

TEXTILES AND CLIMATE CHANGE

“5 percent of [global] greenhouse gas emissions [come from] the textile industry. That’s about equivalent to the impact from the aviation sector, so all the planes flying in the world.” --World Resources Institute

Changing climate affects the growing of natural fibers

Natural fibers are the backbone of the textile industry—climate change affects the growth and production of these natural fibers.

Textile production affects the climate

Cotton production alone leaves a huge impact on the environment. A kilogram (about 2 pounds) of cotton (the equivalent of one pair of jeans and one t-shirt) can take more than 20,000 liters (almost 5,500 gallons) of water to produce.

The Carbon Footprint

The footprint left behind by major textile operations is huge, and carbon is released throughout the supply chain. Textile production is the fifth largest contributor to CO₂ emissions in the United States.

Materials

Polyester and other synthetic materials, the emissions for production are much higher as they are produced from fossil fuels such as crude oil.

Recycling

It has been estimated that less than 1% of material used to produce clothing is recycled within the clothing industry.

Dyeing

All synthetic dyes and chemicals are hazardous to the environment. Approximately 20% of industrial water pollution globally is attributable to the dyeing and treatment of textiles.

The clothing industry uses over 60% of the textiles produced and a large proportion of clothing manufacturing occurs in China and India with coal-fueled power plants, increasing the footprint of each garment.

“FAST FASHION”

Increased consumption = more waste

Since 2000, each garment is worn less before being disposed of and this shorter “garment lifespan” means higher relative manufacturing emissions.

Textile maintenance (washing, drying, ironing)

Tumble drying especially significantly affects individual energy use and footprint.

SOME SOLUTIONS

GOAL: a circular economy where the value of products and materials is maintained for as long as possible and waste and resource use is minimized

1) REUSE, RECYCLE

Buy from local thrift and secondhand stores

EXAMPLE: Reuse on Union, Athens, OH

2) VOTE with your DOLLAR

Buy from companies making a difference

EXAMPLE: PATAGONIA polyester fleece jacket from recycled bottles

3) BUY QUALITY AND REPUTATION

Buy quality clothing and local fibers that last from reputable, ethical sources

EXAMPLE: FIBERSHED, a regional textile community connecting local fiber, local color, and local labor.

→ See Sept 25, 2019 NYT article by Jessica Petway, “How to Buy Clothes That Are Built to Last”

https://www.nytimes.com/interactive/2019/climate/sustainable-clothing.html?fallback=0&recId=1ROeBWIMWMkCbWM5LwKtbJwTJzs&locked=0&geoContinent=NA&geoRegion=CA&recAlloc=als1&geoCountry=US&blockId=home-featured&imp_id=469688278&action=click&module=editorContent&pgtype=Article®ion=CompanionColumn&contentCollection=Trending