Textile Exchange

Materials Market Report

September 2026

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Cover photo: Claudia Gori

Introduction

About this report

Welcome to the 13th edition of the Textile Exchange *Materials Market Report*.

The *Materials Market Report*, first launched in 2013, is a comprehensive annual publication that provides unique data and insights into the global production of textile fibers and other key raw materials used for the textile, clothing, leather, and footwear industries.

The report groups the raw materials into textile fibers and non-textile raw materials such as raw hides/skins, rubber, and down.

This year, the report has been organized into two parts:

Part 1 is the latest update to the annual dataset, covering global raw material production by total weight, irrespective of end use. It also includes breakdowns by sustainability program and related insights.

Part 2 is a new section of the 2026 report. It provides insights into global raw material production by end use, including apparel, home textiles, footwear, bags, and technical textiles.

It's important to recognize that compiling global market data on raw materials is challenging, and the quality of available data is often limited. The collection of primary data from suppliers is generally beyond the scope of this report, so Textile Exchange uses secondary data from industry associations, international organizations, governmental organizations, standard setters, and research institutes. While Textile Exchange has collected, analyzed, and compiled this information in good faith and has cross-checked it wherever possible, the report is intended for general guidance and informational purposes only. It is not intended to constitute advice, recommendations, or instructions for any specific course of action. The *Materials Market Report* does not provide an assessment of programs or standards, and the information should not be used or considered as advice or recommendation in any direction.

Due to gaps and inconsistencies in global market data, modeling has been applied where needed. For many years, Textile Exchange has worked on improving data quality and increasing transparency in the industry.

The estimations for the new section of the *Materials Market Report* have been developed in response to the growing interest in better understanding the breakdown of raw material production by end use. For this purpose, Textile Exchange has collaborated with the apparel alliance, an industry working group of which it is a member, alongside global organizations Apparel Impact Institute (Aii), Cascale, and ZDHC.

This is just a starting point. Textile Exchange aims to continuously improve the modeling and scope as new information and data become available. While more work remains to be done, Textile Exchange encourages the industry to help further improve the quality and accessibility of global raw material production data. Only through collaboration and collective effort is it possible to build the data needed to measure progress and, ultimately, achieve both individual and collective goals.

Textile Exchange would like to sincerely thank all those who have contributed data or information to this report.

Photo: Luisa Bravo

Executive summary

Part 1: Global production

Global textile fiber production

2025 saw global textile fiber production increase from around 132 million tonnes in 2024 to a record 139 million tonnes. This is predominantly due to growth in the production of new virgin fossil-based synthetics.

Since 2000, when global textile fiber production was 58 million tonnes, production has more than doubled, and it is expected to grow to 172 million tonnes in 2030 if business as usual continues. While the industry has made commitments to accelerate action toward achieving climate and nature impact goals, trends, such as a reliance on virgin fossil-based synthetic materials and the limitations of textile-to-textile recycling, threaten to undermine these commitments.

The market share of fibers made from recycled feedstocks remained at around 7.6% in 2025. The vast majority of this was recycled polyester made from plastic bottles, which accounted for 6.8% of all fiber produced worldwide.

Overall, less than 1% of the global fiber market was from pre- or post-consumer recycled textiles.

All recycled cotton, all recycled animal fibers, and the vast majority of manmade cellulosic fibers (MMCFs) made from recycled feedstocks are considered textile-to-textile recycled fiber due to the feedstock being pre- or post-consumer textile waste. Only a very small percentage of recycled synthetics are textile-to-textile recycled, with the majority being made from plastic bottles in the case of polyester, or discarded fishing nets and carpets in the case of polyamide.

Polyester

Polyester continues to be the most widely produced textile fiber in the world. Polyester fiber production increased from 77.7 million tonnes in 2024 to 82.5 million tonnes in 2025 and accounted for 59% of global fiber production, the same as in 2024.

Recycled polyester fiber production increased from around 9.4 million tonnes in 2024 to around 9.7 million tonnes in 2025. However, as in 2024, due to the larger increase in virgin polyester production, there was a slight decrease in the overall market share of recycled polyester, from an estimated 12.0% of global polyester production in 2024 to around 11.8% in 2025.

Systems for polyester textile-to-textile recycling are in development but are only estimated to account for around 3% of all recycled polyester, or 0.3% of all polyester. The interest in, and use of, ocean or ocean-bound plastic is increasing, but overall market share remains very low, making up less than 0.005% of all recycled polyester. Recycled polyester is still primarily made from plastic bottles (97%).

The market share of biobased polyester fiber remained very low at around 0.01% of global polyester production. The report also highlights other emerging alternatives to virgin fossil-based polyester such as fibers made from captured CO_2.

Cotton

Cotton remains the second most widely produced textile fiber after polyester. Global cotton fiber production increased from 25.4 million tonnes in 2023/24 to 25.7 million tonnes in 2024/25, with cotton's share of the global fiber market remaining at 18%.

An estimated 1% of global cotton fiber production is made using recycled feedstock, all of which is considered textile-to-textile recycled fiber.

The market share of virgin cotton covered by the programs that shared data for this report increased to an estimated 37% in 2024/25, up from 35% in 2023/24.

Better Cotton, including its equivalents Agro-2, Integrated Production System of Andalucía, Spain (IPS), Israel Cotton Production Standard System (ICPSS), myBMP, and Responsible Brazilian Cotton (ABR), made up the majority of the virgin cotton covered by programs (65% of the 37%), accounting for 24% of all virgin cotton produced in 2024/25. Better Cotton without its equivalents accounted for around 8% of all cotton grown in 2024/25, ABR for 13%, myBMP for 2%, Agro-2 for 1%, IPS for 0.1%, and ICPSS for 0.03%.

All other cotton programs that shared data for this report (including Climate Beneficial™ Verified, Climate Beneficial™ Verified-Transitional, Fairtrade, International Sustainability and Carbon Certification, organic, organic in-conversion, Organic Cotton Accelerator, Organic Cotton Accelerator in-conversion, REEL Cotton Code, REEL Regenerative Code, regenagri, Regenerative Cotton Standard®, Regenerative Organic Certified®, and the U.S. Cotton Trust Protocol) had a combined market share of around 13% of global cotton production in 2024/25.

Executive summary

Manmade cellulosic fibers

Production of MMCFs, including viscose (rayon), lyocell, modal, acetate, and cupro, increased from 8.4 million tonnes in 2024 to 9.1 million tonnes in 2025. MMCFs now account for 7% of the global fiber market, up from 6% in 2024.

MMCFs produced using Forest Stewardship Council® (FSC®) and/or Programme for the Endorsement of Forest Certification (PEFC)-certified or controlled feedstock remained at an estimated market share between 65–70% of all MMCFs in 2025.

The market share of MMCFs made from recycled feedstocks (virtually all of which is considered textile-to-textile recycled fiber and includes MMCFs made from any recycled cellulosic fiber, not only MMCF-to-MMCF recycling) increased from an estimated 1.1% in 2024 to 1.5% in 2025. Amid ongoing research and development, this figure is expected to continue increasing in the coming years.

Polyamide (nylon)

Polyamide (nylon) is the second most used synthetic fiber and made up 5% of the global fiber market in 2025, with 7.3 million tonnes produced globally. Due to technical recycling challenges and comparatively lower prices for new virgin fossil-based polyamide, recycled polyamide continues to make up only 3% of the total polyamide market share. Most recycled polyamide is made from pre-consumer waste or post-consumer materials such as discarded fishing nets and carpets. In 2025, an estimated 2% of all polyamide was estimated to be textile-to-textile recycled fiber.

The market share of biobased polyamide fibers in 2025 remained low, at around 0.5% of the global polyamide fiber market. Similar to the reasons for the low uptake of biobased polyester, price, availability, and questions about the sustainability of biobased polyamide dampened market growth.

Wool

Global sheep wool production remained at around 1 million tonnes of clean wool fiber in 2025, with wool accounting for 0.7% of the global fiber market.

The combined market share of wool produced according to the Responsible Wool Standard, ZQ, ZQ Regenerative Index (ZQRX), SustainaWOOL® (formerly SustainaWOOL Green), ResponsiWOOL® (formerly Sustainablue), Sustainable Cape Wool Standard, Climate Beneficial™ Verified, Climate Beneficial™ Verified-Transitional, and Land to Market™ increased from around 4.7% of all virgin wool in 2024 to 5.0% in 2025.

Recycled wool accounted for around 8% of the global total wool market in 2025, the same as in 2024, all of which is considered textile-to-textile recycled fiber.

Mohair

An estimated 4,737 tonnes of greasy mohair fiber were produced globally in 2025. The Responsible Mohair Standard accounts for 47% of all mohair produced in 2025, down slightly from 50% in 2024. Responsible Mohair Standard accounted for 83% of all greasy mohair produced in South Africa in 2025, 10% in Australia, and 0.2% in Argentina.

Alpaca

Global alpaca fiber production was estimated to be 6,500 tonnes in 2025. The global market share of the Responsible Alpaca Standard was 9%, with all Responsible Alpaca Standard certified production coming from Peru, where it accounted for 13% of the country's total alpaca fiber production.

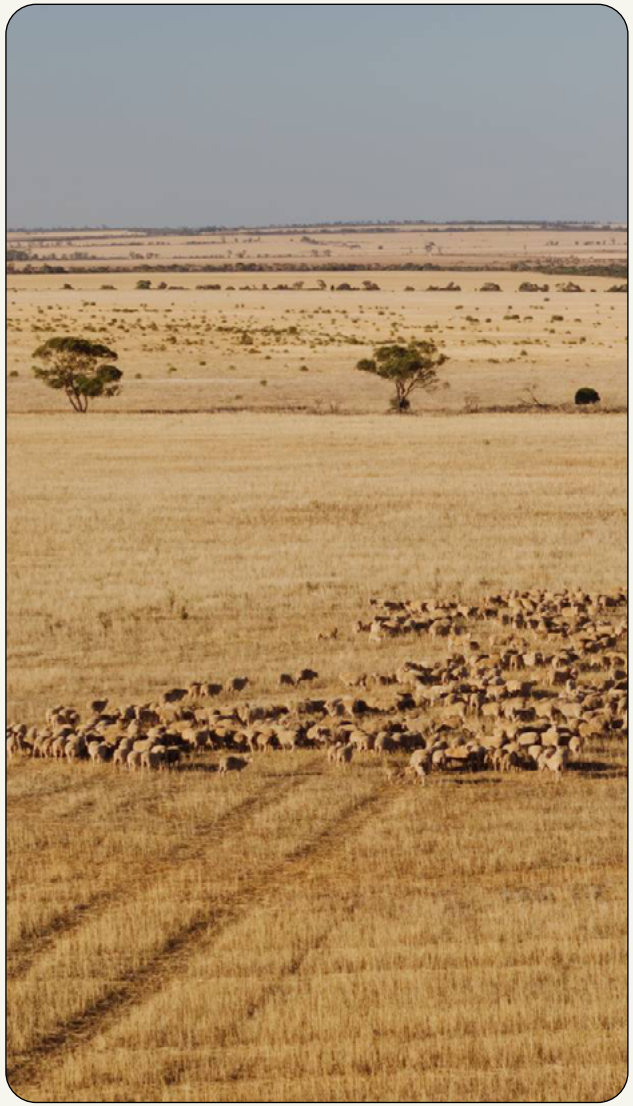


Photo: Tristan McKenzie

Executive summary

Cashmere

Global cashmere production was estimated to be 28,010 tonnes of greasy fiber in 2025. The combined market share of cashmere produced according to Agronomists and Veterinarians Without Borders (AVSF) Sustainable Cashmere Certification, The Good Cashmere Standard®, Responsible Nomads, and Sustainable Fibre Alliance (SFA) Animal Fibre Standard was estimated to be 21% in 2025, down slightly from 22% in 2024.

Other fibers

Other fibers—from hemp to elastane—continued to gain traction in the industry but remained at small market shares. Beyond the fibers already mentioned, this report also includes production by total weight for other plant-based fibers (jute, coir, flax, hemp, sisal, abaca, kapok, ramie, and agave fibers), other animal fibers (angora rabbit, camel, guanaco, llama, vicuña, and yak hair), and other synthetic fibers (polypropylene, acrylic, and elastane).

Other raw materials

Leather

Leather, measured in terms of raw hides of cattle, sheep, goats, and buffalo, had an estimated global production of 14 million tonnes in 2025. Cattle hides were the most used type of hide, with an estimated 9.5 million tonnes produced, followed by sheep hides at 2.2 million tonnes, goat hides at 1.5 million tonnes, and buffalo hides at 0.8 million tonnes.

For leather, most standards cover the processing stage. While multiple standards cover animal welfare for meat production, only a few small supply chains currently manage to maintain traceability from farm to slaughter and up to finished leather goods. Therefore, there is no meaningful data to report at this stage related to the weight of raw hides produced under a farm-level program.

Down

Global down production was estimated at around 0.70 million tonnes in 2025, up from 0.67 million tonnes in 2024 . Of this, 0.69 million tonnes was virgin down, and 0.01 million tonnes was recycled down. Out of the virgin down produced, the market share of the Responsible Down Standard (RDS) increased from 11% in 2024 to 13% in 2025.

Rubber

Global natural rubber production totaled just under 15 million tonnes in 2025. The market share of rubber forest covered by the FSC® and PEFC increased from around 3.7% in 2024 to 4.8% in 2025.

Part 2: Global production by end use

A new section of the report shares modeling data that estimates the attribution of different fibers and raw materials to different parts of the industry. The data suggests fiber usage for technical textiles is growing the fastest, while apparel and home textile markets are still increasing on a global level.

Photo: Erwann Petersen

Part 1: Global production

PART 1: GLOBAL PRODUCTION

Part 1a: Global textile fiber production

Global fiber market trends

Global textile fiber production increased to a record 139 million tonnes in 2025, up from 132 million tonnes in 2024.[1]

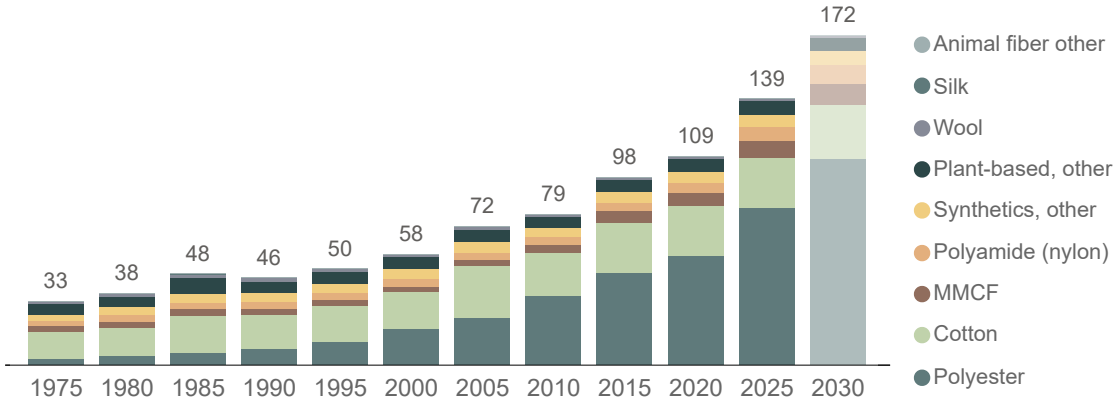
This growth was primarily driven by the increase in new virgin fossil-based fiber production from 81 million tonnes in 2024 to 86 million tonnes in 2025.[1]

Since 2000, when 58 million tonnes of fiber was estimated to have been produced globally, global fiber production has more than doubled and is expected to grow to 172 million tonnes in 2030 if business continues as usual.

Polyester continues to contribute most significantly to the growth in total global textile fiber production. Polyester replaced cotton as the most widely used fiber in the world in 2006 and has grown since then.

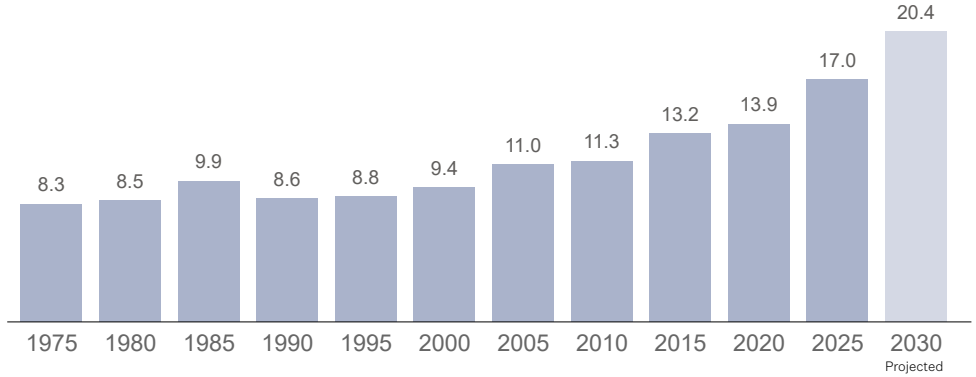
Global fiber production per person has also increased significantly over the past decades, growing from 8.3 kilograms per person in 1975 to **17.0 kilograms per person in 2025.**[2] This figure is expected to rise to 20.4 kilograms per person by 2030 if business continues as usual.

Global fiber production (million tonnes)[1]



Source: Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, Mohair South Africa, and its own modeling.

Global fiber production (kilograms per person)[2]



Source: Textile Exchange based on UN data and global data compilation.

1. Textile Exchange compilation based on data from the European Man-Made Fibres Association (CIRFS), Food and Agriculture Organization of the United Nations (FAO), International Cotton Advisory Committee (ICAC), German Association of Chemical Fiber Manufacturers (IVC), International Wool Textile Organisation (IWTO), Mohair South Africa, Maia Research, and its own modeling. Production weights of certain minority fibers such as polytrimethylene terephthalate (PTT), carbon, aramid, polylactic acid (PLA), polybutylene succinate (PBS), and polyethylene furanoate (PEF) are not included. Cotton production data is collected in accordance with the harvest year used by ICAC, which runs from August 1 to July 31, with production allocated to the later calendar year (for example, 2024/25 cotton production is allocated to the 2025 calendar year) except for Brazil, for which data is collected by calendar year and aligns with the earlier year (for example, Brazil's 2024 cotton production is reported as 2024/25) as per the methodology of ICAC and USDA, revised in 2023. MMCF and synthetic fiber data includes both staple fiber and filament. **NOTE:** The percent market shares may differ from other sources due to: (1) The overview including other plant fibers, other animal fibers, and silk—all of which are often excluded from global statistics—and (2) different cotton year allocations. In general, all global figures are estimates.
2. Textile Exchange calculations based on United Nations (UN) Population Division 2024, World Population Prospects 2024, and production data specified in footnote 1.

Global textile fiber market 2025

Synthetic fibers

Synthetic fibers have dominated the fiber market since the mid-1990s. At around 96.2 million tonnes, this fiber category made up approximately 69% of global fiber production in 2025.

Polyester alone had a market share of around 59% of global fiber production in 2025, with approximately 82.5 million tonnes produced.

Polyamide (nylon), the second-most used synthetic fiber, accounted for 7.3 million tonnes and approximately 5% of the global fiber market in 2025.

Other synthetics—polypropylene, acrylic, and elastane—had a combined market share of 5% in 2025, with total production estimated to be 6.4 million tonnes.

Plant fibers

Plant fibers had a market share of around 23% of the global fiber market in 2025, with a combined production total of 32.7 million tonnes.

Cotton is the second-most important fiber globally in terms of production measured by weight. At around 25.7 million tonnes, cotton had a market share of approximately 18% of global fiber production in 2025.

Other (non-cotton) plant-based fibers (including hemp, flax, jute, coir, other bast fibers, sisal, manila, kapok, agave, and ramie) had a combined market share of around 5%, with 6.9 million tonnes produced in 2025. Hemp had a market share of 0.3%, with 0.4 million tonnes produced, while flax had a market share of around 0.2%, with around 0.3 million tonnes produced.

Manmade cellulosic fibers

Manmade cellulosic fibers (MMCFs) had a market share of around 7% in 2025, with global production estimated to be 9.1 million tonnes.

Viscose (rayon) made up the majority of MMCF production at 7.2 million tonnes, accounting for around 5% of global fiber production in 2025.

Other MMCFs (including acetate, lyocell, modal, and cupro) had a combined market share of 1.4%.

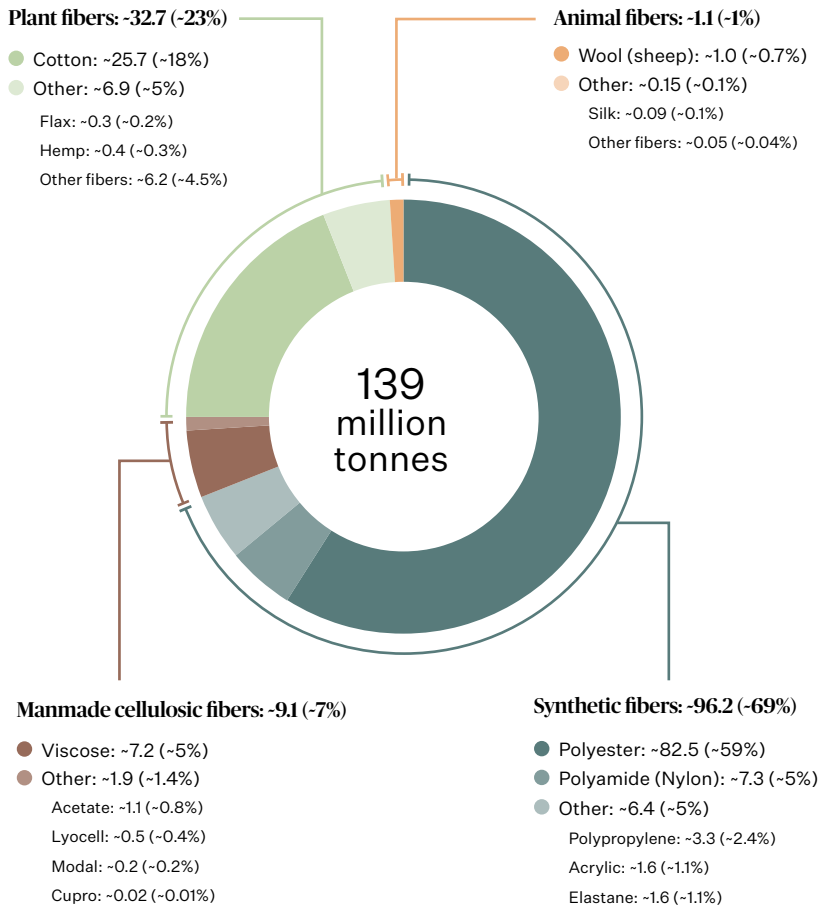
Animal fibers

Animal fibers had a combined market share of around 1% in 2025.

Wool made up the majority of this, with global clean wool production totaling around 1.0 million tonnes and accounting for 0.7% of global fiber production.

Other animal fibers had a combined market share of 0.1%, with silk making up the majority of this.

Global fiber production in 2025
(million tonnes and % of global fiber production)

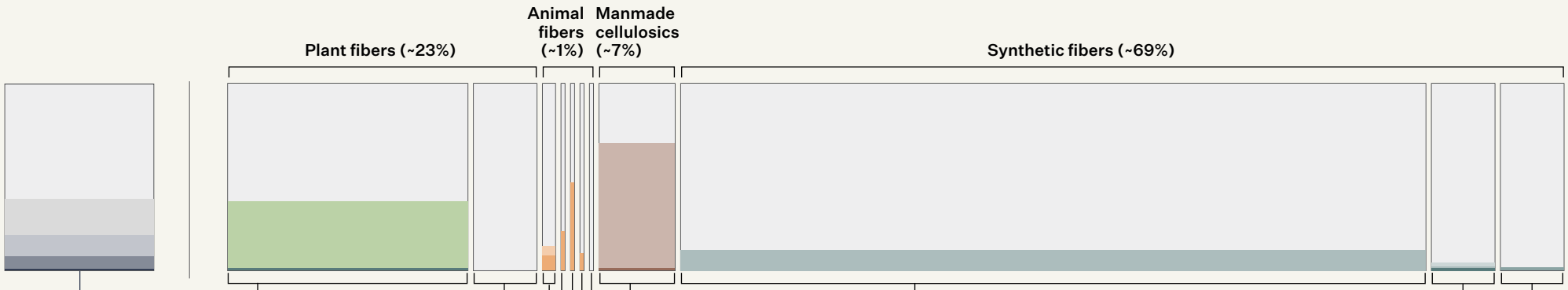


Source: Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, Mohair South Africa, and its own modeling.

NOTE: This chart includes recycled fibers. Other animal fibers included here are alpaca, angora, camel, cashmere, guanaco, llama, mohair, vicuna, and yak. Other plant fibers included here are jute, coir, sisal, abaca, ramie, kenaf, kapok, and agave. Leather, down, and rubber are not included as they are considered non-fiber raw materials for the purpose of this report.

The global fiber market 2025: Program overview

139 million tonnes
Global fiber production in 2025



Global fibers[1]

- ~62% Fossil-based[2]
- ~19% Renewable conventional/unknown[3, 4]
- ~11% Renewable listed programs[5]
- ~7% Recycled bottles[8]
- ~1% Recycled textiles[9]

Cotton (~19%)

- ~62% Conventional/unknown[3]
- ~37% ABR, Agro-2, Better Cotton, Climate Beneficial™ Verified, CmiA, Fairtrade, IPS, ISCC, ICPSS, myBMP, organic, OCA, ROC, REEL Cotton Code, REEL Regenerative Code, regenagri, Regenerative Cotton Standard®, Regenevate, the USCTP, and some in-conversion[10]
- ~1% Recycled cotton

Other plant fibers (~5%)

Viscose/acetate/lyocell/modal/cupro (~7%)

- ~32% Conventional/unknown
- ~67% FSC®/PEFC-certified or controlled feedstock
- ~1% Recycled textiles[9]

Polyester (~59%)

- ~88% Fossil-based[2]
- ~11% Recycled bottles[8]
- ~0.3% Recycled textiles[9]
- ~0.01% Biobased PET

Polyamide (nylon) (~5%)

- ~97% Fossil-based[2]
- ~2% Recycled textiles[9]
- ~0.2% Recycled non-textile feedstock[9]
- ~0.5% Biobased PA

Other synthetics (PP/AC/EL)[6] (~5%)

- ~99% Fossil-based[2]
- ~0.1% Recycled textiles[9]
- ~0.9% Recycled non-textile feedstock[9]

Other animal fibers (0.1%)[7]

Cashmere (~0.02%)

- ~79% Conventional/unknown[3]
- ~21% AVSF Sustainable Cashmere Certification, The Good Cashmere Standard®, Responsible Nomads, and the SFA Cashmere Standard

Wool (~0.7%)

- ~87% Conventional/unknown[3]
- ~5% Climate Beneficial™, RWS, SCWS, ZQ, SustainaWOOL, and ResponsiWOOL
- ~8% Recycled wool

Alpaca (~0.005%)

- ~91% Conventional/unknown[3]
- ~9% Responsible Alpaca Standard

Mohair (~0.003%)

- ~53% Conventional/unknown[3]
- ~47% Responsible Mohair Standard

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1. This graph aims to inform the industry about global total fiber production and the shares covered by different programs.
2. Fossil-based is calculated as the synthetics total excluding recycled and biobased synthetics, plus the fossil-based share in acetate.
3. Conventional/unknown includes production by programs for which data was not accessible or available.
4. Renewable conventional/unknown is calculated as the global fiber total excluding fossil-based, the renewable listed programs, recycled bottles, and recycled pre- or post-consumer textiles, and other non-bottle feedstock.
5. Renewable listed programs include all the programs listed in this chart apart from the recycled fibers.
6. Other synthetic fibers include polypropylene (PP), acrylic (AC), and elastane (EL).
7. Other animal fibers include angora, camel, guanaco, llama, vicuna, yak, and silk.
8. The percentages listed for recycled bottles include a very small percentage of non-bottle feedstock.
9. References to recycled textiles include pre- or post-consumer recycled textiles.
10. Includes Climate Beneficial™ Verified-Transitional, Organic Cotton Accelerator in-conversion, and organic in-conversion for the India Organic Regulation, Turkey Organic Regulation, USA Organic Regulation, EU Organic Regulation (Italy and Spain), and Peru Organic Regulation. Data on in-conversion production is not currently available for all standards/programs.

The global recycled textile fiber market

The market share of fibers made from recycled feedstocks remained at around 7.6% in 2025. The vast majority of this was recycled polyester made from plastic bottles, which accounted for 6.8% of all fiber produced worldwide.[1]

Polyester continued to have the highest proportion of recycled fibers of any fiber category in 2025, at an estimated 12%.

Wool had the second-highest recycled fiber share after polyester in 2025, at an estimated 8%.

It is estimated that recycled elastane and recycled polyamide (nylon) each accounted for around 3% of total elastane and polyamide production, respectively, in 2025, while the recycled fiber shares for cotton and MMCFs were each estimated to be around 1%.

Recycled acrylic accounted for around 1% of total acrylic, and recycled polypropylene accounted for around 0.4% of total polypropylene.

Textile-to-textile recycling[2]

Overall, around 1% of the global fiber market was from pre- or post-consumer recycled textiles in 2025. This equals around 1–1.5 million tonnes of textile-to-textile recycled fibers produced in 2025.[2]

All recycled cotton, all recycled animal fibers, and virtually all MMCFs made from recycled feedstocks are considered textile-to-textile recycled fibers due to the feedstock being pre- or post-consumer textile waste.

When it comes to recycled polyester, only around 3% of the recycled polyester fiber production was textile-to-textile recycled fiber (equivalent to 0.3% of all polyester fibers), while 97% of recycled polyester fibers were made from plastic bottles and other non-textile feedstock in 2025, compared to 2.6% of all recycled polyester in 2024. For recycled polyamide fiber, an estimated 90% of the recycled polyamide fiber was textile-to-textile recycled fiber (equivalent to 2% of all polyamide fibers), primarily made from technical textiles (fishing nets) and home textiles (carpets).

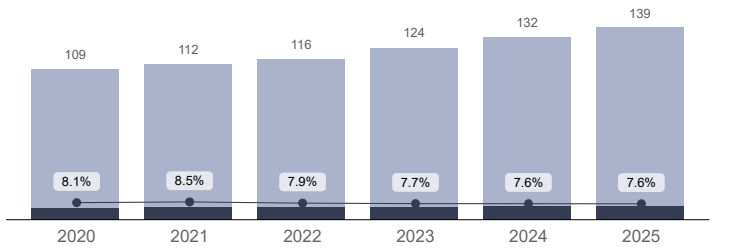
By 2030, estimates indicate that ~3–5 million tonnes of textile-to-textile recycled fiber could be produced,[3] an increase from the ~1–1.5 million tonnes produced in 2025.

Recycling fibers from blended textiles

The proliferation of textiles made from fiber blends—such as cotton and polyester or elastane—poses significant challenges when it comes to recycling textile waste. Some innovative startups are working on solutions to make high-value fiber blend recycling possible; for example, chemical recycling technologies that can help overcome complications associated with the mechanical recycling of textiles.

1. Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, and its own modelling.
2. Textile-to-textile recycled materials are defined as materials utilizing feedstock from an existing fibrous source and which are processed through a Tier 4 raw material production and primary processing stage (see Supply Chain Taxonomy). Textile feedstocks are reclaimed textile materials from pre-consumer or post-consumer sources that are diverted from the waste stream and used as inputs for new textile fiber or material production. In line with ISO terminology, "pre-consumer" includes materials commonly referred to as post-industrial; however, eligibility is limited to materials that are genuinely reclaimed from production, such as defective, quality-reject, or hard waste. Unsold goods, returns, overstock, or other materials that have not been truly diverted from the waste stream do not qualify as eligible reclaimed feedstock.
3. Textile Exchange based on a joint research project conducted with Reverse Resources, Fashion for Good, and TEXroad in 2025/2026. This range aligns with the aggregate results from the commissioned Maia Research reports.

