Textile Exchange

Guidance on Science-Based Targets for Nature

For the fashion, apparel, and textile industry

February 2025

Contents

Cover photo: Alejandra Orosco

About this guidance

Goal and scope of this guidance

Textile Exchange's Climate+ strategy includes a focus on both climate and nature impacts related to raw materials and fibers used in the fashion, apparel, and textile sector. In addition to guiding the industry toward greenhouse gas reduction targets, we also recognize a need to set holistic goals and align focus on nature-related impact areas such as freshwater, land, biodiversity, and soil health.

Nature-related impact areas are context-specific and there has been methodology development for target setting in these areas over the past several years led by the Science Based Target Network (SBTN). The SBTN methods are complex and granular, requiring very specific datasets and tracking. Textile Exchange is uniquely positioned to translate these methods to the fashion, apparel, and textile industry to support the uptake of nature-related targets as well as use outputs for industry-wide goal setting.

Textile Exchange's engagement model supports action that delivers nature outcomes in key production landscapes, allowing us to provide consistent impact measurement, guidance, and insights into nature-related target setting.

This document has been developed by Textile Exchange to provide guidance on implementing primarily Step 3 of the science-based targets (SBTs) for nature framework within the fashion, apparel, and textile industry at the Tier 4 level (raw material production and primary processing).[1] The intention is for this document to evolve over time to continue to provide up-to-date guidance for the industry.

Photo: Carl van der Linde

Introduction

What is the Science Based Targets initiative?

Human activities are destroying nature at a rate much faster than it can replenish itself.[2] This continued loss of the natural environment threatens not only over half the global Gross Domestic Product, but also human lives and well-being, with the poorest and most vulnerable hit first and hardest.[3]

The climate crisis is deeply linked to the nature crisis. Both need to be addressed simultaneously to drive a swift transition to a nature-positive, carbon-neutral future.

The Science Based Targets initiative (SBTi) and the Science Based Targets Network provide globally-accepted guidance for companies to set targets and develop strategies for nature and climate. Both are aligned with the Planetary Boundaries concept and can help companies address regulation, such as the Corporate Social Reporting Directive (CSRD) and voluntary disclosure frameworks, such as the Taskforce for Nature-related Financial Disclosure (TNFD).

About the Science Based Targets initiative

The Science Based Targets initiative was launched in 2015 and is an organization that provides standards, tools, and guidance to companies and financial institutions. These resources have been developed to help companies and financial institutions align their greenhouse gas (GHG) emissions targets to reach net zero by 2050, at the latest.

Science-based targets show companies and financial institutions how much and how quickly they need to reduce their GHG emissions to prevent the worst effects of climate change.

The Science Based Targets initiative:

