



**Textile
Exchange**

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**MATERIALS MATTER
STANDARD PILOT V1.0**



**SUMMARY PAPER
RECYCLED MATERIALS**

Summary Paper – Recycled Materials

Materials Matter Standard Pilot V1.0

About Textile Exchange

Textile Exchange is a global non-profit helping to drive beneficial outcomes for climate and nature across the fashion, textile, and apparel industry, right from the start of the supply system.

Our goal is to help the industry achieve a 45% reduction in the greenhouse gas emissions that come from producing fibers and raw materials by 2030 (from a 2019 baseline). To get there, we are keeping our focus holistic and interconnected, accelerating the adoption of practices that improve soil health, water, and biodiversity while respecting human livelihoods and animal welfare.

Over the last 20 years, our internationally recognized standards for the production of different fibers and raw materials have helped build integrity in the industry. As a member of [ISEAL](#), we comply with three credibility Codes of Good Practice which underpin our policies and procedures for organizational functions like standard-setting, assurance, and monitoring, evaluation, and learning. These practices ensure we provide value, rigor, accessibility, and transparency in our standards.

All of our standards are anchored by an independent, third-party assurance model that supports organizations in consistently demonstrating and maintaining conformity while handling and trading their certified products, through an independently verifiable and impartial process.

About the Materials Matter Standard

The Materials Matter Standard is a voluntary sustainability standard for the production and initial processing of raw materials used in the fashion, textile, and apparel industry.

The standard sets out to incentivize a system in which the materials in our clothing and textiles support the climate, respect human rights and animal welfare, and drive beneficial outcomes for soil health, water, and biodiversity. It aligns the industry on a shared trajectory towards this vision by establishing what best practice looks like for different materials in various settings, from farms to recycling facilities.

By focusing specifically on the start of the supply chain, the Materials Matter Standard provides a global certification model that is connected to the unique contexts of producers and processors, as well as their local communities and landscapes. A blend of practice-based criteria and outcome-based indicators helps participating organizations get acknowledged for meeting core requirements and builds their capacity to measure results. At the same time, it gives brands and retailers that choose certified materials a way to speak confidently to customers about them.

In the long term, the Materials Matter Standard provides a foundation for producers and processors to understand how their activities impact the people and ecosystems around them, track their progress based on different practices, and learn where to improve over time to drive beneficial outcomes on the ground. Beyond getting certified, optional leadership criteria invite participating organizations to raise the bar through areas like regeneration, renewable energy, and textile-to-textile recycling.

Over time, the Materials Matter Standard will be improved and adapted using insights from the auditing process and outcome measurements. This will help make sure it brings more meaningful benefits to those producing materials for the industry, as well as those directly impacted by the practices they use.

Please note that the Materials Matter Standard was known as the “unified standard” during its development. With the release of the Pilot V1.0, Textile Exchange is pleased to share its official name with stakeholders.

Transitioning towards the Materials Matter Standard system

In 2021, Textile Exchange began a comprehensive revision of its existing standards framework to develop a more harmonized system across all of our material-specific standards. Our goal was to meaningfully embed our organizational climate and nature goals into the production of all raw materials included in the scope of our certification, as well as to facilitate a simplified communication at the consumer level through more integrated and aligned claims and labeling.

After review and approval of the public project plan from an International Working Group (IWG), the first draft of the Materials Matter standard (then referred to as the “unified” standard) was made available for public consultation from May to July 2023, with the second draft open for public consultation from October to November 2023. Following invaluable feedback from stakeholders, the Materials Matter Standard Pilot V1.0 was released publicly in early June, 2024.

The rest of our progress in 2024 will then be focused on feasibility testing, the preparation of supplementary documentation, and outreach events to raise awareness among standard users. Learnings from these activities will be used to refine criteria and related policies for the final version of the standard which, following pilot testing and system updates, will be published in mid-2025.