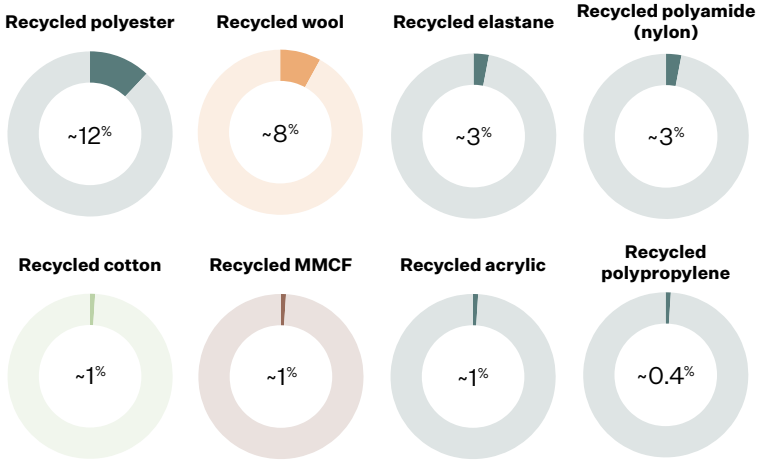
Global fiber production (million tonnes and % recycled)



Source: Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, and its own modeling.

Recycled Virgin Recycled %

Market share of recycled within each fiber category in 2025



Source: Textile Exchange based on Maia Research and global data compilation.

Part 1a: Global fiber production

Cotton

Total cotton production
A global overview

Cotton is the second-most important textile fiber globally in terms of production, accounting for approximately 18% of all fiber produced worldwide in 2025.[1]

Cotton is a plant fiber and most cotton produced each year is virgin cotton, grown as an agricultural crop by small- and large-scale farmers around the world. Some of this virgin cotton production is certified and/or verified to one or more programs/standards. For the purposes of this report, virgin cotton produced under one or more of the programs/standards listed in the virgin cotton section is referred to as "virgin, certified," whilst the remaining virgin cotton production is referred to as "conventional/unknown."[2,3]

In addition to being grown as an agricultural crop, cotton can also be recycled from pre- or post-consumer cotton waste.

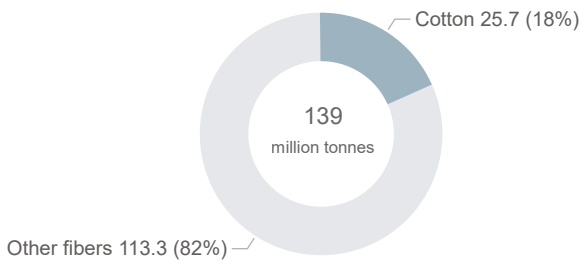
In this chapter, data on virgin and recycled fibers are reported separately, as they are different production systems and have different data collection mechanisms.

In total, it is estimated that 25.7 million tonnes of cotton were produced globally in 2025.[1] Of this, 25.4 million tonnes (99%) was virgin cotton and 0.4 million tonnes (1%) was recycled cotton (all of which is considered textile-to-textile recycled fiber).1 Out of the total virgin cotton produced, 15.9 million tonnes (63%) was virgin cotton from conventional/unknown sources,[2] and 9.4 million tonnes (37%) was virgin certified cotton.[4]

Cotton is used in a variety of products. See Part 2 of this report for more information on the different end uses.

1. Calculated by Textile Exchange based on the following sources:
   i. International Cotton Advisory Committee (ICAC). World Cotton Statistics. 2026.
   NOTE: For the virgin cotton production by weight in 2025, ICAC harvest year data from the 2024/25 season has been applied.
   ii. Maia Research. Global Recycled Cotton Market Report 2026. Commissioned report. 2026.
2. The programs included for virgin cotton are those listed in the Global cotton fiber production by program in 2024/25 chart, plus Cleaner Cotton and e3® Sustainable Cotton for historical data (discontinued after 2019/20 and 2022/23, respectively).
3. "Conventional/unknown" includes production by programs for which data was not accessible or available.
4. Textile Exchange calculations based on the source referenced in footnote 1 and cotton program data provided by the programs. Overlaps between programs are excluded where possible, but minor overlaps may remain.

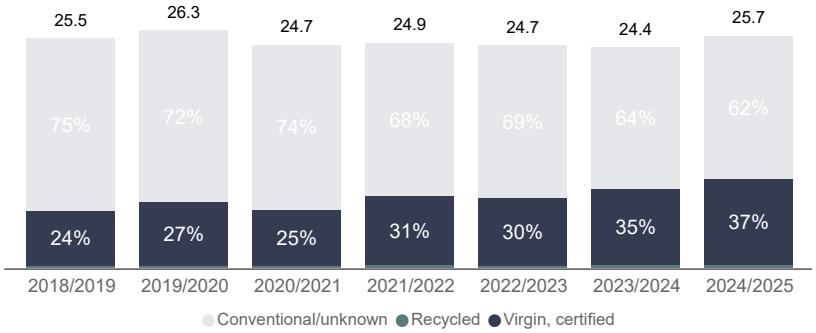
Global market share of cotton in 2025 (million tonnes)



Source: Textile Exchange based on ICAC and other sources.

NOTE: Includes recycled cotton.

Global cotton production by program type (million tonnes)



Source: Textile Exchange based on ICAC, Maia Research, and cotton program owners.

Virgin cotton

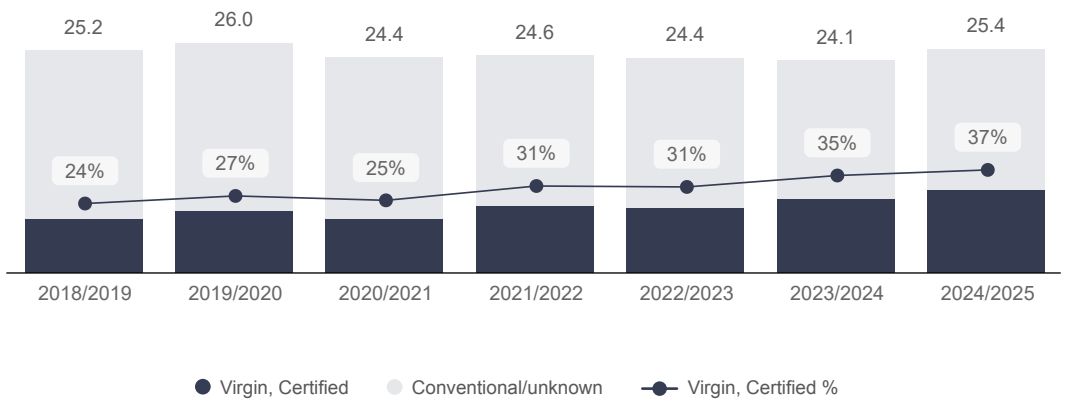
Global cotton production

Globally, the production of virgin cotton fiber increased from 24.1 to 25.4 million tonnes between the cotton harvest year 2023/24 and 2024/25.[1] Cotton covered by the programs that shared data for this report[2] had a combined production total of around 9.4 million tonnes in 2024/25 and accounted for around 37% of all virgin cotton fiber, up from 8.4 million tonnes (35%) in 2023/24.[3]

Better Cotton Initiative, including its equivalents[4] Agro-2, Integrated Production System of Andalucía, Spain (IPS), Israel Cotton Production Standard System (ICPSS), myBMP, and Responsible Brazilian Cotton (ABR), made up the majority of the virgin cotton covered by programs (65% of the 37%), accounting for around 24% of all cotton grown globally in 2024/25. Better Cotton without its equivalents accounted for around 8% of all cotton grown in 2024/25, ABR for 13%, myBMP for 2%, Agro-2 for 1%, ICPSS for 0.03%, and IPS for 0.1%.

Other cotton programs, including Climate Beneficial™ Verified, Climate Beneficial™ Verified-Transitional, Cotton made in Africa® (CmiA), Fairtrade, International Sustainability and Carbon Certification (ISCC), organic[5], organic in-conversion, Organic Cotton Accelerator, Organic Cotton Accelerator in-conversion, REEL Cotton Code, REEL Regenerative Code, regenagri, Regenerative Cotton Standard®, Regenerative Organic Certified®, Regenevate, and the U.S. Cotton Trust Protocol (USCTP), had a combined market share of around 13% of global cotton production in 2024/25.[3]

Global virgin cotton fiber production (million tonnes) and share of programs (%) [2]



Source: Textile Exchange based on ICAC and cotton program owners.

NOTE: This chart only includes virgin cotton and not recycled cotton.

1. ICAC. World Cotton Statistics. 2026. Cotton harvest years run from August 1 to July 31. More details in Part 1 methodology and disclaimer.
2. The programs included for virgin cotton are those listed in the Global cotton fiber production by program in 2024/25 chart, plus Cleaner Cotton and e3® Sustainable Cotton for historical data (discontinued after 2019/20 and 2022/23, respectively). The figures presented here cover only virgin cotton and do not include recycled cotton, which is covered in the recycled cotton chapter. Note that the cotton programs included in this report no longer directly correlate with the list of programs included in the 2025 Sustainable Cotton Challenge.
3. Textile Exchange calculations based on the source referenced in footnote 1 and cotton program data provided by the programs. Overlaps between programs are excluded where possible, but minor overlaps may remain. For regenagri, significant overlaps exist—see footnote 5 on the next page for more details.
4. Better Cotton equivalents as reported by Better Cotton.
5. See the organic cotton section for further source information and footnotes.

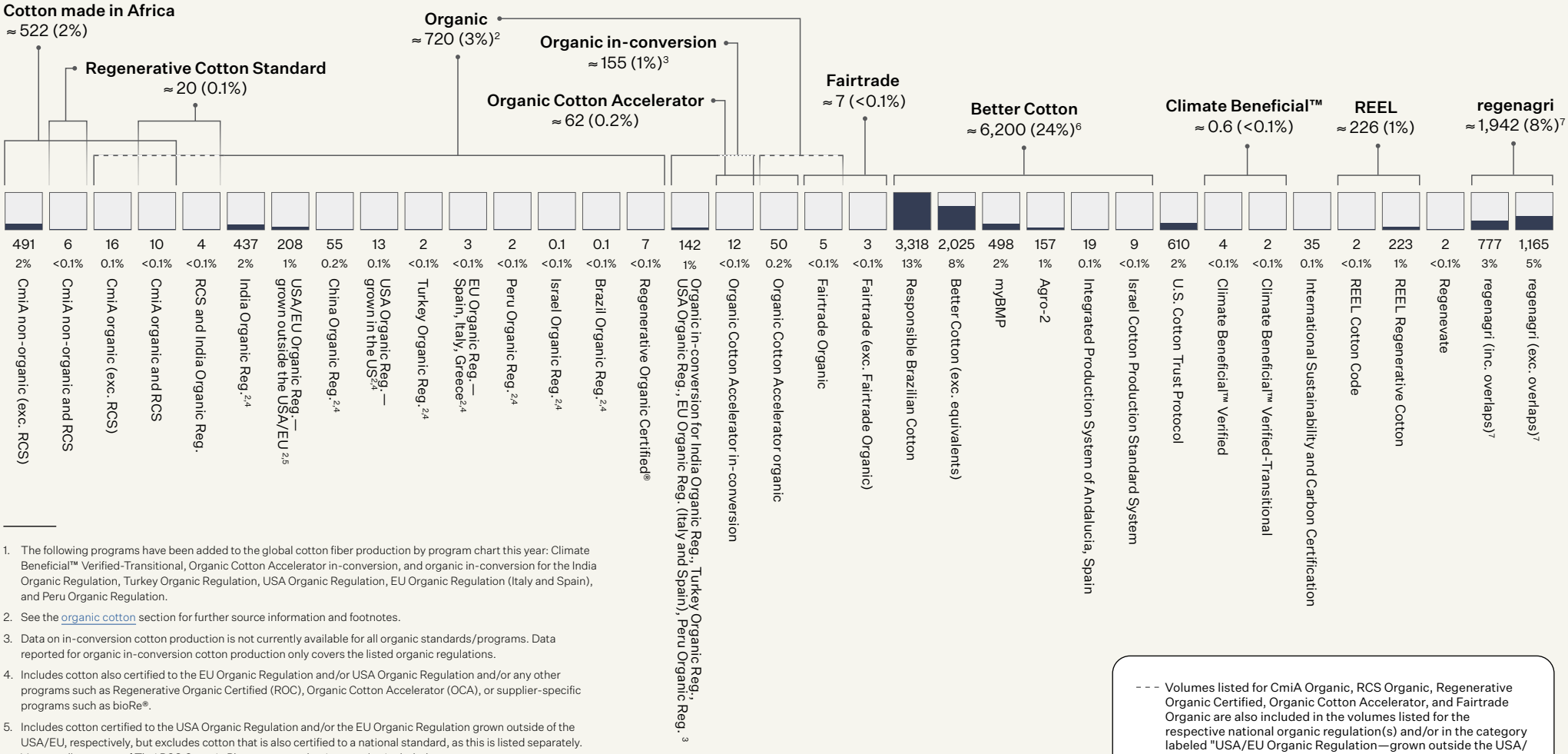
Virgin cotton

Cotton program overview

Global cotton fiber production by program in 2024/25 (thousand tonnes) and market share of total cotton (%)[1]

Total virgin cotton: 25.4 million tonnes

Covered by the programs below: 9.4 million tonnes (37%)



1. The following programs have been added to the global cotton fiber production by program chart this year: Climate Beneficial™ Verified-Transitional, Organic Cotton Accelerator in-conversion, and organic in-conversion for the India Organic Regulation, Turkey Organic Regulation, USA Organic Regulation, EU Organic Regulation (Italy and Spain), and Peru Organic Regulation.
2. See the organic cotton section for further source information and footnotes.
3. Data on in-conversion cotton production is not currently available for all organic standards/programs. Data reported for organic in-conversion cotton production only covers the listed organic regulations.
4. Includes cotton also certified to the EU Organic Regulation and/or USA Organic Regulation and/or any other programs such as Regenerative Organic Certified (ROC), Organic Cotton Accelerator (OCA), or supplier-specific programs such as bioRe®.
5. Includes cotton certified to the USA Organic Regulation and/or the EU Organic Regulation grown outside of the USA/EU, respectively, but excludes cotton that is also certified to a national standard, as this is listed separately. Very small amounts of Thai PGS Organic Plus cotton production are also included.
6. Better Cotton, including equivalents, as reported by Better Cotton.
7. Significant overlaps exist between regenagri and other cotton programs. Precise overlap data isn't available, but it is estimated that around 40% (776,769 tonnes) of total regenagri cotton (1,941,921 tonnes) overlaps with other cotton programs. This 40% has been excluded when calculating the market share of virgin cotton covered by the programs that shared data for this report.

- - - Volumes listed for CmiA Organic, RCS Organic, Regenerative Organic Certified, Organic Cotton Accelerator, and Fairtrade Organic are also included in the volumes listed for the respective national organic regulation(s) and/or in the category labeled "USA/EU Organic Regulation—grown outside the USA/EU" but have not been double-counted in aggregated totals.

····· Organic Cotton Accelerator's in-conversion production is also included under organic in-conversion for India Organic Reg. but has not been double-counted in the organic in-conversion total.

Virgin cotton

A closer look at the programs

Agro-2 cotton production, recognized as equivalent to the Better Cotton Standard System since 2020, increased from 112,995 tonnes in 2023/24 to 156,518 tonnes in 2024/25. Agro-2 accounted for 75% of cotton grown in Greece and 0.6% of cotton grown worldwide.

Better Cotton (including equivalents) represented around 24% of all cotton produced worldwide in 2024/25, with global production increasing from 5.6 million tonnes in 2023/24 to 6.0 million tonnes in 2024/25. Better Cotton without its equivalents made up around 34% of all Better Cotton produced in 2024/25. The remaining 66% was produced according to the Better Cotton equivalents Agro-2, IPS, ICPSS, myBMP, and ABR.

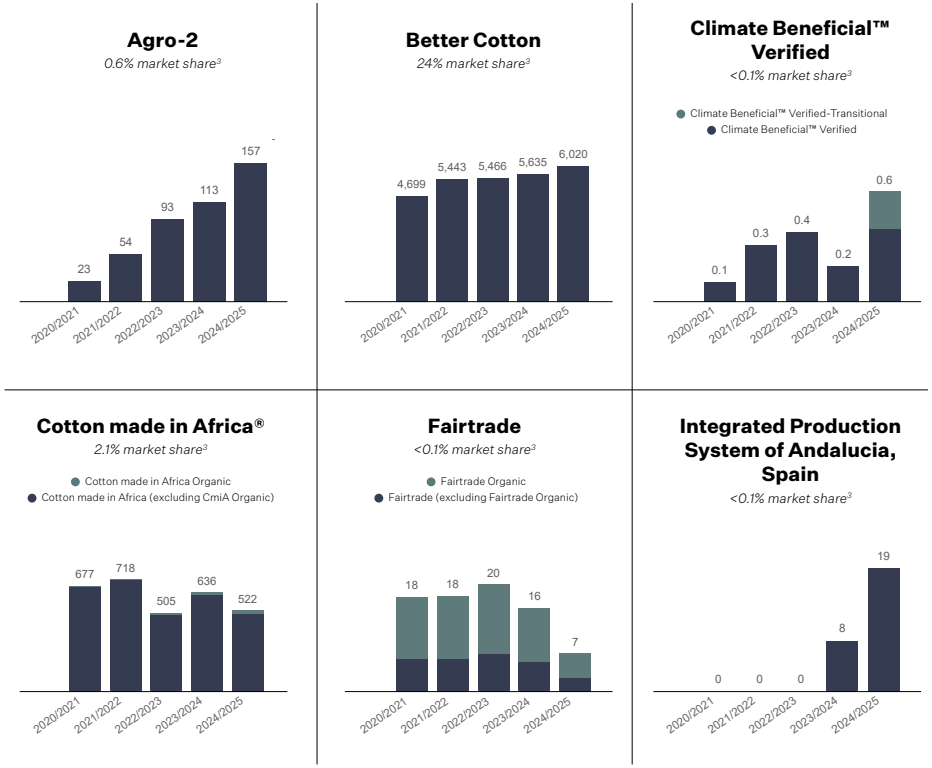
Climate Beneficial™ Verified cotton production increased from 203 tonnes in 2023/24 to 410 tonnes in 2024/25. All Climate Beneficial™ Verified cotton was produced in the United States, where it accounted for 0.01% of total US cotton production. In 2024/25, producer enrollment began for a new in-conversion program, Climate Beneficial™ Verified-Transitional, and 212 tonnes was produced under this program.

Cotton made in Africa® (CmiA) production decreased from 635,763 tonnes in 2023/24 to 522,363 tonnes in 2024/25. CmiA accounted for 2.1% of all cotton produced globally in 2024/25, and around 34% of all cotton produced in Africa. The equivalency between CmiA and Better Cotton ended in 2022, meaning 2023/24 and 2024/25 production was no longer covered by the equivalency.[1] Some CmiA cotton production was also certified to an organic standard—25,238 tonnes globally with 18,253 tonnes in Tanzania, 4,460 tonnes in Uganda, 1,869 tonnes in Benin, and 656 tonnes in Zambia.

Fairtrade cotton production decreased from 15,962 tonnes in 2023/24 to 7,340 tonnes in 2024/25 and now accounts for 0.03% of global cotton production. This decline was attributed to reduced demand in 2024/25, but production is expected to grow again in 2025/26 as new clients come on board. Approximately 63% (4,624 tonnes) of Fairtrade cotton was also certified to an organic standard in 2024/25.

The Integrated Production System of Andalucía, Spain (IPS)—known as Sistema de Producción Integrada (SPI) in Spanish—became recognized as equivalent to the Better Cotton Standard System in 2023. Andalucía is Spain's main cotton-producing region, and, in 2024/25, 18,815 tonnes of cotton fiber were produced on IPS-licensed farms, up from 7,785 tonnes in 2023/24.

Global cotton fiber production by program (thousand tonnes)[2]



1. While the equivalency agreement between CmiA and the Better Cotton Standard System ended in 2022, certain amounts of CmiA cotton from validated countries in West Africa were sold as Better Cotton equivalent in 2023/24 under a quota agreement between Aid by Trade Foundation (AbTF) and Better Cotton.
2. Production by program is the total production measured by weight per program including equivalents and overlaps with other standards. Program data is based on information from program owners, received through email correspondence or from their websites. For Better Cotton equivalents (Agro-2, IPS, ICPSS, myBMP, and ABR), production data is provided by Better Cotton, and in some cases also by the equivalency program.
3. Market shares refer to the estimated percent of global virgin cotton production covered by the program in 2024/25.

Virgin cotton

A closer look at the programs

International Sustainability and Carbon Certification (ISCC) cotton production saw a significant decline, dropping from 108,736 tonnes in 2023/24 to 35,466 tonnes in 2024/25, accounting for 0.14% of global cotton production. Most ISCC-certified cotton continued to be produced in Greece, with some production also in Kenya.

The Israel Cotton Production Standard System (ICPSS)—a standard developed by the Israel Cotton Production and Marketing Board (ICB) in 2018—has been recognized as a Better Cotton equivalent since 2020. ICPSS production decreased from 14,217 tonnes in 2023/24 to 8,582 tonnes in 2024/25 but continued to account for virtually all (99.8%) of Israel's cotton production and 0.03% of global cotton production.

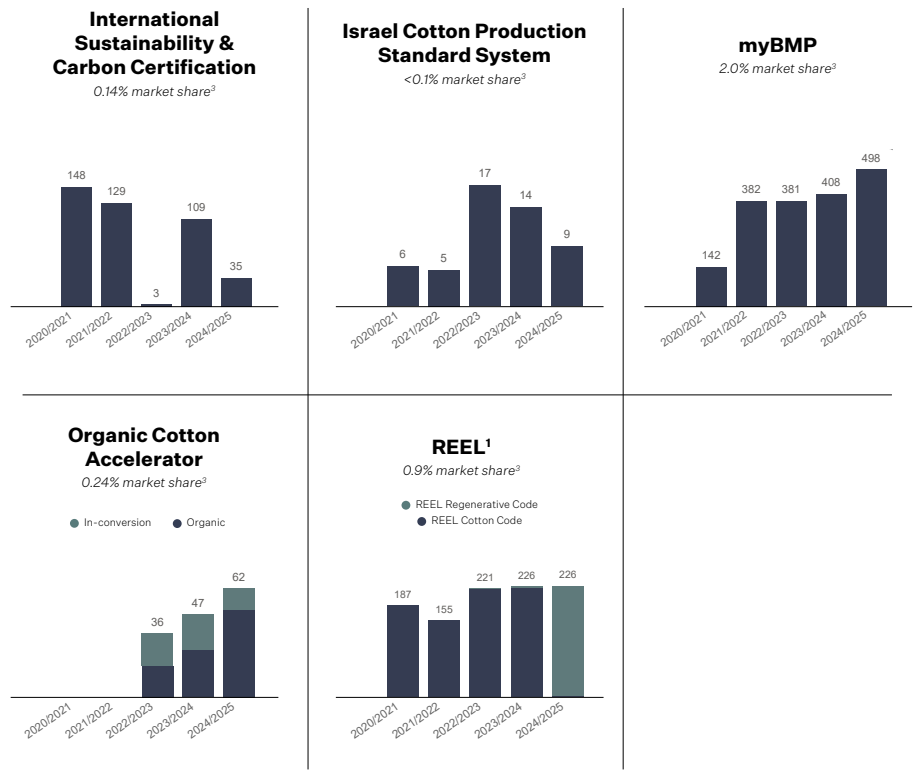
Leading Harvest™ has a Farmland Management Standard currently used to certify cotton in Australia and the United States. A total area of 99,567 hectares was under certification in 2024/2025 across 14 farms, some of which was also myBMP or regenagri certified. Data on production by weight is not currently available.

myBMP cotton, recognized as a Better Cotton equivalent since 2014, increased from 407,659 tonnes in 2023/24 to 497,528 tonnes in 2024/25, now accounting for around 41% of cotton grown in Australia and 2% of cotton grown worldwide.

Organic Cotton Accelerator (OCA)'s Farm Programme, which covers criteria beyond the current scope of the existing organic certification system, saw another year of significant growth, with production increasing from 26,987 tonnes of organic cotton fiber in 2023/24 to 49,507 tonnes in 2024/25. Organic cotton fiber produced under OCA's Farm Programme now accounts for 0.24% of all cotton produced worldwide. The majority of this production continues to take place in India (40,845 tonnes, accounting for 0.81% of India's total cotton production) but in its first year of certification following a successful pilot a significant amount also now comes from Turkey (7,011 tonnes, accounting for 0.83% of Turkey's cotton production). Meanwhile Pakistan produced 1,651 tonnes, accounting for 0.14% of Pakistan's total cotton production. OCA's in-conversion cotton production reduced from 20,099 tonnes to 12,120 tonnes between 2023/24 and 2024/25, reflecting the transition of some production areas into organic certification.

REEL[1] has two Codes of Conduct that are used for cotton: the REEL Cotton Code and the more recent REEL Regenerative Code. In 2024/25, most of REEL's cotton production transitioned from the REEL Cotton Code to the REEL Regenerative Code. As a result, REEL Cotton Code production dropped from 223,533 tonnes in 2023/24 to 3,175 tonnes in 2024/25 (now accounting for 0.01% of all cotton produced worldwide), while REEL Regenerative Code production increased from 2,066 tonnes in 2023/24 to 222,962 tonnes in 2024/25 (now accounting for 0.88% of all cotton produced worldwide).

Global cotton fiber production by program (thousand tonnes)[2]



1. In May 2025, CottonConnect released the REEL Standards system, including the REEL Cotton Standard 1.0 and the REEL Regenerative Standard 1.0. The volumes included in this report cover 2024/25 and therefore still refer to the REEL Cotton Code and the REEL Regenerative Code.
2. Production volumes by program include the total volume produced per program including equivalents and overlaps with other standards. Program data is based on information from program owners, received through email correspondence or from their websites. For Better Cotton equivalents (Agro-2, IPS, ICPSS, myBMP, and ABR), production data is provided by Better Cotton, and in some cases also by the equivalency program.
3. Market shares refer to the estimated percent of global virgin cotton production covered by the program in 2024/25.

Virgin cotton

A closer look at the programs

regenagri is a regenerative agriculture program launched by Peterson and Control Union in 2020. regenagri-certified cotton production increased significantly, from an estimated 0.9 million tonnes in 2023/24 to 1.9 million tonnes in 2024/25. This production spanned 18 countries and accounted for 8% of all cotton produced worldwide in 2024/25.[1] A significant proportion of this production is also certified to other cotton programs. While the precise overlap figure is not available, it is estimated to average around 40% globally.

Regenerative Cotton Standard® (RCS) was launched by the Aid by Trade Foundation in November 2023. In 2024/25, the second year of certification, production reached 19,643 tonnes, up from 6,427 tonnes in 2023/24. RCS production took place in Tanzania (15,440 tonnes, accounting for 27% of national cotton production), and—for the first time—in India (4,203 tonnes, accounting for <0.1% of national cotton production). Some RCS production is also organic and/or CmiA certified.

Regenerative Organic Certified® (ROC™) total cotton production decreased marginally from 7,726 tonnes in 2023/24 to 7,392 tonnes in 2024/25. Regionally, there was an increase in production in Peru, and a decrease in India, although the decrease in India is partly attributed to data not being available for all producers. Globally, ROC continues to account for <0.1% of cotton production.

Regenevate is a program launched by USB Certification in Turkey in 2022. Following a sharp increase in 2023/24 when production reached 6,303 tonnes, production dropped back down to 2,327 tonnes in 2024/25. Regenevate accounted for 0.28% of all cotton grown in Turkey in 2024/25, and <0.1% of all cotton grown worldwide.

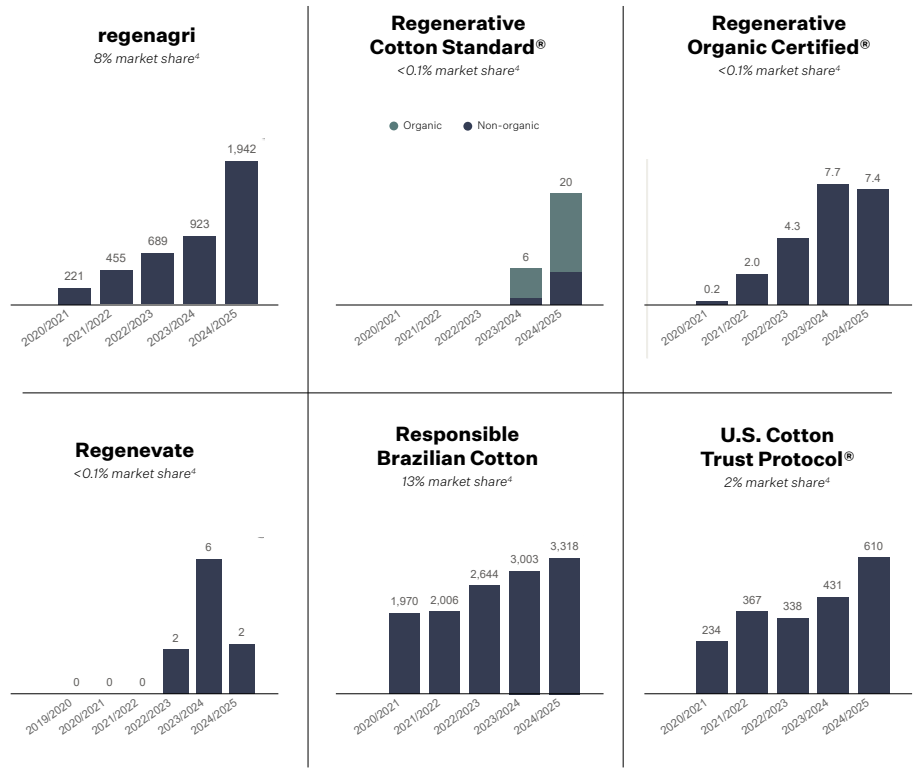
Responsible Brazilian Cotton (ABR)—the Brazilian Association of Cotton Producers (ABRAPA)'s program—saw production increase from 3.0 million in 2023/24 to around 3.3 million tonnes in 2024/25, now accounting for 90% of cotton grown in Brazil and around 13% of all cotton grown worldwide.[2]

U.S. Cotton Trust Protocol® (USCTP) production increased from 431,095 tonnes in 2023/24 to 609,600 tonnes in 2024/25, now accounting for 19% of all cotton produced in the United States and 2.4% of all cotton produced worldwide. The environmental performance of USCTP cotton is measured and analyzed at the field level using Field to Market's Fieldprint Platform, and is verified by Control Union Certifications.

Cleaner Cotton and e3® Sustainable Cotton[2] production were discontinued in 2020 and 2022, respectively.

1. Data on 2023/24 regenagri production was not available at the time of reporting so 2022/23 data from regenagri's Impact Report 2023 was used as a proxy. Seed cotton volumes were converted to fiber volumes by applying national average ginning outturns as per ICAC's Cotton Production Data Portal.

Global cotton fiber production by program (thousand tonnes)[3]



2. While in general the report aligns with ICAC's reporting year, in order to align with the global Better Cotton volumes for 2023/24 reported by Better Cotton, the volumes reported here for ABR cotton grown in Brazil are based on the reporting cycle of Brazil's National Supply Company (CONAB) and cover cotton grown in the 2024 calendar year. However, total cotton figures for Brazil included in this report follow the approach taken by ICAC which (for Brazil only) has recently shifted to cover cotton grown in the 2023 calendar year. See methodology for more detail.
3. Production volumes by program include the total volume produced per program including equivalents and overlaps with other standards. Program data is based on information from program owners, received through email correspondence or from their websites. For Better Cotton equivalencies (Agro-2, IPS, ICPSS, myBMP, and ABR), production data is provided by Better Cotton, and in some cases also by the equivalency program.
4. Market shares refer to the estimated percent of global virgin cotton production covered by the program in 2024/25.

Virgin cotton
Organic cotton

Certification of organic cotton production is a highly complex landscape, with 13 farm-level organic standards/programs (including governmental regulations) known to be used for cotton in 2024/25.

These differ from some organic chain of custody standards, which use farm-level organic standards/programs as inputs. Some of these farm-level standards/programs are specific to just one country, while others are used in many countries; some are governmental regulations, while others are private standards; and some have equivalency agreements with other standards, while others do not. In addition, aggregating global organic cotton production data is particularly difficult due to organic cotton often being certified to multiple standards, and not all standard owners publish data.

IFOAM – Organics International publishes a list of farm-level organic standards that it endorses in its IFOAM Family of Standards. In 2024/25, this list included 50 standards,[1] six of which were known to be used for the certification of cotton, all of which were governmental standards. Three of these—the India Organic Regulation, USA Organic Regulation, and EU Organic Regulation (which are often used in combination with each other or with other farm-level organic standards)—were estimated to account for around 92% of all certified organic cotton in 2024/25.