- Defines and promotes best practice in emissions reductions and net-zero targets in line with climate science.
- Develops standards, tools, and guidance to enable companies and financial institutions to set science-based targets in line with the latest climate science.
- Assesses and validates companies' and financial institutions' targets through its validation services arm.
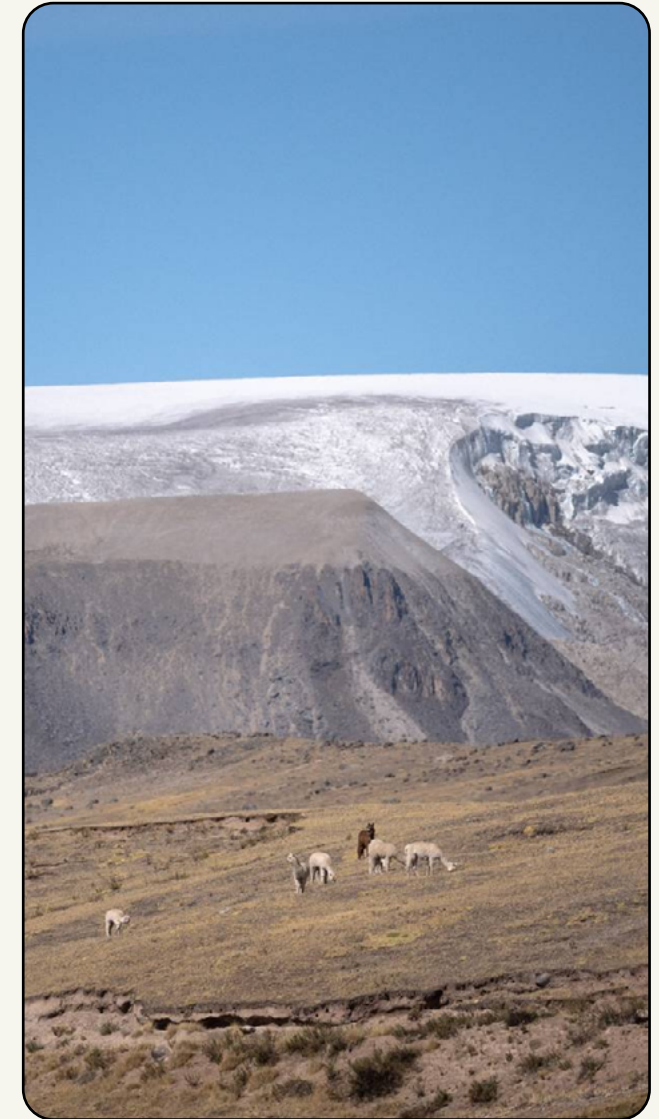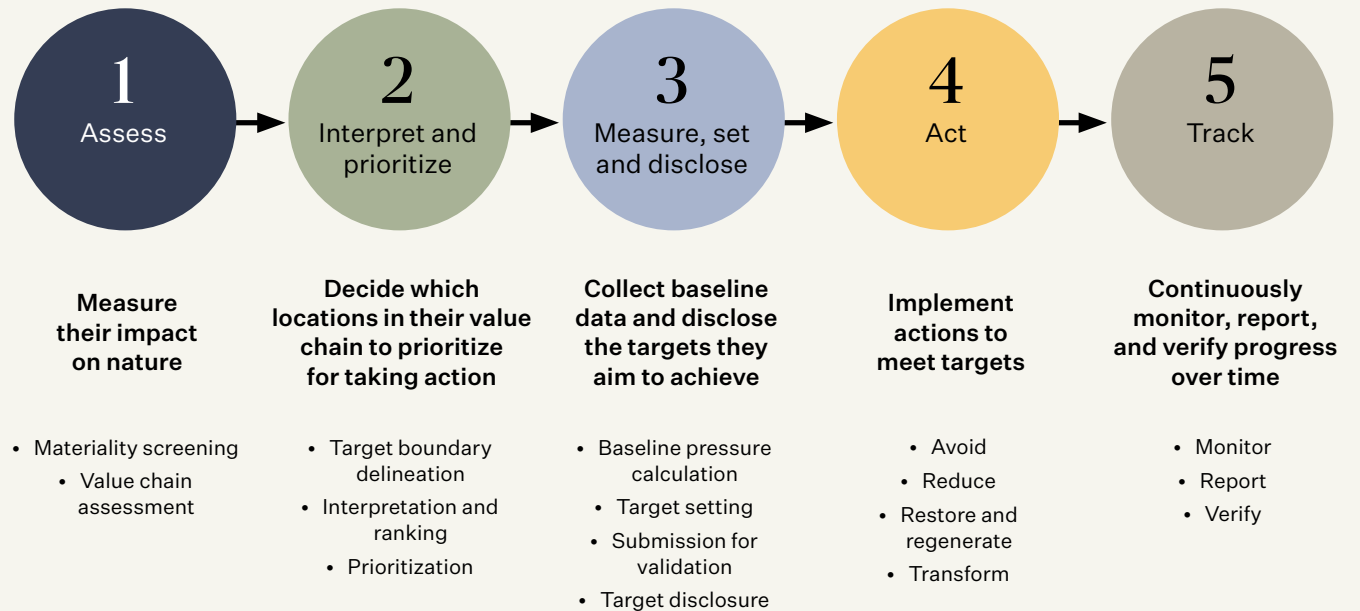

Photo: Angela Ponce

What is the Science Based Targets Network?

The Science Based Targets Network was established in 2019, building on the success of SBTi, to develop science-based nature targets so companies and cities can comprehensively address their environmental impacts across biodiversity, land, freshwater, and oceans. These targets are in addition to the climate targets that companies and financial institutions can set through the SBTi.

