Textile Exchange

2025 Recycled Polyester Challenge

First Annual Report

July 2022

Foreword

From performance to price, there are many reasons that brands rely on polyester in their products. It has grown to be the most popular material used in the fashion and textile industry, representing 52% of global fiber production in 2020.[1]

We know that this reliance on virgin fossil-based materials is damaging to our environment. But at the same time, there is no other fiber on the market today that could absorb this demand. It's a dependency that won't disappear overnight, so at Textile Exchange, we're committed to making sure synthetic fibers like polyester are being used as responsibly as they can be right now.

Our goal is for synthetic fiber production to drive beneficial impact through preferred fiber choices, with no new virgin fossil-based fibers entering the system. To get there, all materials used in this category should come from a recycled or regenerative source.

This shift will be essential if the fashion and textile industry is to do its bit to limit global warming. That's why we're encouraging brands to make the shift to recycled with our 2025 Recycled Polyester Challenge, which represents the first step of our wider industry roadmap for synthetic fibers:

1. Remove dependence on virgin fossil fuels, and away from plastic bottles

This phase is about reducing the industry's reliance on fossil fuel sources for producing conventional virgin polyester. And, while plastic bottles have been a useful feedstock for the last few years, we don't want to incentivize their production further and we know we need to innovate towards new solutions.

2. Drive forward innovation in textile-to-textile recycling

For real progress to happen, brands and retailers also need to find ways for products to be returned at the end-of-life, and support systems to get these products to the right places so that recycling old garments and textiles into new ones can become a reality. Design for recycling is important too to ensure that textile-to-textile recycling processes can be supported with appropriate inputs/feedstocks.

3. Support and scale new innovations for synthetic equivalents

The third focus area is around next-gen materials, like biosynthetics, that have all the properties of a synthetic material and can be used as direct replacements for their fossil-based counterparts.

4. Push for further research on the causes and consequences of fiber fragmentation

More research is needed to understand the impact of the fragments of all kinds of fibers and materials. However, those from fossil-based materials have been shown to take a significant number of years to break down, so we need to put work within this fiber category first.

1 Textile Exchange, 2021. "Preferred Fiber & Materials Market Report." https://textileexchange.org/wpcontent/uploads/2021/08/Textile-Exchange_Preferred-Fiber-and-Materials-Market-Report_2021.pdf

What's inside

Executive Summary

In 2019, the baseline year for the 2025 Recycled Polyester Challenge, the apparel industry accounted for 32 million tonnes of the 58 million tonnes of polyester fiber used that year. Only approximately 14% of this was recycled, despite having a significantly lower carbon footprint than its conventional counterpart.

To keep the industry on track toward its climate targets, this percentage needs to increase to **45%** by 2025, assuming a 3% growth rate in the apparel industry. The long-term vision is to bring this up to **90%** by 2030.

Today, mechanically recycled polyester from plastic water bottles makes up the vast majority of recycled polyester. However, chemical recycling and, more specifically, textile-to-textile recycling will be a necessary part of reaching our goal.

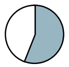
We recognize that more data is needed on the greenhouse gas emission reductions associated with chemical recycling and that even with less significant reductions compared to mechanical recycling, it is a key part of the solution. We will continue to explore roadmap scenarios as impact data evolves and as the textile-to-textile recycling market matures.

It's important to clarify that our goal for recycled polyester is that it should *replace* virgin synthetic feedstocks, rather than substitute other fiber categories or justify increased industry growth. Textile Exchange supports the industry to measure its progress towards the 2025 Recycled Polyester Challenge by publishing this annual report.

Key takeaways

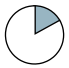
132
companies

132 companies (including subsidiaries) signed up to the 2025 Recycled Polyester Challenge between its launch in April 2021 and December 2021. This includes 109 (83%) brands and retailers and 23 (17%) suppliers and manufacturers. All participants have committed to targets ranging from having 45% to 100% recycled polyester by 2025.



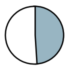
56%
signatories

56% (74) of the 132 signatories in 2021 committed to replacing 100% of their virgin fossil based-polyester with recycled by 2025.



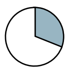
17%
signatories

17% (22) already use more than 45% recycled polyester and 7% (9) achieved their target in 2020.



49%
signatories

49% (65) were able to report their total polyester volumes not only for 2020 but also for 2019.



31%
signatories

31% (41) reduced their total polyester fiber volume from 2019 to 2020. However, 18% (24) increased their total polyester fiber volume.

