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Polyester — a substance derived from oil — is the most common material used in fashion today and makes up more than half of clothing produced. (Unsplash/Sarah Brown)



by Lizzy Case

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The movement to divest from fossil fuels is rapidly gaining momentum. From [theological societies](#) to universities, more citizens are recognizing the vital link between divesting from fossil fuels in the public sphere and a moral obligation to care for people and planet.

Beyond finances, personal divestment is oftentimes thought of as a reductionary act — removing plastic products (the vast majority of which are derived from fossil fuels) from kitchens and bathrooms or laundry and other cleaning supplies to be replaced with more sustainable options. Yet many people overlook a major source of plastic in their homes — the contents of their closets.

According to [Vogue Business](#), "4 in 5 Americans believe they're somewhat knowledgeable about ways to reduce plastic waste in their daily life. Yet, 7 in 10 do not recognise that crude oil is used to make textiles for clothing." Part of our moral calling to create a better carbon future must include taking stock of and reducing the oil woven into our wardrobes.

Polyester — a substance derived from oil — is [the most common material](#) used in fashion today and makes up [more than half](#) of clothing produced. In 2016, [65 million tons of plastic](#) was produced for textile fibers, representing almost 20% of total plastic production for that year.

As other sectors, such as transportation and energy, discuss winding down their dependence on oil, the fossil fuel industry is banking on plastics in clothing as a growing revenue stream over the [next 20 years](#). Production of synthetic textiles currently accounts for about 1.35% of global oil consumption, which is higher than the [annual oil consumption of Spain](#).

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Not only are these synthetic materials derived from oil, but they require an immense amount of energy to produce. In addition to what's contained in the garment itself, more fossil fuels are needed to power manufacturing facilities and transport products to customers. According to the [Ellen MacArthur Foundation](#), carbon dioxide emissions for synthetic clothing are six times higher than those for cotton clothing. An additional hidden cost comes from harm to garment workers, whose daily contact

with these plastic fibers [threatens their health](#) and makes them more susceptible to disease.

Today, not only is the majority of clothing made from plastic, but we're also buying more of it than ever before. Prior to the COVID-19 pandemic, the fashion industry generated [\\$2.5 trillion in global annual revenues](#). The number of garments produced annually has doubled since 2000 and exceeded [100 billion pieces for the first time](#) in 2014.

However, this increase in production doesn't translate to purchases and long-lasting ownership. Industry overproduction means that roughly [one garbage truck of clothes](#) is landfilled every second. Much of this will gradually rot down over hundreds of years, releasing microfibers, toxic chemicals and methane into the biosphere. [Vast quantities](#) of second-hand clothing are exported from the Global North to the Global South where it overwhelms local ecosystems and economies, eventually accumulating in mountains of waste that can be [seen from space](#).

On a smaller scale, microfibers from synthetic fabrics wreak havoc in our world. Microfibers are microscopic plastic fragments shed by synthetic fabrics during washing and wear and are the [most prevalent type of microplastic](#) found in the environment. A recent study from the North Pole found that more than [73% of microfiber pollution](#) is made of polyester. These microfibers have been found both 2,000 meters below sea level and in [human placenta](#). They absorb pollutants such as heavy metal, neurotoxins and harmful pathogens, which accumulate up the food chain and increase the chance of disease in environments like coral reefs.

Microfibers are also notoriously difficult to capture. An estimated 500,000 tonnes of microfibers enter wastewater every year from washing — the equivalent of [50 billion plastic bottles](#). Although there are some temporary solutions like bags that limit the release of microfibers during washing and retrofitting washing machines with collection filters, these cannot capture fibers shed during wear and use or address the deeper issues of overproduction and waste.



An estimated 500,000 tonnes of microfibers enter wastewater every year from washing — the equivalent of 50 billion plastic bottles. (Unsplash/Annie Spratt)

Increasingly, brands are offering recycled synthetic textiles as a sustainable solution. Unfortunately, these efforts fall short. Almost all recycled polyester is made from recycled PET bottles, which can mostly be reprocessed in a closed-loop bottle-to-bottle system. Creating polyester from these bottles diverts them from a closed-loop stream and turns them into fibers with no recycling solutions in place.

Most clothing is made with blended fibers, which are incompatible with current recycling technologies and haven't been commercialized at scale. Estimates for the percentage of [fiber-to-fiber recycling](#) range from 1% to as little as 0.1%. Additionally, [recycled polyester](#) sheds microfibers at a higher rate than virgin polyester when it's used, worn and washed, feeding into the larger environmental problem.

The call to divest from fossil fuels and all of their products is a sacred one found in the very foundations of our faith. From Genesis to Revelation, the scriptures remind us that humanity is a part of the natural world and we are meant to live in an

interconnected, interdependent relationship with God and the whole of creation. We are not called to dominate the earth and use its resources at will, but rather to practice careful, boundaried, responsible stewardship. We are to revere and respect the earth and its balanced web of life as holy, much as we're called to keep the Sabbath holy.

Indeed, Pope Francis' papal encyclical "[Laudato Si'](#), On Care for Our Common Home," names the climate as a "common good, belonging to all and meant for all," and urges the progressive replacement of technologies and systems based on fossil fuels without delay as a faithful response to caring for our common home.

To be more mindful of fossil fuels in your closet, begin with changing your laundry habits. Wash full loads of laundry with cold water to reduce friction and stress on fabrics and cut down on the amount of microfibers released in the washing machine. Spot clean as often as possible and wash clothing less frequently. Use a drying rack or dry clothing in the machine on a low setting to keep fabric fibers more intact.

New clothes tend to shed more microfibers than clothing that's been previously washed and worn, so a more responsible way to purchase is to shop second hand options. Choose garments made of natural fibers such as cotton and linen with certifications like the [Global Organic Textile Standard](#) to ensure the production process lines up with sustainable values.

Finally, support initiatives like local [Fibershed](#) affiliates to drive change and create new, regenerative clothing systems focused on the health and wellbeing of people and planet.

As we continue to divest from fossil fuels in our institutions and homes, we mustn't forget our closets.