In addition to the 50 organic standards endorsed by IFOAM – Organics International, there were another seven organic standards/programs not included in the IFOAM Family of Standards but known to be used for cotton in 2024/25 (often used in combination with the EU Organic Regulation and/or the USA Organic Regulation). These included the Brazil Organic Regulation (a governmental regulation also recognizing the Participatory Guarantee System), the Peru Organic Regulation (a governmental regulation), Thai PGS Organic Plus, the Ecocert Organic Standard (a private standard), the Demeter Biodynamic Standard (a private standard), Regenerative Organic Certified®, and the Organic Cotton Accelerator.

Participatory Guarantee System (PGS) initiatives are supported by IFOAM-Organics International as an alternative and complementary tool to third-party certification within the organic sector. PGS is used for cotton in Brazil (as one of three regulatory paths recognized by Brazil Organic, alongside third-party certification and social control organizations) and in Thailand (as Thai PGS Organic Plus).

IFOAM Family of Standards: Governmental regulations

India Organic Regulation: The majority of organic cotton produced globally is estimated to have been grown in India and certified according to the India Organic Regulation, also known as India's National Programme of Organic Production (India-NPOP), as reported by India's Agricultural and Processed Food Products Export Development Authority (APEDA). Based on information reported by APEDA, an estimated 436,648 tonnes of cotton fiber were certified under the India Organic Regulation in 2024/25. An additional 135,640 tonnes was estimated to be in conversion to organic.[2] While all organic cotton grown in India is certified to the India Organic Regulation, most of it is also certified to the EU Organic Regulation and/or the USA Organic Regulation, and some is covered under non-governmental standards and programs such as Regenerative Organic Certified or the Organic Cotton Accelerator.

USA Organic Regulation: Cotton certified to the USA Organic Regulation, also known as the United States National Organic Program (US-NOP), is grown not only in the United States but also in many other countries worldwide. The United States Department of Agriculture (USDA) reported that 12,863 tonnes of organic cotton fiber grown in the United States were certified to the USA Organic Regulation in 2024/25.[3] A further 266 tonnes was in conversion to organic. Complete data for countries outside the United States certifying to US-NOP is not currently published by the USDA so has been estimated based on data from other sources (such as organic cotton producers, certification bodies, and gins). These estimates can be found in the organic cotton fiber production by program chart, grouped with cotton production certified to the EU Organic Regulation produced in non-EU countries.

EU Organic Regulation: Within the EU, cotton certified to the EU Organic Regulation was grown in Greece, Spain, and Italy in 2024/25. In Greece, based on data from the Ministry of Rural Development and Food (MRDF), an estimated 2,598 tonnes of cotton fiber were certified to the EU Organic Regulation in 2024/25.[4] In Spain, according to the Ministry of Agriculture, Fisheries and Food (MAPA), 26 tonnes of cotton fiber were certified to the EU Organic Regulation in 2024/25.[5] In Italy, the National Information System for Organic Agriculture (SINAB) established by the Ministry of Agriculture, Food and Forestry reported that 23 tonnes of cotton fiber were certified to the EU Organic Regulation in 2024/25, while a further 16 tonnes was in conversion to organic.[6]

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1. IFOAM – Organics International. "IFOAM Family of Standards". Family Standards Frame: April 11, 2025. **NOTE:** An update was released on February 16, 2026, which will apply to the 2025/26 harvest year and includes 44 standards as opposed to the previous 50 standards.
2. CRISIL Ltd. and India's Agricultural and Processed Food Products Export Development Authority (APEDA). Study of Indian Organic Market and Export Promotion Strategy. 2024. **NOTE:** 2024/25 production data was not available at the time of reporting so 2023/24 was used as a proxy. Cotton production data is reported as seed cotton and combines organic and in-conversion production together. Seed cotton weights were converted to cotton fiber using India's average ginning outturn as per ICAC's Cotton Production Data Portal. Organic production was estimated by applying the average share of organic out of total organic and in-conversion cotton certified by APEDA from the previous three years.
3. United States Department for Agriculture (USDA). Annual Organic Cotton Market Summary. Vol. 16. August 2025. **NOTE:** USDA reports cotton production in bales. These were converted to tonnes using the Bale Shape and Size Annexure for 2023 from ICAC's Cotton Production Data Portal.
4. Greek Ministry of Rural Development & Food. Statistics of Biological Products of Plant & Animal Origin. **NOTE:** 2023/24 and 2024/25 data was not available at the time of reporting, so 2022/23 data was used as a proxy for these years.
5. Spain's Ministry of Agriculture, Fisheries and Food (MAPA). Organic Production. Seed cotton weights were converted to cotton fiber using Spain's average ginning outturn as per ICAC's Cotton Production Data Portal.
6. Italy's National Information System for Organic Agriculture (SINAB). BIO IN CIFRE 2025. **NOTE:** SINAB only reports land area (hectares), so a yield estimate was used to convert this to fiber. The yield estimate applied was based on the assumption that organic cotton yields are, on average, 80% those of conventional cotton (de Ponti, T, Bert Rijk, and Martin K. van Ittersum. "The crop yield gap between organic and conventional agriculture". Agricultural Systems 108 (2012): 1–9). Spain's conventional cotton yield as per ICAC was used as a proxy for Italy's in this calculation since yield data for Italy was unavailable. ICAC's data dashboard reported no cotton output from Italy in 2024/25. Textile Exchange are working to better understand this discrepancy between ICAC and SINAB data.

Virgin cotton
Organic cotton

The EU Organic Regulation is also used to certify cotton in many countries outside of Europe, but the EU does not currently publish data on this. Therefore, total cotton production certified outside the EU to the EU Organic Regulation has been estimated based on data from other sources (such as organic cotton producers, certification bodies, and gins) and is included in the organic cotton fiber production by program chart, grouped with cotton production certified to the USA Organic Regulation grown outside the United States.

Argentina Organic Regulation: In the past, the Argentina Organic Regulation has applied to the cultivation of organic cotton in Argentina. The Ministry of Economy of Argentina publishes organic agriculture data but does not provide a breakdown by cotton. It could not be confirmed whether any certified organic cotton was produced in Argentina in 2024/25.

China Organic Regulation: Organic cotton sold on the domestic market in China must be certified to the China Organic Regulation (China National Organic Product Standard). Based on data from China's State Administration for Market Regulation (CNCA), it is estimated that 54,701 tonnes of organic cotton fiber were certified to the China Organic Regulation in 2024/25.[1] Organic cotton sold for export from China is often also certified to the EU Organic Regulation and/or the USA Organic Regulation.

Turkey Organic Regulation: A relatively small share of the total organic cotton fiber grown in Turkey is certified to its national standard, the Turkey Organic Regulation, with the Ministry of Agriculture and Forestry reporting 2,408 tonnes certified in 2024/25 and an additional 6,314 tonnes in conversion.[2] Most of Turkey's organic cotton is certified to the EU Organic Regulation and/or the USA Organic Regulation. This production[3] is aggregated in the organic cotton fiber production by program chart, grouped with other cotton certified to the EU Organic Regulation and/or the USA Organic Regulation grown outside of the EU/US.

Israel Organic Regulation: In Israel, the Israel Cotton Board reported that 96 tonnes of cotton fiber were certified to the Israel Organic Regulation in 2024/25.[4] This figure includes cotton also certified to the EU Organic Regulation and/or the USA Organic Regulation.

Other (non-IFOAM) organic standards used for cotton

Brazil Organic Regulation: The Brazil Organic Regulation is a governmental regulation that also recognizes the Participatory Guarantee System. Governmental data is not currently available, so the report includes data from other sources, such as organic cotton producers and certification bodies. Based on this, in 2024/25, an estimated 103 tonnes of cotton fiber were certified to the Brazil Organic Regulation. This figure includes cotton also certified to the EU Organic Regulation and/or the USA Organic Regulation.

Peru Organic Regulation: In Peru, the Ministry of Agrarian Development and Irrigation (MIDAGRI) reports that 2,066 tonnes of cotton fiber were certified to the Peru Organic Regulation (a governmental regulation) in 2024/25, with a further 190 tonnes in conversion to organic.[5] These figures include cotton also certified to the EU Organic Regulation and/or USA Organic Regulation and/or other standards such as Regenerative Organic Certified®.

Thai PGS Organic Plus: In Thailand, it is estimated that 7 tonnes of cotton were certified to Thai PGS Organic Plus in 2024/25, a collaborative network of local organizations working on the PGS.[6]

Demeter: Demeter is a biodynamic farm standard used to certify cotton in Egypt in combination with the USA/EU Organic Regulation. Specific data on Demeter-certified cotton was not available but is covered under the production total reported for cotton certified to the EU Organic Regulation and/or the USA Organic Regulation grown outside the EU/US, as shown in the organic cotton fiber production by program chart.

1. CNCA. "National certification and accreditation information public service platform". **NOTE:** CNCA did not publish production volumes for 2023/24 or 2024/25 so a yield estimate was used to convert land area to fiber for these years. The yield estimate used was an average of the yields for 2020/21, 2021/22, and 2022/23 (the last three years for which both production and land area data were published by CNCA).
2. Turkish Ministry of Agriculture and Forestry. "Crop Production—Statistics".
3. Data on organic cotton production certified to the EU Organic Regulation and/or the USA Organic Regulation in Turkey in 2022/23, 2023/24, and 2024/25 was estimated based on 2021/22 data shared by the Turkish Ministry of Agriculture and Forestry in a Presentation on Organic Cotton on February 17, 2022. The growth rate for total cotton production in Turkey, calculated based on data from ICAC's Cotton Production Data Portal, was applied to the 2021/22 production data to estimate production volumes for 2022/23, 2023/24, and 2024/25.
4. The Israel Cotton Board Ltd. Email correspondence, February–March 2026.
5. MIDAGRI. "Organic and in-transition area statistics". **NOTE:** The Ministry only reports land area (hectares), so a yield estimate was used to convert this to fiber. The yield estimate applied was based on the assumption that organic cotton yields are, on average, 80% those of conventional cotton (de Ponti, T, Bert Rijk, and Martin K. van Ittersum. "The crop yield gap between organic and conventional agriculture". Agricultural Systems 108 (2012): 1–9). Peru's conventional cotton yield was based on ICAC's Cotton Production Data Portal.
6. 2024/25 data was not available at the time of reporting, so 2023/24 data was used as a proxy.

Virgin cotton
Organic cotton

Ecocert Organic Standard (EOS): EOS is a private standard implemented by Ecocert, which had equivalence with the EU Organic Regulation up to December 31, 2024. Clients certified under EOS have been transitioned to be certified under EU Regulation 2018/848. Existing EOS certificates remained valid until October 15, 2025. Specific data for EOS-certified cotton was not available but is covered under the production reported for the EU Organic Regulation.

Regenerative Organic Certified® (ROC™): ROC is an agricultural standard that builds on the USA Organic Regulation, meaning entities must first be certified to the USA Organic Regulation or a formally recognized international equivalent. See previous ROC section for production data.

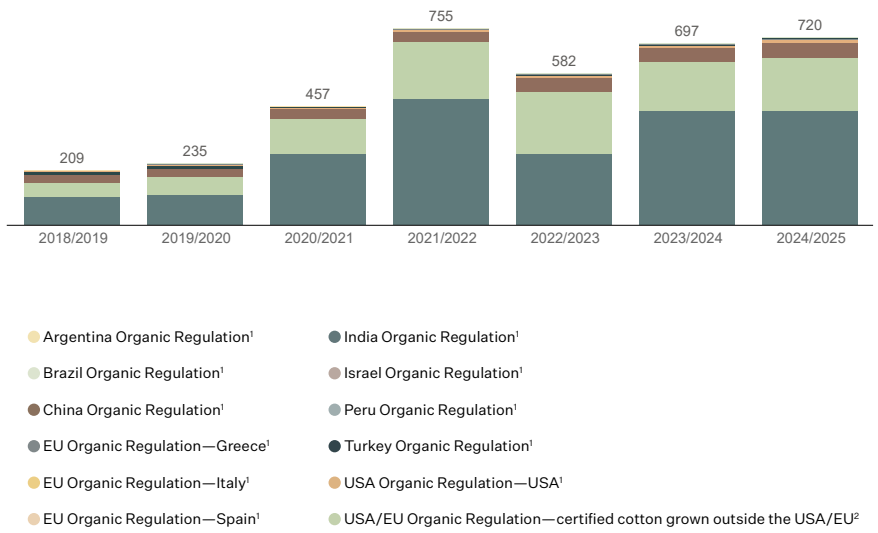
Organic Cotton Accelerator (OCA): OCA is not an organic standard but operates on top of the existing certification system, covering criteria beyond the current scope of organic certification via its Farm Programme. See previous OCA section for production data.

Global estimate

Due to the complex landscape of organic certification, calculating total organic cotton production by weight at the global level is extremely challenging. Organic cotton is often certified to multiple standards, complicating the aggregation process. Moreover, significant data gaps exist, necessitating the use of modeling and proxies in several countries. As a result, this global data should be considered very rough estimates.

The organic cotton fiber production by program chart includes data on each national or governmental organic standard/program for which cotton production data was available at the time of reporting. Based on this, in 2024/25, approximately 720 thousand tonnes of cotton were estimated to have been certified to one or more of the 13 farm-level organic standards or programs known to be used for cotton production that year, representing around 2.8% of global cotton production.

Organic cotton fiber production by program (thousand tonnes)



Source: Textile Exchange based on India's APEDA, the United States' USDA, Greece's MRDF, Spain's MAPA, Italy's SINAB, China's CNCA, Turkey's Ministry of Agriculture and Forestry database and presentation, The Israel Cotton Board Ltd., Peru's MIDAGRI, and other data sources such as ICAC's data portal, organic cotton producers, and certification bodies. For some countries, conversion factors were applied to calculate fiber volumes and/or proxies were used due to data for the latest year(s) not being available at the time of reporting.

Note that this chart does not include in-conversion cotton production.

1. Includes cotton volumes that are also certified to the EU Organic Regulation and/or USA Organic Regulation and/or any other programs such as ROC, OCA, or supplier-specific programs such as bioRe®.
2. Includes cotton certified to the USA Organic Regulation and/or the EU Organic Regulation grown outside of the USA/EU, respectively, but excludes cotton that is also certified to a national standard as this is listed separately. Very small amounts of Thai PGS Organic Plus cotton production are also included.

Virgin cotton

Evolution of the cotton programs

Equivalency agreements[1]

The following programs are, or have been, recognized as equivalent to the Better Cotton Standard System:

- Cotton made in Africa® (CmiA) between 2012 and 2022[2]
- Responsible Brazilian Cotton (ABR) since 2014
- myBMP since 2014
- Agro-2 since 2020
- The Israel Cotton Production Standard System (ICPSS) since 2020
- The Integrated Production System of Andalucía, Spain (IPS) since 2023

Discontinued cotton programs

Cleaner Cotton™ was discontinued in March 2020, when the funding for the regular farm program ended.

Field to Market continues to be used as a tool but it is no longer considered a standalone program. Most of the cotton that uses Field to Market's Fieldprint Platform to measure and analyze environmental performance on the field is also enrolled in the USCTP, as Field to Market enrollment is a condition of the USCTP. Cotton that is part of Field to Market but not part of the USCTP is not otherwise certified or verified.

e3® Sustainable Cotton program ceased being offered to the market by BASF in 2023/24.

1. Not including equivalency agreements with organic certification.
2. While the equivalency agreement between CmiA and the Better Cotton Standard System ended in 2022, certain amounts of CmiA cotton from validated countries in West Africa were sold as Better Cotton equivalent in 2023/24 under a quota agreement between AbTF and Better Cotton.

Cotton programs timeline

1996 *IFOAM–Organics International set first international organic standard*

Sustainable Cotton Project/Cleaner Cotton™ founded

1997 *MyBMP founded*

2004 *Fairtrade standard for seed cotton established*

2005 *Better Cotton founded*

Cotton made in Africa® (CmiA) established

2009 *ABRAPA's Responsible Brazilian Cotton (ABR) program started*

2010 *CottonConnect's REEL cotton program started*

International Sustainability and Carbon Certification (ISCC) started

2012 *CmiA became recognized as equivalent to the Better Cotton Standard System (BCSS)*

2013 *Bayer CropScience launched e3® Sustainable Cotton program (later moved under BASF)*

Field to Market launched

2014 *myBMP recognized as equivalent to the BCSS*

ABR recognized as equivalent to the BCSS

2015 *REEL Cotton Code was developed*

Climate Beneficial™ Verification program launched

2016 *Organic Cotton Accelerator was established*

2018 *Regenerative Organic Certified® launched*

2019 *U.S. Cotton Trust Protocol launched*

2020 *Climate Beneficial™ cotton first grown*

Agro-2 became recognized as equivalent to the BCSS

Israel Cotton Production Standard System (ICPSS) recognized as equivalent to the BCSS

Cleaner Cotton discontinued

QAI Transitional program discontinued

regenagri launched

2021 *CottonConnect introduced the REEL Regenerative Code*

Field to Market no longer considered a standalone program

Leading Harvest™ launched its Farmland Management Standard

2022 *CmiA and BCSS equivalency agreement ends*

Regenevate launched

Regenerative Cotton Standard® launched

2023 *The Integrated Production System of Andalucía, Spain (IPS) recognized as equivalent to the BCSS*

2024 *e3® Sustainable Cotton program discontinued*

Virgin cotton

Where to find cotton programs across the globe[1]

Legend:

- Total cotton > 1 million t
- Total cotton > 300,000 t
- Total cotton > 100,000 t
- Total cotton < 100,000 t

● Cotton programs (%)
○ *Conventional cotton (%)*

This chart lists only countries where cotton is produced according to one of the listed cotton programs.

Big cotton producing countries (>100,000t) with no cotton covered by the programs include Turkmenistan, Myanmar, and Sudan.

Southern Europe

Greece — 97%
Total: ~210,000 t
- ● Agro-2: ~75%
- ● ISCC: ~16%
- ● regenagri: ~8%[8]
- ● EU Organic Regulation: ~1%
- ○ *Conventional: ~3%*

Italy — 100%
Total: ~0 t[4,10]
- ● EU Organic Reg.: ~60%
- ● EU Organic Reg. in-conversion: ~40%
- ○ *Conventional: none*

Spain — 86%
Total: ~25,000 t
- ● IPS: ~75%
- ● regenagri: ~18%[9]
- ● EU Organic Reg.: ~0.1%
- ○ *Conventional: ~14%*

Western and Central Asia

Azerbaijan — 20%
Total: ~90,000 t
- ● USA/EU Organic Reg.: ~20%[7]
- ○ *Conventional: ~80%*

Israel — 101%[4]
Total: ~8,600 t
- ● ICPSS: ~100%
- ● Israel Organic Regulation: ~1%[5]
- ○ *Conventional: ~none*

Kyrgyzstan — 68%
Total: ~22,000 t
- ● USA/EU Organic Reg.: ~68%[7]
- ● Fairtrade: undisclosed[3]
- ○ *Conventional: ~32%*

Tajikistan — 37%
Total: ~100,000 t
- ● Better Cotton: ~18%[2]
- ● USA/EU Organic Reg.: ~12%[7]
- ● regenagri: ~12%[8]
- ● Fairtrade: undisclosed[3]
- ○ *Conventional: ~63%*

Turkey — 31%
Total: ~840,000 t
- ● regenagri: ~13%[9]
- ● Better Cotton: ~12%[2]
- ● USA/EU Organic Reg.: ~9%[7]
- ● OCA: ~1%
- ● Turkey Organic Reg. in-conversion: ~1%[5]
- ● REEL Regenerative: ~1%
- ● Regenevate: ~0.3%
- ● Turkey Organic Reg.: ~0.3%[5]
- ○ *Conventional: ~69%*

Uzbekistan — 13%
Total: ~640,000 t
- ● regenagri: ~13%[8]
- ● Better Cotton: ~1%[2]
- ● USA/EU Organic Reg.: ~1%[7]
- ○ *Conventional: ~87%*

Northern America

United States #4 12% of global cotton — 34%
Total: ~3,138,000 t
- ● USCTP: ~19%
- ● Better Cotton: ~11%[2]
- ● regenagri: ~7%[8]
- ● USA Organic Reg.: ~0.4%
- ● USA Organic Reg. in-conversion: ~0.01%
- ● Climate Beneficial™ Verified: ~0.01%
- ● Climate Beneficial™ Verified-Transitional: ~0.01%
- ○ *Conventional: ~66%*

Africa

See next page

Eastern and South-Eastern Asia

China #1 25% of global cotton — 2%
Total: ~6,412,000 t
- ● Better Cotton: ~1%[2]
- ● China Organic Reg.: ~1%[5]
- ● regenagri: ~0.4%[8]
- ● REEL Cotton: ~0.03%
- ● REEL Regenerative: ~0.004%
- ○ *Conventional: ~98%*

India #2 20% of global cotton — 36%
Total: ~5,053,000 t
- ● Better Cotton: ~19%[2]
- ● India Organic Reg.: ~9%[5,8]
- ● India Organic Reg. in-conversion: ~3%
- ● regenagri: ~5%[8]
- ● REEL Regenerative: ~4%
- ● OCA: ~1%
- ● OCA in-conversion: ~0.2%
- ● Regenerative Cotton Standard: ~0.1%[9]
- ● ROC: ~0.1%
- ● Fairtrade organic: ~0.1%[4]
- ● REEL Cotton: ~0.02%
- ● Fairtrade (excluding Fairtrade organic): ~0.04%[4]
- ○ *Conventional: ~64%*

Thailand — 0.4%
Total: ~1,510 t
- ● Thai PGS Organic Plus: ~0.4%
- ○ *Conventional: ~99.6%*

Latin America and the Caribbean

Brazil #3 15% of global cotton — 98%
Total: ~3,700,000 t
- ● ABR: ~90%
- ● regenagri: ~14%[8]
- ● Brazil Organic: ~0.003%[5,6]
- ○ *Conventional: ~2%*

Mexico — 10%
Total: ~177,000 t
- ● regenagri: ~10%
- ○ *Conventional: ~90%*

Peru — 30%
Total: ~10,000 t
- ● ROC: ~36%
- ● Peru Organic: ~21%[5]
- ● regenagri: ~12%[8]
- ● Peru Organic in-conversion: ~2%[5]
- ○ *Conventional: ~70%*

Southern Asia

Bangladesh — 9%
Total: ~33,000 t
- ● REEL Regenerative: ~9%
- ○ *Conventional: ~91%*

Pakistan — 36%
Total: ~1,200,000 t
- ● Better Cotton: ~28%[2]
- ● USA/EU Organic Reg.: ~3%[7]
- ● REEL Regenerative: ~3%
- ● regenagri: ~2%[8]
- ● OCA in-conversion: ~0.2%
- ● OCA: ~0.1%
- ○ *Conventional: ~64%*

Australia and New Zealand

Australia #5 5% of global cotton — 69%
Total: ~1,223,000 t
- ● regenagri: ~47%[8]
- ● MyBMP: ~41%
- ○ *Conventional: ~31%*

1. Cotton program-specific data was collected from the programs and is reported in this map as a share (%) of the country's total global cotton production in 2024/25. Data on total cotton production is from ICAC (World Cotton Statistics. Downloaded April 15, 2026). Conventional cotton production is calculated by Textile Exchange. Production is reported in metric tonnes (t). Recycled cotton is not included in this map.
2. Better Cotton refers here to Better Cotton excluding equivalents. Better Cotton equivalents are listed separately.
3. Fairtrade data is not always disclosed on a per-country basis for confidentiality reasons. In these cases, the percentage listed for the country's total cotton that is covered by cotton programs does not include Fairtrade cotton and is thus actually slightly higher.
4. The share of a country's total cotton that is covered by the listed cotton programs (represented in the pie charts) is derived from the difference between the aggregated cotton production by weight of these programs in that country (as shared by the respective program owners, and with overlaps between programs excluded based on best available information) and the overall cotton production of that country as reported by ICAC. For some countries, there is a discrepancy between the two that results in figures above 100%. Both ICAC and Textile Exchange rely on secondary data, and there are sometimes discrepancies between the data sources used. Sometimes, a country's total cotton production as reported by ICAC, USDA, and national governments can differ. Textile Exchange is working to better understand these discrepancies. Learn more about Textile Exchange's data collection methodology here, and about the sources of ICAC's cotton statistics here.
5. This includes cotton that is also certified to (or in conversion to, in the case of in-conversion production) the EU Organic Regulation and/or USA Organic Regulation and/or any other programs such as Regenerative Organic Certification® (ROC), the Organic Cotton Accelerator (OCA), or supplier-specific programs such as bioRe®.
6. Brazil Organic is a governmental standard that is not part of the IFOAM Family of Standards.
7. USA/EU Organic Reg refers to cotton certified to the USA Organic Regulation and/or the EU Organic Regulation grown outside of the USA/EU, respectively. It excludes cotton that is also certified to a national standard as this is listed separately.
8. regenagri percentages in this chart include overlaps with other cotton programs, where applicable.
9. All Regenerative Cotton Standard production in India is also certified to the India Organic Regulation. This has not been double counted in the overall share of India's total cotton that is covered by the listed programs (represented in the pie chart).
10. As noted in footnote 4, discrepancies exist between data sources. ICAC reported 0 tonnes of cotton production for Italy's 2024/25 cotton production, while Italy's National Information System for Organic Agriculture (SINAB) established by the Ministry of Agriculture, Food and Forestry reported that 23 tonnes of cotton fiber were certified to the EU Organic Regulation in 2024/25, while a further 16 tonnes was in conversion to organic.

Virgin cotton

Where to find cotton programs across the globe[1]

Legend:

- Total cotton > 1 million t
- Total cotton > 300,000 t
- Total cotton > 100,000 t
- Total cotton < 100,000 t

● Cotton programs (%)
○ *Conventional cotton (%)*

This chart lists only countries where cotton is produced according to one of the listed cotton programs.

Big cotton producing countries (>100,000t) with no cotton covered by the programs include Turkmenistan, Myanmar, and Sudan.

Sub-Saharan Africa

Benin
22%
Total: ~280,000 t
- CmiA (exc. CmiA Organic): ~21%
- CmiA Organic: ~1%
- USA/EU Organic Reg.: ~1%[3]
- *Conventional: ~78%*

Burkina Faso
105%[4]
Total: ~120,000 t
- CmiA: ~104%[4]
- USA/EU Organic Reg.: ~0.4%[3]
- *Conventional: ~none*

Cameroon
97%
Total: ~120,000 t
- CmiA: ~97%
- *Conventional: ~3%*

Chad
77%
Total: ~30,000 t
- CmiA: ~77%
- *Conventional: 23%*

Côte d'Ivoire
78%
Total: ~190,000 t
- CmiA: ~70%
- regenagri: ~12%
- *Conventional: ~22%*

Ethiopia
0.02%
Total: ~70,000 t
- USA/EU Organic Reg.: ~0.02%[3]
- *Conventional: ~99.98%*

Kenya
127%[4]
Total: ~1,030 t
- ISCC: ~127%[4]
- *Conventional: ~none*

Mali
87%
Total: ~210,000 t
- Better Cotton: ~87%[2]
- *Conventional: ~13%*

Mozambique
149%[4]
Total: ~8,000 t
- Better Cotton: ~84%[2]
- CmiA: ~65%
- *Conventional: ~none*

Senegal
0.3%
Total: ~6,850 t
- USA/EU Organic Reg.: ~0.3%[3]
- Fairtrade: undisclosed[6]
- *Conventional: ~99.7*

Tanzania
145%[4]
Total: ~57,000 t
- regenagri: ~145%[4,5]
- USA/EU Organic Reg.: ~39%[3]
- CmiA Organic: ~32%
- Regenerative Cotton Standard®: ~27%
- CmiA (exc. CmiA Organic): ~10%
- *Conventional: ~none*

Togo
86%
Total: ~30,000 t
- CmiA: ~86%
- *Conventional: ~14%*

Uganda
25%
Total: ~44,730 t
- USA/EU Organic Reg.: ~25%[3]
- CmiA Organic: ~10%
- Fairtrade: undisclosed[6]
- *Conventional: ~75%*

Zambia
18%
Total: ~15,000 t
- regenagri: ~12%[5]
- CmiA (exc. CmiA Organic): ~10%
- CmiA Organic: ~4%
- USA/EU Organic Reg.: ~1%[3]
- *Conventional: ~82%*

Northern Africa

Egypt
8%
Total: ~100,000 t
- Better Cotton: ~7%[2]
- regenagri: ~1%[5]
- USA/EU Organic Reg.: ~0.4%[3,7]
- REEL Cotton: ~0.2%
- REEL Regenerative: ~0.02%
- Fairtrade: undisclosed[6]
- *Conventional: ~92%*

1. Cotton program-specific data was collected from the programs and is reported in this map as a share (%) of the country's total global cotton production by weight in 2023/24. Total cotton production data is from ICAC (ICAC. World Cotton Statistics. Downloaded April 15, 2026. Conventional cotton production was calculated by Textile Exchange. Production is reported in metric tonnes (t). Recycled cotton is not included in this map.
2. Better Cotton refers here to Better Cotton excluding equivalents. Better Cotton equivalents are listed separately.
3. USA/EU Organic Reg refers to cotton certified to the USA Organic Regulation and/or the EU Organic Regulation grown outside of the USA/ EU, respectively. It excludes cotton that is also certified to a national standard as this is listed separately.
4. The share of that country's total cotton that is covered by the listed cotton programs (represented in the pie charts) is derived from the difference between the aggregated cotton production of these programs in that country (as shared by the respective program owners, and with overlaps between programs excluded based on best available information) and the overall cotton production of that country as reported by ICAC. For some countries, there is a discrepancy between the two that results in figures above 100%. Both ICAC and Textile Exchange rely on secondary data, and there are sometimes discrepancies between the data sources used. Sometimes, a country's total cotton production as reported by ICAC, USDA, and national governments can differ. Textile Exchange is working to better understand these discrepancies. Learn more about Textile Exchange's data collection methodology here, and about the sources of ICAC's cotton statistics here.
5. regenagri percentages in this chart include overlaps with other cotton programs, where applicable.
6. Fairtrade data is not always disclosed on a per-country level for confidentiality reasons. In these cases, the percentage listed for the country's total cotton that is covered by cotton programs does not include Fairtrade cotton and is thus actually slightly higher.
7. Includes Demeter-certified cotton.

Recycled cotton
Market overview

Recycled cotton, all of which is considered textile-to-textile recycled fiber, had an estimated production total of 0.4 million tonnes in 2025 (compared to 25.4 million tonnes of virgin cotton), giving it a market share of approximately 1% of total cotton production.[1]

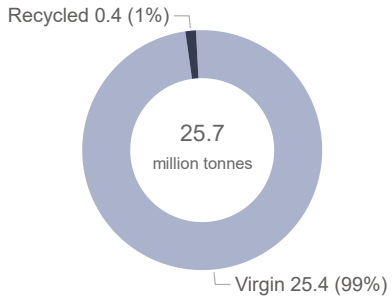
It should be noted that the data presented here refers to mechanically recycled cotton. Chemically recycled cotton is covered in the chapter on manmade cellulosic fibers since the result is a manmade cellulosic fiber, not cotton.

Key standards

Textile Exchange's Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) are key third-party standards used for recycled cotton.[2]

Photo: Luisa Bravo

Recycled cotton's market share of global cotton production in 2025 (million tonnes)



Source: Textile Exchange based on ICAC and Maia Research.

NOTE: All recycled cotton is considered textile-to-textile recycled fiber.