Going forward

While the industry may celebrate the progress made, further acceleration is urgently needed:

- More companies need to join the 2025 Recycled Polyester Challenge and commit to increasingly ambitious targets for the industry to achieve an overall reduction of 45%.
- All companies have to set ambitious targets.
- Overall material consumption, particularly but not only fossil-based, needs to be reduced.

Introduction

History of the challenge

In April 2021, Textile Exchange and the United Nations Framework Convention on Climate Change's Fashion Industry Charter for Climate Action launched a joint initiative to spur a shift in the market towards the uptake of recycled polyester and its associated reduction in greenhouse gases. The 2025 Recycled Polyester Challenge serves as an important catalyst for change in the apparel industry.

Together, we are challenging the industry to commit to bringing the overall percentage of recycled polyester up from 14% to 45% by 2025. The challenge will continue the successful acceleration that began with Textile Exchange's 2017 Recycled Polyester Commitment.

We encourage brands to commit to the most ambitious uptake target possible of 80-100% recycled polyester. This will be essential from the brands in our community in reaching our 2025 45% recycled volume target and for building critical mass to reach an absolute 90% recycled volume share by 2030.

How to participate

Learn more about how to join the 2025 Recycled Polyester Challenge and sign up: https://textileexchange.org/2025-recycled-polyester-challenge/

Acknowledgments

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Disclaimer

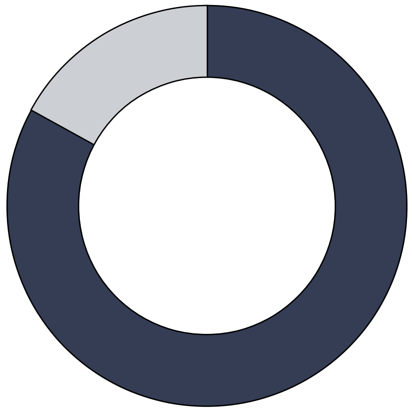
While Textile Exchange reviews all data entries, checks calculations, and carries out consistency checks, it does not verify the accuracy of the data or disclosures within a company's survey submission, or the process of preparing the disclosures. That responsibility remains with the participating company.

Signatories and their Commitments

132 companies (including subsidiaries) signed up to the 2025 Recycled Polyester Challenge between its launch in April 2021 and December 2021. This includes 109 (83%) brands and retailers and 23 (17%) suppliers and manufacturers. All participants have committed to targets ranging from having 45% to 100% recycled polyester by 2025.

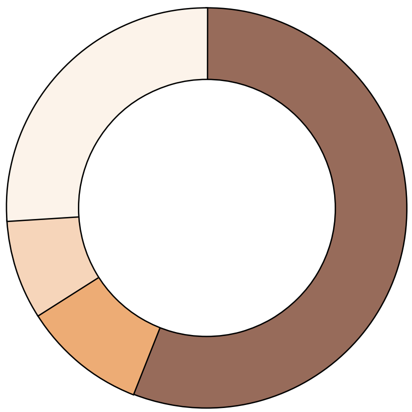
56% (74) of the 132 signatories committed to using 100% recycled polyester fiber rather than virgin fossil-based polyester by 2025.

10% (13) committed to using over 80% recycled polyester fibers by 2025, **8%** (10) committed to over 60%, and **26%** (35) committed to over 45%.



2021 signatories by type

- Brand/retailer (83%)
- Supplier/manufacturer (17%)



Recycled polyester % commitments made by the signatories in 2021

- 100% (56%)
- >80% (10%)
- >60% (8%)
- >45% (26%)

Signatories and their Commitments

Signatories (April-December 2021 sign-up)

Brands/retailers:

adidas AG *(adidas, Reebok)*

Adore Me

Athleta

Banana Republic

Dedicated Sweden AB

Gap Inc.

Gina Tricot

G-Star RAW

Gymshark

H&M Group *(H&M, COS, Weekday, Monki, H&M Home, & Other Stories, ARKET, AFOUND)*

Helly Hansen AS *(Helly Hansen and Musto)*

House of Baukjen *(Baukjen, Isabella Oliver)*

HUGO BOSS

Inditex *(Zara, Zara Home, Pull&Bear, Massimo Dutti, Bershka, Oysho, Stradivarius, Uterqüe)*

Infinite Athletic*

J Wear by Jalin Design**

J.Crew

Joules

Kameng Sabai*

KID ASA *(Kid Interior and Hemtex)***

Konsciouskind*

lululemon athletica

Madewell

MANGO

Mantis World Limited

Mara Hoffman Inc

Marks and Spencer

Mini Rodini**

Moose Knuckles

New Balance Athletics, Inc. *(New Balance Athletics Inc and PF Flyers)*

Norrøna Sport

Nudie Jeans

Old Navy

Outerknown

Pact

Pieux*

Piping Hot Australia Pty Ltd

prAna

PUMA SE *(PUMA and Cobra)*

Recreational Equipment Inc. (REI)

