

Synthetics Anonymous 2.0

Fashion's persistent plastic problem



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Executive summary

Synthetics Anonymous 2.0 uncovers the lack of progress that has been made by the fashion industry to kick its synthetics addiction. One year on from *Synthetics Anonymous: fashion brands' addiction to fossil fuels* (henceforth referred to as *Synthetics Anonymous 1.0*), this report assesses where global clothing companies stand in reducing reliance on synthetic fibres and their transparency on usage.

Fossil-fuel-based fibres are a key enabler of the business model driving today's overconsumption of fashion. They also perpetuate the fashion industry's dependence on continued fossil-fuel extraction in the midst of a climate emergency. As we exposed in our 2022 investigation, *Dressed to Kill*, fashion brands' reliance on synthetic fibre is exposing fashion brands to other risks, such as using polyester produced from Russian oil at a time of war, as well as sourcing from companies that have invested in producing polyester from coal.¹ As synthetic fibres represent over two-thirds of textiles, a share that is growing, they have become a huge cause of fashion's ongoing waste crisis, which shows no sign of abating. With the majority of synthetics being unrecyclable and often used in complex textile blends that stand in the way of circularity, we still see no wide recognition from the fashion industry that this is a significant problem. The report also finds an overwhelming lack of transparency over synthetic fibre supply chains, and none of the brands has committed to a phase-out of fossil-fuel-based synthetic fibres.

We reached out to 55 brands with a questionnaire and conducted desk research into their policies and public disclosure of relevant information on this topic. Our questionnaire requested disclosure on several topics, including use of synthetic fibres, synthetic suppliers, use of recycled fibres, commitments to phase out synthetics fibres, policies to address end-of-life management of synthetic fibres, policies to address microfibre release, climate targets and company position on elements of the European Union (EU) legislation proposed in the EU Textile Strategy. Where appropriate, brands and retailers were classified into four categories: *Front-runners*, *could do better*, *trailing behind* and *red zone*. In total, 31 of 55 (56%) brands responded to our enquiry, a rate lower than in 2021 when we received direct answers from 39 of 46 brands (85%).

Analysis of the responses to our questionnaire signals fashion's synthetic fibre addiction has not undergone any significant rehabilitation over the last five years. Thus, amidst an accelerating climate emergency, over one-fifth of the largest fashion companies are recording a heavier reliance on fossil-fuel-derived fabrics. Brands



continue to mask their addiction to synthetic fibres under the guise of commitments to increase their proportion of 'sustainable' materials, including recycled synthetics (mostly polyester and nylon); however, green claims on polyester made from recycled polyethylene terephthalate (PET) bottles as the main sustainability strategy for synthetics have been facing increasing scrutiny over the past year from regulators and consumers concerned about misleading environmental claims. At the same time, few brands are investing in fibre-to-fibre recycling technology. Moreover, brands have still not changed communication across their online channels, as our investigation still revealed high levels of greenwashing through the use of vague and unsubstantiated claims with regards to 'sustainable' materials, 'preferred fibres', 'environmentally friendly fibres' or 'better' materials.

The disparity between fashion's sustainability agenda that is hyper marketed in the windows and on the websites of brands and the concrete evidence of their inaction on fossil-fuel-derived fabrics detailed in this report should act as a call to action for policymakers, investors and retailers to advocate for and embrace legislation that can regulate and help to rehabilitate fashion's synthetic fibre addiction, which should also put them on track to meet climate targets and align them with the circular economy agenda.

Key findings

Still hooked on fossil fuels

- From the 55 global brands and retailers analysed this year, only one company (Reformation), landed in our *Frontrunners* category. The company is committed to phasing out virgin synthetics by 2030 and reducing all synthetics (virgin and recycled) to less than 1% of total sourcing by 2025.
- There were 22 companies (40%) that were in the *Red Zone*, with little to no transparency about their strategy on synthetic fibre use.
- From the 33 companies that revealed their synthetics volume and percentage, ultra-fast-fashion brand Boohoo was identified as the organisation with the heaviest reliance on synthetics as a percentage of its total annual fibre used (64%) and was also the brand found to have the most polyester included in the majority of its textile products (54%).
- Nike and Inditex reported the highest volumes of synthetics and polyester used in their products, disclosing volumes of 166,343t and 131,548t, respectively.
- Fourteen of 55 brands (25%) have increased their use of synthetics, both in terms of the percentage of total fibre mix and total volume over this period. Thus, amidst an accelerating climate emergency, with many other industries scrambling to decarbonise, one quarter of the fashion sector's largest companies are recording a heavier reliance on fossil-fuel-derived fabrics.