1. Calculated by Textile Exchange based on the following sources:
   i. ICAC. World Cotton Statistics. Downloaded April 15, 2026. **NOTE:** For the virgin cotton production by weight in 2025, ICAC harvest year data from the 2024/25 season has been applied.
   ii. Maia Research. *Global Recycled Cotton Market Report 2026*. Commissioned report. 2026.
   iii. Textile Exchange, Reverse Resources, TEXroad, and Fashion for Good. Textile-to-Textile Recycled Fiber Availability Data for Apparel and Home Textiles. Forthcoming.
2. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Part 1a: Global fiber production

Other plant-based fibers

Other plant-based fibers

Global overview

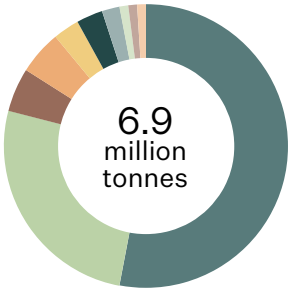
Besides cotton, there is a diversity of other plant-based fibers such as jute, coir, flax, hemp, sisal, abaca, kapok, ramie, and agave.[1] With a global production total of around 6.9 million tonnes, these non-cotton, plant-based fibers had a combined market share of approximately 5% of global fiber production in 2025.[2] It is estimated that more than 8 million households are involved in the production of these fibers.[3]

Jute had the largest market share of all non-cotton, plant-based fibers in 2025, accounting for around 53% of this category, and 3% of the global fiber market. It is estimated that 3.7 million tonnes of jute were produced globally in 2025.[2] Similar to hemp, flax, and ramie, jute is a bast fiber derived from the strands surrounding the hurd, or woody core, of the stem. It is primarily used to make twine, rope, matting, packaging material, and home textiles.[4]

Coir had the second-largest market share, accounting for approximately 26% of all non-cotton, plant-based fibers, and 1.3% of the global fiber market. It is estimated that 1.8 million tonnes of coir were produced worldwide in 2025.[2] Coir is a fiber extracted from the husks of coconuts and is primarily used to produce home textiles such as floor mats, doormats, brushes, and mattresses.[4]

Flax fiber production data is not easily accessible at a global level, but it is estimated that around 0.3 million tonnes of flax fiber were produced worldwide in 2025, including short and long staple fibers.[4] This means that flax accounted for around 5% of the non-cotton, plant-based fiber market and 0.2% of the global fiber market in 2025. Flax fiber, or linen, is used for a variety of products including home textiles and apparel.[5]

Global other (non-cotton) plant-based fiber production in 2025

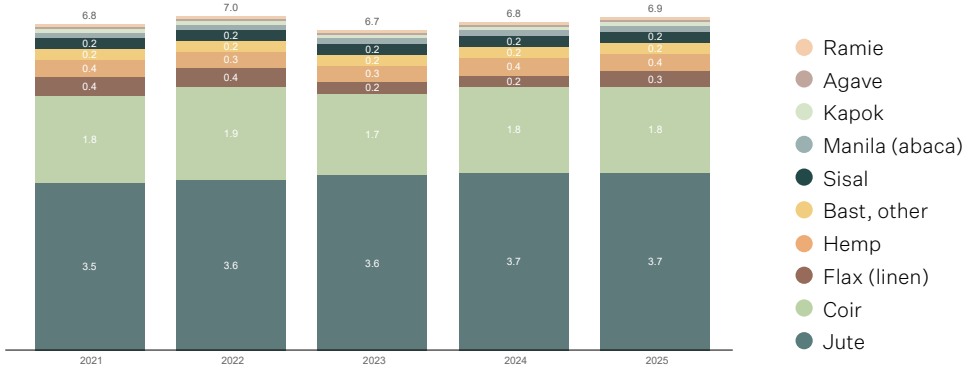


Jute · Coir · Flax (linen) · Hemp · Sisal · Bast, other · Manila (abaca) · Kapok · Agave · Ramie

8+ million households
are estimated to be involved in the production of these natural, non-cotton, plant-based fibers.[4]

Source: Textile Exchange based on FAOSTAT and The Alliance for European Flax-Linen & Hemp data.

Global other (non-cotton) plant-based fiber production (million tonnes)



Source: Textile Exchange based on Alliance for European Flax-Linen & Hemp and FAOSTAT.

1. If these plants are dissolved into pulp, they are listed in the chapter on manmade cellulosic fibers. If polymerization is used to process them, they are listed as biosynthetics.
2. Textile Exchange based on FAOSTAT, Alliance for European Flax-Linen & Hemp, and total global production volumes compiled by Textile Exchange (see global fiber market). FAOSTAT 2024 data, the latest available, is used as a proxy for 2025. NOTE: The quality of the data for these other plant-based fibers is limited. Data adjustments are regularly made for historical data and data gaps exist for some countries. For FAO's fiber definitions, use the Food and Agriculture Organization Corporate Statistical Database (FAOSTAT) query tool (select definitions and standards then item, and type the fiber name).
3. Discover Natural Fibres Initiative. 2020.
4. See Part 2 of this report for more data and information on sector modeling, including the quantification methodology.
5. Textile Exchange flax data and information are based on Alliance for European Flax-Linen & Hemp. Email correspondence, March 2025.

Other plant-based fibers
Global overview

European Flax™ is the Alliance for European Flax-Linen and Hemp's traceability standard for flax fiber grown in Europe. The revised European Flax™ Standard Version 3.1 was released on October 22, 2024, and took effect January 1, 2025. In 2025, the certification name changed from European Flax™ to Masters of FLAX FIBRE™. Masters of LINEN™ is the Alliance's registered trademark, indicating linen that is 100% made by European companies, from field to fabric.

Organic flax—grown according to one of the IFOAM Family of Standards—is produced at a very small scale.

CottonConnect is piloting the REEL Linen Code, which builds on the REEL Cotton Code and consists of two parts: farming and processing (scutching and spinning). It outlines practices in management, social, and environmental areas.

In 2026, INCCert plans to launch the Responsible Bast Standard (RBS), a unified certification framework for bast fibers that will include a new Responsible Flax Standard (RFS).

Hemp production data is not easily accessible at a global level but it is estimated that 0.4 million tonnes of fiber hemp was grown worldwide in 2025, meaning hemp accounted for around 5% of the non-cotton, plant-based fiber market, and around 0.3% of the global fiber market.[1] Hemp is a bast fiber used in various industries.

Hemp production is not yet legal worldwide, but governments are increasingly authorizing farmers to grow the crop. According to data from the Food and Agriculture Organization Corporate Statistical Database (FAOSTAT), 20 countries grew fiber hemp in 2025. France accounted for over a third of global hemp fiber production, followed by China, the United States, the Netherlands, Democratic People's Republic of Korea (North), Australia, Chile, Poland, Italy, Lithuania, Austria, Romania, Russian Federation, Ukraine, Spain, Czechia, Greece, Republic of Korea (South), People's Republic of Turkey, and Japan.[1]

The Responsible Hemp Standard (RHS), developed by INCCert, is a global chain-of-custody certification program that spans the supply chain from farm-level certification to final product. RHS is currently being implemented in Europe and North America, with certified operators in Peru, France, Turkey, and the United States. In 2025, a total of 15 thousand tonnes of RHS-certified hemp fiber was produced across 800 hectares in France and the United States.

Sisal, bast other, manila, kapok, agave, and ramie had a combined global production of approximately 0.7 million tonnes in 2025, accounting for around 0.5% of the global fiber market.[2]

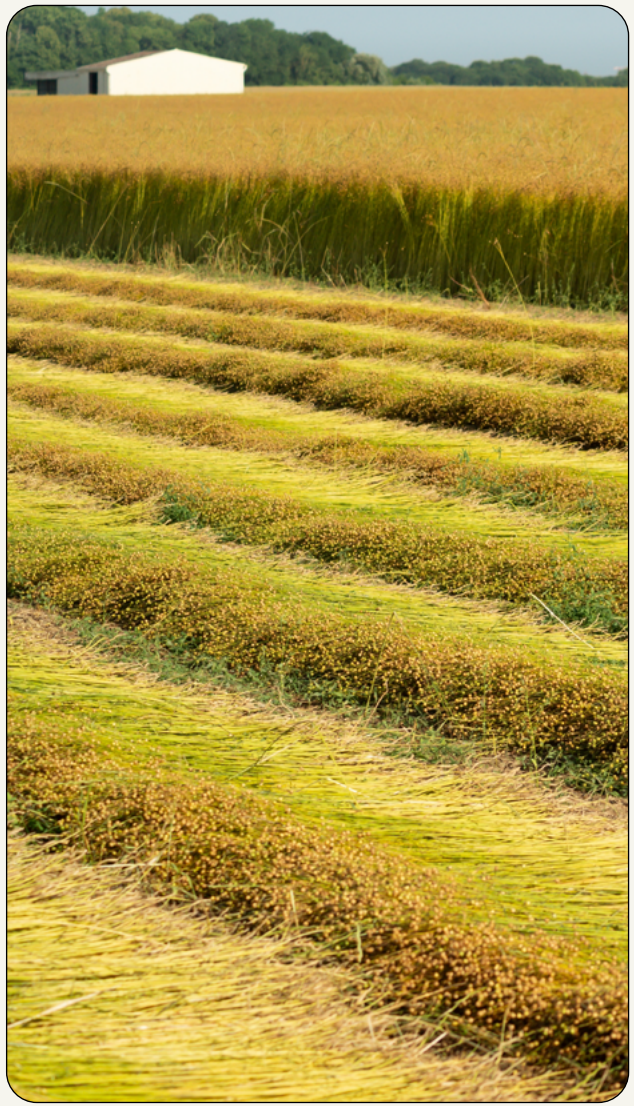


Photo: dsbedarieva (Shutterstock)

1. Textile Exchange based on FAOSTAT and total global production volumes compiled by Textile Exchange (see global fiber market). 2025 data was not available at the time of reporting, and 2024 data has therefore been used as a proxy.
2. The production of other plant-based fibers such as nettle are very low and are not currently included in this report. If these plants are dissolved into pulp, they are listed in the chapter on manmade cellulosic fibers. If polymerization is used to process them, they are listed as biosynthetics.

Part 1a: Global fiber production

Wool

Total wool production
A global overview

Wool is the most widely used animal-based fiber globally and accounted for 0.7% of all fiber produced worldwide in 2025.[1]

Virgin wool is produced from sheep and is considered a renewable fiber. Some of this virgin wool production is certified and/or verified to one or more programs/standards. For the purpose of this report, virgin wool produced under one or more of the programs/standards listed in the virgin wool section is referred to as "virgin, certified," whilst the remaining virgin wool produced is referred to as "conventional/unknown."[2]

Wool fiber can also be produced by recycling pre- or post-consumer wool waste.

In this chapter, data on virgin and recycled fibers are reported separately as they are different production systems and have different data collection mechanisms.

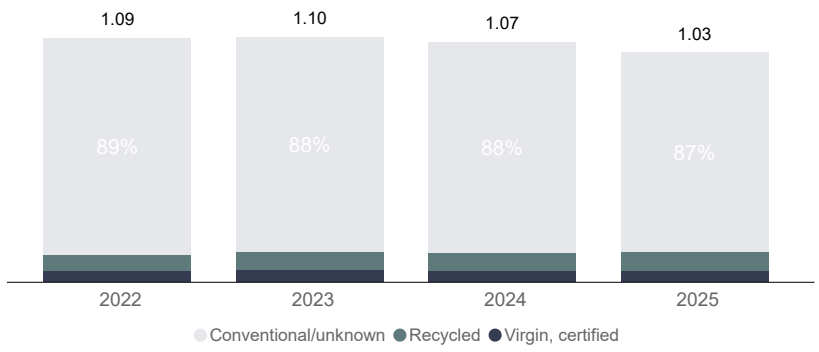
In total, it is estimated that 1.03 million tonnes of wool fiber (clean virgin wool plus recycled wool fiber) were produced globally in 2025.1 Of this, 0.94 million tonnes was virgin clean wool (equivalent to 1.78 million tonnes of greasy wool) and 0.09 million tonnes (8%) was recycled wool (all of which is considered textile-to-textile recycled fiber).[3] Of the virgin clean wool produced, 0.05 million tonnes (5% of total wool) was certified wool,[4] and 0.89 million tonnes (87%) was conventional/unknown.[2]

The following pages covering virgin wool report production as greasy wool since the data is referring to farm-level programs/standards.

Overall, total wool production, and wool's global market share, have been gradually declining over the years as a result of the rise in production of cheaper synthetic fibers.

Wool is used for a variety of products. See Part 2 of this report for information on global wool production by end use.

Global clean wool production by program type (million tonnes)



Source: Textile Exchange based on IWTO, Maia Research, and program owners.

1. International Wool Textile Organisation (IWTO). Market Information Edition 20. 2026.
2. Conventional/unknown includes production by programs for which data was not accessible or available.
3. Maia Research, 2026. Global Recycled Wool Market Report 2026. Commissioned report. A bottom-up calculation in a joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
4. Textile Exchange calculations based on the source referenced in footnote 1 and wool program data provided by the programs. Overlaps between programs are excluded where possible, but minor overlaps may remain.

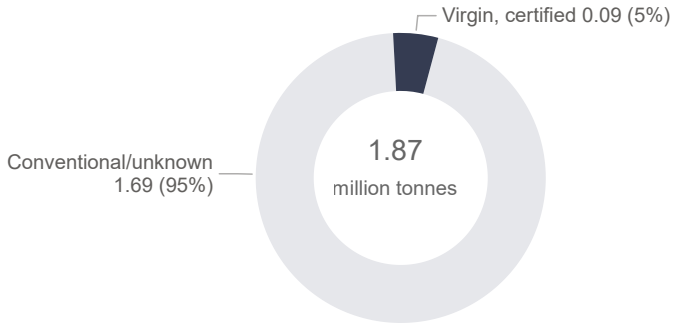
Virgin sheep wool
Production facts and figures

Globally, an estimated 0.94 million tonnes of virgin clean wool fiber, or 1.78 million tonnes of virgin greasy wool fiber, were produced in 2025.[1]

Wool produced according to the Responsible Wool Standard, ZQ, ZQ Regenerative Index (ZQRX)[2], SustainaWOOL® (formerly SustainaWOOL Green), ResponsiWOOL® (formerly Sustainablue),[3] Sustainable Cape Wool Standard, Climate Beneficial™ Verified, Climate Beneficial™ Verified-Transitional, and Land to Market™ increased slightly from an estimated 47,017 tonnes (~4.7% of total clean wool production) in 2024 to 47,133 tonnes (~5.0%) in 2025.[4]

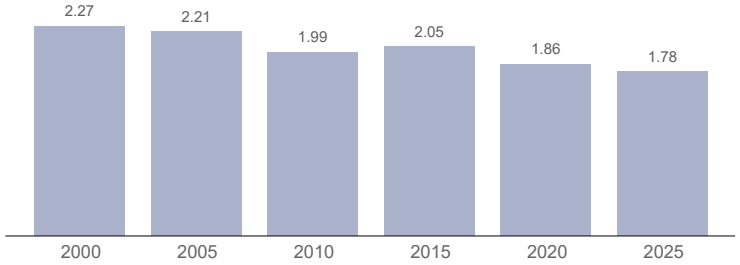
The Responsible Wool Standard (including equivalents) accounted for approximately 89% of this 5.0% market share in 2025 and accounted for 4.5% of the global greasy wool market. Including equivalents where applicable, ZQ accounted for 1.2%, Sustainable Cape Wool Standard farm audit for 0.1% (with a further 0.6% being certified under both the Responsible Wool Standard and the Sustainable Cape Wool Standard shearing module), ResponsiWOOL[3] for 0.2%, SustainaWOOL[3] for 0.1%, Climate Beneficial™ Verified for 0.004%, Climate Beneficial™ Verified-Transitional for 0.001%, and Land to Market™ for 0.5%. Due to the double certification of around 2.2% of global greasy wool production, 5.0% (and not 7.2%) was certified according to these programs.[5]

Global wool programs' greasy wool market share in 2025 (million tonnes)[5]



Source: Textile Exchange based on IWTO and program owners.

Global greasy wool fiber production (million tonnes)



Source: Textile Exchange based on IWTO.

NOTE: This chart covers virgin wool and not recycled wool.

1. IWTO. Market Information Edition 20. 2026.
2. ZQRX was renamed to ZQ+ in early 2026. In the reporting period 2025 it was still called ZQRX.
3. In July 2024, the SustainaWOOL Integrity Scheme (SWIS) transitioned into the Australian Wool Sustainability Scheme (AWSS). As part of this transition, from July 1, 2024, what was known as SustainaWOOL Green became SustainaWOOL, Sustainablue became ResponsiWOOL, and SustainaWOOL Gold was discontinued. Production reported for 2024 includes wool from both SWIS and AWSS. The key difference between SustainaWOOL and ResponsiWOOL is that the former includes only non-mulesed or ceased-mulesed wool, while the latter allows mulesing (or liquid nitrogen use) with pain relief.
4. Textile Exchange calculations based on the source referenced in footnote 1 and wool program data provided by the programs. Overlaps between programs are excluded where possible, but minor overlaps may remain.
5. Conventional/unknown includes production by programs for which data was not accessible or available.

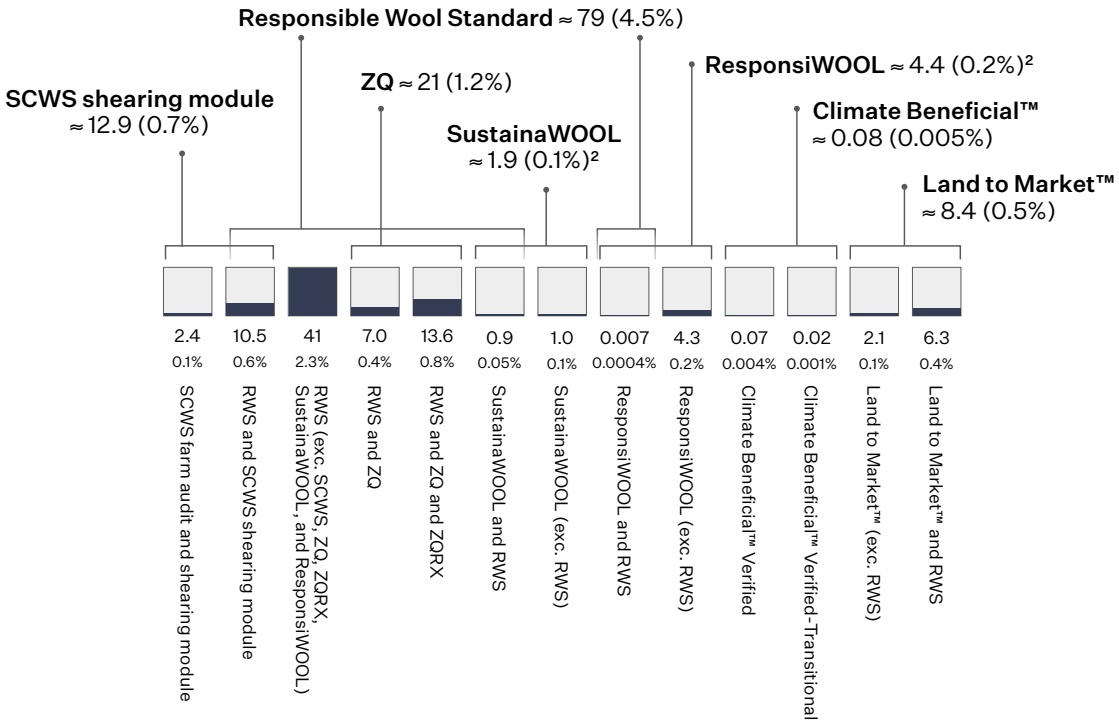
Virgin sheep wool
Production facts and figures

Data on production by weight was not available at the time of reporting for the following programs covering sheep, which were developed for the food sector but from which wool might have been an output: Certified Humane®, organic, Pasture for Life, Global Animal Partnership (G.A.P) Animal Welfare Certified, and A Greener World.

Responsible Wool Standard[1] greasy wool production increased from 70,389 tonnes (3.8% of global greasy wool) in 2024 to 79,135 tonnes (4.5%) in 2025. The fluctuation in Responsible Wool Standard production over the last few years reflects fluctuations in wool prices. 2024 saw low wool prices and certified wool often not being sufficiently rewarded by the market, whereas 2025 saw wool prices recover and premiums for certified wool return. There was a shortage in the supply of wool in some regions, which also contributed to increased prices.

The Communal Farmer Group Certification model, launched by Textile Exchange in 2021, has broadened access to certification, now including farmers with no or limited land tenure, such as nomadic and semi-nomadic farmers. Further adaptations to this model, which will be renamed to the Small Scale Farmer Group model, are being piloted as part of the Materials Matter Standard development, aiming to improve accessibility for these farmers.

Global greasy wool production by program in 2025 (thousand tonnes) and share of total greasy wool (%)



Source: Textile Exchange based on IWTO and program owners.

1. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.
2. In July 2024, the SustainaWOOL Integrity Scheme (SWIS) transitioned into the Australian Wool Sustainability Scheme (AWSS). As part of this transition, from July 1, 2024, what was known as SustainaWOOL Green became SustainaWOOL®, Sustainablue became ResponsiWOOL®, and SustainaWOOL Gold was discontinued. Production reported for 2024 includes wool from both SWIS and AWSS. The key difference between SustainaWOOL and ResponsiWOOL is that the former includes only non-mulesed or ceased-mulesed wool, while the latter allows mulesing (or liquid nitrogen use) with pain relief.

Virgin sheep wool
Production facts and figures

To date, Responsible Wool Standard certified wool covers fine wool (75%), medium wool (20%), and coarse wool (5%). By the end of 2025, an estimated 22 million sheep were under Responsible Wool Standard certification. In addition to animal welfare, the Responsible Wool Standard also addresses land management. By the close of 2025, over 30 million hectares of land were certified under the Responsible Wool Standard.

The Responsible Wool Standard has also seen strong adoption through the supply chain, particularly in key apparel wool-processing countries such as Italy and China.

Climate Beneficial™ Verified,[1] which operates in the United States, had 18,323 sheep under its program in 2025 and produced around 66 tonnes of greasy wool. In addition, and for the first time, 4,208 sheep were under the new Climate Beneficial™ Verified-Transitional program in 2025, producing around 15 tonnes of greasy wool.

Certified Humane® wool was produced on a small scale in Australia in 2025, but production data was not available at the time of reporting. Textiles made from this wool were not labeled Certified Humane® as some parts of the supply chain could not be audited.

A Greener World, which is active in the United States, Canada, the United Kingdom, Ireland, Portugal, Australia, Ecuador, and France, has four certifications that are used to certify animals producing wool and/or raw hides for leather. These certifications include Certified Animal Welfare Approved by A Greener World, Certified Grassfed by A Greener World, Certified Non-GMO by A Greener World, and Certified Regenerative by A Greener World. Production data was not available.

Land to Market™ currently operates across wool landscapes in Uruguay, Argentina, Chile, South Africa, Australia, New Zealand, Spain, and the United States. In 2025, an estimated 8,400 tonnes of greasy wool was produced from just around 2.1 million sheep.[2]

Photo: Pierre Girardin

1. The Climate Beneficial™ Fiber Program has changed its name to the Climate Beneficial™ Verified Program. Additionally, in 2024/25, it introduced a transitional track named Climate Beneficial™ Verified-Transitional in addition to Climate Beneficial™ Verified.
2. Significant overlap exists between Land to Market and Responsible Wool Standard wool certifications. Precise overlap data isn't available, but it is estimated that 75% of total Land to Market wool production in 2025 was also Responsible Wool Standard certified. This 75% has been excluded when calculating the overall market share of virgin wool covered by the programs that shared data for this report.

Virgin sheep wool
Production facts and figures

Pasture for Life had approximately 30 thousand sheep under Pasture for Life management in 2025, the same as in 2024. Data on the weight of wool produced from these sheep is not currently available.

Sustainable Cape Wool Standard, developed by Cape Wools SA, had a total of 2,403 tonnes of greasy wool certified under its farm audit in 2025, down from 3,892 tonnes in 2024. This decline is largely due to the validity of the standard reducing from three to two years, and outstanding re-audits still needing to be conducted. In addition to the greasy wool certified under the Sustainable Cape Wool Standard farm audit, a further 10,514 tonnes of Responsible Wool Standard certified greasy wool was certified under the Sustainable Cape Wool Standard shearing module in 2025, up from 8,160 tonnes in 2024.

SustainaWOOL® (formerly SustainaWOOL Green) production totaled 1,927 tonnes in 2025, down from 5,310 tonnes in 2024. Meanwhile, ResponsiWOOL® (formerly Sustainablue) production was 4,355 tonnes, down from 10,080 tonnes.[2] The SustainaWOOL Integrity Scheme (SWIS) transitioned into the Australian Wool Sustainability Scheme (AWSS) in July 2024, which includes new traceability requirements. The key difference between SustainaWOOL and ResponsiWOOL is that the former includes only non-mulesed or ceased-mulesed wool, while the latter allows mulesing when pain relief is used.

ZQ is a supplier program owned by private company Zentera (formerly New Zealand Merino) covering production of certified greasy wool in New Zealand and Australia. Total production was estimated to be 20,640 tonnes in 2025, up from 15,193 tonnes in 2024 when production temporarily declined due to a combination of extended dry periods and the cost of certification. ZQ accounted for around 1.2% of global sheep wool production in 2025, with all ZQ wool also being Responsible Wool Standard certified. Additional regenerative outcome measurement according to ZQRX (now called ZQ Plus) was carried out for around 66% of all ZQ wool produced in 2025.

Information on the market share of non-mulesed wool can be found on the non-mulesed wool market page.

Global greasy wool production by program (tonnes)[1]

1. Program data is based on information from program owners, received through email correspondence or from their websites. Production by program is the total production measured by weight per program including equivalents and overlaps with other standards.
2. In July 2024, the SustainaWOOL Integrity Scheme (SWIS) transitioned into the Australian Wool Sustainability Scheme (AWSS). As part of this transition, from July 1, 2024, what was known as SustainaWOOL Green became SustainaWOOL, Sustainablue became ResponsiWOOL, and SustainaWOOL Gold was discontinued. Production reported for 2024 includes wool from both SWIS and AWSS. Production reported for SustainaWOOL for 2023 and 2024 includes both SustainaWOOL Green and SustainaWOOL Gold production. The key difference between SustainaWOOL and ResponsiWOOL is that the former includes only non-mulesed or ceased-mulesed wool, while the latter allows mulesing (or liquid nitrogen use) with pain relief. Data reported on production by weight uses auction sales as a proxy. Data is not currently available on non-auction sales.
3. Market shares refer to the estimated percent of global virgin wool production covered by the program in 2024/25.

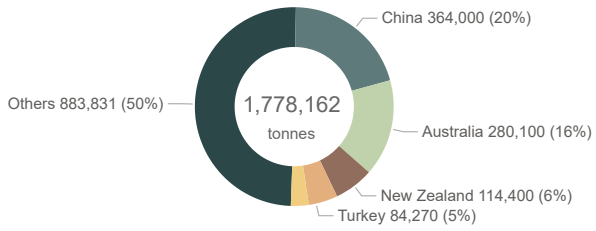
Virgin sheep wool

Where to find wool programs across the globe

In some key wool-producing countries/areas, Responsible Wool Standard certified wool had considerable market shares in 2025. Most significantly in terms of both weight and market share, 47% of all wool produced in South Africa was Responsible Wool Standard certified.[1] This figure was 95% in the Falkland Islands (Malvinas),2 53%in Uruguay, 38% in Chile, 34% in Argentina, 13% in New Zealand, 7% in Australia, 4% in the United States, 3% in India, 0.47% in the United Kingdom,[7] and 0.01% in China. Although the percentage of Responsible Wool Standard wool in Australia remains relatively low, because of the huge amount of wool that is produced in total, Australia produces the largest amount of Responsible Wool Standard wool by total weight in the world.

Climate Beneficial™ Verified wool had a market share of 0.7% in the United States, with an additional 0.2% under Climate Beneficial™ Verified-Transitional. ZQ (which is also Responsible Wool Standard certified) had a market share of 12% in New Zealand, 10% in South Africa, and 1% in Australia. The Sustainable Cape Wool Standard farm audit had a market share of 6% in South Africa. In Australia, SustainaWOOL® (formerly SustainaWOOL Green) had an estimated market share of 0.7% and ResponsiWOOL® (formerly Sustainablue) had a market share of 1.6%. Land to Market operated in the following countries but country-level data is not available: Uruguay, Argentina, Chile, South Africa, Australia, New Zealand, Spain, and the United States.

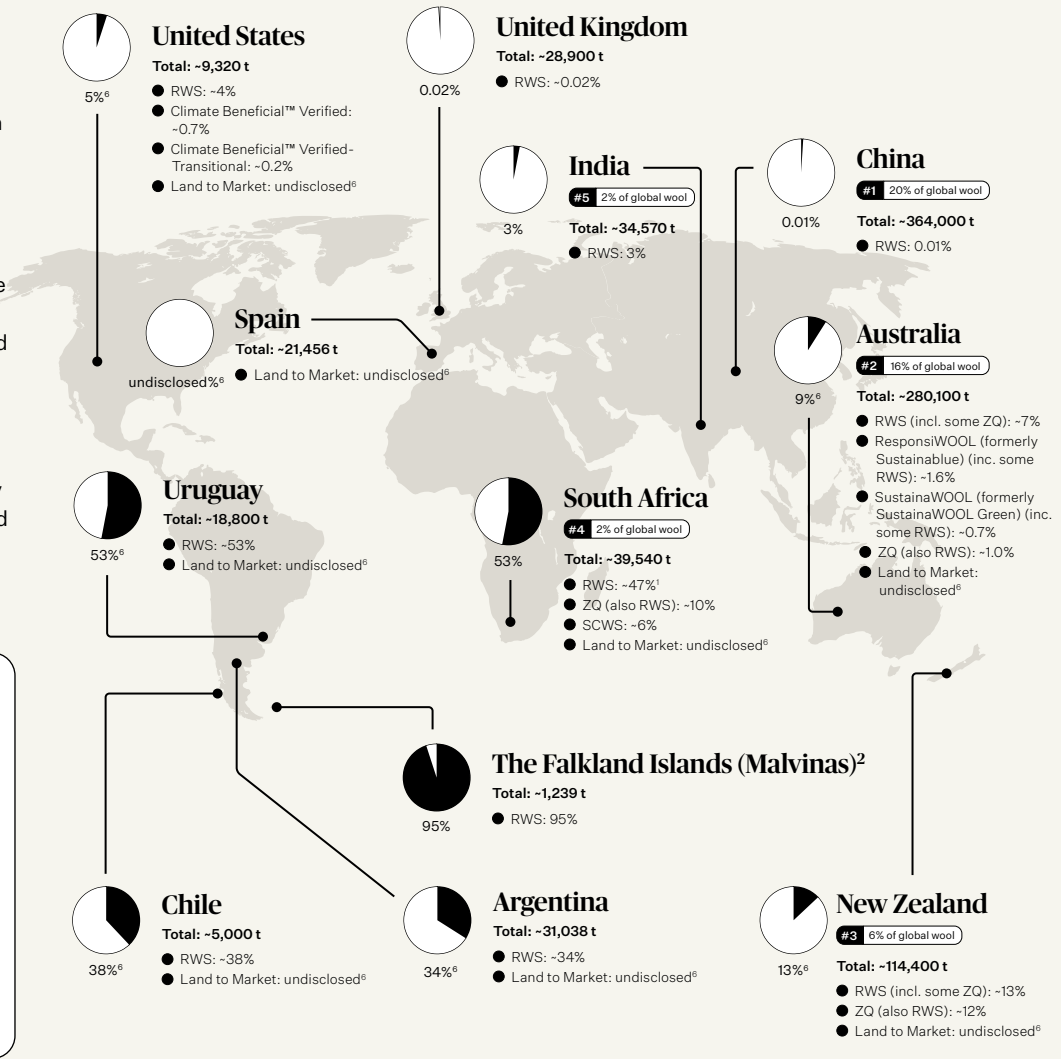
Global greasy wool production by country in 2025 (tonnes)



Source: Textile Exchange based on IWTO.

NOTE: This chart covers virgin wool and not recycled wool.

Market share of wool programs by country/area [3,4,5]



1. Textile Exchange uses Cape Wools SA data for RWS production in South Africa. Cape Wools SA is the official wool data collection body in South Africa and collects data on total wool production as well as for wool programs such as the Sustainable Cape Wool Standard, RWS, and Abelusi.
2. A dispute exists between the governments of Argentina and the United Kingdom concerning sovereignty over the Falkland Islands (Malvinas).
3. IWTO. Market Information Edition 20. 2026.
4. Only wool-producing countries with production according to the following programs are displayed: RWS, Climate Beneficial™ Verified, Sustainable Cape Wool Standard, SustainaWOOL (formerly SustainaWOOL Green), ResponsiWOOL (formerly Sustainablue), ZQ, ZQRX, and Land to Market. Data on production measured by weight was not available at the time of reporting for the following programs covering sheep that were developed for the food sector but from which wool might be an output: Certified Humane®, organic, Pasture for Life, G.A.P., Animal Welfare Certified, and A Greener World.
5. Market shares are given in percentages compared to overall wool production based on IWTO data as mentioned in footnote 3. Total wool production figures per country are for greasy wool.
6. Land to Market data is not disclosed on a per-country level for confidentiality reasons. In these cases, the percentage listed for the country's total wool that is covered by wool programs does not include Land to Market wool and is thus actually slightly higher. Some Land to Market wool production is also RWS-certified.
7. A revised figure for the United Kingdom was received after closing the Materials Market Report production data. This chart shows the updated figure. As the change is marginal on a global level, the global RWS number hasn't been restated.

