New report exposes extent of fashion industry’s reliance on fossil fuel-based synthetics

- 49 of the world’s biggest brands show no clear commitment to ending their addiction to synthetics.
- US brands worst offenders: Patagonia, Nike and Lululemon fail to disclose reliance on synthetics.
- 85% of companies plan to reach sustainability standards with the false solution of recycled plastic bottles.

The world’s biggest fashion brands are fuelling the plastic pollution and climate crisis through continued reliance on synthetic fibres made from fossil fuels, finds a new report by Changing Markets.

The report, entitled *Synthetics Anonymous: Fashion brands’ addition to fossil fuels*, assessed 46 of the world’s supposedly most transparent brands, from high street to luxury, including Lululemon, Patagonia, The North Face, Gap and Nike on the amount of fossil fuel based materials in their collections and commitments to move away from them.

It finds that most brands are aiming to deal with the fossil fashion problem by replacing virgin polyester with downcycled single-use plastic bottles, a false solution because it is a one-way street to landfill or incineration.

Muhammad Malas, Senior Climate Campaigner from Stand.earth said:
“*The production of synthetic fibres amounts to nearly 1.3 billion barrels of oil every year, exceeding the annual oil consumption of Spain. The fashion industry’s dependence on fossil-based materials is not compatible with climate leadership and undermines the sector’s efforts to drastically cut emissions in the next nine years.*”

The problem with synthetics
Synthetic fibres account for 1.35% of global oil consumption and represent over two thirds (69%) of all materials used in textiles. This figure is expected to reach nearly
three quarters by 2030, of which 85% will be polyester, a material produced from oil, fracked gas,\(^1\) and with investments on the way to even produce it from coal.

The brand assessment found that:

- 11 of the 15 companies that made it to the “red zone” are North American and include leading brands whose values and marketing reflect healthy lifestyles and a strong connection to nature. These companies, including Gap, Gildan, Lululemon, Nike, Patagonia, Target, The North Face, Timberland and Walmart, refused to respond to the assessment questionnaire.
- Well over three-quarters (85%) of the brands said downcycled plastic bottles were their main source of recycled polyester.
- Only six brands indicated they want to avoid or reduce synthetics altogether: Reformation, Hugo Boss, Esprit, Dressmann, Puma and United Colors of Benetton, but no company made a clear commitment to phase out the use of fossil-based synthetics from their collections.

Livia Firth, Eco-Age co-founder and creative director, said: “For us at Eco-Age this report comes out precisely at the moment we need it most. There is so much greenwashing regarding circularity – a much needed business model we all need to adopt, but made nearly impossible in the fashion industry by the vast amount of synthetic fibres used. In this regards, we have also been working for few months at EU level to make sure that the proposed PEF label uses the correct methodology, and we hope the EU Commission will take this groundbreaking report into consideration to ensure the correct legislative way forward.

The red zone
The 15 worst performing brands assigned to the bottom category are those with minimum to no transparency about their use of synthetics, nor any numerical information about the use of synthetics on their websites. The vast majority of these (11 out of 15) are North American brands – many of which market themselves as embodying a healthy lifestyle, athleticism or being in connection with nature.

Despite many well-known sustainability claims, Patagonia refused to respond to the assessment and discloses no information on its website about its use of synthetics, nor does it outline any specific commitment to reduce its reliance on them. While it encourages people to ‘buy less, demand more’ and to ‘join the fight against irresponsible, fast-fashion manufacturing’ it makes no commitment to move away from synthetics altogether.

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\(^1\) Tecnon OrbiChem (2021) World Synthetic Fibres Database: Strategic market overview.
Additionally, Patagonia advertises ocean plastics and fishing nets as a better alternative to virgin plastic, yet this is an approach that does little to stop the flow of plastics into the environment and only deals with the after-effects.

Similarly, Lululemon, which recently announced its goals to build circular business model, ‘minimise its negative impact’ and ‘contribute to restoring our natural environment’, provides little information on the source of the polyester or synthetics in its products, and its commitment to “used plastics instead of fossil fuels” has the potential to mislead Lululemon customers the companies increased use of recycled water bottles will be fossil fuel free.

Also in the bottom category for the weakness of its publicly available policies on synthetic fibres, and for failing to respond to the Changing Markets assessment, is Nike. Nike is one of the biggest users of synthetics by tonnage, and figures show it uses far more synthetics than cotton (publicly reported using 152,723 tonnes of polyester in FY2020). While its use of polyester fluctuated in recent years, it has increased by 9% overall since 2015.

Nike is one of a rising number of companies offering products from downcycled PET bottles, but also recycled synthetic products from used or unsold items. However, it provides few details of the recycling technology used, nor the environmental impacts associated with it; nor does it disclose what percentage of the overall product is recycled this way.