Top ten brands that use the most synthetic fibres as a proportion of total fibre used		Top ten brands that use the most synthetics by disclosed volume	
Brand	Synthetics as % of total fibre used	Brand	Disclosed volume of synthetics (tonnes)
boohoo	64%	 NIKE	245,239*
	63%*	INDITEX	178,030
 lululemon	62%	PUMA	66,248
NEW LOOK	60%**	PVH	32,936
adidas	56%	boohoo	30,616
PRIMARK	43%	next	23,915
	36%		23,524
INDITEX	36%	 lululemon	23,390
PUMA	35%	MARKS & SPENCER	22,156
next	34%	George ASDA	15,696

*Derived from 'top materials' nylon, polyester, polyurethane and rubber.

*Derived from polyester and rubber data.

**Derived from 2021 response.

These data were collected from publicly available information from the 33 brands that shared data on their synthetic fibres by volume and percentages.

Murky supply chain

- Of the brands that responded to the Changing Markets Foundation's questions about their synthetic suppliers, 27 out of 31 (87%) provided insufficient details on their synthetic suppliers. Several companies provided no details on synthetic suppliers at all, including retailers Asda, Sainsbury's and Tesco, high-street retailers Inditex and Uniqlo, online retailer Zalando, sport brand Puma and luxury companies Burberry and Kering (owner of brands including Balenciaga, Bottega Veneta, Gucci and Saint Laurent).
- Only four of 31 brands that responded (7% of all brands included in the research), sent Changing Markets their supplier lists, which explicitly outline which companies provide synthetics and what type. These brands are Levi Strauss & Co., Next and Reformation, with Boohoo only sharing their recycled synthetic supplier lists.

Banking on bottles

- Overall, 45 of the 55 brands (81%) have set targets to increase their recycled synthetic content, namely polyester. The 99% of recycled polyester comes from downcycling PET bottles,² a false solution and a far cry from a circular model. Moreover, no single company has paired this commitment with a promise to decrease the overall volume of synthetics used in their garments.
- Across all fibre types, several brands were completely dependent on recycled polyester for all their recycled fibre content; these brands included Morrisons (100%), Next (97%) and Puma (93%).
- A handful of brands disclosed the total amount invested in fibre-to-fibre technologies. These were Reformation, Tesco, H&M Group and Hugo Boss. With each of these, except Hugo Boss, sharing figures. H&M Group shared the value of direct investments, noting that in 2021, this hit €3.7 million. These funds have been redirected towards companies such as Ambercycle, Infinited Fiber and Re:newcell. It should be kept in mind that this represents 0.04% of H&M Group's gross profit of €9.58 billion in the last financial year.
- Voluntary initiatives, such as the Textile Exchange's 2025 Recycled Polyester Challenge are proving to have a limited impact. From the initiative's 132 members, just under half were able to report on total polyester volumes for 2019–2020 and only 41 of 132 (31%) of those that joined the challenge had reduced their total polyester fibre volumes between 2019 and 2020.³

Brands that use the most recycled polyester as a proportion of their total recycled fibre content		Top ten brands that use the most natural fibres as a proportion of total recycled fibre content	
Brand	Recycled polyester as % of total recycled fibre content	Brand	Recycled natural fibres as % of total fibres used
 Morrisons	100	Reformation	68.03
next	97	 UNITED COLORS OF BENETTON	62
PUMA	93	 K E R I N G	55.1
PRIMARK [®]	92	Dressmann[®]	50
 Levi's	92	INDITEX	25
G-STAR RAW	86	 H&M	24.45
 ASDA	84.2	PVH	24
 zalando	83	 bonprix	12.9
 C&A	80.41	boohoo	12
LINDEX	77	 C&A	7.31

Microfibre release still in brands' blind spots

- On the important issue of microfibre release, brands demonstrated a concerning lack of disclosure. Of 55 brands, 25 (45%) landed in the *Red Zone*, with either no evident microfibre policies or little available information.
- Our results highlight an overreliance on membership in voluntary initiatives such as The Microfibre Consortium (TMC), cross-functional working groups and research projects, whereby brands continue to kick the can down the road. The TMC is limited in scope, has transparency issues and has failed to deliver significant measurable positive impact since its inception in 2018. Only one brand, Reformation, landed in the *Frontrunners* category, as it said it would phase out the use of synthetics as a precautionary principle to tackle microfibre release. No other company mentioned phasing out synthetics because of microfibres, and none from children's collections. This is concerning as studies have shown that children may be the most at risk from microplastic exposure.^{4,5}

End-of-life lacking tangible action

Efforts to effectively manage the end of life of synthetic clothing are predominantly focused on the pursuit of product durability, with half of brands saying that they are doing this. Attempts to remedy the challenges of separating textiles for recycling, repair or reuse were also popular as 26 of 55 brands claim to be investing in solutions; however, much of this was participation in research initiatives as opposed to being able to prove investment in end-of-life infrastructure such as recycling, repair facilities or sorting.