Virgin sheep wool
The non-mulesed wool market

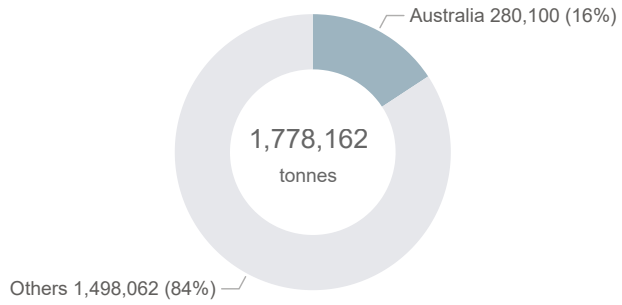
Mulesing, defined as the removal of wool-bearing strips of skin from between the hind legs (the breech area), tail skin folds, or tail skin wrinkles of sheep to prevent flystrike, remains a key issue in wool production.

Since New Zealand banned mulesing in 2018, Australia, which holds around 16%[1] of the global greasy wool market, is now the only country where the practice continues. Therefore, the risk of sourcing wool produced with mulesing practices remains high without a traceability system to ensure the wool is mulesing-free.

It's important to recognize that different forms of mulesing exist: traditional mulesing using shears, freeze mulesing (steining) with liquid nitrogen, and the use of rubber rings, commonly employed for tail docking or castration, to remove loose skin from the breech area. In September 2019, Four Paws and Humane Society International opposed freeze mulesing due to the severe pain it causes sheep. Both organizations, along with Textile Exchange, oppose any form of breech mutilation or modification.

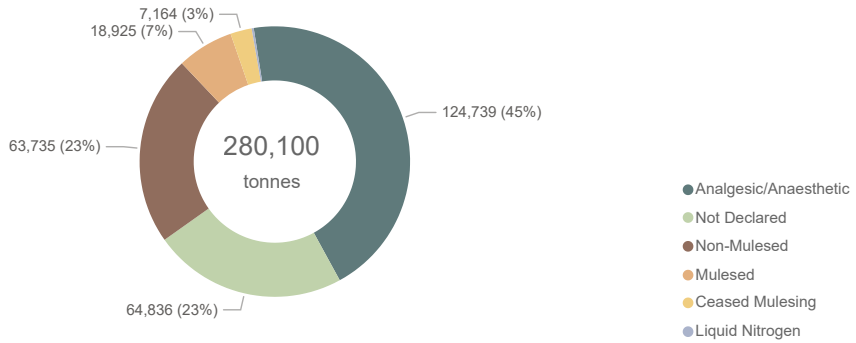
The definition of mulesing typically includes all forms of breech mutilation or modification, including steining. However, the Australian Wool Exchange (AWEX) only includes "the removal of skin from the breech and/or tail of a sheep using mulesing shears" in its definition.[2]

Australia's market share of global greasy wool production in 2025 (tonnes)[1]



Source: Textile Exchange based on IWTO.

Mulesing status of greasy wool in Australia in 2025 (thousand tonnes)[3]



Source: Textile Exchange based on AWEX and AWPFC.

1. IWTO. Market Information Edition 20. 2026. NOTE: The virgin wool production total for Australia has been revised for 2025 and previous years by IWTO to remove the wool slipe that was previously included in the Australia wool production totals.
2. Animal Health Australia. Australian Animal Welfare Standards and Guidelines for Sheep, Edition 1, Version 1. 2016.
3. Calculated by Textile Exchange based on the following sources:
   i. IWTO. Market Information Edition 20. 2026. Australian production data based on Australian Wool Innovation (AWI). **NOTE:** The 2024/25 Australian wool production volume reported by IWTO has been used as total virgin Australian wool production.
   ii. Australian Wool Exchange (AWEX), National Wool Declaration Integrity Program. 2026. **NOTE:** The mulesing-status split has been calculated based on AWEX-reported bale volumes.

Virgin sheep wool
The non-mulesed wool market

Since 2022, AWEX have also been tracking declarations on the use of freeze mulesing with liquid nitrogen (steining) as well as mulesing using shears.[1]

In the Australian National Wool Declaration (NWD) Version 10.0, effective July 2024, minor revisions were made to the NWD definitions to improve clarity.[2]

Certifications such as Responsible Wool Standard, ZQ, and SustainaWOOL® (formerly SustainaWOOL Green) ensure their wool is sourced from farms that have never mulesed or have ceased mulesing. Organic wool certified under the Organic Content Standard (OCS) must also be non-mulesed or from farms with a ceased-mulesing status as per the latest revision (OCS 3.0) launched in April 2020.

Additionally, since Global Organic Textile Standard (GOTS) version 6.0 was introduced in March 2020, GOTS has included mulesed wool in its list of prohibited fibers.

Australian National Wool Declaration (NWD) definitions as of Version 10.0, effective July 2024:[2]

M **Mulesed**:
Sheep in this mob have been mulesed[3] without the use of an analgesic and/or anesthetic product registered by APVMA.

AA **Analgesic/Anesthetic**:
Sheep in this mob have been mulesed[3] with the use of an analgesic and/or anesthetic product registered by APVMA.

LN **Liquid Nitrogen**:
Sheep in this mob have been treated with liquid nitrogen.

ND **Not Declared**

CM **Ceased Mulesing**:
No lambs born on this property in the last 12 months have been mulesed,[3] and no mulesed (or AA) ewes or wethers have been purchased in the last 12 months.
NOTE: For a property to be eligible for CM status, the answer to both CM property questions must be "no".

NM **Non-Mulesed**:
Sheep in this mob have not been mulesed[3] or treated with liquid nitrogen.

Photo: Pierre Girardin

1. AWEX. Annual Report 2021/2022. 2022. Revisions to the NWD definitions introduced in V9.3 include
   i. the Non-Mulesed (NM)definition refers to the exclusion of liquid nitrogen, and
   ii. introduction of Liquid Nitrogen (LN) for sheep treated with liquid nitrogen.
2. AWEX. National Wool Declaration (NWD) V10.0. Business Rules for MS. Issue 1. 2023. Revisions to the NWD definitions introduced in V10.0 include
   i. the addition of the following note to the Ceased Mulesing (CM) category: "Note: For a property to be eligible for CM status, the answer to both CM property questions must be No." and
   ii. revisions to the wording of the NM definition from "No sheep in this mob have been mulesed or treated with liquid nitrogen" to "Sheep in this mob have not been mulesed or treated with liquid nitrogen."
3. Mulesing definition adopted by AWEX: "The removal of skin from the breech and/or tail of a sheep using mulesing shears."

Recycled sheep wool
Production facts and figures

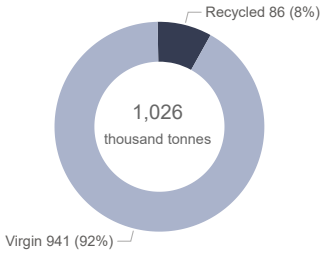
Wool recycling has a long history. Accounting for around 8% of the global wool market, recycled wool (all of which is considered textile-to-textile recycled fiber) had an estimated production total of 86 thousand tonnes in 2025, up from 83 thousand tonnes in 2024.[1,2]

The Italian district of Prato is a major producer of recycled wool, producing approximately 47 thousand tonnes of the fiber in 2025 (around 55% of the global total recycled wool).[3] Other major production centers for wool recycling are China and the Indian city of Panipat.

Recycled standards

The key standards for recycled wool are the Recycled Claim Standard (RCS), Global Recycled Standard (GRS),[4] and Cardato Recycled for recycled wool from Prato, Italy.

Global recycled wool market share 2025 (thousand tonnes)



Source: Textile Exchange based on IWTO and Maia Research.

NOTE: All recycled wool is considered textile-to-textile recycled fiber.

Photo: Claudia Gori

1. Maia Research. Global Recycled Wool Market Report 2026. Commissioned report. 2026.
2. IWTO. Market Information Edition 20. 2026.
3. Cardato. Email correspondence, March 2026.
4. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Part 1a: Global fiber production

Other animal fibers

Virgin mohair
Production facts and figures

Mohair is the hair of the Angora goat (not to be confused with the Angora rabbit, which produces Angora wool). In 2025, around 4,737 tonnes of greasy mohair fibers were produced globally.

Over half (57%) of the world's mohair (2,700 tonnes) was produced in South Africa. The remaining mohair was produced in Lesotho (680 tonnes, accounting for 14% of global mohair production), Turkey, (348 tonnes, accounting for 7%), Argentina (339 tonnes, accounting for 7%), the United States (230 tonnes, accounting for 5%), Australia (80 tonnes, accounting for 2%), New Zealand (30 tonnes, accounting for 1%), and other countries (330 tonnes, accounting for 7%).[1]

The South African mohair industry was governed by its own Sustainable Mohair Production Guidelines between 2009 and 2020, when the Responsible Mohair Standard was developed.

The Responsible Mohair Standard was the evolution of the increasing importance of, and demand for, an independent, third-party-audited, international standard. Textile Exchange launched the Responsible Mohair Standard in 2020.

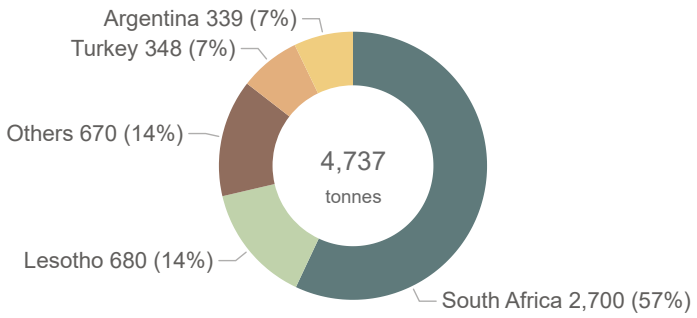
Along with the Responsible Alpaca Standard it aligns with the Responsible Wool Standard in terms of content covering animal welfare, land management, and people. The latest version, Responsible Mohair Standard 1.2, was released in 2021.[2]

The market share of Responsible Mohair Standard mohair was 47% of all mohair produced worldwide in 2025, down slightly from 2024 when the market share was 50%.

Responsible Mohair Standard fibers were produced in South Africa, Australia, and Argentina in 2025, with production totaling 2,246 tonnes. Responsible Mohair Standard accounted for 83% of all greasy mohair produced in South Africa, 10% of total mohair production in Australia, and 0.2% of total mohair production in Argentina in 2025.

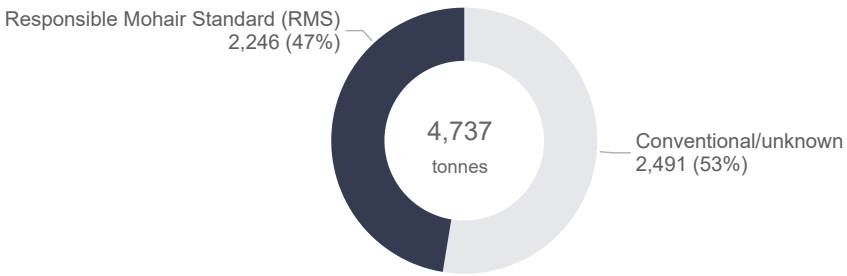
Mohair is used for a variety of products. See Part 2 of this report for information on the end uses.

Global greasy mohair fiber production by country in 2025 (tonnes)



Source: Mohair South Africa

Global market share of the Responsible Mohair Standard in 2025 (tonnes)



Source: Textile Exchange based on Mohair South Africa and RMS.

1. Mohair South Africa. Email correspondence, March 2026.
2. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Virgin cashmere
Production facts and figures

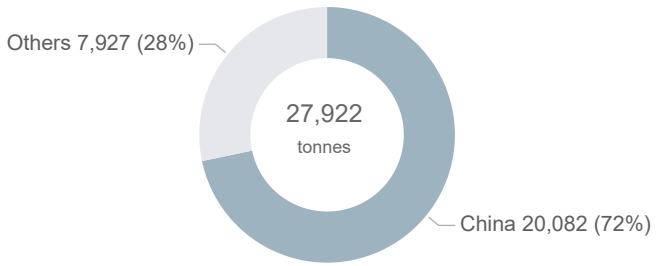
Globally, around 28,010 tonnes of greasy cashmere fibers were estimated to have been produced in 2025.[1] Around 72% of this was produced in China.[2]

The global market share of cashmere produced according to the listed programs[3]—Agronomists and Veterinarians Without Borders (AVSF) Sustainable Cashmere Certification, The Good Cashmere Standard® (GCS), Responsible Nomads (RN), and the Sustainable Fibre Alliance (SFA) Animal Fibre Standard—was estimated to be 21% (5,853 tonnes) in 2025, down slightly from 22% (6,256 tonnes) in 2024.[3]

The combined market share of these cashmere programs has fluctuated over the years in response to changes in market demand, certified cashmere not always being sufficiently rewarded by the market, and extreme weather events.

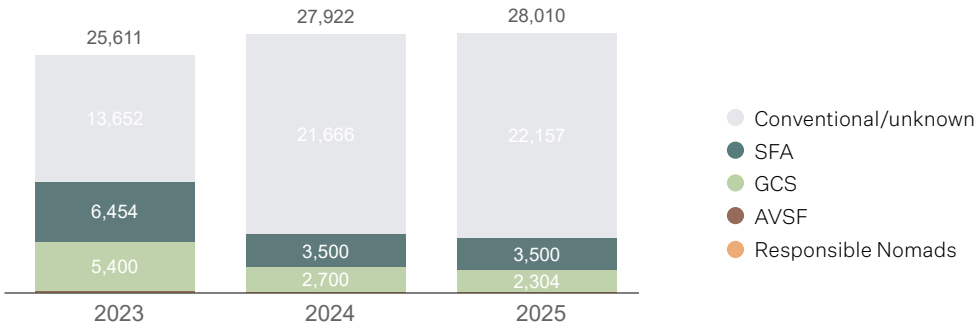
Cashmere is used for a variety of products. See Part 2 of this report for more information on the end uses.

Global cashmere production by country in 2025 (tonnes)



Source: Textile Exchange based on IWTO and National Bureau of Statistics of China.

Global cashmere production by program in 2025 (tonnes)



Source: Textile Exchange based on AVSF, GCS, IWTO, RN, and SFA.

1. International Wool Textile Organisation (WTO). Market Information Edition 20. 2026.
2. Textile Exchange based on National Bureau of Statistics of China. "Output of Cashmere." In National Data Database, under "Output of Livestock Products." Accessed December 3, 2025.
3. Textile Exchange compilation based on source (1) and data provided by the program(s): AVSF, GCS, RN, and SFA. It is possible that there is an overlap in the production weights reported for the different programs.

Virgin cashmere
Production facts and figures

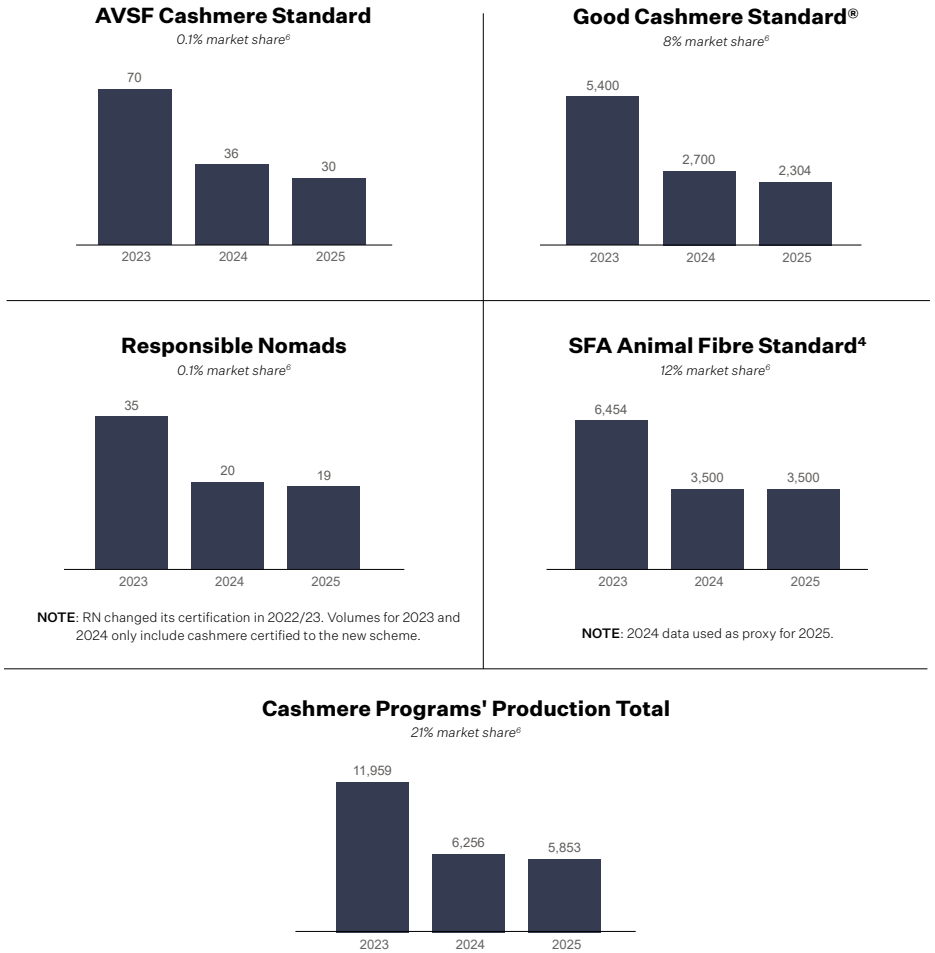
Agronomists and Veterinarians Without Borders (AVSF) produced 30 tonnes of greasy cashmere fiber from around 86 thousand goats in Mongolia under its Sustainable Cashmere Certification in 2025, accounting for 0.1% of cashmere produced worldwide.[1] The decline in AVSF's greasy cashmere production in 2024 and 2025 is attributed to low market demand causing producers to seek other market opportunities.

The Good Cashmere Standard® (GCS), developed by the Aid by Trade Foundation (AbTF) in 2019, produced 2,304 tonnes of greasy cashmere fiber in 2025 from around 2 million goats in China, representing a slight decrease from 2024, when 2,700 tonnes of fiber were produced. This decline is attributed to modest market demand resulting in the total weight of verified GCS cashmere being reduced to give priority to existing verified stock. GCS accounted for around 11% of all cashmere produced in China in 2025, and around 8% of all cashmere produced worldwide.[1,2]

The Responsible Nomads (RN) program, previously referred to as Green Gold and Animal Health program,[3] adopted a new certification scheme between 2022 and 2023. Only cashmere produced under the new scheme is included in the production weights reported since 2023. Between 2024 and 2025, production fell slightly from 20 to 19 tonnes.

The Sustainable Fibre Alliance (SFA), with its SFA Animal Fibre Standard (which replaces the former SFA Cashmere Standard v1.0), produced an estimated 3,500 tonnes of greasy cashmere fiber in 2025 across China and Mongolia, accounting for 12% of all cashmere produced worldwide.[4] The decline in SFA's greasy cashmere production in 2024 and 2025 compared to previous years is partly a result of an extreme winter weather event known as dzud, which caused a significant loss of livestock.

Cashmere production by program (tonnes)[5]



NOTE: RN changed its certification in 2022/23. Volumes for 2023 and 2024 only include cashmere certified to the new scheme.

NOTE: 2024 data used as proxy for 2025.

1. IWTO. Market Information Edition 20. 2026.
2. Textile Exchange based on National Bureau of Statistics of China, 2025.
3. RN: The Green Gold and Animal Health Project of the Swiss Agency for Development and Cooperation (SDC) and Mongolian National Federation of Pasture User Groups of Herders (MNFPUG) have partnered in the development and implementation of this program.
4. 2025 production data for SFA was not available at the time of reporting so 2024 production has been used as a proxy.
   NOTE: In December 2024, the SFA Cashmere Standard v1.0 was replaced with the SFA Animal Fibre Standard.
5. Program data is based on information from program owners, received through email correspondence or from their websites. The production data reported here includes the total production measured by weight per program including equivalents and overlaps with other standards. It is therefore possible that there is overlap in the production reported for the different programs.
6. Market shares refer to the estimated percent of global virgin cashmere production covered by the program in 2025.

Virgin alpaca
Production facts and figures

Alpaca fiber is the hair gathered from alpacas, a species of South American camelid native to Peru. Global alpaca fiber production was estimated to be 6,500 tonnes in 2025, of which 73% (4,713 tonnes) came from Peru.[1]

Historically, alpaca fiber was reserved for royalty due to its fine micron range. Today, most alpacas still reside in the highlands of Peru, at altitudes ranging from 11 thousand to 16 thousand feet (3,500 to 5 thousand meters). About 4 million alpacas live in Peru, with a small percentage in other countries like Bolivia, Australia, the United Kingdom, and the United States. The vast majority (95%) belong to the Huacaya breed, with the remaining 5% classified as Suri.

Huacaya fleece is the primary variation used in textile and knitwear production. The current supply chain is centralized in Peru, where around 90% of the processing is handled by two main suppliers with vertically integrated operations.

Additionally, several smaller producer groups operate independently. More than 90% of the fiber produced in Peru comes from smallholder farmers with small numbers of animals owned by each farmer. Currently, alpaca fiber is collected and sold by middlemen before being processed by the two large processors.[2]

Alpaca fiber is used for a variety of products. See Part 2 of this report for information on the end uses.

Key standards

The Responsible Alpaca Standard, launched in April 2021, is a voluntary global standard that addresses the welfare of alpacas, the land they graze on, and social welfare at the farm level.[3]

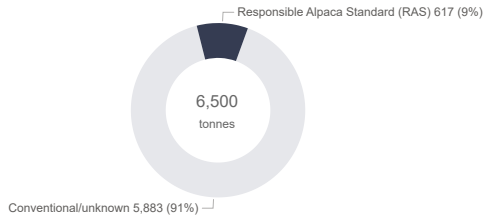
In 2025, the global market share of Responsible Alpaca Standard certified alpaca fiber was estimated to be 9% (617 tonnes). This is up from 8% (503 tonnes) in 2024.

In Peru, where all Responsible Alpaca Standard certified alpaca fiber was produced in 2025, 13% of the country's total alpaca fiber production was Responsible Alpaca Standard certified. Most of the certified fiber is already committed to specific supply chains, and it will take time to increase the fiber available on the open market.

Alpaca farming in Peru is based on extensive grazing and free-ranging husbandry systems, with animals adapted to their environment.

The Responsible Alpaca Standard was developed to verify that alpaca fiber comes from responsible sources covering farm-level animal welfare practices, land management, and social welfare. Chain of custody certification ensures that fiber from certified farms is properly identified and tracked. The Responsible Alpaca Standard is part of the Responsible Animal Fiber (RAF) framework, along with the Responsible Wool Standard and the Responsible Mohair Standard.[3]

Global market share of Responsible Alpaca Standard in 2025 (tonnes)



Source: Textile Exchange based on IWTO and RAS.

Photo: Alejandra Orosco

1. IWTO. Market Information Edition 20. 2026.
2. Peru's Ministry of Agriculture and Irrigation (MINAGRI). Potencial Productivo y Comercial de la Alpaca. 2019.
3. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Virgin silk
Production facts and figures

Silk is an animal-based fiber that accounts for a relatively small share of the overall fiber market. Approximately 300 thousand households are involved in raw silk production.[1]

In 2025, global raw silk production was estimated to be 93,988 tonnes.[2,3]

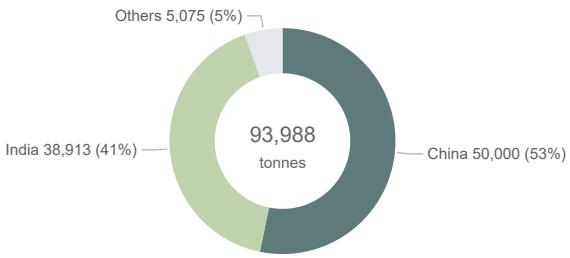
While global silk production more than doubled between 1990 and 2015, it has since more than halved again.[4,5]

China and India together accounted for an estimated 95% of global silk production in 2025, with China accounting for 53% and India for 41%.[3]

Silk programs include organic standards such as the India Organic Regulation, the Organic Content Standard (OCS), and the Global Organic Textile Standard (GOTS). Other standards include Certified Wildlife Friendly® and the World Fair Trade Organization (WFTO). For recycled silk, the Global Recycled Standard (GRS) and the Recycled Claim Standard (RCS) can be used.[5]

Silk is used for a variety of products. See Part 2 of this report for more information on end uses.

Global silk production in 2025 (tonnes)



Source: Textile Exchange based on FAOSTAT.

Photo: M Production (Shutterstock)

1. Discover Natural Fibers Initiative (DNFI). "40 Million Households Produce Natural Fibers". 2020.
2. Raw silk is defined as "Obtained by reeling the filaments from cocoons. Not thrown." Source: Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). "FAOSTAT Definitions and Standards." Accessed August 19, 2026.
3. FAOSTAT. "Food and agriculture data". Accessed January 2026. 2023 data was the latest available at the time of reporting and is therefore used in this report as a proxy for 2024 and 2025.
4. Historical FAOSTAT data on silk production has been revised a number of times by FAOSTAT. Textile Exchange always reports the latest FAOSTAT data available at the time of reporting.
5. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Other virgin animal fibers

Production facts and figures

Other animal fibers (beyond sheep wool, cashmere, mohair, alpaca, and silk) include those from yaks, camels, llamas, vicuñas, guanacos, and Angora rabbits.

Yak fiber, primarily sourced from the Himalayas and regions of Mongolia and Central Asia, has been used in the Himalayan region for over a thousand years and has recently gained recognition as a premium fiber in the international fashion industry. In 2025, an estimated 3,465 tonnes of yak hair were produced.[1]

Camel hair is sourced from camels, with major suppliers including Mongolia, Tibet, Afghanistan, Iran, Russia, China, New Zealand, and Australia. In 2025, an estimated 6,092 tonnes of camel hair were produced.[1]

Llama, vicuña, and guanaco, all camelids native to South America, also provide valuable fibers. While llamas are domesticated, guanacos and vicuñas are wild camelids related to llamas and alpacas, living in the high alpine areas of the Andes. Their extremely fine wool is highly valuable. In 2025, an estimated 3 thousand tonnes of llama wool, 7 tonnes of vicuña wool, and 2 tonnes of guanaco wool were produced.[1]

Angora wool comes from Angora rabbits (distinct from mohair, which is sourced from Angora goats). In 2025, an estimated 500 tonnes of angora wool were produced.1

Other animal fibers are used for a variety of products. See Part 2 of this report for more information on end uses.

Photo: Alejandra Orosco

1. IWTO. Market Information Edition 20. 2026. Weights reported are the greasy weight.

Part 1a: Global fiber production

Manmade cellulosic fibers

Total manmade cellulosic fibers production

A global overview

Manmade cellulosic fibers (MMCFs), including viscose, acetate, lyocell, modal, and cupro, had a combined global fiber market share of around 7% in 2025.[1]

Virgin MMCFs are generally produced from the cellulose found in trees harvested from natural or semi-natural forests and tree plantations. A large share of virgin MMCFs is produced using Forest Stewardship Council® (FSC®) and/or Programme for the Endorsement of Forest Certification (PEFC)-certified or controlled feedstock. For the purpose of this report, the remainder of virgin MMCFs is referred to as conventional/unknown.[2]

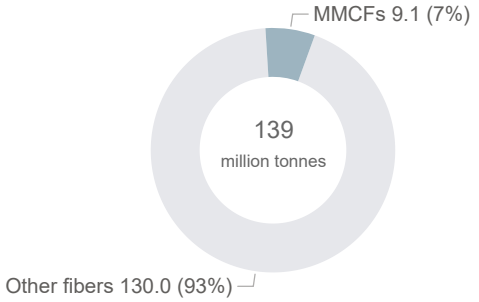
MMCFs can also be made from recycled feedstocks (which include MMCFs made from any recycled cellulosic fiber, not only MMCF-to-MMCF recycling).

In this chapter, data on virgin and recycled MMCFs is shared separately as they are different production systems and have different data collection mechanisms.

In total, it is estimated that 9.1 million tonnes of MMCFs were produced globally in 2025.[1] Of this, 6.1 million tonnes (67%) were virgin MMCFs produced using FSC- and/or PEFC-certified or controlled feedstock,[3] 2.9 million tonnes (32%) were virgin MMCFs from conventional/unknown sources,[2] and 0.1 million tonnes (1%) were MMCFs made from recycled feedstocks (almost all of which is considered textile-to-textile recycled fiber).[4]

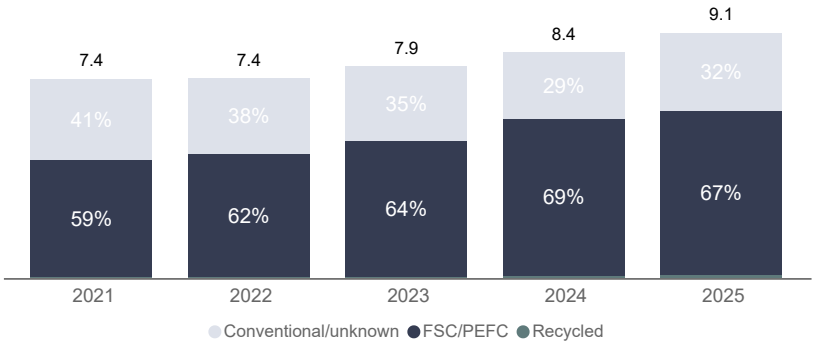
MMCFs are used for a variety of products. See Part 2 of this report for information on end uses.

Global market share of MMCFs in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Global MMCF production by program type (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

1. Maia Research. Global Manmade Cellulosic Fiber Market Report 2026. Commissioned report. 2026. A joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
2. Conventional/unknown includes production by programs for which data was not accessible or available.
3. Textile Exchange estimate based on publicly available information such as audit reports and on Textile Exchange's own supplier mapping.
4. Textile Exchange based on Maia Research. Global Recycled Manmade Cellulosic Fiber Market Report 2026 and Global Manmade Cellulosic Fiber Market Report 2026. Commissioned reports. 2026.

Virgin manmade cellulosic fibers

Production facts and figures

Globally, an estimated 9.1 million tonnes of manmade cellulosic fibers (MMCFs)— including viscose (rayon), acetate, lyocell, modal, and cupro—were produced in 2025.[1]

Global MMCF production has almost tripled since 1990, when annual production was just over 3 million tonnes, and is expected to continue growing in the coming years.[1]

Viscose (rayon) made up the majority of the global MMCF market (79%), with production totaling around 7.2 million tonnes in 2025.[1]

Acetate had a market share of around 12% of all MMCFs in 2025, with production estimated to be 1.1 million tonnes,[1] but is mainly used for non-textile applications.

