

## The Fashion Industry's Effect on the Environment

Fast fashion and its detrimental effects on the environment are a commonly discussed topic in environmentalism and sustainability today, but many regular people are still not aware of its disastrous impacts on our earth.

### Overview

Fashion is one of the world's top polluting and emitting industries, but because of the complicated supply chain and the behind-the-scenes nature of the industry's environmental impacts, many consumers are just not aware of its detriments. In addition, there is not much credible data about the specific impacts of the fashion industry.

- According to [Vox](#), most widely cited statistics about fashion's impact vary widely, are not concrete, or are flat-out incorrect
  - There is a huge lack of technical papers and peer-reviewed studies, which makes it difficult to hold companies accountable with concrete targets or even to trust activists
  - We cannot decide what changes must be made or find concrete solutions without good information on the issues
- According to [the BBC](#), the complex supply chain of clothing production also creates difficulties in assessing the impact of the industry
  - This makes it difficult to account for all emissions produced by any given garment

### Fast Fashion and Consumerism

Our consumerist habits have been fueled by the fashion industry and its creation of trends. By purchasing so much of what we don't need, we support brands with wasteful and unsustainable production practices, and increase waste ourselves.

- According to [the BBC](#), the ever-increasing rate of rising trends pushes consumers to buy more clothing and has increased the industry's pace of change for new clothing
  - Most haute couture brands offer four clothing collections a year, and the average for all brands is five new collections a year
  - This has led to a rise in "fast fashion" - inexpensive clothing produced rapidly by mass-market retailers in response to the latest trends (definition according to [Oxford](#))
    - Number of collections is even higher (up to 25 a year)
- The BBC also asserts that online shopping has increased consumerism among clothing buyers
  - We often return large portion of items after trying them on at home (and returns double carbon footprint of shipping)
- Mental health and self-esteem issues often increase our propensity to compulsively purchase clothing, according to the BBC
  - 5% of population are compulsive buyers

## Waste Culture/Disposability Cycle

The impact of fashion also comes from the culture of waste surrounding excess consumption.

- People own too much, do not get a great deal of use out of what they own, and dispose of things quickly to make room for new, trending items
  - According to [the BBC](#), the average number of times a garment is worn is decreasing, while clothing production is increasing (which degrades the quality and longevity of garments).
- The BBC also asserts that on the corporate side, it is often cheaper for companies to throw away, burn, or slash unsold merchandise than to recycle or rehome it. High-end companies also do this to protect the exclusivity of their brand.



Clothing in dump (photo from [Sussex Green Living](#))

## Supply Chain

The complex supply chain of fashion holds many moving parts with huge environmental impacts, including in farming and material production, material sourcing, textile dyeing, textile manufacturing, and product shipping.

- Farming and production
  - Cotton production uses a very large amount of water. According to [sustainyourstyle.com](#), it takes 20,000 liters of water to produce one kilogram of cotton.
    - This has caused lakes like the Aral sea, located between Kazakhstan and Uzbekistan, to completely dry up from water diversion for cotton production



Comparison between the Aral Sea in 1960 and 2018 (photo from [MDPI](#))

- Cotton farming also uses chemical fertilizers, which pollute nearby water sources and ecosystems.
- Material production and farming also causes soil and land degradation due to overuse and poor farming practices, according to [sustainyourstyle](#).
  - Cashmere - overgrazing of pastures
  - Wood based fibers (rayon, modal, viscose) - deforestation
  - Chemical fertilizer use - soil and mineral erosion
- Sourcing
  - The environmental impacts of differing materials used in clothing vary widely.
  - According to [the BBC](#), synthetic fibers (usually polyester) are the most problematic. This is a huge problem, because 65% of our clothing is based in polyester polymer.
    - Washing synthetic clothing introduces microplastics to our water
      - Puts plastic in our food chain
    - Polyester contributes much more to emissions than natural fibers
      - One shirt emits two times the carbon of a cotton shirt through its life cycle, and does not biodegrade
    - Synthetic fibers are also made using fossil fuels

- Manufacturing
  - Clothing-producing factories often run on fossil fuels (like coal) and have high carbon and pollution emissions.
  - These factories also often exploit and underpay their workers, forcing them to work long hours in abysmal conditions with miniscule compensation (often under \$1 U.S. a day)
- Textile dyeing
  - Dyeing textiles uses a large amount of water (200 tons per ton of fabric) and incorporates a huge amount of toxic chemicals
  - The leftover dye and water are often dumped, where chemicals runoff into water sources and farms

### Regulation

- There is a huge lack of info and transparency from clothing companies about their impacts. Often, they outsource their manufacturing and are not even aware of their manufacturer's production practices or the source of their materials.
- There is also a severe lack of regulation from consuming countries on clothing companies about their production, manufacturing, and shipping practices.

### Solutions

Although fashion's impact is a complex issue requiring complex solutions, and most change needs to be made at the corporate and government level, changing our behavior as consumers can make a small impact and push companies to make needed changes to mitigate their harm. Some ideas, according to [the BBC](#), are to:

- Only buy what you need, truly want, and will keep
- Reduce the need you feel to purchase clothing and to follow trends and the latest style
  - Resist going places where you will get the urge to purchase clothing
  - Mend worn clothing and get as much use out of what you have as possible
- Rent pieces that you will wear only once from services like Rent the Runway
- Buy your clothing secondhand (such as at a thrift store, consignment shop, or vintage store)
- Buy high-quality garments close to natural state of material, and pay attention to material
  - Avoid synthetic fibers and dye, bleach, and pre-washed clothing
- Buy fabrics and clothing certified by organizations such as Better Cotton Initiative and Global Organic Textile Standard
- Promote circular economy and adopt circular use practices
- Decrease frequency of washing clothes
- To dispose of clothing, give it to friends, donate it, or sell it. Do not throw them away
  - When it is completely worn, recycle
  - Don't dispose of clothing just to make room for new clothes
- Treat underlying reasons why we feel the need to purchase clothing
  - Seek psychiatric help to address self-esteem issues/compulsive behaviors

## Sources

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