The final published standard will state an effective date and a mandatory date. The effective date is planned for the first quarter of 2026 and means that auditing and certification may begin on a voluntary basis whereby organizations may request an audit to the Materials Matter Standard from licensed certification bodies. This will remain optional during a transitional period for organizations already certified to current standards superseded by the Materials Matter Standard, including the Global Recycled Standard (GRS), Recycled Claim Standard (RCS), Responsible Wool Standard (RWS), Responsible Mohair Standard (RMS), Responsible Alpaca Standard (RAS), and Responsible Down Standard (RDS).

The mandatory date is planned for mid-2026, 12 months after the final standard publication date. This means that all applicable audits (for both sites that are already certified and new applicants) will be required to be to the new Materials Matter Standard from that date onwards.

Timeline

March 2024: Materials Matter Standard Pilot V1.0 is approved by IWG	Finalize core content to release for 2024 implementation planning and pilot testing
June 2024: Public release of the Materials Matter Standard Pilot V1.0	Unified standard released publicly with Materials Matter name, as well as supporting documentation to guide standards users
Apr–Oct 2024: Pilot test criteria and hold workshops for stakeholders	Pilot testing remotely and in the field; full standards system updates; promotion and education of new/revised content; progress on approach to recognition partnerships for external standards/tools
2025: Final Materials Matter Standard publication	Criteria and related policies are planned to be released on the publication date in mid-2025; a transitional period will follow publication to allow certification bodies and certified organizations to fully prepare for auditing
2026: Published standard will have an effective date followed by a mandatory date that begins during 2026	Standard becomes effective in the first quarter of 2026: organizations may request audits by approved certification bodies; standard becomes mandatory mid-2026: auditing and certification required for prior standard scopes superseded by the Materials Matter Standard

Scope

The Materials Matter Standard criteria cover practices and outcomes for the production and initial processing of raw materials, including primary/recycled feedstocks, and apply to farms, producers, and first processing facilities.

The main impact areas of the Materials Matter Standard focus on virgin raw material production (including land use practices in the raising of animals, as well as animal welfare, and treatment of workers), and the first processing stage of extracted raw materials and feedstocks (including processes such as wool scouring, dissolving pulp, chemical/mechanical recycling, down processing, and ginning).

The materials included in the scope of the pilot version of the Materials Matter Standard include:

- Animal fibers and materials: Sheep wool, Mohair, Alpaca, Down, and Skins
- Recycled: Synthetics, Natural materials, Recycled MMCF

Some of the materials proposed for inclusion within the scope of the standard will be added through a framework for recognition partnerships with organizations that own sustainability systems in an effort to focus on collaboration first and avoid duplication of standards systems. Partnerships for full recognition mean Textile Exchange would accept related certified raw material inputs into its standard system rather than through direct Textile Exchange raw material certification. Proposed materials that may be added over time are:

- Animal fibers and materials: Cashmere
- Fiber crops: Cotton
- Forest/plant-derived: MMCF, Biosynthetics

The standard is globally applicable, with no explicit geographic limitations except those that may occur due to legal restrictions.

Chain of custody

Principle 6 of the Materials Matter Standard contains fundamental chain of custody criteria to be met at the raw material production level. This section contains criteria for:

- **Material handling:** The physical segregation of certified materials from non-certified materials, maintaining an adequate identification system.
- **Volume reconciliation:** Maintaining records of volumes collected, produced, stored, and sold as certified.
- **Sale of certified materials:** The conditions to fulfill for making a certified transaction, including the application for a transaction certificate to be issued by the certification body for each shipment.
- **Logo use and claims:** The conditions for using the Materials Matter trademarks, including the Materials Matter name, the Materials Matter logo, and the Materials Matter Certified label. We will be releasing an updated version of our Logo Use and Claims Policy to align with the Materials Matter Standard in 2024/2025.

Under specific circumstances detailed in the preface of the Materials Matter Standard Pilot V1.0, organizations are required to implement the full Content Claim Standard (we will be releasing an updated version of this document to align with the Materials Matter Standard in 2024/2025), instead of Principle 6 of the Materials Matter Standard.