Microplastics emerged as a critical blindspot for several brands, including Nike. Despite the known damage they cause to human and environmental health – including recent research which has found microplastics in placentas, stools and even able to cross the blood-brain barrier – the vast majority of brands were found to be asleep at the wheel when it comes to microplastics, delaying meaningful action by citing uncertainty and calling for even more research.

Making progress
In contrast, Reformation, one of the few brands found to possess a level of transparency and integrity with its commitment towards moving away from fossil fuel based fibres, notes that synthetics do not meet its fibre standards because, among other issues, they are fossil-fuel based and lead to microplastic shedding.

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US brand Reformation disclosed that 4-5% of its textiles are made of synthetics, but that it only uses them in its main collection when ‘needed for fabric performance or stretch’. Products made primarily from synthetics are allowed in its swimwear collection, and it reported an increase since launching.

**Kidswear**

A concerning finding is that US brands use significantly more synthetics in kidswear than European retailers.

**Walmart** has a higher rate of synthetics use in kidswear (87%), compared to European retailers with an average of 36% of kidswear items containing synthetics. In **Forever21** kidswear, 80% contained synthetics and the average polyester content is 72%.

This is particularly concerning in light of a recent study showing that children under six inhale around three times more microplastics than the average adult⁴ and with scientists warning of the potential health risks of microfibres for those with developing lungs.⁵

**Under the microscope**

A further part of the investigation scrutinised 12 brands and over 4,000 products, revealing routine deception of consumers through greenwashing tactics. The research shows that nearly 60% of green claims for the products analysed are misleading to consumers or fail to substantiate claims being made.

**Urska Trunk, Campaigns Advisor at Changing Markets** said:

“While brands are quick to capitalise on consumer concern by using sustainability as a marketing ploy, the vast majority of such claims are all style and no substance. While they greenwash their clothing collections, they are simultaneously dragging their feet on embracing truly circular solutions, for example by not making the necessary investments to ensure a future in which clothes can be recycled back into clothes.”

**Recommendations**

Not a single brand ranked as a frontrunner on their approach to synthetics; coupled with the greenwashing exposed in the report suggests that the industry has a long way to go to contribute to tackling the climate and waste crises in a meaningful way.

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The report urges brands to tackle their addiction to fossil fuel-derived synthetics, to commit to ambitious climate targets, cut the greenwashing and invest in truly circular solutions. Consumers are encouraged to think twice about their purchases and to question the integrity of the shops they are buying from before purchasing.

Finally, the report asks legislators to take action to address low quality clothes mass produced by the fast fashion industry and ensure that brands become more transparent and responsible about their supply chains and the end-of-life of their products. In addition, measures are needed to end greenwashing, which the report found to be rampant in the industry.

ENDS

The report is available to read here:
https://changingmarkets.org/portfolio/fossil-fashion/

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About Changing Markets
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The Changing Markets Foundation partnered with Stand.earth, Plastic Soup Foundation, No Plastic in My Sea, Retorna, The Clean Clothes Campaign and Fashion Revolution for this campaign. Our mission is to expose irresponsible corporate practices and drive change towards a more sustainable economy.

About the study
Changing Markets analysed in total 49 fashion companies - 46 of these were assessed based on their responses to our questionnaire and publicly available information and 12 through analysis of their online shops. There was some crossover between the two studies, with 9 of the fashion companies featuring in both studies.

About the assessment of 46 companies
The 46 brands who received the questionnaire were selected based on their high scores in the Fashion Transparency Index 2020, and were combined with some of the most well-known brands to use synthetics, as well as with companies that have signed up to the Changing Markets’ Foundation Roadmap towards Responsible Viscose and Modal Fibre Manufacturing. They were evaluated based on their individual responses to a Changing Markets questionnaire and publicly available data on their websites.
According to this, brands and retailers were classified into four categories - frontrunners, could do better, trailing behind and red zone.

About the analysis of 12 online shops
Changing Markets analysed over 4,000 products from 12 brands’ online Spring/Summer 2021 collections to assess the prevalence of synthetic fibres in today’s fashion. We wanted to better understand the composition of products and claims that companies make directly to their customers – and how this compares with policies and commitments they publish online or disclose to civil society. The brands we investigated were: ASOS, Boohoo, Forever21, Gucci, George at Asda, H&M, Louis Vuitton, M&S, Uniqlo, Walmart, Zalando and Zara. These were chosen to represent a range of brands: from luxury to low-cost, department stores and online-only, those who put sustainability at the forefront of their communications and ultra-fast-fashion brands for whom this is not a consideration. For the analysis, a selection of products was randomly chosen across the following male and female categories: shirts/tops, non-jeans-based trousers, jackets/coats, dresses, kidswear and hoodies/sweatshirts, with data collected on material composition, sustainability claims (if any) and certifications to support such claims. We have also used a recently published draft guidance by the UK Competition and Markets Authority to establish whether the claims were substantiated or not.