In 2020, SBTN released the initial guidance and then in 2024, SBTN released its first methods to set science-based targets for nature to help companies confidently assess and address their most urgent impacts and dependencies, putting businesses on the path toward sustainable transformation. Notably, the SBTN methods are well correlated with the CSRD requirements and are included as the target-setting framework within the TNFD's disclosure framework. Science-based targets for nature provide a clear framework to help companies, including those in the textile industry, set measurable, science-driven goals to reduce their impact on biodiversity, land, freshwater, and oceans. Eleven companies have already gone through the process to have validated materiality assessments and/ or targets, including fashion company Kering, which publicly disclosed land and freshwater targets.

SBTN's 5-step approach requires businesses to:

1 Assess

2 Interpret and prioritize

3 Measure, set and disclose

4 Act

5 Track

Measure their impact on nature

- Materiality screening
- Value chain assessment

Decide which locations in their value chain to prioritize for taking action

- Target boundary delineation
- Interpretation and ranking
- Prioritization

Collect baseline data and disclose the targets they aim to achieve

- Baseline pressure calculation
- Target setting
- Submission for validation
- Target disclosure

Implement actions to meet targets

- Avoid
- Reduce
- Restore and regenerate
- Transform

Continuously monitor, report, and verify progress over time

- Monitor
- Report
- Verify

Source: Science Based Targets Network (2024).
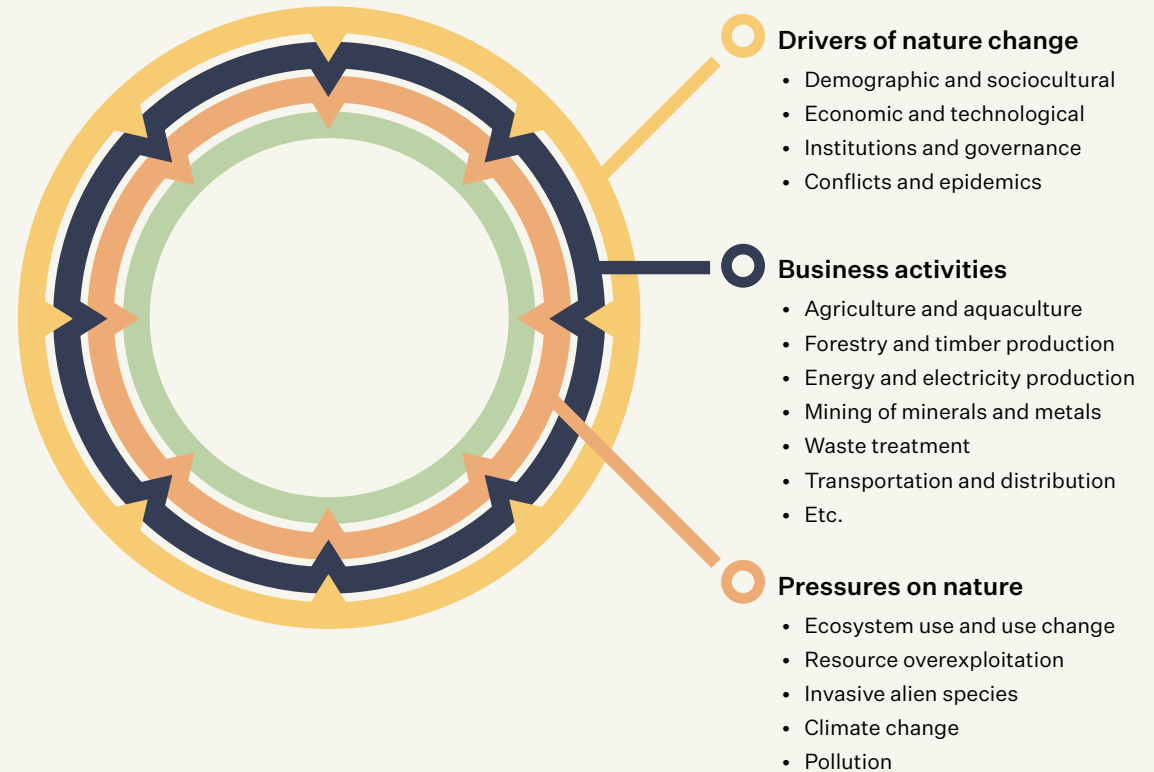
What is the Nature Positive Initiative?

The Nature Positive Initiative is a collaborative effort designed to help businesses and financial institutions adopt strategies that not only reduce harm to nature but actively contribute to restoring ecosystems and enhancing biodiversity.