Reformation

REGATTA GROUP *(Dare2be)*

Royal Robbins LLC

Tact & Stone**

tentree International Inc

Tesco Stores Ltd *(F&F Division only)*

Totême**

Tsunami Sport

VARNER *(Dressmann, Cubus, Carlings, Bik Bok, Urban/Junkyard, Volt)*

VF Corporation *(The North Face, Smartwool, Vans, JanSport, Dickies and Timberland)*

VOICE *(VIC, Match, Boys of Europe, Jean Paul, Va Vite, Henry Choice, Mario Conti, Marie Philippe, Blu, Redford, Donna, Mr.Capuchin, Wos Not Wos, Alvo)*

Suppliers/ manufacturers:

Alpine Group - Paradise Textiles

Armstrong Mills

Crestex

Ereks-Blue Matters

ITOCHU Corporation

Jiangsu Yongyin

Juritex Import-Export GmbH

Orimpex Textile

REO-ECO Recycle Tech*

Sapphire Textile Mills Limited

Sportif JRH*

SULOCHANA MILLS, INDIA

Sympatex

Legend:

* Companies that signed up between August and December 2021 after the Corporate Fiber and Materials Benchmark submission period had already started, and therefore were excluded from the reporting requirements in 2021.

** Companies that signed up between August and December 2021 but still reported conventional and recycled polyester volumes for 2020 via the Corporate Fiber and Materials Benchmark.

Note:

This list includes all signatories who reported their conventional and recycled polyester volumes for 2020. It also includes new signatories that signed up between August and December 2021 after the Corporate Fiber and Materials Benchmark submission period had already started, and therefore were excluded from the reporting requirements in 2021.

It does not include the 25 signatories (15 brands/retailers and 10 suppliers) that signed up before August 2021 but didn't report their conventional and recycled polyester volumes for 2020 via the Corporate Fiber and Materials Benchmark.

Signatories' Performance

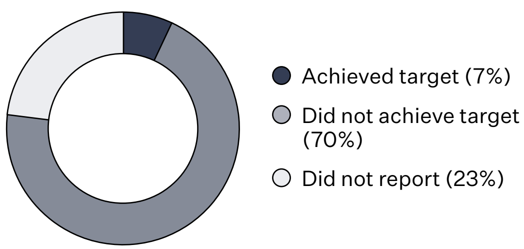
Percentage of recycled polyester used

17% (22) of the 132 signatories already use more than 45% recycled polyester and 7% (9) achieved their target in 2020.

5% (6) were already using 100% recycled polyester in 2020, **7%** (9) were using above 80%, **4%** (5) above 60%, and **2%** (2) above 45%. **60%** (79) were using less than 45% recycled polyester.

7% (9) achieved their target in 2020. **70%** (92) have not yet achieved their target.

Percent of signatories that already achieved their target

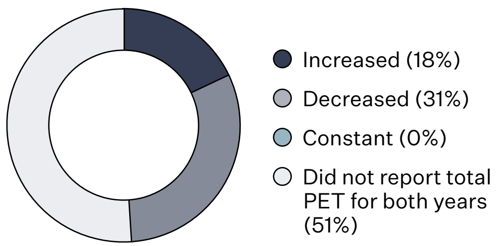


Amount of virgin polyester used

31% (41) of the 132 signatories reduced their total polyester fiber volume from 2019 to 2020. However, 18% (24) increased their total polyester fiber volume.

The total polyester volume of the reporting signatory brands and retailers was 647,964 tonnes in 2020 (roughly 2% of the apparel industry's polyester fiber market in 2020). The total recycled polyester volume of the reporting signatory brands and retailers was 151,729 tonnes in 2020 (roughly 2% of the apparel industry's recycled polyester fiber market in 2020).

Total polyester usage trend of signatories between 2019 and 2020



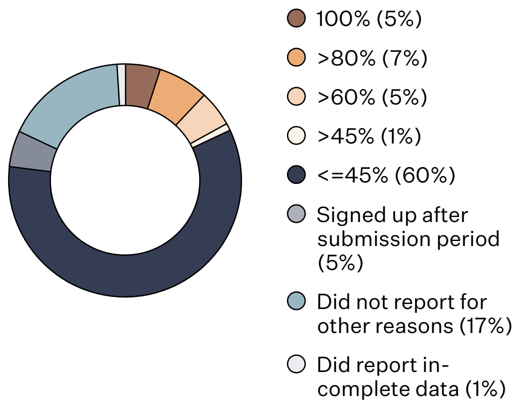
Reporting

2019: **50%** (66) of the 132 signatories were able to report their total polyester volumes not only for 2020 but also for 2019. The other 50% (66) did not report the total polyester volumes for both years because they signed up later, or for other reasons.

