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Environmental impact of the textile industry

THIS IS HOW (FAST) FASHION IS DESTROYING OUR PLANET

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The fashion industry is booming: over 100 billion garments are produced globally every year. Whilst, in the last 15 years, clothing production has doubled, fashion cycles are getting shorter and shorter. The fast fashion phenomenon causes brands to launch up to 24 collections per year.¹

But these trends come at a cost: careless and uninformed consumption is taking a toll on the environment and its ecosystems— so ultimately, we are all affected.

The textile industry is among the most environmentally hazardous sectors of all. In 2018, it emitted approximately 2.1 billion tonnes of greenhouse gases.² This is equivalent to the cumulative emissions of France, Germany and Great Britain.

Therefore, it is hardly surprising that sustainability has become a widely used buzzword – however, generalization often causes confusion. Although it is a known fact that conventionally produced clothing is harmful, it generally remains unclear where the problems stem from.

Here are the biggest ways the fashion industry impacts the planet.

Clothing production puts pressure on resources

The industry's system follows a principle of "take-make-dispose". It operates in an almost fully linear way. The production of clothes consumes large amounts of resources. The vast majority of clothes, namely 97%, is still made from materials that have been explicitly produced for the purpose of clothing production. Thus, a total of 98 million tonnes of resources are used annually.³

More than 70% of the environmental impact is caused by the energy-intensive production, processing and treatment of raw materials.⁴ Leather and other animal-derived are particularly harmful. This is illustrated by the HIGG Material Index, which compares the environmental impact of various materials in terms of climate

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influence, water use, energy use and eutrophication and classifies leather as the third most harmful material.⁵

Furthermore, cotton farming usually involves the use of large quantities of pesticides, fertilizers and water. Every year, total textile production consumes around 93 billion cubic meters of water.⁶ This corresponds to about twice the volume of water in Lake Constance. In particular, this poses great challenges to regions where water is already scarce.

However, the negative effects go beyond the excessive use of resources.

Several types of chemicals are used in various manufacturing processes, many of which have the potential to be toxic. The use of these substances of concern not only affects the health of farmers and textile workers, it also has serious ecological consequences. Large quantities of water containing toxic chemicals are released into the environment during production processes. Globally, 17 to 20% of industrial water pollution can be attributed to textile finishing.⁷ Untreated waste water contaminates local rivers also used for fishing, drinking or bathing.

Ready-to-wear and ready-to-toss

By the time our clothes end up in stores and ultimately, in our closets, they usually have travelled all over the world. In addition to transport and distribution, washing our garments can also be ecologically damaging. When being washed, textiles made of synthetic materials such as polyester, nylon or acrylic release microfibers. Annually, approximately half a million tonnes of those fibers enter the oceans.⁸ Considering an item's entire life cycle, it is estimated that the washing and drying of one kilogram of clothing generates eleven kilograms of greenhouse gases.⁹

The fashion world is racing, fast-paced trends are dominating. The consequence: more than half of all clothing produced is disposed within years of being made.¹⁰ After their use, 73% of all garments end up in incinerators or landfills.¹¹ The majority of reused material is utilized in downcycling processes and is used, for instance, for insulation material, wiping cloths or mattress fillings. However, those presumably constitute the final use as they are very difficult to recapture.

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Less than 1% of the material used to produce clothing represents closed-loop recycling – meaning it is recycled into new clothing.¹²

Sustainable fashion is the future

The real threat of climate change is often discussed – rightfully so, since the negative effects of the fashion industry are tremendous and potentially catastrophic. As stated in a study by the Circular Fibres Initiative, the environmental impact of textile supply chains will increase exponentially causing the textile industry to consume 26% of the global carbon budget by 2050.¹³

Considering, the rapid developments in climate change, this would be disastrous and the crises ahead of us would not only increase in frequency but also intensity. This would result in further irreversible damages to our ecosystems, which are ultimately vital for our future.

Therefore, the fashion industry is in desperate need of disruptive processes, but first and foremost, it is in need of brands that are willing to take on responsibility - brands that are committing to implementing sustainability and transparency as integral parts of their businesses.

Conscious consumption is crucial in realizing a future worth living in. Sustainable fashion is more than just clothes, it is an expression of mindsets and reflects values one stands for.

You can find tips on how to shop more sustainably [here](#).

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