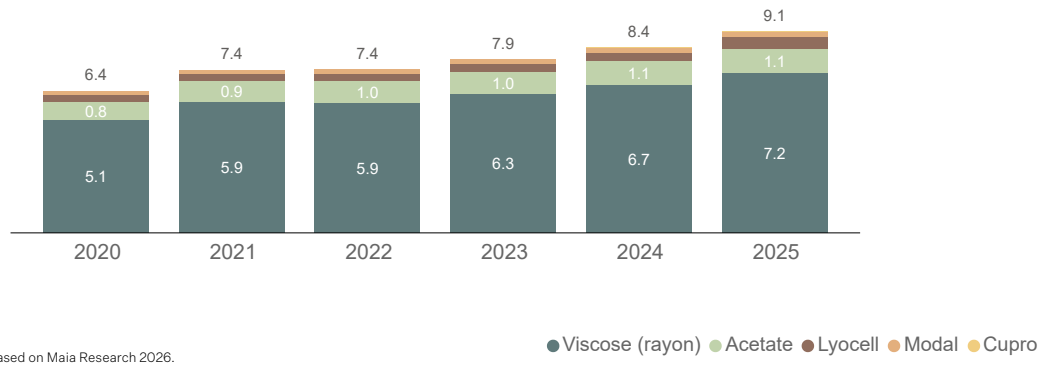
Lyocell was the third-most used MMCF type in 2025, after viscose and acetate. It had a market share of around 6% of all MMCFs, and a production total of around 0.5 million tonnes.[1]

Modal had a market share of around 3% of the total MMCF market in 2025, with a production total of around 0.2 million tonnes.[1]

Cupro had a market share of around 0.2% of the total MMCF market. There was only one supplier of cupro, which produced around 0.02 million tonnes in 2025.[1]

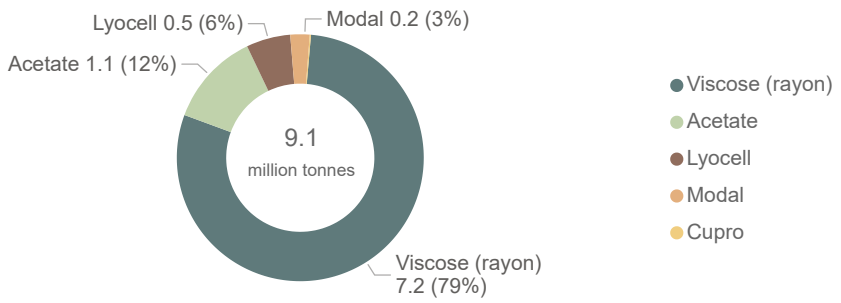
Currently, manmade cellulosic fibers are primarily produced from wood. Around 1.5% of the global market is currently made from textile-to-textile recycled fibers or other alternative feedstocks.[1]

Global MMCF production (million tonnes)



Source: Textile Exchange based on Maia Research 2026.

Global MMCF production by type in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research 2026.

1. Maia Research. Global Manmade Cellulosic Fiber Market Report 2026. Commissioned report. 2026.

Virgin manmade cellulosic fibers

Standards for feedstock

MMCFs produced using FSC® and/or PEFC-certified or controlled feedstock had an estimated market share of around 67% of all MMCFs in 2025.[1]

FSC, founded in 1993, is an international member-led organization that sets standards for responsible forest management and chain of custody. The first textile products with consumer-facing FSC labels hit the market in 2020.[2]

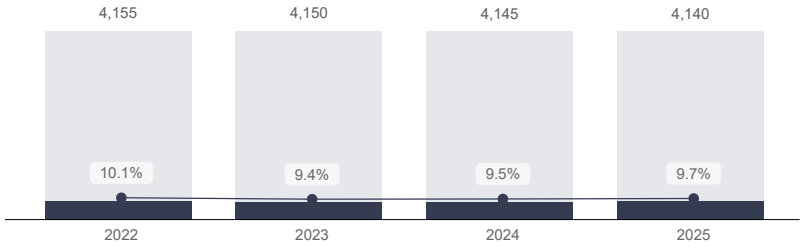
PEFC, founded in 1999, is a global alliance of national forest certification systems and is the largest forest certification system worldwide. Brands and retailers first started using consumer-facing communication for PEFC textiles in 2022.[3]

Overall, the share of global forest area covered by FSC and/or PEFC increased slightly, from around 9.5% in 2024 to around 9.7% in 2025.[4,5]

In total, around 7.1% of all certified forests were covered by PEFC and its equivalents in 2025, with roughly half of this covered by Sustainable Forestry Initiative® (SFI®), a key PEFC-endorsed forest certification system operational in Canada and the United States. Approximately 4.1% of all forests were covered by FSC in 2025.

Due to the double certification of around 1.6% of all forests, 9.7% (and not 11.3%) of all forests were covered by FSC and/or PEFC in 2025.[3,4,5]

Forest programs (million hectares) and % of forest area covered by the programs

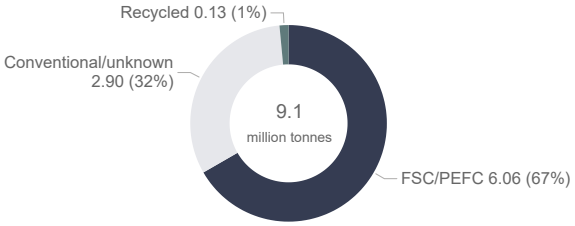


Source: Textile Exchange based on FAO,[4] FSC, PEFC, and SFI.

NOTE: Volumes include both certified and controlled volumes.

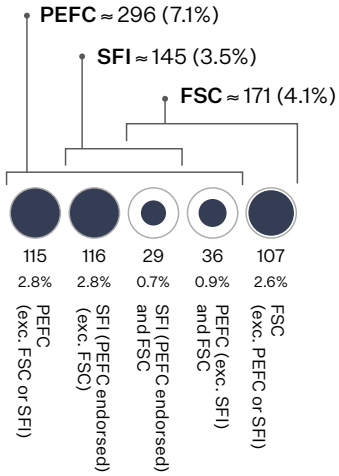
Certified (total) FSC and/or PEFC · Others · % of Certified Forest Area

Global MMCF production by feedstock in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research, CanopyStyle audit reports, and other additional sources.

Forest programs in 2025 (million hectares) and share of total forest area (%)



1. Textile Exchange estimate based on publicly available information and its own supplier mapping.
2. FSC. Email correspondence.
3. PEFC. Email correspondence.
4. Food and Agriculture Organization of the United Nations, "Land Use", in Corporate Statistical Database, under "Land, Inputs, and Sustainability → Land". Accessed November 2025.
5. Based on FSC and PEFC press releases from June 2024, the FSC Database, the PEFC Database, and email correspondence with FSC, PEFC and SFI.

Virgin manmade cellulosic fibers

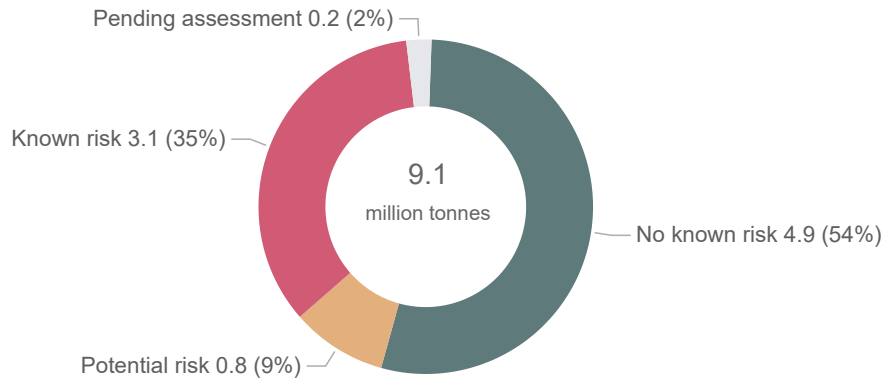
Standards for feedstock

Since their launch in 2017, the CanopyStyle Audits have become the leading assessment of MMCF suppliers' raw material sourcing practices. The results of the audits are fed into Canopy's annual Hot Button Report, which compares the performance of MMCF producers across several impact categories.

In 2025, 98% of the world's MMCF producers were rated in the Hot Button Report, with contributions from 30 producers globally.

54% of global MMCF production was awarded green shirts (either dark, medium, or light green shirt categories) in 2025.[1] These producers, categorized as having no known risk, have been audited and assessed as being at low risk of sourcing MMCFs from Ancient and Endangered Forests or have taken substantive action to eliminate known risks in their supply chains. This compares to 50% in 2021, 53% in 2022, 54% in 2023, and 53% in 2024.[1]

Risk status of global MMCF production rated in CanopyStyle's Hot Button Report 2025



Source: Textile Exchange based on Canopy's 2025 Hot Button Report.

NOTE: Capacity is used as a proxy for production volumes. The no known risk category includes dark, medium, or light green CanopyStyle shirt colors. Potential risk includes light green yellow, yellow, and yellow with red shirt colors. Known risk includes red and light green with red shirt colors and those with known risk. Pending assessment includes those newly engaged, newly engaged and acting, and not yet assessed.

1. Canopy. 2025 Hot Button Report. 2026.

Virgin manmade cellulosic fibers

Standards for pulp and fiber

Pulp and fiber

Zero Discharge of Hazardous Chemicals (ZDHC) expanded the scope of its work to cover fiber production in 2020. It released guidelines initially focused on viscose and modal staple fiber, which were expanded in 2023 to also cover lyocell, cupro, and acetate. The guidelines provide MMCF suppliers with unified criteria for measuring output indicators as well as an aligned approach for the recovery of sulfur compounds, part of the inputs, and by-products generated during the production process. The latest version, the ZDHC MMCF Guidelines Version 3.0, released in October 2025, restructured the guidelines to align with broader ZDHC frameworks by separating expectations into input management, process management, and output management. The guidelines establish integrated expectations for input feedstock sourcing, input chemical management, chemical recovery, discharged wastewater, sludge disposal, and air quality for manufacturing facilities producing manmade cellulosic fibers.

In October 2024, ZDHC published Dissolved Pulp Guidelines V1.0, created to address the use and discharge of chemicals in wood-based dissolved pulp manufacturing. The guidelines include chemical recovery, wastewater, and air emission requirements.

Bluesign has developed specific criteria for fiber production that were added as Annex Fiber Manufacturing to its bluesign Criteria for production sites in March 2020. These criteria apply to the manufacturing of synthetic fibers, for example, polyester and polyamide, as well as MMCFs. For MMCFs, this includes criteria for feedstock, pulp, and fiber production. One MMCF supplier has already become a bluesign System Partner and produces bluesign-approved fibers. Bluesign is currently revising the bluesign criteria to take into account industry developments and expects to publish the revised version in 2026.

Further standards that can be used at the pulp and/or fiber level include the Cradle to Cradle Material Health Certificate Standard, OEKO-TEX® STeP certification, and the EU Ecolabel for textile products.

Another option is production in compliance with the EU's Best Available Techniques (BAT) Reference Documents (also referred to as BREFs).

For standards related to MMCFs made from recycled feedstocks, see the recycled manmade cellulosic fibers page.

Photo: Teresa Freitas

Recycled manmade cellulosic fibers

Supplier updates

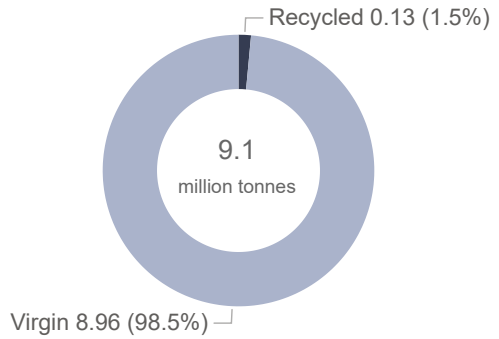
The market share of MMCFs made from recycled feedstocks (virtually all of which is considered textile-to-textile recycled fiber and includes MMCFs made from any recycled cellulosic fiber, not only MMCF-to-MMCF recycling) increased from an estimated 1.1% in 2024 to 1.5% in 2025.[1] Amid ongoing research and development, this figure is expected to continue increasing in the coming years.

In 2025, the recycled feedstock used was almost exclusively textile based, from either cotton linter or pre-consumer cotton textile residues and a small percentage of post-consumer cotton textiles. MMCFs made from alternative feedstocks, such as agricultural residues, are extremely small-scale, and most are at pilot stage. All commercially available (beyond laboratory stage) recycled MMCFs were made from textile feedstock.

Canopy estimates that recycling just 25% of global pre- and post-consumer cotton textile waste, plus 25% of MMCF textile waste, could replace all wood fiber currently used to manufacture dissolving pulp.[2]

For MMCFs made from recycled materials, the Recycled Claim Standard (RCS), Global Recycled Standard (GRS),[3] and SCS Recycled Content Certification can be used. The first suppliers of MMCFs made from recycled feedstocks have been RCS-certified.

Global MMCF production in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

NOTE: In 2025, the recycled feedstock used was almost exclusively textile based and therefore considered textile-to-textile recycled fiber.

1. Textile Exchange based on Maia Research. Global Recycled Manmade Cellulosic Fiber Market Report 2026 and Global Manmade Cellulosic Fiber Market Report 2026. Commissioned reports. 2026. A bottom-up calculation in a joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
2. Canopy. SURVIVAL. A Plan for Saving Forests and Climate: A Pulp Thriller. 2020.
3. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Part 1a: Global fiber production

Polyester

Total polyester production

A global overview

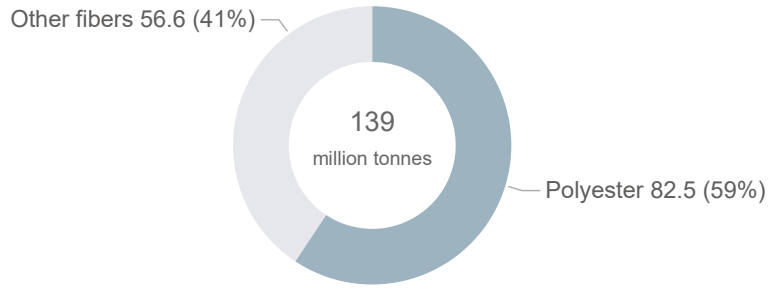
Polyester is the most widely produced fiber worldwide, accounting for 59% of all fiber production in 2025.[1]

Most polyester produced globally is made from new virgin fossil-based feedstocks. Polyester can also be produced from recycled feedstocks, most commonly plastic bottles, with small amounts produced using other pre- or post-consumer materials. Biobased and, more recently, CO_2-based feedstocks are emerging materials.

In total, it is estimated that 82.5 million tonnes of polyester were produced globally in 2025, of which 72.8 million tonnes (88%) were virgin fossil-based polyester,[1] 9.7 million tonnes (12%) were recycled polyester,[2] and 0.01 million tonnes (0.01%) were biobased polyester.[3] With a production weight of 0.3 million tonnes, textile-to-textile recycled polyester fiber made up 3% of all recycled polyester,[2] equivalent to 0.3% of total polyester and 0.2% of global fiber production.

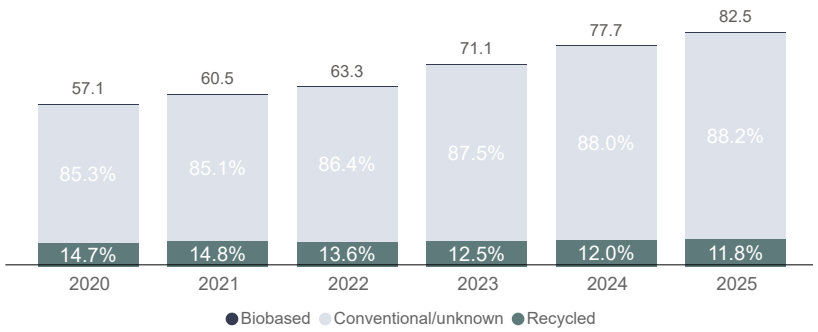
Polyester fiber is used for a variety of products. See Part 2 of this report for information on end uses.

Global market share of polyester in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Global polyester production by program type (million tonnes)



Source: Textile Exchange based on Maia Research, nova-Institute and global data compilation.

1. Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.
2. Maia Research. Global Recycled Polyester Fiber Market Report 2026. Commissioned report. 2026.
3. Estimate based on: nova-Institute. Bio-based Building Blocks and Polymers: Global Capacities, Production and Trends 2025–2030. 2026. And Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.

Recycled polyester
Production facts and figures

Recycled polyester fiber production increased from around 9.3 million tonnes in 2024 to around 9.7 million tonnes in 2025.[1]

However, due to the larger increase in virgin polyester production (from 68 to 73 million tonnes),[2] there was actually a decrease in the overall market share of recycled polyester from an estimated 12.0% of global polyester production in 2024 to 11.8% in 2025.[3]

Feedstock types

Recycled polyester is predominantly made from polyethylene terephthalate (PET) plastic bottles, which make up an estimated 97% of all recycled polyester feedstock.[2] Recycled polyester can also be made from other post-consumer plastics such as ocean waste and packaging waste.

Textile-to-textile recycled polyester

Textile-to-textile recycled polyester fiber makes up just 3% of all recycled polyester fiber, compared to 2.6% of all recycled polyester in 2024. This means 0.3% of all polyester fiber in 2025 was textile-to-textile recycled, the same as 2024 due to the growth of virgin fossil-based polyester.[1]

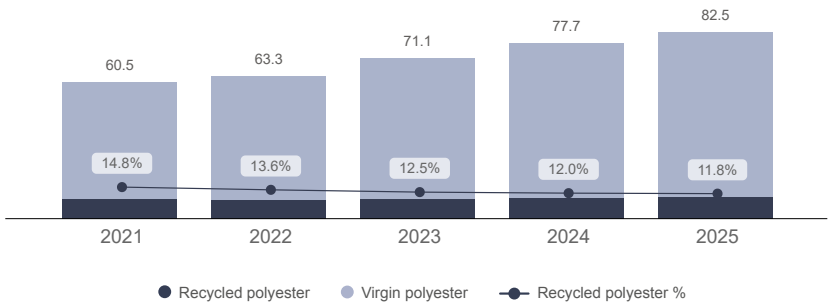
Amid increasing demand for post-consumer bottles within the bottle industry, as well as the wider packaging industry and other sectors, competition for post-consumer bottles is increasing. Textile-to-textile recycling is an important strategy for ensuring future feedstock supplies for the recycled polyester textile industry, improving waste management and aligning with upcoming legislation.

Recycling types

Most recycled polyester is currently produced through mechanical recycling. Key challenges associated with chemical and biological recycling include high costs and investment requirements, infrastructural and technological challenges, and limited access to suitable and consistent feedstocks. As new operations begin commercial production of chemically recycled polyester and other companies are investing in the research and development phase, the market share of chemically recycled polyester is expected to grow in the coming years.

For more information, see Textile Exchange's 2024 report The Future of Synthetics, which explores the technologies and infrastructure needed to facilitate the transition away from virgin fossil fuel-derived synthetic materials, as well as Textile Exchange's Life Cycle Assessment for Polyester, published in 2026.

Global polyester production (million tonnes) and share of recycled (%)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

NOTE: Virgin polyester in this chart includes small volumes of biobased polyester.

1. Maia Research. Global Recycled Polyester Fiber Market Report 2026. Commissioned report. 2026. A bottom-up calculation in a joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
2. Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.
3. Textile Exchange. 2026. Based on sources listed in footnotes (1) and (2).

Recycled polyester
Production facts and figures

Standards

The main standards used for recycled polyester include the Global Recycled Standard (GRS), the Recycled Claim Standard (RCS),[1] and the SCS Recycled Content Standard.

In December 2024, Zero Discharge of Hazardous Chemicals (ZDHC) released its Recycled Polyester Guidelines V1.0, with the aim of transforming sustainable chemical management within the polyester recycling sector. This covered both mechanical and chemical recycling processes. The guidelines provide recycled polyester suppliers with a harmonized framework for monitoring input feedstock, chemical usage, chemical recovery, and environmental outputs, including wastewater, sludge, and air emissions.

Ocean-bound plastic

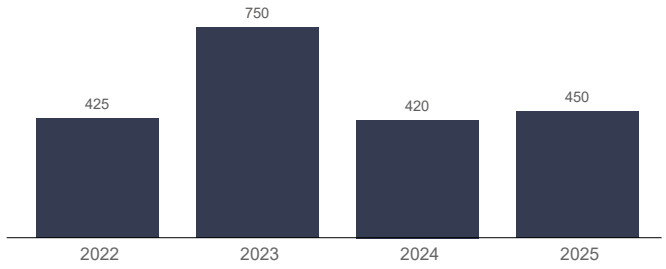
More than 11 million tonnes of plastic end up in the oceans every year.[2] An increasing number of initiatives are working on the collection of ocean-bound or ocean plastic[3] as feedstock for recycled polyester.

Zero Plastic Oceans launched the Ocean Bound Plastic (OBP) Certification in 2020, in collaboration with the certification body Control Union. It is designed to encourage the removal of ocean-bound plastic from the environment by adding value to the effective collection and treatment of plastic before it reaches the ocean.

A total of 450 tonnes of recycled polyester fiber was OBP-certified in 2025, up from 420 tonnes in 2024. It's important to note that most recycled OBP is sold to non-certified buyers, meaning the final usage of OBP cannot be tracked precisely. The majority of OBP-certified recycled polyester fiber was produced in China in 2025, with small amounts also produced in Indonesia and India.

In addition to the 450 tonnes of OBP-certified fiber produced in 2025, 9,600 tonnes of reclaimed OBP-certified feedstock was also produced, originating predominantly from China but also from Malaysia, Indonesia, Thailand, India, Pakistan, Australia, New Zealand, the United States, Taiwan, Japan, Republic of Korea (South), and the Netherlands.[4]

Ocean Bound Plastic certified fiber production (tonnes)



Source: Ocean Bound Plastic 2026

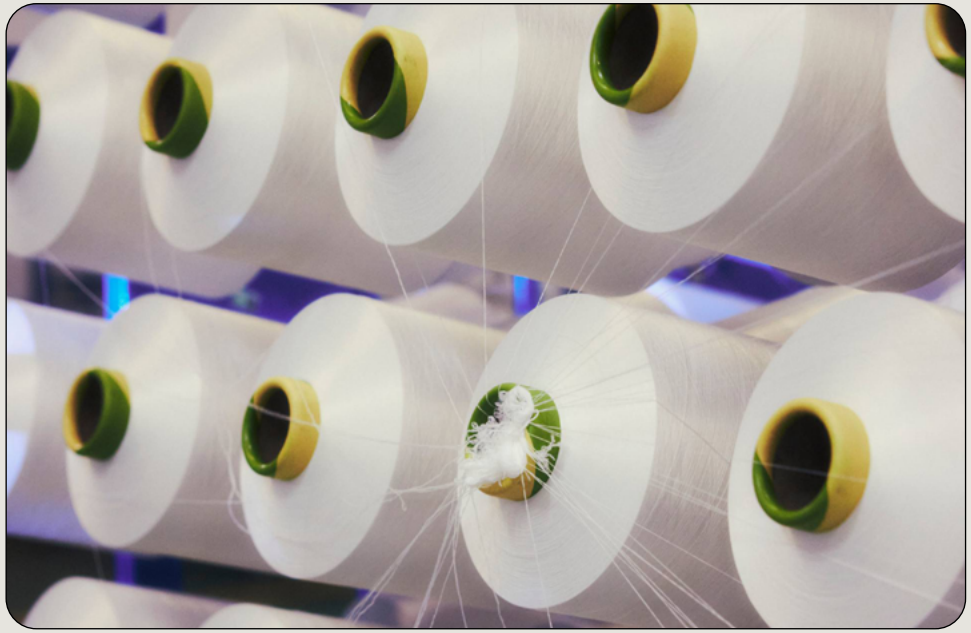


Photo: Johnny Man

1. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.
2. UNEP, 2021. From Pollution to Solution a Global Assessment of Marine Litter and Plastic Pollution.
3. Ocean-bound plastic is generally defined as abandoned plastic waste located within 50 km from shores where waste management is inexistent or inefficient. Source: Ocean Bound Plastic Certification. "What is Ocean Bound Plastic (OBP)?"Accessed April 15, 2026.
4. Zero Plastic Oceans. Email correspondence, February 2026.

Biobased and CO_2-based polyester

Emerging materials

All synthetic fibers can, in theory, be made from new virgin fossil-based feedstocks, recycled feedstocks, biobased feedstocks, or CO_2-based feedstocks. Biobased and, more recently, CO_2-based feedstocks are emerging materials.

Biobased polyester

The market share of biobased polyester is estimated to be around 0.01% of total polyester production.[1]

Many biosynthetic materials that exist on the market today are partially biobased. Further development of feedstocks is needed to provide the industry with innovative solutions to drive the uptake of biobased polyesters.

While many sustainability standards for biobased feedstocks exist, the scale and adoption of these standards for biosynthetics are still limited. Key standards for biomass certification are the Roundtable on Sustainable Biomaterials (RSB), International Sustainability & Carbon Certification (ISCC) Plus, and Bonsucro.

CO_2-based fibers

A few companies are exploring innovative approaches to directly capture carbon dioxide (CO_2) from the air and use the carbon element as feedstock for textiles. The carbon can be processed into the chemical building blocks used in the production of synthetic fibers, such as polyester. Carbon Capture and Utilization and Storage (CCUS) and Direct Air Capture (DAC) are new technologies in development. Their energy usage is currently very high, but if technological challenges are overcome and the process is powered by renewable energy, it will have potential as an alternative to new virgin fossil feedstock. Solutions in development today are partially derived from captured carbon.

For more information on biobased and CO_2-based polyester, see Textile Exchange's 2024 report The Future of Synthetics.

Photo: Priyadarshini Ravichandran

1. Estimate based on: nova-Institute. Bio-based Building Blocks and Polymers: Global Capacities, Production and Trends 2025–2030. 2026. And Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.

Part 1a: Global fiber production

Polyamide (nylon)

Total polyamide (nylon) production

A global overview

Polyamide (nylon) is the second-most used synthetic fiber and accounted for approximately 5% of the global fiber market in 2025.[1] There has been a steady increase in global polyamide fiber production over the last five years.

Feedstock used

Most polyamide produced globally is made from new virgin fossil-based feedstocks. Recycled polyamide is produced from pre- or post-consumer materials, and very small amounts of biobased polyamide are also produced.

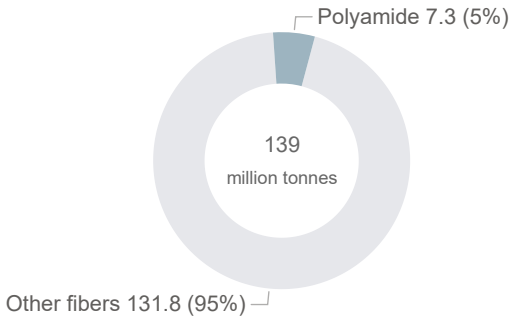
In total, it is estimated that 7.3 million tonnes of polyamide were produced globally in 2025, of which 7.1 million tonnes (97%) were virgin fossil-based polyamide, 0.2 million tonnes (3%) were recycled polyamide,[2] and 0.04 million tonnes (0.5%) were biobased polyamide.[3]

Textile-to-textile recycled polyamide fiber

With around 0.2 million tonnes, textile-to-textile recycled polyamide fiber made up 90% of all recycled polyamide,[1] equivalent to 2% of total polyamide and 0.1% of global fiber production.[2]

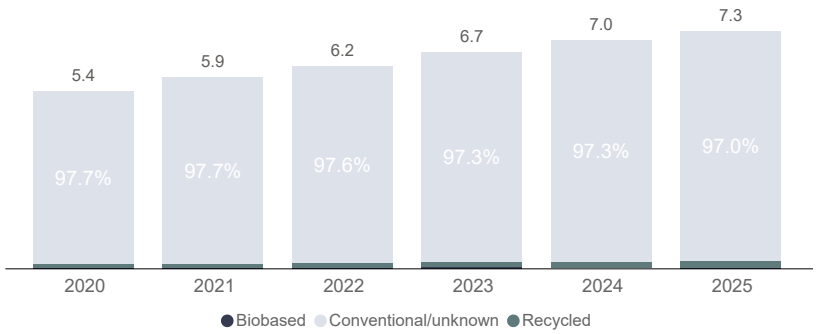
Polyamide is used for a variety of products. See Part 2 of this report for information on end uses.

Global market share of polyamide (nylon) in 2025 (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Global polyamide (nylon) production by program type (million tonnes)



Source: Textile Exchange based on Maia Research, nova-Institute and global data compilation.

1. Maia Research. Global Polyamide Fiber Market Report 2026. Commissioned report. 2026.
2. Maia Research. Global Recycled Nylon Fiber Market Report 2025. Commissioned report. 2025. A bottom-up calculation in a joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
3. Estimate based on: nova-Institut. Bio-based Building Blocks and Polymers: Global Capacities, Production and Trends 2025–2030. 2026. And Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.

Recycled polyamide (nylon)
Production facts and figures

The recycled polyamide fiber market is growing, but at a slow rate. Around 0.2 million tonnes of recycled polyamide were produced globally in 2025.[1]

Due to technical challenges, limitations related to feedstock quality and availability, and investment needs, the market share of recycled polyamide is still very low, accounting for around 2.5% of all polyamide fiber production in 2025.[1,2]

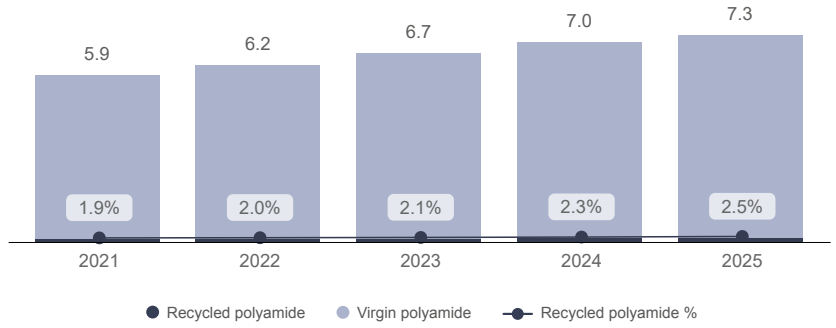
Feedstock types

Recycled polyamide can be produced from pre- or post-consumer waste. Pre-consumer waste may include processing scraps, fabric cut-offs, or hard polyamide waste. Post-consumer polyamide is made from materials such as discarded fishing nets, carpets, or other used textiles. The recycling process can be mechanical or chemical. An estimated 90% of recycled polyamide (or 2% of total polyamide) is textile-to-textile recycled fiber.

Standards

The main standards used for recycled polyamide include the Global Recycled Standard (GRS) and the Recycled Claim Standard (RCS).[3]

Global polyamide (nylon) production (million tonnes) and share of recycled (%)



Source: Textile Exchange based on Maia Research 2026 and global data compilations.

1. Maia Research. Global Recycled Nylon Fiber Market Report 2026. Commissioned report. 2026.
2. Maia Research. Global Polyamide Fiber Market Report 2026. Commissioned report. 2026. A bottom-up calculation in a joint research project with Reverse Resources, Fashion for Good, and TEXroad led to similar textile-to-textile recycled fiber numbers.
3. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026. Learn more here.

Biobased polyamide (nylon)

Emerging materials

The global production total for biobased polyamide (nylon) fiber was estimated to be around 0.04 million tonnes in 2025.[1] It is estimated that biobased polyamide fibers make up around 0.5% of the polyamide fiber market.[1]

Many biosynthetic materials that exist on the market today are partially biobased. Further development of feedstocks is needed to provide the industry with innovative solutions to drive the uptake of biobased polyamides.

For more information, see Textile Exchange's 2024 report The Future of Synthetics.

Photo: Mickael Samama

1. Estimate based on: nova-Institute. Bio-based Building Blocks and Polymers: Global Capacities, Production and Trends 2025–2030. 2026. And Maia Research. Global Polyester Fiber Market Report 2026. Commissioned report. 2026.

Part 1a: Global fiber production

Other synthetic fibers

Other synthetic fibers
Production facts and figures

Other synthetics—including polypropylene, acrylic, and elastane—had a combined production total of 6.4 million tonnes and a market share of around 5% of the global fiber market in 2025.

Polypropylene had a global fiber market share of 2.4%, with fiber production reaching 3.3 million tonnes. The market share of recycled polypropylene fibers was estimated to be around 0.4% of global polypropylene production.[1]

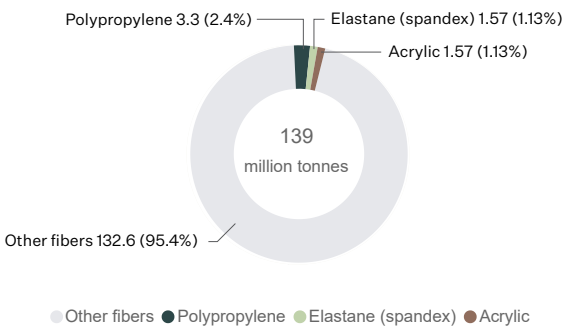
Acrylic fibers had an estimated production total of just under 1.6 million tonnes and accounted for 1.1% of the global fiber market in 2025. Global acrylic fiber production has been gradually declining over the years. The market share of recycled acrylic was estimated to be 1.0% of total acrylic fiber production.[1]

Elastane fiber production was 1.6 million tonnes in 2025 and accounted for around 1.1% of the global fiber market. The share of recycled elastane was estimated to be 3.4% of global elastane fiber production in 2025.[1]

These synthetic fibers are used for a variety of products. See Part 2 of this report for more information on end uses.