2020: **23%** (31) did not report their volumes for 2020.

2021: **5%** (6) did not report their recycled polyester and conventional polyester volumes in 2021, because they signed up after the submission period, and 19% (25) did not report their volumes for other reasons.

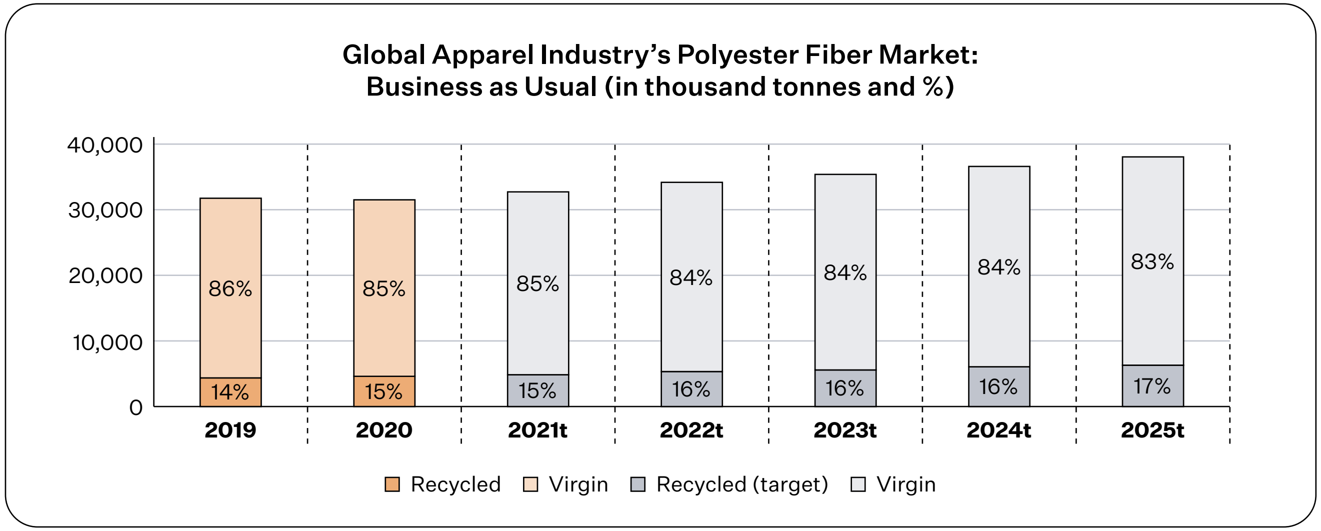
Number and percent of signatories by actual recycled polyester % in 2020