Developed by leading environmental organizations, this initiative takes a higher-level view of the term "nature positive." It provides guidance on metrics and definitions while aligning with global sustainability goals to contribute toward nature-positive outcomes.[4] It also guides companies in reversing nature loss, ensuring that their operations result in a net benefit to ecosystems and biodiversity.

While there is no single globally accepted definition for "nature positive," there are several working definitions:

- The Global Goal for Nature Group has defined the term as "halting and reversing nature loss by 2030, measured from a baseline of 2020, and full recovery by 2050."[5]
- The International Union of Concerned Scientists defines it as "halting and reversing the loss of nature measured from its current status, reducing future negative impacts alongside restoring and renewing nature, to put both living and non-living nature measurably on the path to recovery."[6]
- The term is defined by the Science Based Targets Network as "a high-level goal and concept describing a future state of nature (e.g., biodiversity, nature's contributions to people) that is greater than the current state."[7]

Taking aim at the drivers and pressures of nature loss

Drivers of nature change

- Demographic and sociocultural
- Economic and technological
- Institutions and governance
- Conflicts and epidemics

Business activities

- Agriculture and aquaculture
- Forestry and timber production
- Energy and electricity production
- Mining of minerals and metals
- Waste treatment
- Transportation and distribution
- Etc.

Pressures on nature

- Ecosystem use and use change
- Resource overexploitation
- Invasive alien species
- Climate change
- Pollution

Source: Science Based Targets Network (2024), Taking aim at the drivers and pressures of nature loss.

What is the Nature Positive Initiative?

All of the definitions for "nature positive" align with the [Global Biodiversity Framework](), which sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050. Many countries have signed up to implement the framework, and both the Nature Positive Initiative and science-based targets for nature guidance can be used to help companies articulate their contribution to these globally important goals and ambitions.
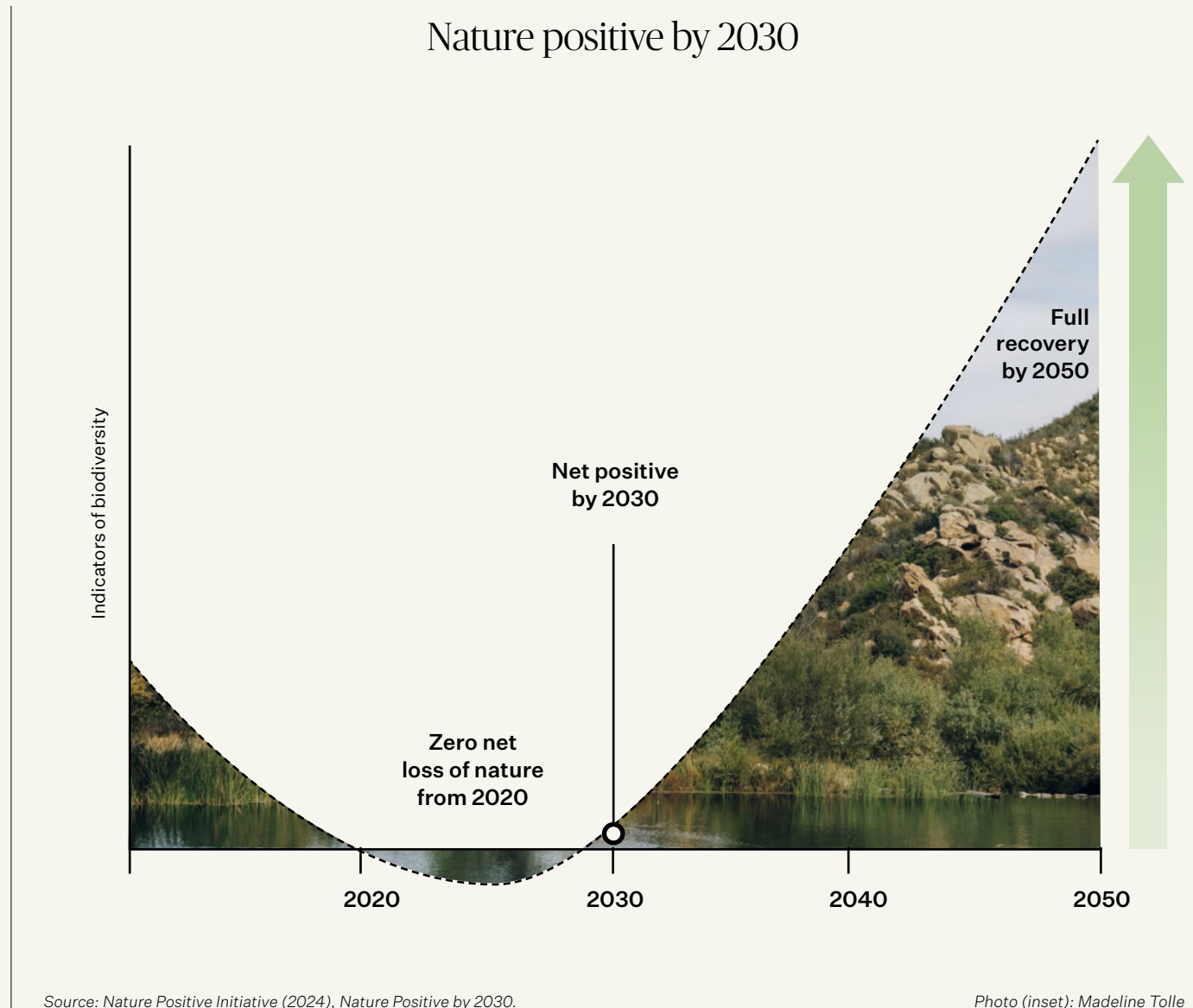
Nature positive by 2030