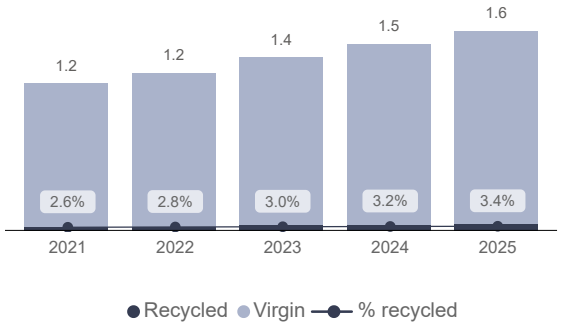
The production of other synthetics, such as polytrimethylene terephthalate (PTT), polylactic acid (PLA), and similar materials, is very low and not currently included in this report.

Global market share of other synthetics 2025 (million tonnes)



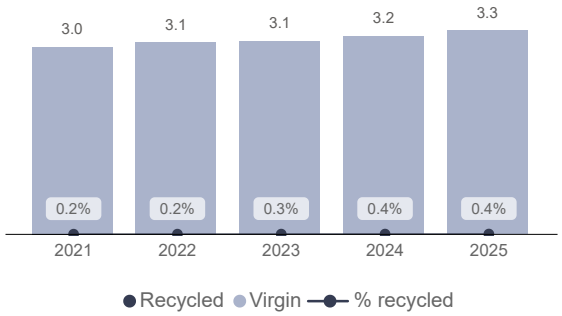
Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Elastane fiber production (million tonnes)



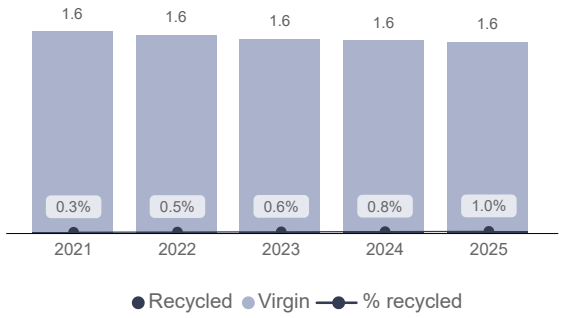
Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Polypropylene fiber production (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

Acrylic fiber production (million tonnes)



Source: Textile Exchange based on Maia Research 2026 and global data compilation.

1. Maia Research. Global Other Synthetics Fiber Market Report 2026. Commissioned report. 2026.

PART 1: GLOBAL PRODUCTION

Part 1b: Global production of other raw materials (non-fiber)

Part 1b: Global production of other raw materials (non-fiber)

Down and feathers

Total down and feathers production

A global overview

Virgin down and feather production is derived from birds, mainly ducks and geese. Some virgin down and feather production is certified and/or verified to one or more programs/standards. For the purpose of this report, virgin down produced under one or more of the programs/standards listed in the virgin down section is referred to as "virgin, certified", while the remaining virgin down production is referred to as "conventional/unknown."[1]

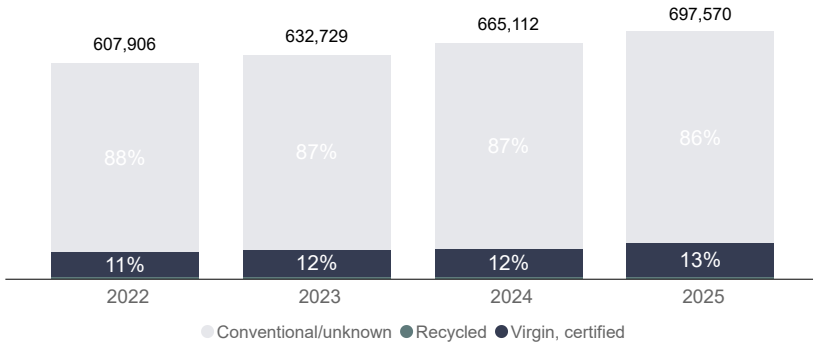
Recycled down is produced using reclaimed down and feathers from pre- or post-consumer waste.

In this chapter, data on virgin and recycled down is shared separately as they are different production systems and have different data collection mechanisms.

In total, it is estimated that 697,570 tonnes of down and feathers were produced globally in 2025.[2] Of this, 691,190 tonnes (99%) were virgin down and 6,380 tonnes (1%) were recycled down.[3] Of the virgin down produced, 597,755 tonnes (86%) were from conventional/unknown sources,[1] and 93,435 tonnes (14%) were virgin, certified down.[4]

Down and feathers are used for a variety of products. See Part 2 of this report for information on end uses.

Global down and feathers production by program type (tonnes)



Source: Textile Exchange based on Maia Research 2026.

1. Conventional/unknown includes production by programs for which data was not accessible or available.
2. Maia Research. Global Down and Feather Market Report 2026. Commissioned report. 2026.
3. Maia Research. Global Recycled Down and Feathers Market Report 2026. Commissioned report. 2026.
4. Textile Exchange calculations based on the source referenced in footnote 2 and down program data provided by the programs.

Virgin down and feathers

Production facts and figures

Global virgin down and feather production increased from around 659,073 tonnes in 2024 to around 691,190 tonnes in 2025.[1] Around 90% of down comes from ducks, with the remainder mainly from geese.

Concerns about the treatment of animals have led to the development of animal welfare standards for down. Key standards include the Responsible Down Standard (RDS) and DOWNPASS.[3] These standards ensure that there is:

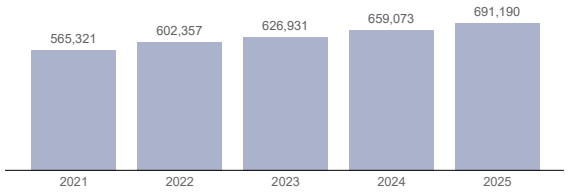
- No live plucking
- No force-feeding
- Broader animal welfare (depending on the standard)

Multi-tier cage farming, increasingly used in China for ducks, is prohibited by the RDS, as the animal welfare outcomes it describes cannot be delivered by these systems.

RDS-certified down production increased from 71,698 tonnes in 2024 to 87 thousand tonnes in 2025.[3] Globally, RDS accounted for 13% of total virgin down production in 2025. Most RDS-certified down was produced in China in 2025. Other countries producing RDS-certified down included Poland, Vietnam, Hungary, the United Kingdom, the United States, Taiwan, Ukraine, Germany, and France.

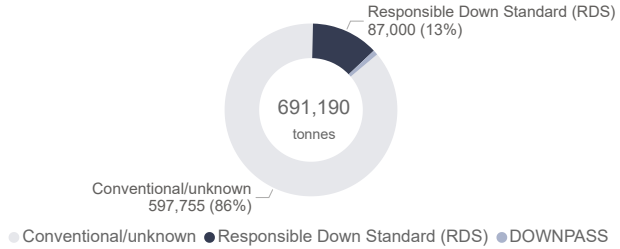
DOWNPASS: Due to the war in Ukraine and the revision of the DOWNPASS standard, information on the exact production of audited down and feathers used as filling material in 2025 is currently not available. As a rough proxy, based on the bedding produced and labelled, as well as feedback from audit organizations, it was estimated that approximately 6,435 tonnes of DOWNPASS-audited down and feathers were produced in 2024.[4] In 2021, 6,958 tonnes of DOWNPASS-certified down was produced globally. No data or approximations are available for 2022, 2023, or 2025. Using the 2024 estimate as a proxy for 2025, DOWNPASS had an estimated market share of around 1%.

Global virgin down production (tonnes)[1]



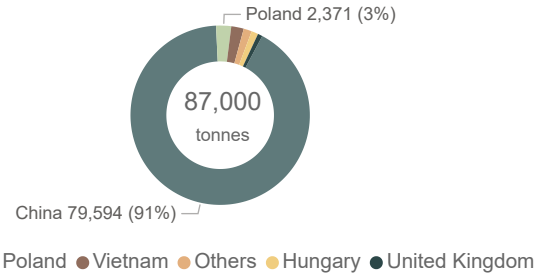
Source: Textile Exchange based on Maia Research 2026.

Market share of down programs in 2025 (tonnes)



Source: Textile Exchange based on Maia Research 2026 and standard owners.

Responsible Down Standard certified down by country 2025 (tonnes)



Source: Textile Exchange

1. Maia Research. Global Down and Feather Market Report 2026. Commissioned report. 2026.
2. The Global Traceable Down Standard (TDS) was withdrawn in 2020 and is therefore no longer covered in this report.
3. The methodology for estimating RDS production was revised for the Materials Market Report 2026 to include more refined assumptions on the classification of birds and on their production. This has resulted in revisions to historic RDS data.
4. DOWNPASS. Email correspondence, May 2025.

Recycled down and feathers

Production facts and figures

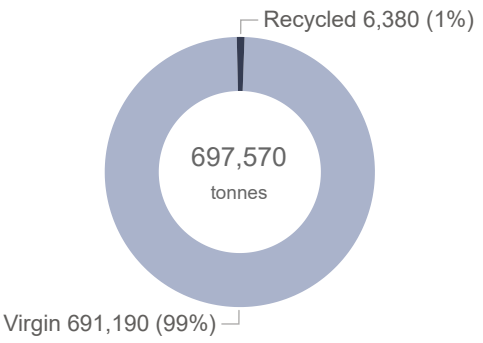
While global virgin down production was around 691,190 tonnes in 2025, the production of recycled down was estimated to be around 6,380 tonnes.[1]

This represents a slight increase in recycled down production compared to 2024, when an estimated 6,039 tonnes was produced. Considering the increase in total down production, however, the market share of recycled down remained around 1%.

Key standards

Key standards used for recycled down include the Recycled Claim Standard (RCS) and the Global Recycled Standard (GRS).[2]

Recycled down market share in 2025 (tonnes)



Source: Textile Exchange based on Maia Research 2026.

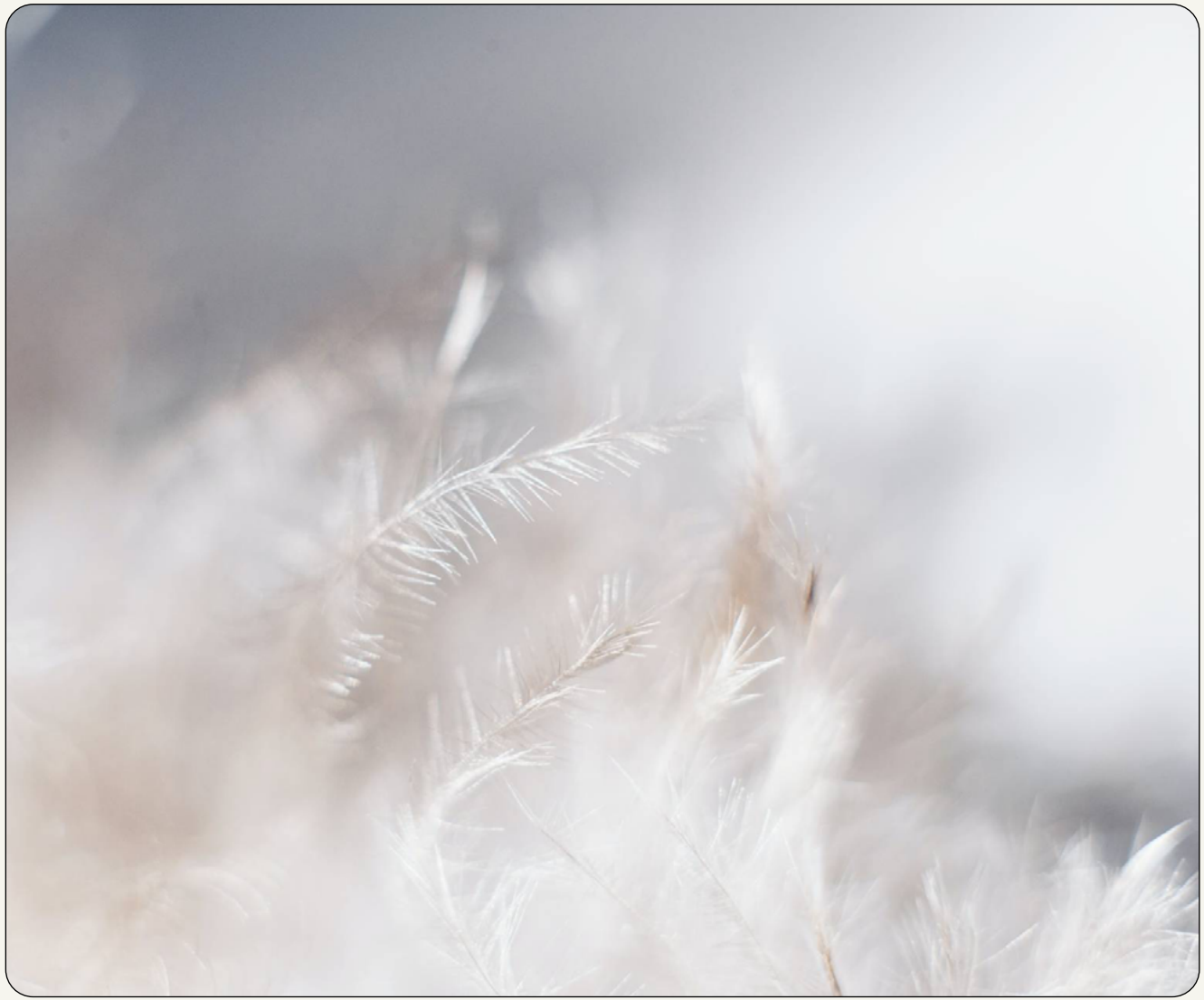


Photo: Evie S (Unsplash)

1. Maia Research. Global Recycled Down and Feathers Market Report 2026. Commissioned report. 2026.
2. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Part 1b: Global production of other raw materials (non-fiber)

Leather

Raw hides
A global overview

Leather, measured in terms of raw hides of cattle, sheep, goats, and buffalo, had an estimated global production of 14.0 million tonnes in 2025, from an estimated 1.6 billion animals.[1,2]

Cattle hides were the most common type of hide, with an estimated 9.5 million tonnes produced in 2025, accounting for over two-thirds of total hide production. China was the largest producer of cattle hides, accounting for 16% of global production, followed by the United States, accounting for 12%, Brazil for 11%, India for 7%, and Argentina for 5%.[1,3]

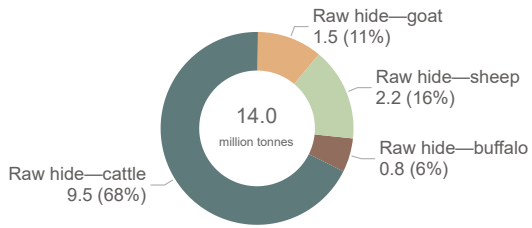
Sheep hides were the second most common type of hide, with production totaling around 2.2 million tonnes. The largest producer was China, which accounted for 27% of global sheep hide production, followed by Australia and India that each accounted for 9%.[1]

Around 1.5 million tonnes of goat hides were produced in 2025, with the largest producers being China at 33% of global goat hide production, India at 21%, and Pakistan at 9%.[1]

An estimated 0.8 million tonnes of buffalo hides were also produced, with the largest producers being India at 38%, China at 28%, and Pakistan at 21% of global buffalo hide production.[1,3]

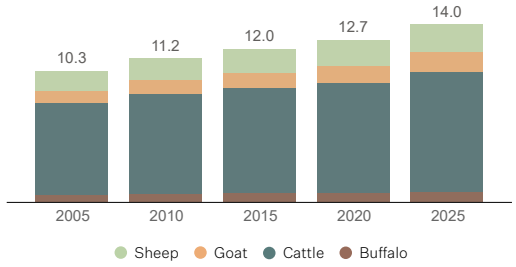
Raw hides from cattle, sheep, goat, and buffalo are processed into leather for use in a variety of products. For more information on the share of raw hides turned into leather and their end uses, see Part 2 of this report.

Global raw hides production by type in 2025 (million tonnes)



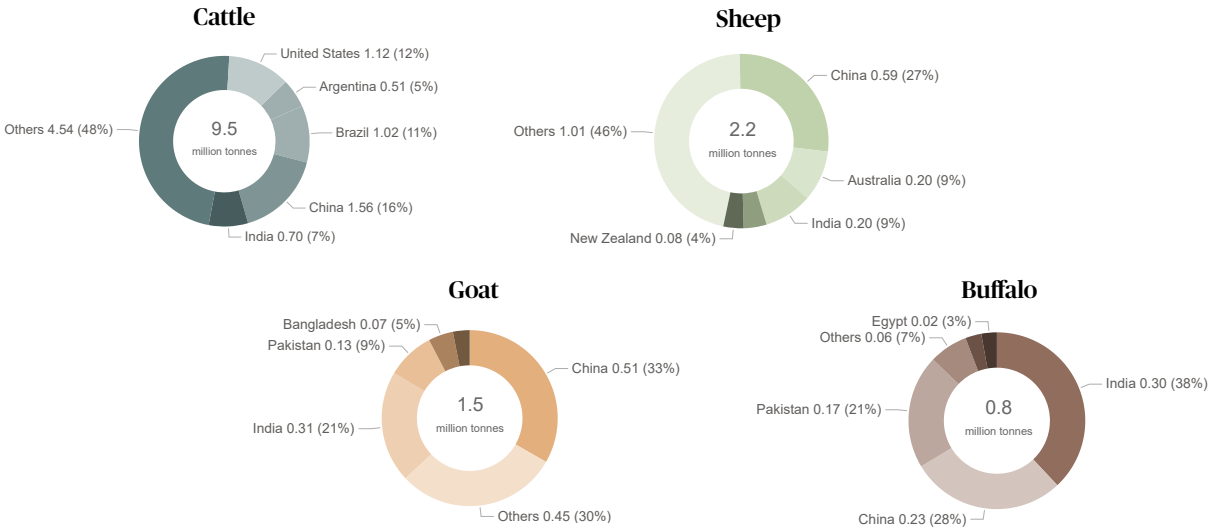
Source: Textile Exchange based on FAOSTAT. 2024 data is used as proxy for 2025.

Global raw hides production (million tonnes)



Source: Textile Exchange based on FAOSTAT. 2024 data is used as proxy for 2025.

Raw hides by country in 2025 (million tonnes)



Source: Textile Exchange based on FAOSTAT. 2024 data is used as proxy for 2025.

1. Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). Database. Accessed January 2026. 2024 data is used as a proxy for 2025, as 2025 data was not available at the time of reporting. The United Nations Food and Agriculture Organization (FAO)'s hide and skin production by weight for big animals is calculated based on meat production (carcass weight) using conversion factors.
2. Includes raw cattle hides, buffalo hides, goat skins, and sheep skins. Other types of hides and skins are not included.
3. In 2023, FAOSTAT's cattle and buffalo meat production data (and therefore also its hide and skin data) was revised to include all cattle under buffalo for India. Textile Exchange has applied the percentage breakdown between India's cattle and buffalo production from 2021 as a proxy.

Raw hides

Standards and certification systems

Adopting standards and certification systems helps the leather industry ensure compliance with relevant criteria and acknowledge good industry practice.

Different standards and certification systems differ widely in their requirements, approach to assurance—ranging from self-declaration to third-party audits—and the degree of traceability and oversight throughout the supply chain. Some operate only in specific regions or markets, while others focus on particular impact areas.

For leather, most standards cover the processing stage. While multiple standards cover animal welfare for meat production, only a few small supply chains currently manage to maintain traceability of the hides of certified animals through to finished leather goods. Beyond animal welfare concerns, brands need to know whether leather originates from animal production on land where deforestation or conversion of other natural ecosystems takes place—highlighting the necessity for traceable and certified supply chains.

The standards listed here all cover the production of animals whose hides and skins could be used for leather. Some programs explicitly include hides, skins, and/or leather as a certified output, others focus solely on meat. The species covered by each program differ.

A Greener World which is active in the United States, Canada, the United Kingdom, Ireland, Portugal, Australia, Ecuador, and France, has four certifications that are used to certify animals producing meat and/or raw hides for leather. These certifications include Certified Animal Welfare Approved by A Greener World, Certified Grassfed by A Greener World, Certified Non-GMO by A Greener World, and Certified Regenerative by A Greener World. A Greener World covers cattle, sheep, goats, and buffalo. Production data isn't currently available.

Beter Leven, with its Better Life label, was developed by the Dutch Society for the Protection of Animals (SPA) and uses a star rating system to indicate the living conditions of the animals behind its products. Beter Leven covers cattle. Production data isn't currently available.

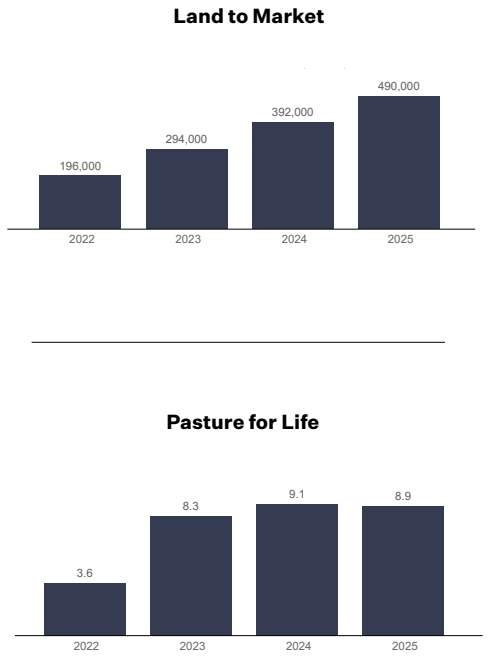
Certified Humane® cattle hides are currently being used in leather production, but since some parts of the supply chain could not be audited, the Certified Humane® logo is not yet being used on final products. Certified Humane® covers cattle, sheep and goats. Production data isn't currently available.

Global Animal Partnership (G.A.P.)'s Animal Welfare Certified had G.A.P.-certified cattle in the United States, Australia, and New Zealand, and sheep in Australia and New Zealand in 2025. There was also some production in Uruguay and Chile. Animal Welfare Certified covers cattle, sheep and goats. Production data isn't currently available.

Land to Market™ currently operates across Uruguay, Argentina, Chile, South Africa, Australia, New Zealand, Spain, and the United States. In 2025, approximately 1 million cattle were certified under Land to Market, producing an estimated 490 thousand tonnes of rawhide. Land to Market™ covers cattle, sheep, and goats.

Pasture for Life, which operates in the United Kingdom, had 14 thousand cattle under Pasture for Life management in 2025.[1] Of these, 248 certified cattle (approximately 8.9 tonnes of raw hide) were collected to produce leather.[2] Pasture for Life covers cattle, sheep, and goats.

Global hides production by program (tonnes)[1]



1. Pasture for Life. Email correspondence, February 2026.
2. British Pasture Leather. Email correspondence, March 2026. British Pasture Leather is the first and only producer of leather from the hides of cattle certified by Pasture for Life. The cattle are raised on farms following regenerative principles in the UK.

Raw hides

Standards and certification systems

Responsible Animal Fiber (RAF)[1] is a framework used by Textile Exchange to cover standards that address animal fibers, including the Responsible Wool Standard, the Responsible Mohair Standard, and the Responsible Alpaca Standard. The most recent versions of the RAF standards all include an optional module covering slaughter. When this module is applied, and the chain of custody is maintained, claims about the origin of animal skin and leather can be made.

Sbcert is a certification body based in Brazil, which also operates in the United States, Mexico, Argentina, Chile, Norway, and the Netherlands. They have their own animal welfare standard and are also responsible for auditing the PRIMI traceability protocol, which in 2025 monitored the traceability of over 200 thousand cattle from birth to slaughter across eight Brazilian states.

Photo: Danilo Arenas

1. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Recycled leather fiber
Overview

Using recycled leather and recycled leather fiber can play a key role in curbing the industry's waste output. Recycled leather is where the fiber structure remains intact during the recycling process. Recycled leather fiber is produced by disintegrating the leather into fibrous particles, small pieces, or powders, then forming sheets, with or without chemical binding agents. It must contain at least 50% in weight of dry leather fibers.

Recycled leather fiber materials are mainly made from pre-consumer production scraps, consisting of recycled leather fibers and binders, or recycled leather fibers attached to the surface of a synthetic material.

The European Outdoor Group (EOG) published a Recycled Leather report in 2019 to support industry professionals in better understanding recycled leather fibers.

Recycled standards

The standards that can certify recycled leather feedstocks are the Recycled Claim Standard (RCS) and the Global Recycled Standard (GRS).[1] In November 2023, the RCS and GRS were updated to allow shavings/trimmings from leather tanning, splitting, post-tanning, and finishing operations to be accepted as reclaimed inputs.

Photo: Soumen Ray (Shutterstock)

1. Textile Exchange is harmonizing its standards system and is transitioning to the Materials Matter system, due to become effective in December 2026.

Part 1b: Global production of other raw materials (non-fiber)

Natural rubber

Natural rubber
Production facts and figures

Global natural rubber production was estimated to be just under 15 million tonnes in 2025.[1,2]

The largest natural rubber-producing countries were Thailand (accounting for 32% of global production), Indonesia (15%), and Cote d'Ivoire (11%).[1] It is estimated that around 85% of natural rubber is produced by smallholders, involving around 10 million farmers globally.[3]

The market share of rubber forest covered by the Forest Stewardship Council® (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC) increased from around 3.7% in 2024 to 4.8% in 2025.[1,4,5]

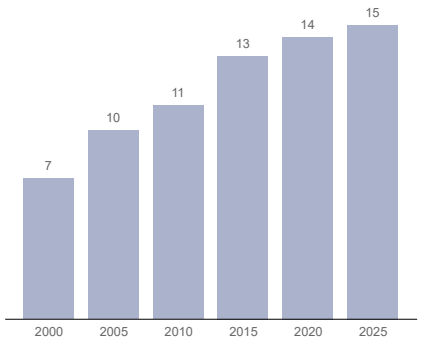
Around 0.4 million hectares of rubber forest (out of a total 13.2 million hectares) produced rubber covered by FSC, representing a market share of around 3%.[1,4]

Around 0.2 million hectares of rubber forest produced rubber covered by PEFC, representing a market share of around 2%.[1] The first rubber covered by PEFC was made available in 2021.[5]

FSC and PEFC are founding members of the Global Platform for Sustainable Natural Rubber (GPSNR).

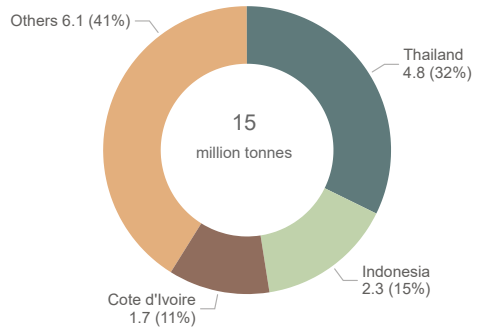
Natural rubber is used in a variety of products. See Part 2 of this report for more information on end uses.

Global natural rubber production (million tonnes)



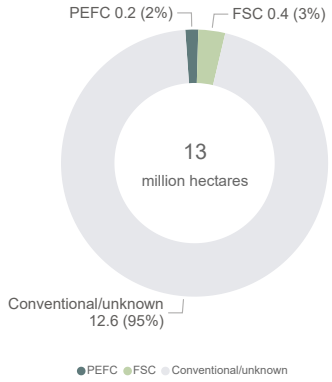
Source: Textile Exchange based on FAO (2024 data used as proxy for 2025).

Global natural rubber production by country in 2025 (million tonnes)



Source: Textile Exchange based on FAO (2024 data used as proxy for 2025).

Global rubber forest area by program in 2025 (million hectares)



Source: Textile Exchange based on FSC, PEFC, and FAO (2024 data used as proxy for 2025).

1. Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). Database. Accessed February 2026. 2025 data not available at the time of reporting, so 2024 data has therefore been used as a proxy.
2. Natural rubber accounts for approximately half of global rubber production, the other half being synthetic. Source: Rubber Board, Government of India. May Monthly Statistical Bulletin. 2025. And Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). Database. Crops and livestock products. Accessed February 2026.
3. FSC. Responsible Sourcing of Natural Rubber. 2019.
4. FSC. Email correspondence, March 2026. It should be noted that figures reported for FSC include both certified and controlled production.
5. PEFC. Email correspondence, March 2026. It should be noted that figures reported for PEFC include both certified and controlled production.

PART 1: GLOBAL PRODUCTION

Part 1 methodology and disclaimer

Part 1 methodology and disclaimer

Key information shared in the report

Part 1 of the *Materials Market Report* contains (a) global production measured by weight of various fibers and materials and (b) program-specific data such as production per program measured by weight.

Textile Exchange has collected, analyzed, and compiled this information in all good conscience and cross-checked the data and information wherever possible. No guarantee is given for all the information. This report is intended for general guidance and informational purposes only. It is not the report's intention to be used or considered as advice or recommendation in any direction.

Global production measured by weight

The compilation of global market data is challenging. The collection of primary data directly from suppliers is beyond what is possible within the scope of this report, Textile Exchange uses secondary data from industry associations, international organizations, governmental organizations, standard setters, and research institutes. Textile Exchange strives to provide an accurate and reliable picture of the market, but data gaps and inconsistencies are very common in global market data, and modeling must be applied to some data. Specific data sources are directly mentioned on individual pages.

a) Data quality checks and triangulation

Textile Exchange has tried to identify the most reliable sources for each fiber category and conducted triangulations with at least two to three sources wherever possible. In general, all global market data is rounded estimates.

b) Production data scope

The production data in this report covers the total production measured by weight of fibers produced, not differentiating between different uses, and are thus not specific to the apparel industry. The fibers may be used for apparel, home textiles, technical textiles, or other applications.

Minority fibers, such as polytrimethylene terephthalate (PTT) and polylactic acid (PLA), and protein fibers are not included.

c) Definition of fiber and materials

The term fiber in this report includes staple fiber and filament. All numbers for manmade cellulosic fibers and synthetics include staple fiber and filament production. The term materials includes fibers and other raw materials such as leather, down, and rubber. Aggregate data on global fiber production does not include leather, down, or rubber. For flax, the term fiber includes both short and long staple fibers.

d) Allocation of years

This report shares data based on the calendar year. Some data sources collect data on a seasonal basis. Cotton production data is collected according to the harvest year used by the International Cotton Advisory Committee (ICAC), from August 1 to July 31, spanning two calendar years. This report allocates cotton production to the latter of these two calendar years. For example, cotton harvested between August 1, 2024, and July 31, 2025, is allocated to the 2025 calendar year.

The exception to this rule is total virgin cotton data for Brazil, which is collected by calendar year rather than harvest year and, in alignment with the methodology of ICAC (revised in 2023 to align with the U.S Department of Agriculture (USDA)'s revised methodology for Brazil), reflects production from the earlier calendar year. This means that, for example, this year's *Materials Market Report* covers cotton produced in Brazil in 2024, since this is allocated to 2024/25 by ICAC and the USDA.

NOTE: This only applies to total virgin cotton data for Brazil.

While in general the report aligns with ICAC's reporting year, to align with the global Better Cotton production data for 2023/24 reported by Better Cotton, the production data reported for Responsible Brazilian Cotton (ABR)—a Better Cotton equivalent—cotton grown in Brazil is based on Brazil's National Supply Company's (CONAB) reporting cycle. They cover cotton grown in the 2024 calendar year, whereas total cotton figures for Brazil included in this report follow the approach taken by ICAC and cover cotton grown in the 2023 calendar year.

Where applicable, the International Wool Textile Organisation (IWTO) applies a similar approach for wool as ICAC takes for cotton (for example, 2024/25 wool production is allocated to the 2025 calendar year).

e) Modeling

To close data gaps, modeling, as well as assumptions and inferences, are used. For example, country average yields may be applied instead of program-specific yields, or seed cotton weights may be used to estimate fiber weights. Where data for a specific year is missing, the previous year's data is used as a proxy.

Part 1 methodology and disclaimer

f) Fiber-specific methodologies

Recycled cotton, wool, and down: As ICAC's cotton data, International Wool Textile Organisation (IWTO)'s wool data, and Maia Research's down data refer to virgin production weights, the recycled cotton, wool, and down production weights were added on top. The total production weights for cotton, wool, and down are thus higher than those reported by ICAC, IWTO, and Maia Research, respectively.