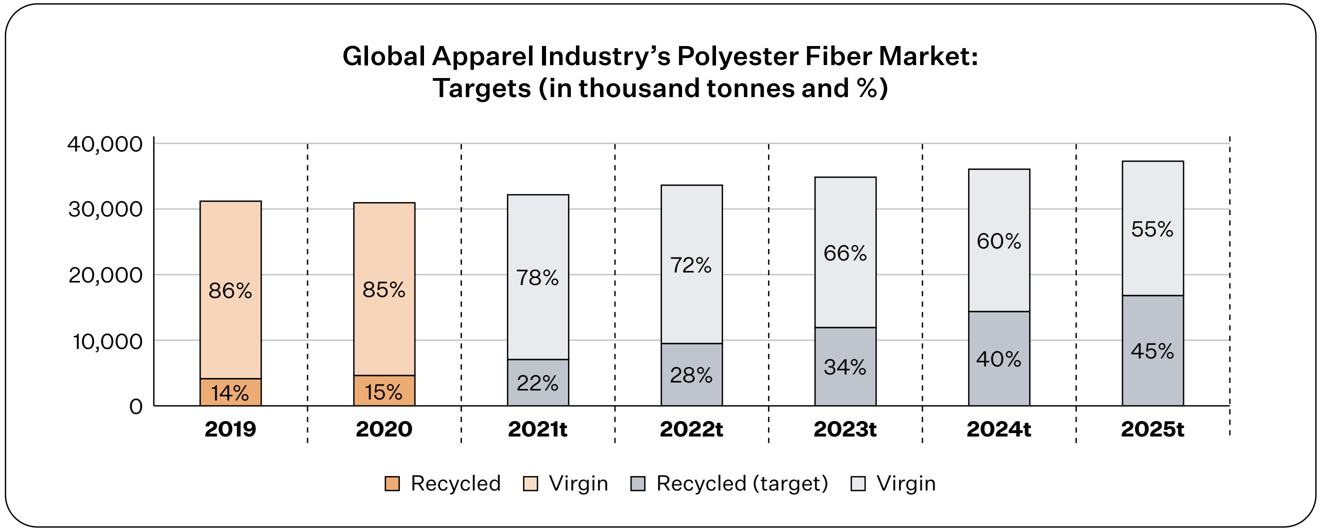


Progress Towards the Industry's Goal

Currently, recycled polyester represents **14%** of fashion's polyester market. By 2025, it needs to comprise at least **45%**, assuming a 3% growth rate in the apparel industry. The long-term vision is to bring this number up to **90%** by 2030.

The market share of the reporting signatories by volume was around **2%** of the total apparel industry's polyester fiber market in 2020. This demonstrates why we need more companies to join the 2025 Recycled Polyester Challenge and commit to ambitious targets above 45% to increase the transition of uptake from virgin polyester to recycled polyester in their material portfolios. This will help further accelerate the transition from fossil-based to recycled polyester and reduce the total polyester fiber use.





Methodology

Key terms and definitions

Recycled polyester:

Polyester that has been reprocessed from reclaimed pre-and/or post-consumer material by means of a manufacturing process.

Fiber:

Fiber includes staple fiber and filament. All numbers reported include staple fiber and filament production volumes.

The apparel industry’s (recycled) polyester fiber market:

While polyester fibers are used by various industries including apparel, home textiles, technical textiles, and more, the 2025 Recycled Polyester Challenge and report specifically look at the apparel industry’s polyester market. See assumptions for further details.

Signatory:

A brand/retailer or supplier/manufacturer that has signed up to the 2025 Recycled Polyester Challenge

Data sources

Signatory data:

Data from signatories was collected via Textile Exchange’s Corporate Fiber and Materials Benchmark Program between July and December 2021 for the 2020 reporting cycle, and historical data where available.

Industry data:

Global apparel polyester fiber data are based on global total polyester fiber market data from market research compiled on demand for Textile Exchange and assumptions on the apparel industry’s market share (see assumptions).

Modelling and assumptions

Signatories counting:

If holding companies report for their subsidiaries, every subsidiary is counted as one, and not the holding company.

Data gaps:

Where data gaps exist, Textile Exchange attempts to replace these values with best estimates from historical or comparable proxies.

The apparel industry’s market share:

The report assumed that 55% of all polyester fiber is used for apparel.

Growth rate:

For the scenario modeling, a 3% growth rate was assumed.

Market share:

The market share of the reporting signatories in terms of volumes was estimated by comparing the production volume of a given year with the reported volumes for the same year to roughly estimate the % covered. Please note that this includes brands and retailers only because if volumes of suppliers are included there is a risk of double-counting volumes.

About Textile Exchange

At Textile Exchange, our goal is to help the industry achieve a 45% reduction in the greenhouse gas (GHG) emissions that come from producing fibers and raw materials by 2030. This is known as Tier 4 of the supply chain, and it accounts for 24% of the industry's GHG impacts related to the supply chain.

This goal underpins our Climate+ strategy. We're calling it Climate+, because it goes beyond accounting for greenhouse gas emissions. Instead, it is an interconnected approach that swaps siloed solutions for interdependent impact areas like soil health, water, and biodiversity.

Our strategy is underpinned by three major areas of impact– and opportunity:

First, we're accelerating the adoption of organic, regenerative, recycled, or other more responsible alternatives to conventional fibers. We want to make these materials the accessible default by providing global certifications and standards as well as industry-wide benchmarking for brands to measure and manage their sourcing strategies.

Next, we need innovation and out-of-the-box thinking. New business models, circular systems, and even innovative materials. This means collecting better data and facilitating information sharing around how we can scale existing solutions, like regenerative agriculture and textile-to-textile recycling. We do this through our industry reports and data-driven tools, while bringing leaders together via our round tables, conference, and other platforms.

Most importantly, we've got to rethink growth. Slowing down, making less, and producing with purpose. Our vision is a new system that works in sync with nature, respecting planetary boundaries while protecting the people that sustain it. To get there, we're keeping our focus holistic and interconnected as we guide our global community in this collective climate strategy.

The 2025 Recycled Polyester Challenge is partnership In action. Learn more: https://textileexchange.org/2025-recycled-polyester-challenge/