Hazy on climate

At a broader level, examination of the fashion industry's climate targets reveals that brands are not as ambitious as their barrage of press releases and Net Zero marketing campaigns would lead us to believe.

- Six of 55 companies (10%) had no climate targets whatsoever.
- Companies such as lululemon and Boohoo, who are working meticulously to craft a reputation as being sustainable, reported increasing their emissions. In 2021, lululemon increased total Scope 3 emissions by 36% compared with 2020 and 79% compared with its baseline in 2018. Boohoo stated that from 2020 to 2021 their emissions increased by 29%.
- In some instances, Scope 3 emissions targets are missing from company goals and reporting on progress towards near- and long-term climate targets is sparse.
- Despite commitments to the Science-Based Targets Initiative (SBTi), UNFCCC's Fashion Industry Charter for Climate Action, the Carbon Disclosure Project or Textile Exchange, several companies do not map their synthetics supply chains and thus, cannot deal with the basic risks of sourcing, such as reliance on conflict oil, coal and fracked gas.
- Seven companies said they would still source from a supplier that uses coal, despite many of them being committed to phase out coal from owned and supplier sites by 2023 under the UNFCCC's Fashion Industry Charter for Climate Action. This includes Dressman, Lindex, Primark, PVH Group and Tesco.
- Fewer than half the brands (45%) that engaged with us outright said they would not source from a supplier that produces polyester from coal. Despite 14 of 31 responding with a clear 'no' to this question, our *Dressed to Kill* report found that several of these were found sourcing from the Chinese Hengli Group, which has invested in a \$20 billion project to produce polyester from coal by the end of 2025.⁶ This includes Adidas, Asda, C&A, H&M, Inditex and PVH Group. If these brands do not rapidly improve supply chain visibility and step away from companies with plans to turn coal into clothes, they will break their own climate commitments.