Recycled manmade fibers: In contrast, the total synthetic fiber production by weight reported by Maia Research, The European Man-Made Fibres Association (CIRFS), and The German Association of Chemical Fiber Manufacturers (IVC) includes the recycled share. Recycled manmade cellulosic fibers are also assumed to be included in the total manmade cellulosic fiber production as reported by Maia Research, CIRFS, and IVC.

Organic cotton: Textile Exchange collects and reports data from government sources wherever possible. For countries without available government data, Textile Exchange collects and reports data from organic cotton producers, gins, certification bodies, and other sources. However, due to data gaps, modeling and proxies are used, which may result in incomplete data.

g) Geographic classification

Textile Exchange is currently updating its geographic classification document to reflect recent changes. As this is a comprehensive and ongoing review, the existing geographic classifications are being used in this report and in all related databases, files, and communications to maintain consistency throughout.

Program-specific production data

Program-specific data, such as production measured by weight, is based on publicly available information and/or information collected from the programs and initiatives. While overlaps between programs are excluded where possible, some overlap may remain between the production data reported for different programs.

Methodological changes, data revision, and comparison to previous years

Textile Exchange continuously improves its data collection and analysis. Some data reported in previous years has been revised or updated as actual data has become available for initial estimates, or the methodology has been improved. A simple comparison between previously reported numbers and data reported this year may not reflect the actual change over time due to these updates. The latest data for the reporting period and previous years is always published in the latest report.

Key revisions from the 2025 to the 2026 Materials Market Report

The following methodological changes were applied in compiling this report:

- Backward-adjusted data was provided for the following programs and updated accordingly: organic cotton, Cotton made in Africa®, Better Cotton, Responsible Brazilian Cotton (ABR), REEL Regenerative Code, regenagri, Regenerative Organic Certified ® (ROC™), Forest Stewardship Council (FSC) certified forest areas, Programme for the Endorsement of Forest Certification (PEFC) rubber, National Wool Declaration (NWD) mulesing status of greasy wool in Australia, the Australian Wool Sustainability Scheme (SustainaWOOL and ResponsiWOOL),the Sustainable Fibre Alliance (SFA) Cashmere Standard, the Responsible Alpaca Standard (RAS), and the Responsible Down Standard (RDS). As a result, the overall share of production covered by these programs out of their respective fiber total may have changed from what was previously reported.
- ICAC cotton statistics were updated, resulting in revisions to previously reported cotton production by total weight.
- IWTO revised data on the virgin clean and greasy Australian and global wool production total for 2025 and previous years to remove the wool slipe that was previously included in the Australia wool production totals. IWTO revised data on the virgin total production of alpaca, camel, cashmere, and llama fibers.
- Food and Agriculture Organization (FAO) statistics were updated for other plant-based fibers, rubber, raw hides, number of animals, forest area, and silk, leading to revisions in previously reported global production weight for these fibers/materials.
- Total production weights of recycled cotton and down were updated.
- As a result of the fiber-specific revisions listed above, historic global fiber production weights have been updated and may differ from those previously reported.

Part 2: Global production by end use

PART 2: GLOBAL PRODUCTION BY END USE

Part 2a: Global textile fiber production by end use

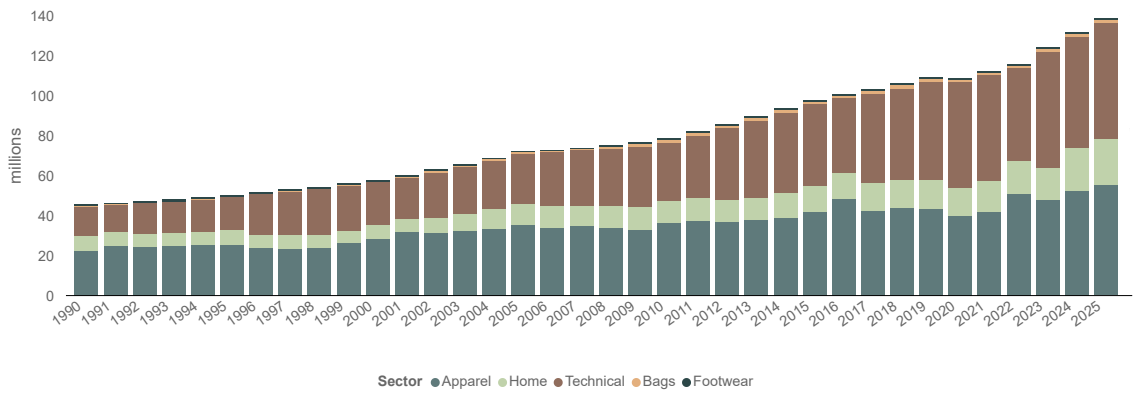
Global textile fiber
Production by end use

Global textile fiber[1] production has increased substantially over the past three decades from approximately 46 million tonnes in 1995 to 139 million tonnes in 2025.[2] This growth has been driven by a rising global population from 5.7 billion to 8.2 billion and growing annual textile fiber consumption per person from 9 kg to 17 kg. This covers all textile fiber applications such as apparel, home, and technical textiles.[3]

Textile fibers are used across a wide and increasingly diverse range of end-use markets.

- **Apparel** has historically been the dominant end-use for textile fiber. While still growing and contributing to overall textile fiber production growth at a global level, apparel has a slower growth rate compared to home textiles and technical textiles. The apparel market share in the textile industry has thus gradually declined.
- **Home textiles**, including bedding, towels, carpets, curtains, and furnishings, are another key end-usw market, with growth rates higher than those of apparel and lower than those of technical textiles. They also have a lower overall market share than apparel and technical textiles.
- **Technical textiles** have experienced the strongest growth over the past two decades. Technical textiles include a variety of different applications, including automotive textiles, construction materials, medical products, filtration systems, geotextiles, and nonwoven hygiene products.
- **Bags and footwear** represent very small end-use segments but help complete the overall picture of textile fiber usage across final applications.

Global textile fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, Mohair South Africa[4], United Nations (UN) Comtrade,[5] Techno-scientific assessment of the management options for used and waste textiles in the European Union,[6] Product Environmental Footprint – Representative Product (PEF–RP),[7] and its own modeling.

1. Textile fibers are natural or manufactured fibers that are produced for conversion into textile products—including apparel, home textiles, and technical textiles—through spinning or direct web formation (e.g., nonwovens). Fibers produced exclusively for non-textile applications, such as papermaking, insulation, construction reinforcement, or composite materials, are excluded.
2. Textile Exchange based on data from European Man-Made Fibres Association (CIRFS), Food and Agriculture Organization of the United Nations (FAO), International Cotton Advisory Committee (ICAC), German Association of Chemical Fiber Manufacturers (IVC), International Wool Textile Organisation (IWTO), Maia Research, Mohair South Africa, and its own modeling.
3. Textile Exchange calculations based on United Nations Population Division 2024, World Population Prospects 2024, and production data specified in part the previous footnote.
4. Textile Exchange based on data from CIRFS, FAO, ICAC, IVC, IWTO, Maia Research, Mohair South Africa, and its own modeling.
5. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
6. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
7. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

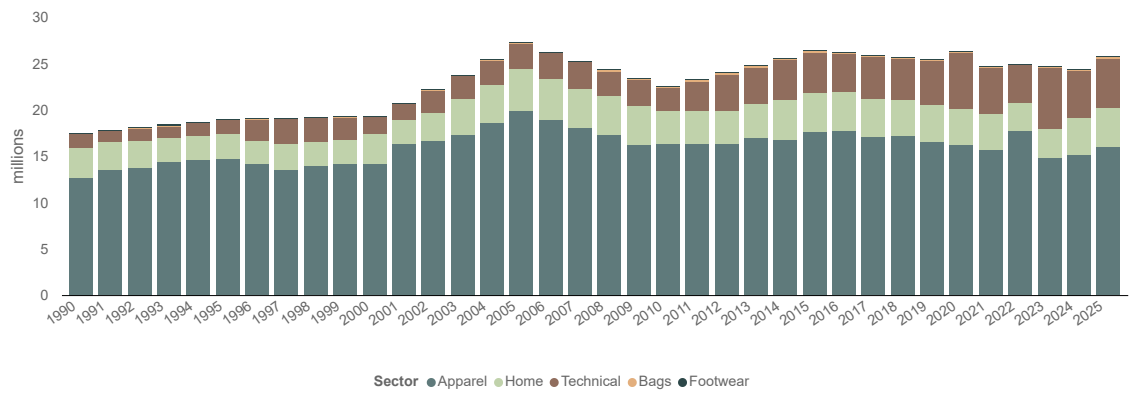
Cotton
Production by end use

Global cotton fiber production has increased over the last three decades, from approximately 19 million tonnes in 1995 to around 25.7 million tonnes in 2025.[1] The growth primarily happened between 1995 and 2005. Since then, global cotton production has remained relatively stable, hovering around 25 million tonnes over the last two decades.

Cotton is used for a variety of purposes, with apparel being its main end-use.

- **Apparel** continues to account for the majority of global cotton consumption. However, the relative share of cotton used in apparel has gradually declined as synthetic fiber use has grown and gained market share in several apparel product segments.
- **Home textiles**, such as bed linen, towels, and carpets, have remained a stable and important end-use category.
- **Technical textiles** applications have expanded, including medical textiles and hygiene products. However, by production weight, they are still significantly lower than apparel.
- **Bags and footwear** remain a very small end-use segment.

Global cotton lint fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on ICAC, UN Comtrade,[2] techno-scientific assessment of the management options for used and waste textiles in the European Union,[3] PEF-RP,[4] and its own modeling.

1. Calculated by Textile Exchange based on the following sources:
   i. ICAC. World Cotton Statistics. 2026. **NOTE:** For virgin cotton production by weight in 2025, ICAC harvest year data from the 2024/25 season has been applied.
   ii. Maia Research. Global Recycled Cotton Market Report 2026. Commissioned report. 2026.
2. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
3. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
4. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

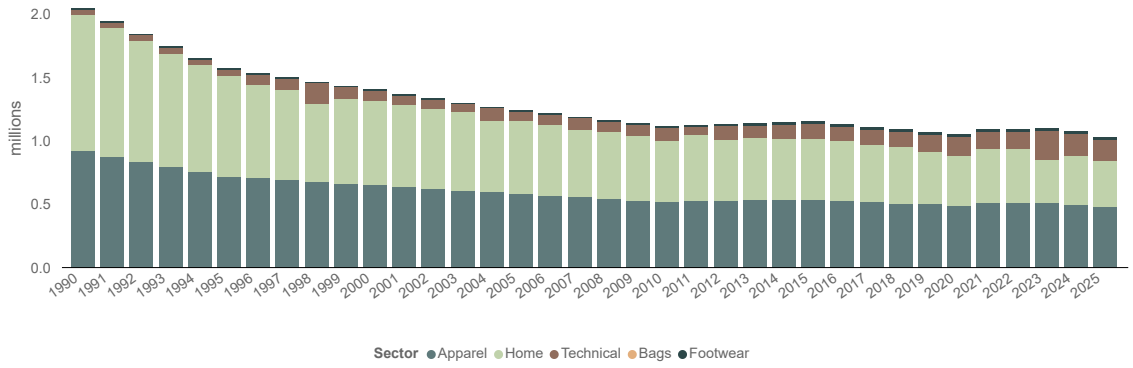
Wool
Production by end use

Global clean wool production has gradually declined over the last three decades, from approximately 2 million tonnes in 1990 to around 1 million tonnes in 2025.[1]

Wool fibers vary widely in fineness, length, and strength depending on factors such as breed and nutrition. These different qualities are suited to different applications. Fine wool is primarily used for premium apparel textiles, while coarser wool is mainly used in home and technical textiles.

- **Apparel** accounts for the largest share of global wool use. Fine wool is used for premium knitwear, suits, and outerwear. The amount and share of wool used in apparel has gradually declined as synthetic fibers and cotton have grown and increased their market share across many apparel segments.
- **Home textiles**, including carpets, rugs, upholstery, blankets, and home insulation, remain an important end-use category for wool. Although global demand for wool home textiles has declined due to competition from synthetic alternatives, wool continues to be used for premium home textile products.
- **Technical textiles** represent a relatively small but gradually expanding market. Wool is used in insulation materials, acoustic products, and other specialty applications because of its natural flame resistance, moisture management, and biodegradability.
- **Bags and footwear** remain a very small end-use segment.

Global wool fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from IWTO, UN Comtrade,[2] techno-scientific assessment of the management options for used and waste textiles in the European Union,[3] PEF-RP,[4] and its own modeling

1. Calculated by Textile Exchange based on the following sources:
   i. IWTO. Market Information Edition 2026. 2026.
   ii. Maia Research. Global Recycled Wool Market Report 2026. Commissioned report. 2026.
2. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
3. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
4. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

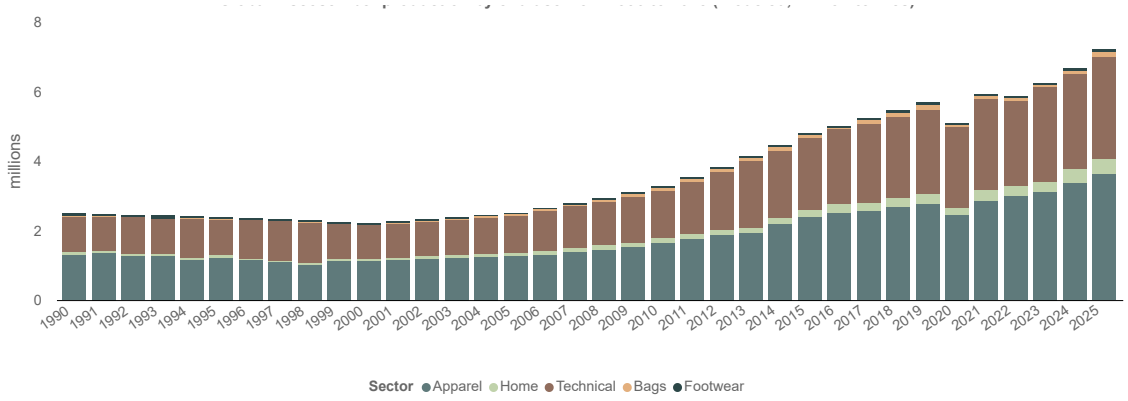
Viscose
Production by end use

Global viscose fiber production has increased substantially over the last three decades, from approximately 2.5 million tonnes in 1990 to around 7.2 million tonnes in 2025.[1] An exception to the growth was the temporary decline in 2020 due to the COVID-19 pandemic. Production recovered from 2021 onward.

Viscose is used in a variety of applications.

- **Apparel** accounts for the largest and a growing share of global viscose consumption. Viscose is widely used in dresses, blouses, shirts, linings, and knitwear because of its softness, drape, moisture absorbency, and silk-like appearance.
- **Home textiles**, including bed linen, curtains, upholstery, and furnishings, have remained a stable but comparatively small end-use category.
- **Technical textiles** have expanded and now include nonwoven hygiene products, medical textiles, wipes, filtration materials, and specialty applications. Growth has been particularly strong in disposable nonwoven products, where viscose is often blended with other natural or synthetic fibers.
- **Bags and footwear** remain a very small end-use segment, primarily covering footwear and bag linings.

Global viscose fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from CIRFS, IVC, Maia Research, UN Comtrade,[2] Techno-scientific assessment of the management options for used and waste textiles in the European Union,[3] PEF-RP,[4] and its own modeling.

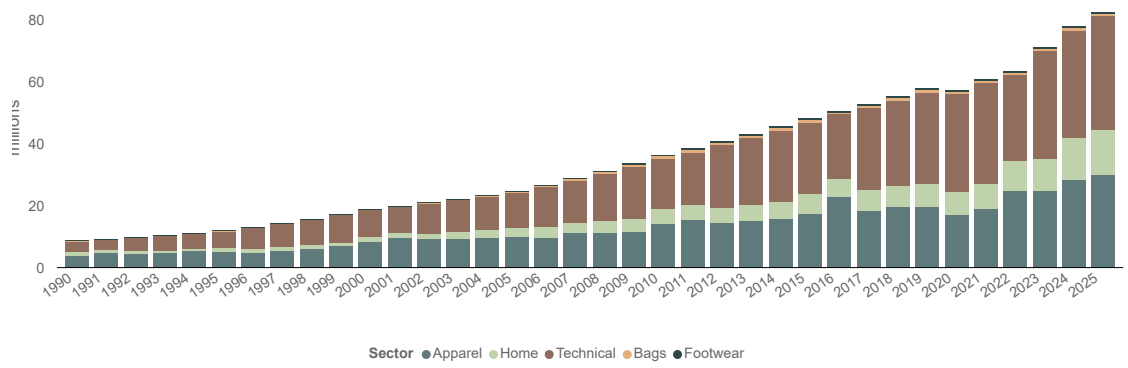
1. Textile Exchange based on data from CIRFS, IVC, and Maia Research.
2. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
3. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
4. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

Polyester
Production by end use

Global polyester fiber production has increased significantly over the past three decades, rising from approximately 9 million tonnes in 1990 to more than 82.5 million tonnes in 2025.[1] The growth of polyester has significantly outpaced that of all other major textile fibers. Today, polyester accounts for more than half of all global fiber production and has become the dominant material used in the textile industry. This growth has been driven by its low cost, durability, versatility, and suitability for high-volume manufacturing.

- **Apparel** has been the dominant end-use for polyester and continues to account for one of the largest shares of global consumption today. Polyester has gained substantial market share in apparel due to its affordability, durability, and compatibility with fast fashion business models. Over the past two decades, polyester has increasingly replaced natural fibers, such as cotton and wool, in many apparel categories.
- **Home textiles**, including carpets, furnishings, curtains, and bedding, are an important and growing end-use category.
- **Technical textiles** have seen the strongest growth, with increasing amounts being consumed for automotive textiles, geotextiles, construction materials, filtration products, textile-based packaging, and nonwoven hygiene products.
- **Bags and footwear** account for a very small end-use segment covering applications such as footwear and bag linings. The global shift toward athletic and casual footwear has increased the use of synthetic knit materials, reducing the relative importance of leather uppers.

Global polyester fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from CIRFS, IVC, Maia Research, UN Comtrade,[2] techno-scientific assessment of the management options for used and waste textiles in the European Union,[3] PEF-RP,[4] and its own modeling.

1. Textile Exchange based on data from CIRFS, IVC, and Maia Research.
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3. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
4. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

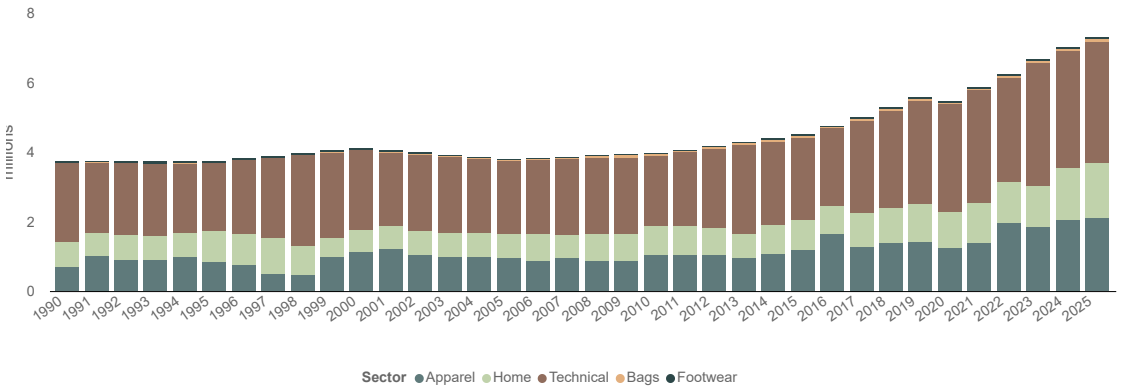
Polyamide
Production by end use

Global polyamide fiber production has increased over the last three decades, from approximately 3.7 million tonnes in 1990 to around 7.3 million tonnes in 2025.[1]

Polyamide is used across a range of end-use markets, with technical textiles the fastest growing.

- **Apparel** accounts for a substantial share of global polyamide fiber consumption. Polyamide fiber is widely used in hosiery, lingerie, swimwear, sportswear, and performance clothing.
- **Home textiles**, including upholstery and furnishings, remain an important end-use category, with polyamide fibers used particularly widely in carpets.
- **Technical textiles** have expanded significantly, including automotive textiles, fishing nets, ropes, airbags, tire cords, and filtration materials. These applications account for an increasing share of global polyamide use.
- **Bags and footwear** account for a very small end-use segment covering, for example, footwear and bag linings.

Global polyamide fiber production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from CIRFS, IVC, Maia Research, UN Comtrade,[2] techno-scientific assessment of the management options for used and waste textiles in the European Union,[3] PEF-RP,[4] and its own modeling.

1. Textile Exchange based on data from CIRFS, IVC, and Maia Research.
2. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
3. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
4. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.

Other fibers
Production by end use

Other plant fibers

The end uses of other plant fibers—agave, bast fibers, coir, flax, hemp, jute, kapok, manila, ramie, sisal—have remained relatively stable.

- **Apparel** represents a smaller but growing share of consumption, particularly for flax, hemp, ramie, and, to a lesser extent, kapok.
- **Home textiles**, including carpets and rugs, remain important markets, particularly for coir, jute, sisal, and flax. Flax is also used for other home textiles such as towels or curtains.
- **Technical textiles** account for the largest share of the end uses. Fibers such as coir, sisal, hemp, jute, and manila are used for ropes, geotextiles, insulation material, automotive components, and other technical products.

Other animal fibers

The distribution of end uses for other animal fibers, including cashmere, mohair, alpaca, angora, camel, guanaco, llama, vicuña, yak, and silk, has remained relatively constant

- **Apparel** continues to account for the vast majority of global other animal fiber usage, where they are primarily used in premium knitwear, shawls, and suits.
- **Home textiles** such as blankets and upholstery represent a smaller market.
- **Technical textiles** remain niche uses.

Other synthetic fibers

The distribution of end uses for other synthetic fibers—acrylic, elastane, and polypropylene—has remained relatively stable, although trends differ by fiber type.

- **Apparel** represents the dominant end-use for acrylic and elastane. Acrylic is widely used in knitwear and socks as an alternative to wool, while elastane is primarily used in products with stretch functionality.
- **Home textiles**, including blankets, carpets, and furnishings, remains an important market for acrylic and polypropylene.
- **Technical textiles** account for a substantial and growing share of polypropylene use. These include nonwoven hygiene products, geotextiles, filtration materials, packaging, automotive textiles, and ropes.

Other manmade cellulosic fibers

The distribution of end uses for other manmade cellulosic fibers—lyocell, modal, cupro, and acetate—has remained relatively stable.

- **Apparel** products continue to account for the largest share of global manmade cellulosic fiber use.
- **Home textiles** such as bed linen and curtains represent a smaller market.
- **Technical textiles** remain limited but have expanded gradually, including nonwoven hygiene products, medical textiles, filtration materials, and specialty cellulose-based applications. An exception is acetate fibers, which are primarily used for cigarette filters, with only a small share used for apparel.

PART 2: GLOBAL PRODUCTION BY END USE

Part 2b: Global production of other raw materials (non-fiber) by end use

Leather
Production by end use

Raw hide utilization and end use of leather

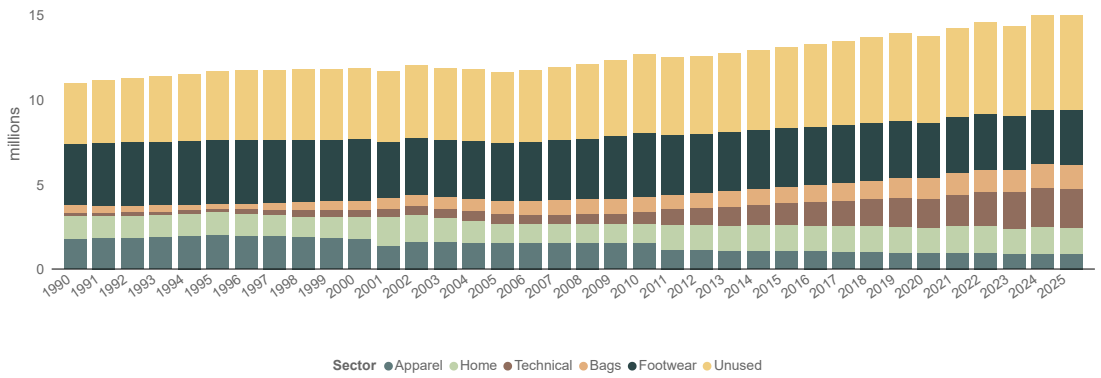
Global raw hide production—measured in terms of cattle, buffalo, goat, and sheep hides—has more than doubled in the last 35 years from around 5 million in 1990 to about 14 million in 2025.[1] Raw hides are a by-product of the meat and dairy industries, meaning that their supply is largely determined by livestock slaughter rather than demand from the leather industry. While global raw hide generation has continued to increase in line with livestock production, finished leather production has remained broadly stable over the past decade. The stagnation of the leather industry is driven by the growing adoption of synthetic materials. The hide utilization rate has thus decreased, and it is estimated that around 60–70% of globally produced raw hides are collected and processed into leather. Approximately 30–40% are not utilized because preservation and collection infrastructure is unavailable, particularly in developing regions, or because the cost of processing exceeds the market value of the resulting leather.[2]

The distribution of leather use has changed significantly over the past 15 years.

- **Footwear** used to be the dominant end-use for leather. However, the global shift toward athletic and casual footwear has reduced the leather share as synthetic textiles, knit materials, and composites increasingly replace leather uppers.
- **Home interior products** represent another end-use category for leather, with its market share remaining relatively stable.
- **Bags** including handbags, wallets, and similar products are another end use for leather.
- **Apparel** and clothing accessories such as leather gloves, belts, and leather pants were historically another key end-use market for leather but now this is declining.
- **Technical products**, such as premium automotive interiors, have seen considerable growth. These sectors now account for a larger share of global leather consumption than in previous decades.

Consequently, leather use has become more diversified across end markets, while overall demand growth has remained constrained by competition from synthetic alternatives.

Global raw hides production by end use from 1990 to 2025 (modeled, million tonnes)



Source: Textile Exchange based on data from FAOSTAT, United Nations Industrial Development Organization (UNIDO), United Nations Information Centre (UNIC), and its own modeling.

1. Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). Database. Accessed January 2026. 2024 data is used as a proxy for 2025, as 2025 data was not available at the time of reporting. Food and Agriculture Organization (FAO)'s hide and skin production by weight for big animals is calculated based on meat production (carcass weight) using conversion factors. Includes raw cattle hides, buffalo hides, goat skins, and sheep skins. Other types of hides and skins are not included.
2. International Council of Tanners. "Industry Position Statement on Deforestation." Accessed on July 15, 2026.

Other raw materials
Production by end use

Down and feather end-use market trends

Global down and feather production has remained relatively stable over the past two decades. Down is a by-product obtained primarily from ducks and geese raised for meat and, to a lesser extent, foie gras and egg production. Down occupies a highly specialized market focused on insulation applications. While production by total weight has remained broadly stable, demand has fluctuated in response to outdoor apparel trends, consumer spending, and increasing competition from synthetic insulation materials.

- **Home textiles** fillings such as duvets and pillows are the largest end use for down.
- **Apparel** fillings and insulation, such as for down jackets, are another key market, driven by growth in outdoor recreation and performance apparel segments.
- **Other products** fillings and insulation, such as for sleeping bags, are another key end-use segment.

Advances in synthetic insulation technologies have reduced demand for natural down across end-use segments.

Natural rubber end-use market trends

Natural rubber is produced specifically to meet industrial demand, with its end uses remaining relatively stable.

- **Footwear** is a small but important part of the natural rubber market, primarily used for shoe outsoles.
- **Apparel** use for natural rubber is limited to tight-fitting and expandable specialty products, such as wetsuits and cycling shorts.
- **Home** and interior applications for natural rubber include flooring.
- **Other products** account for most of the natural rubber use. The tire industry has historically been the dominant market and continues to account for most of global consumption today. Beyond that, rubber is used for a large variety of other products such as, for example, airbags and erasers.

PART 2: GLOBAL PRODUCTION BY END USE

Part 2 methodology and disclaimer

Part 2 methodology and disclaimer

Raw material production by end use

While Part 1 of this report includes global raw material production by total weight, irrespective of end use, Part 2 shares new modeling to determine how much of this global production is used specifically for apparel, home, footwear, bags, or technical products.

The modeling of the textile fiber and raw material production by end use is an evolving area of research and, therefore, this modeling should be used and interpreted with caution. It is a work in progress and is subject to change in future years.

Textile Exchange acknowledges the limitations of the study and is committed to continuous improvement. It encourages the industry to help further improve the modeling.

a) Definitions

The *Materials Market Report* includes textile fibers and raw materials used for the textile, clothing, leather, and footwear (TCLF) industries aligned with the EU scoping.[1]

In the context of this study, the following definitions are used:

- **Textile product:** Any [...][2] product which is exclusively composed of textile fibers, regardless of the mixing or assembly process employed, as well as a product containing at least 80% textile fibers by weight. The definition of textile product is aligned with the definition provided by the Textile Labelling Regulation (TLR).[3]
  1. **Apparel textile:** A textile product worn as clothing or a clothing accessory by a person to clothe or adorn, principally to protect from the outer environment and very often to express their personal identity and/or belonging to a specific social group, with symbolic meanings and aesthetic values.[3] [Within the context of this study, the term clothing is used as synonym to apparel.] Technical textile apparel meeting the definition of apparel and technical textiles are allocated to apparel textiles within the context of this study.
  2. **Home/interior textiles**: Textile products used indoor or outdoor to protect the object they are used on/with, decorate the home/interior environment, or dry the body or parts of the body after they have become wet.[3]
  3. **Technical textiles:** Textile products meeting technical rather than aesthetic criteria, even if, for certain markets like workwear or sports equipment, both types of criteria are met. Technical textiles bring a functional answer to a wide range of specific requirements: lightness, resistance, reinforcement, filtration, fire retardancy, conductivity, insulation, flexibility, absorption, and so on. The definition does not depend on the raw material, the fiber, or the technology used, but on the end use of the product itself. Technical textiles can be used by professionals or not.[3]
- **Leather:** A hide or skin with its original fibrous structure more or less intact and tanned so it does not rot.[3]
- **Footwear:** All articles with applied soles designed to protect or cover the foot, including parts marketed separately.[3]

b) Quantification methodology

The following methodology for modeling the total weight of textile fibers and raw materials by end use is based on following steps:

In cases where Textile Exchange has existing studies or sources to estimate the percentage allocation per end use, it applies these shares to annual global production.

In cases where no reliable studies or sources are available, Textile Exchange uses international UN Comtrade data analysis and modeling to estimate the end-use shares per textile fiber and raw material.[4] These shares are applied to the total weight of global production as proxy shares. The absolute total weight trade data is not used as it does not capture the global total weight, which includes internationally traded and domestic consumption.

Because UN Comtrade data do not always provide the textile fiber and raw material compositions, further references such as the common product compositions as specified in the techno-scientific assessment of the management options for used and waste textiles in the European Union[5] and the Product Environmental Footprint – Representative Product (PEF–RP) Study Report[6] are used in these cases.

The weights mentioned in Part 2 of the report refer to Tier 4 processed raw material weights as defined in the *Supply Chain Taxonomy*.[7] The weights are therefore the textile fiber and raw material input weights at the beginning of the supply chain and not the final product weights at the end of the supply chain at Tier 1. To calculate the Tier 1 weights, supply chain loss factors (also referred to as conversion factors) need to be applied.

1. European Commission . "Textiles Ecosystem – TCLF (textiles, clothing, leather and footwear) industries."
2. The official definition of textile products at the EU level is broader and also includes intermediate textiles ("raw, semi-worked, worked, semi-manufactured, manufactured, semi-made-up or made-up"). As this study focuses on end uses, only the definition of final textile products is used.
3. European Commission, Joint Research Centre, Preparatory Study on Textiles for Product Policy Instruments – 3rd Milestone, draft JRC Science for Policy Report, 2025.
4. United Nations Statistics Division. UN Comtrade Plus database. Data extracted for annual (2023) global trade flows using HS classification.
5. Publications Office of the European Union. Techno-scientific assessment of the management options for used and waste textiles in the European Union. JRC Science for Policy Report, JRC134586. 2023.
6. Technical Secretariat for the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear. PEF–RP Study Report: Apparel and Footwear. Version 3.1. 2025.
7. apparel alliance. Supply Chain Taxonomy. 2026.

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Photo: Alejandra Orosco