washing machine uses more than 50m³ of water a year – as much as an average person drinks in a lifetime.²⁰³

So, what can we do? Washing full loads instead of half loads saves 50% of a washing machine's carbon and water footprint. Washing less often reduces the footprint further (the Levi's CEO has not washed his jeans in ten years).²⁰⁴ It can also make clothes last longer, reduce microplastic release (see below) and save on electricity (see 'Action 3').

Fast fashion's plastic problem

Oil and plastic don't come to mind when you're putting on your clothes, but they should! Polyester and other synthetic fibres, which are in your yoga pants, sports tops, pretty much everything fast fashion and athleisure are kinds of plastic derived from oil. And if we continue business-as-usual, 98% of all future fibre growth is expected in synthetic fibres.

Every time a polyester garment is washed, it releases 700,000 plastic microfibrils. Many of these microplastics pass through sewage treatment and end up in rivers and oceans and then in our food chain, and increasingly in the air. And FYI, microplastics never degrade.

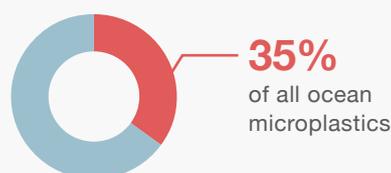
Overall, in a year, it is estimated that 500,000 tonnes – the equivalent of 50 billion plastic bottles – of microfibrils enter the ocean. 35% of all microplastics in the ocean came from the laundering of synthetic textiles like polyester.

And, yes, there is more plastic issues and pollution in fashion, now thanks to clothes hangers – “plastic straw” of the fashion industry, jewellery & sunglasses. Cheap sunglasses and fast fashion jewellery at basement prices mean an exponential increase in plastic waste ending in landfills.

With the amount of polyester produced annually expected to triple between 2007 and 2025, surely it's time to say no to fast fashion and wash our clothes less?

Source: CWR article, "Fashion Frolicking In Oil", by Dawn McGregor (17 Jul 2020), UNEP article, "Fashion's tiny hidden secret (13 Mar 2019)

CWR FASHION'S PLASTIC POLLUTION TRAIL



Source: CWR, Plymouth University study, UN Environment, IUCN

4 ways you can do more...

1. Wear all your clothes for longer

What we need is a mindset change. Instead of buying new clothes, we can wear all our clothes for longer and not just a pair of jeans and three t-shirts for nine more months. This is the most impactful way we can say no to and stop fast fashion (see more in box below) because even donating our clothes and buying from seemingly sustainable brands has pitfalls (see boxes on following page).

Say no to fast fashion

One of the biggest ways we can slow down fast fashion is simply not buying from them. These include brands like Cotton On, H&M, Zara, Topshop, Fashion Nova and others. After all, even if we are wearing clothes from these brands longer or buying fewer clothes from them, we are still perpetuating the cycle of fast fashion.

The good news is fast fashion brands are not infallible – just look at the rapid collapse of Forever 21 in the last few years due to “cookie-cutter” styles and poor sales performances at its rapidly expanding stores. But still consumers need to act and one way to show your support or lack of support is by where you spend your money, so think twice.

Source: Business Insider “At its peak, Forever 21 made \$4.4 billion in revenue. Here’s what led to the brand’s downfall and bankruptcy.” by Kaitlyn Wang & Irene Kim, Sept 2019

2. Buy and wear second-hand clothes

Many people aren’t so keen and some even squeamish about the idea of second hand clothes but the truth is, with the rapid rise of fast fashion, second-hand clothes now are barely and sometimes not even worn. Despite this, buying and wearing second hand clothes can have a big climate impact. If everybody in the US bought one used item instead of new in 2019, it would save the carbon emissions equivalent to taking over half a million cars off the road for a year.²⁰⁵ On top of this, second hand clothes are cheaper so perhaps you could get that dream dress at a bargain? And yes, there are more places to get second hand lux and high fashion items, so that is not an excuse. And remember, buying second hand clothes are better but it’s no excuse to buy too many – even if you have just done a spring cleaning (see more in box below); just buy what you need.

Donating for recycling fuels consumption & adds to fashion waste

What happens to the pile of unwanted old clothes cleared out during spring cleaning? For some people, donating to charities or brand collection boxes is the answer but in reality, this is often only a feel-good solution only and gives consumers an excuse to buy even more clothes.

Why is donating clothes feel-good only? Because a lot of donated clothes often get dumped. What charities can’t sell or give away are sold to buyers in the developing world and still end up in mountains of waste or landfills in those countries, where up to 87% of landfill is incinerated.

Perhaps you’ve seen in-store recycling bins with retailers like H&M implying that the old clothes you bring in will be recycled to make new clothing. But less than 1% of their clothing is actually recycled to make new clothing. That is because the blend of fibres that make their clothes don’t break down easily. So, don’t get too caught up in that ‘do gooder’ feel after donating clothes and definitely don’t use it as an excuse to go on a shopping spree.

Source: Big Think article “Fashion contributes to 10 percent of humanity’s carbon emissions” by Molly Hanson, 9 Dec 2019, Patriot Act with Hasan Minhaj episode “The Ugly Truth Of Fast Fashion” (2019)

3. Rent your clothes instead of buying

A trend worth highlighting is ‘ownership’ which is increasingly popular, especially among millennials – moving away from owning clothes to renting them instead. Businesses are catching on. The company Rent the Runway was valued at USD 1 billion in 2019 and established brands like Urban Outfitters and American Eagle have launched clothing rentals.²⁰⁶ As the State of Fashion 2019 report remarked: ‘If millennials aren’t buying houses, cars, or the latest movie, why would they keep buying clothes?’²⁰⁷

One note of caution though – given all the deliveries required in a rental service, could all the transport-related emissions mean they are doing more harm than good? Check out ‘Action 7’ for more on the impact of online shopping.

4. Buy from brands that are not greenwashing

Who you buy from matters. Some brands, for example, are better for the climate and water as they sell recycled or sustainably sourced materials. However, certain fast fashion brands have caught on and claim to be more sustainable than they really are. Take Zara’s Join Life campaign. Their annual report claims that Zara reuses or recycles 88% of their waste but in reality it’s written in small print 254 pages later that this leaves out the thousands of factories from around the world where nearly all of their waste comes from. Even waste from their stores is not included, as found later in the report.²⁰⁸

So, knowing and buying more from a sustainable brand is rewarding but increasingly difficult given greenwashing like the case described above (see more on this in box below).

Greenwashing: fake eco-creds from fast fashion brands

Despite efforts by fast fashion brands to be more sustainable, their efforts have often been found to be false, with many of them greenwashing. For example, some brands have added sustainable clothing lines to their product range. H&M’s “Conscious Collection” makes up a minority of their overall stock but takes up a large proportion of the brands marketing campaigns. Another example is Zara’s target of 80% of energy at HQ will come from renewable sources but what about the rest of the supply chain – which happens to be the monster portion of energy use? While brands are making efforts, it is clear that they are leading consumers to believe they are doing more good than they actually are. So, consumers get informed and support brands that really are acting for the climate.

Source: Sense & Sustainability article, “How Fast Fashion is Greenwashing” (3 Dec 2019)