Full recovery by 2050

Net positive by 2030

Indicators of biodiversity

Zero net loss of nature from 2020

2020   2030   2040   2050

Source: Nature Positive Initiative (2024), Nature Positive by 2030.

Photo (inset): Madeline Tolle

Science-based targets for nature and the fashion, apparel, and textile industry

Science-based targets for nature and the fashion, apparel, and textile industry

Science-based targets for nature are highly relevant to the Tier 4 level of the fashion, apparel, and textile industry, as they can guide companies in managing the impacts of their raw material sourcing—such as cotton, leather, wool, and synthetic fibers—beyond climate and greenhouse gas emissions.[8]

By setting clear goals for reducing biodiversity loss, land degradation, pollution, and resource consumption, these targets help the industry minimize its ecological footprint and promote more sustainable sourcing and manufacturing practices throughout the supply system.

Key questions to understand impacts and dependencies on nature are highlighted in the Biodiversity Landscape Analysis report, a joint initiative between Textile Exchange and The Fashion Pact in partnership with Conservation International.[9]

Questions for the fashion, apparel, and textile industry include:

- What are the main materials used by the organization?
- Where and how are these materials grown or produced?
- What regions or ecosystems does production rely on for materials?
- What are the highest impacts on nature in these sourcing geographies?
- Is there a relevant certification standard, and how does it address relevant biodiversity risks?
- Does this align with brand expectations/ sourcing policies?

Based on Textile Exchange's 2024 Materials Benchmark study, approximately 52% of the responding brands and suppliers have set science-based targets for climate, while engagement with SBTs for nature by brands and suppliers in the Materials Benchmark is approximately 7%.[10] Textile Exchange hopes that providing this guidance can help improve this number.

Photo: Carl van der Linde

How do science-based targets for nature connect to other frameworks?

There are many different frameworks and sources of guidance related to nature that involve the textile industry. In addition to the Science Based Targets Network, these include the Taskforce for Nature-related Financial Disclosure, the Global Biodiversity Framework, the Planetary Boundaries, and the United Nations Sustainable Development Goals, among many others.

Given the complexity in this space, we have outlined the connection of some of these frameworks within the science-based targets for nature in the table below.

Framework or guidance	Leading organization	Year established	Aim	Connection to science-based targets for nature	More information
Planetary Boundaries	Stockholm Resilience Centre	2009	The Planetary Boundaries present nine boundaries that humanity needs to develop and operate within for it to continue to "thrive for generations to come."	SBTs for nature methods outline what organizations must do to stay within the Earth's limits while addressing the needs of humans.	Learn more
Sustainable Development Goals (SDGs)	United Nations	2015	The SDGs, otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.	SBTs for nature methods align with the objective of the SDGs to implement conservation efforts and sustainability actions to achieve positive global outcomes related to nature and biodiversity.	Learn more
Global Biodiversity Framework	Convention on Biological Diversity	2022	The framework supports the achievement of the SDGs, meeting people's needs through sustainable use and benefit sharing while sustainably managing and reducing threats to biodiversity.	SBTs for nature methods align with the objective of the Global Biodiversity Framework to implement conservation efforts and sustainability actions to achieve positive global outcomes related to nature and biodiversity.	Learn more
Taskforce for Nature-related Financial Disclosures (TNFD)	Financial Stability Board	2021	TNFD provides a set of nature-related recommended disclosures and additional guidance for corporations and financial institutions to identify, assess, manage, and disclose nature-related issues.	When organizations use the TNFD framework to understand their nature-related risks and opportunities, the TNFD recommends the use of SBTs for nature guidance to set targets.	Learn more
State of Nature (SON) Metric Framework	Nature Positive Initiative	2024	The SON framework is intended to be used to help understand if responses to reduce pressure on nature are contributing to nature's recovery. The metrics in the framework can provide insights into the overall health and integrity of ecosystems, species, and natural processes.	SBTN, as well as other organizations, are partners with the Nature Positive Initiative and are exploring how the metrics can be integrated into their frameworks.	Learn more