Structure of the standard

1. Organizational Management	1.1. General Requirements
	1.2. Shared Responsibilities
2. Human Rights and Livelihoods	2.1. Policies, Management Systems and Records
	2.2. Labor Rights
	2.3. Social Justice
	2.4. Livelihoods
	2.5. Management of Waste Collection for Recycled Inputs
3. Land Use	3.1. Management Plan
	3.2. Soil Health
	3.3. Soil Nutrients
	3.4. Pest Management
	3.5. Water Management
	3.6. Conservation of Biodiversity
4. Animal Welfare	4.1. Health and Welfare Plan
	4.2. Animal Nutrition
	4.3. Living Environment
	4.4. Husbandry Procedures
	4.5. Animal Shearing
	4.6. Herd Management
	4.7. Breeding, Birthing, and Caring for Young Animals
	4.8. Handling and Transport
	4.9. Handling and Transport Managed by the Organization
	4.10. Euthanasia and On-Farm Slaughter
	4.11. Slaughterhouse
5. Processing Facility	5.1. Environmental Management System
	5.2. Chemical Management and Restrictions
	5.3. Waste Management
	5.4. Water Use and Discharge
	5.5. Air Emissions
	5.6. Energy Use
6. Chain of Custody	6.1. Material Handling
	6.2. Volume Reconciliation
	6.3. Sale of Certified Materials
	6.4. Logo Use and Claims
7. Group Certification	7.1. Group Configuration
	7.2. Group Management System
	7.3. Group Member Requirements
	7.4. Inspection of Members
	7.5. Adding and Removing Members

Main changes between the Global Recycled Standard and the Materials Matter Standard Pilot V1.0

The following information provides details of the changes between Textile Exchange's current standards and the new Materials Matter Standard. The summary paper also includes other relevant information surrounding the new standard system.

Chemical Management and Restrictions (5.2)

Meeting the chemical requirements of the Global Recycled Standard (GRS) has been a challenge for recyclers, with two aspects causing particular difficulty. One of these aspects is the exclusion of chemicals classified with hazard codes in the GRS (Table A), which was compulsory for certification. In the Materials Matter Standard Pilot V1.0, this requirement has evolved into an optional leadership criterion.

Secondly, the requirement for the exclusion of chemicals that do not comply with the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) has been replaced by new criteria that are more relevant to first processors, recyclers, and manmade fibers.

We have also introduced a new criterion focusing on the analysis and testing of recycled outputs. This has been added to ensure that certified recycled outputs are free from restricted chemicals, safeguarding both consumers and end-users throughout the subsequent stages in the supply chain.

Processing Facility (Principle 5)

Previously, the environmental requirements of the GRS focused only on having an environmental management system in place and fulfilling local regulations. The Processing Facility section of the Materials Matter Standard requires organizations and sites to go beyond the baseline requirements of the GRS and to achieve more than what was already established. Below are some examples in the subsections of waste management, air emissions, and energy use.

Waste Management (5.3)

Two new mandatory certification (conformance) criteria have been introduced in the waste management sub-section to shift the focus from the recycling of pre- and post-consumer waste and to unlock untapped potential in circularity. These concern both the reutilization of certified by-products from the process and unqualified pre- and post-consumer materials that are not allowed in the GRS. The reutilization of by-products and unqualified pre- and post-consumer materials used in manufacturing will not be considered for a recycled content claim.

However, in order to reduce the burden on virgin inputs, it is essential to recognize reuse, resource efficiency, and other practices by the industry to maximize beneficial environmental outcomes. A new criterion has been introduced for continuous chemical recyclers that focuses on reporting on input, output, and waste generated. This change aims to ensure transparency and accuracy in manufacturing capabilities, thereby preventing any potential overstatements by the sites.

To promote closed-loop recycling, we have introduced a new leadership criterion requiring that feedstock for recycling comes from reclaimed pre- and post-textile inputs, promoting textile-to-textile recycling.

To help catalyze the transition to innovative material solutions, a new leadership criterion has been introduced that requires organizations to demonstrate commitment, progress, and tangible

results toward diverging from business-as-usual practices and investing in new materials and processes that yield beneficial outcomes for the environment.