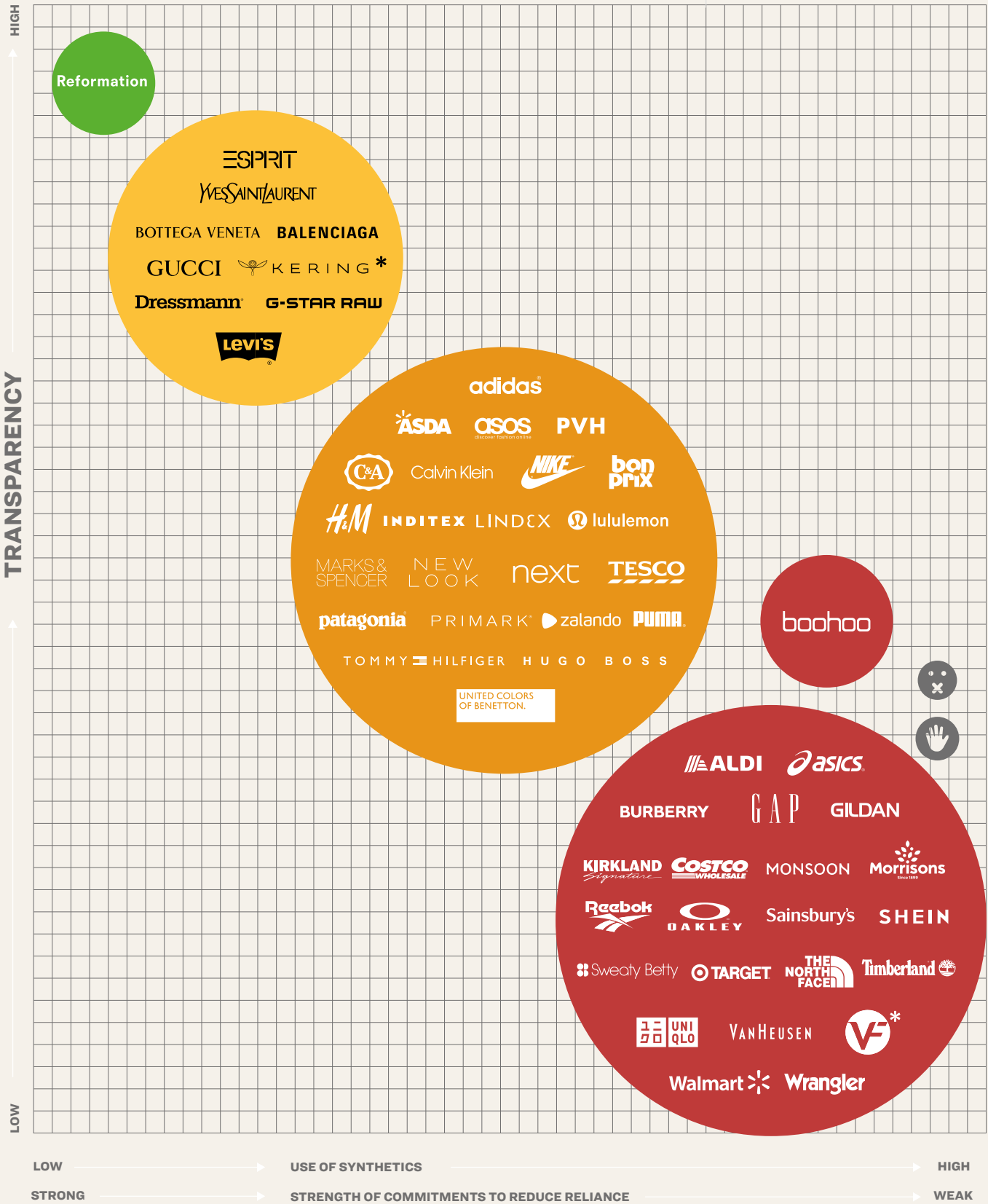
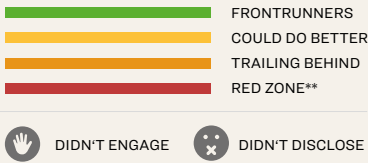
Green light for legislation

Last, this report offers new insights into the sector's attitudes towards policies embedded within the EU Textile Strategy. Although not all brands have headquarters in the EU, 26 of the 31 that responded sell to the EU market, which will also make them subject to the upcoming legislation. We sought to ascertain the popularity of Extended Producer Responsibility (EPR), recycled content targets, supply chain transparency and more. Some elements were more palatable than others. Industry-wide support was expressed for EPR, legislation for eco-design criteria and eco-modulated fees. Overall, 25 of 31 brands (80%) were in favour of EPR, 26 of 31 (83%) were in favour of eco-design criteria and 18 of 31 (58%) were in favour of eco-modulated fees, with many companies acknowledging the value of harmonisation. The majority (68%) would also support legislation for ambitious reuse and recycling targets. Similarly, responses on a ban of chemicals and substances of concern received majority support with 23 of 31 brands (74%) in favour.

There is a significant intention-versus-action gap articulated in many of the responses to proposed legislation. The highest support was expressed for legislation to reduce the risk of false green claims (29 of 31 (94%) brands), including brands currently under investigation for greenwashing (i.e. H&M Group). This level of support also signals that brands are looking for concrete guidance on greenwashing to remain compliant in their claims. The European Commission was supposed to come out with a proposal on this issue on 30 November 2022, but this has been delayed to 2023.

The report clearly demonstrates the inaction by the fashion industry to tackle the ongoing waste, climate and microplastic pollution crisis. Surprisingly, the fashion brands show significant levels of support for several of the policies that were proposed in the EU Textile Strategy. Policymakers must step up and find effective legislative solutions to put the fashion industry on a more sustainable track. The upcoming legislation under the EU Textile Strategy presents a significant opportunity to do this. The legislation needs to be aligned with the EU Strategy for Sustainable and Circular Textiles published in March 2022, which already recognises fossil-fuel-based synthetics as one of the main culprits behind the fast-fashion model, microfibre pollution and the inefficient use of non-renewable resources.⁷

Where do brands stand on transparency, use of synthetic fibres and commitments to phase them out?



This is a simplified representation of companies' performance and not a ranking. More detailed information is available in the league table in Annex III.

* Parent groups VF Corporation, PVH Corporation and Kering are included for references purposes only, because they replied on behalf of their brands or policies are set at the group level.

**Many brands in the Red zone landed there due to lack of transparency and disclosure, rather than necessarily high use.

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