Water Use and Discharge (5.4)

Other learnings from the GRS have been accommodated in the Materials Matter Standard. This includes clarification around wastewater discharge requirements. Sites discharging effluent to off-site facilities are not compelled to test as per the ZDHC Wastewater Guidelines (WWG) but do need to adhere to local legal discharge mandates. Additionally, clarity has been provided for sites where the ZDHC WWG do not cover effluent from polymer manufacturing under their scope. In this case, such sites would follow the dedicated pulp, MMCF, and recycled polyester guidelines that will soon be published by ZDHC.

Air Emissions (5.5)

The Materials Matter Standard also strengthens the focus on reducing greenhouse gas and other air emissions. A new criterion has been introduced that requires organizations to have plans to monitor, measure, and reduce these emissions.

Energy Use (5.6)

With the focus on reducing fossil-based energy and moving towards renewable energy, the Materials Matter Standard introduces new criteria in the energy use sub-section of the Processing Facility section. These criteria require organizations to monitor, measure, and reduce fossil resources.

MMCF in the Materials Matter Standard

Processing Facility (Principle 5)

We have added chemical requirements that would apply to processing facilities at Tier 4 of the supply chain. We have introduced several new criteria that are more relevant to the first processing stage of MMCFs (both virgin and recycled). Below is a summary of the changes.

Chemical Management and Restrictions (5.2)

The MMCF facilities manufacturing cellulosic filament fibers, irrespective of the feedstock (virgin/recycled), must meet the Foundational/Progressive/Aspirational requirements as set out in the latest version of the ZDHC MMCF guidelines. The timelines to achieve different levels are set in the latest version of the ZDHC MMCF Industry Standard Implementation Approach.

Additionally, we have introduced specific criteria on dissolving pulp processing. This includes the prohibition of elemental chlorine for the bleaching of dissolving pulp, and new criteria around responsible manufacturing and chemical recovery for dissolving pulp by implementing either the EU Best Available Techniques Reference Document (EU-BREF) for the production of pulps or the ZDHC MMCF guidelines.

While the EU-BREF document is aimed at the production of pulp, paper, and board, it may be referenced as a guidance document until ZDHC releases a new version of its MMCF guidelines at the end of 2024. The new version of the ZDHC guidelines will cover responsible manufacturing and chemical recovery, wastewater discharge, and air emissions for dissolving pulp from virgin and recycled inputs.

As noted above, we are also introducing new criteria to foster innovation. These criteria aim to encourage advancements such as textile-to-textile recycling or the adoption of safer and less hazardous novel solvents and chemicals in cellulosic filament fiber manufacturing processes.

Water Use and Discharge (5.4)

In this subsection, we reiterate that both dissolving pulp processors using virgin or recycled inputs and MMCF filament fiber manufacturers are required to fulfill the effluent discharge requirements outlined in the ZDHC MMCF guidelines.

Although the guidelines do not yet cover dissolving pulp from virgin or recycled inputs under their scope, ZDHC is expected to update them to include these provisions by the end of 2024.

Energy Use (5.6)

Several MMCF process-related leadership criteria included in the energy use subsection of the second draft of the Materials Matter Standard were removed in the pilot version. It was decided that these criteria, which went into the intricacies of the process, were not feasible for auditing purposes.

With an emphasis on the goal of reducing greenhouse gas emissions, another new criterion was introduced for dissolving pulp manufacturers to recover value from their spent liquors by generating 50% on-site electricity and steam. This is applicable only to dissolving pulp produced from virgin inputs.

Approach to recognition for MMCF

We consider a wide range of raw materials as well as impact areas (including human rights and livelihoods) to recognize verification systems. The recognition framework will now include different models based on the material and the peer organization so that it can better meet needs, areas of alignment, and opportunities for growth.

MMCF is a strategic fiber to include in our future standard system, but we acknowledge peer organizations that have already developed expertise and invested in standards for virgin and/or innovative MMCF inputs.

The ZDHC MMCF guidelines, specifically the Industry Implementation Approach guideline, is a specific recognition model. In this model, the sustainability system includes one or more area(s) of verification (e.g. specific standard criteria) aligned with the Materials Matter Standard core criteria for a defined impact area.

Forest-derived inputs for MMCF production that come from responsible forest management operations are also a candidate feedstock for recognition. Another potential candidate feedstock for recognition are innovative feedstock processes like carbon capture.

Human rights and Livelihoods (Principle 2)

The Human Rights and Livelihoods criteria included in the Materials Matter Standard will apply to facilities at the first processing stage for the recycling of cotton, animal fibers, manmade synthetics, and MMCFs.

In comparison to the social criteria (Section B) in the GRS, the Human Rights and Livelihoods criteria in the Materials Matter Standard are significantly more robust. Additionally, a number of criteria were specifically designed to address the human rights risks linked to waste collection (section 2.5).

Textile Exchange aims to align the Materials Matter Standard with globally recognized human rights due diligence frameworks, namely, the United Nations' Guiding Principles on Business and Human Rights and the OECD's Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector. These frameworks provide the basis for many existing standards and along with new and emerging due diligence laws, provide guidance so that organizations wishing to – or needing to – comply with numerous requirements can do so consistently.

In line with these frameworks, the Human Rights and Livelihoods criteria extend beyond labor standards to cover all relevant areas of internationally recognized human rights while using a risk-based approach. This means that while the number of Human Rights and Livelihoods criteria increases, organizations can achieve compliance in a more tailored and meaningful way. Certified organizations will be expected to assess human rights risks in relation to their operational reality (country, material, processes). Then, they will be asked to prioritize action on those risks or negative impacts based on which are the most severe or most likely to happen. Organizations will not be expected to take action in all Human Rights and Livelihoods areas at once and will likely have some differences regarding their high-risk areas and prioritized actions.

In addition, for some criteria, different conformance determinations have been developed for small, medium, and large organizations. This means that for instance, a small facility will not be expected to have a sophisticated digital wage and working hour tracking system but it will have to provide evidence that it is tracking that workers are paid fairly and transparently. However, all facilities – regardless of size – will be required to assess risks and address priority issues affecting formal and informal waste pickers wherever they provide feedstock to certified facilities.

Effective grievance channels and access to remedy in cases where human rights have been negatively impacted fully or partially by the organization are other important elements of human rights due diligence required by the standard. Certified organizations will additionally be expected to implement both policies and management systems to prevent negative human rights impacts from occurring in their priority high-risk areas. They will also be expected to carry out stakeholder engagement throughout the due diligence process, with a focus on engaging underrepresented rightsholders.

Audits will focus on assessing the accuracy and quality of the organization's Human Rights and Livelihoods due diligence, in relation to each context. Some criteria are designed to sit at a leadership level and will therefore not be mandatory.

Piloting

As part of the Textile Exchange standard development and revision process, pilot activities will be carried out in 2024 to test how the changes introduced to the Materials Matter Standard are fit for purpose and scope. Learnings from on-the-ground implementation will be integrated into the final version of the standard that will become effective in 2025. There are two key objectives in piloting the Material Matters Standard before finalization:

1. **Criteria feasibility assessments:** Assess key questions around feasibility and auditability of the criteria for the intended fiber and material scopes in a varied set of conditions that are representative of the applicable scopes in the certification program. This includes ground-truthing criteria in terms of clarity, means of verification, cost/benefit analysis, and impact across contexts; testing key changes such as the group certification model, the definition of smallholders and criteria applicability, reutilization of by-products; and assessing impact on fee structures.
2. **Testing related tools and guidelines:** Evaluate the efficacy, use-case and practicality of various sets of tools for data collection, along with resources designed to support users in their implementation of the standard. This includes testing the Monitoring, Evaluation and

Learning (MEL) standard indicators and their means of collection through the farm and processing facility questionnaires as well as other scope-related tools and guidelines (e.g., ZDHC guidelines, various HR&L resources, etc.). Insights gained will inform necessary improvements and adaptations to these tools and guidelines, as well as assess the infrastructure requirements for data collection, recording, monitoring, and reporting.