How do science-based targets for nature connect to legislation?

The European Union has recently adopted legal requirements for large and listed companies to report on and address their social and environmental impacts. These include the Corporate Sustainability Reporting Directive (CSRD), which will start applying to large companies in 2025, and the Corporate Sustainability Due Diligence Directive (CSDDD), set to take effect progressively from 2027 onward.

Both directives have different objectives to science-based targets for nature. CSRD is focused on disclosing company social and environmental impacts and financial risks and opportunities for the company, while CSDDD is focused on identifying and addressing adverse human rights and environmental impacts of company actions. SBTs for nature are focused on target setting and driving transformative change in connection to nature. CSRD and CSDDD are mandatory directives for companies in scope, while SBTs for nature continue to be voluntary.

The targets and actions stemming from SBTs for nature will inform the reporting of CSRD and contribute to addressing the nature-related impacts under CSDDD. All these initiatives require a good understanding of a company's footprint (direct operations and high-impact commodities/activities), operational boundaries, land use, and conversion information.

SBTs for nature will support compliance with CSDDD and CSRD in connection to nature-based impacts and extend beyond what is required on this topic under CSRD. They will also help with robust data required under European Sustainability Reporting Standards (ESRS) E4 Biodiversity and Ecosystems, E3 Water and Marine Resources and E1 Climate Change. Therefore, information and data required for CSDDD and CSRD will likely be useful for SBTs for nature target-setting.[11]

We can also note that the science-based targets for nature framework is aligned with the goals of the European Union Deforestation Regulation (EUDR) on deforestation-free products, as SBTN recommends setting no-deforestation targets and implementing traceability. However, this is not a mandatory requirement.

Photo: Alejandra Orosco

Navigating the science-based targets for nature

How are science-based targets for nature connected to the textile industry?

Given the textile industry's significant contribution to biodiversity loss, land use change, and water pollution, science-based targets for nature offer essential guidance to create more sustainable practices, reduce resource dependency, and protect natural systems that are crucial for long-term resilience and industry viability.

The data and time commitment required to align to the SBTs for nature methods and to set targets is complex even for the organizations that are leading in industry sustainability reporting. Companies that are less advanced can, at minimum, use the SBTN Materiality Screening tool to better understand the pressure on nature associated with their various business activities.

In this section, we outline some of the Tier 4 data requirements from the SBTs for nature methods and what they mean in practice for companies within the textile industry, providing recommendations where possible.[12] This guidance focuses primarily on Step 3 of the SBTs for nature guidance. For more details on Steps 1 and 2 of the guidance for the fashion, apparel, and textile sector, please see the Raising the Ambition for Nature report by the Cambridge Institute for Sustainability Leadership, The Fashion Pact, and Conservation International.[13]

> This section will be updated as industry guidance for science-based targets for nature develops and the adoption of the methods increases. This guidance focuses on freshwater and land guidance as they are the most advanced/developed methods at the time of release. SBTs for nature will continue to be refined in 2025, with second versions expected to be released along with new guidance for ocean methods, Step 4 (Act), and Step 5 (Track).

Science-based targets for nature help the fashion, apparel, and textile industry minimize its impact on nature and promote more sustainable sourcing and manufacturing practices across the supply system.

Below is a list of some of the potential areas within the textile value chain that companies can address to reduce their impact on nature:

- Reducing resource use and environmental impact
- Sourcing of preferred raw materials
- Regenerative agriculture
- Circular economy and recycling
- Reducing pollution and chemical use
- Responsible land management practices
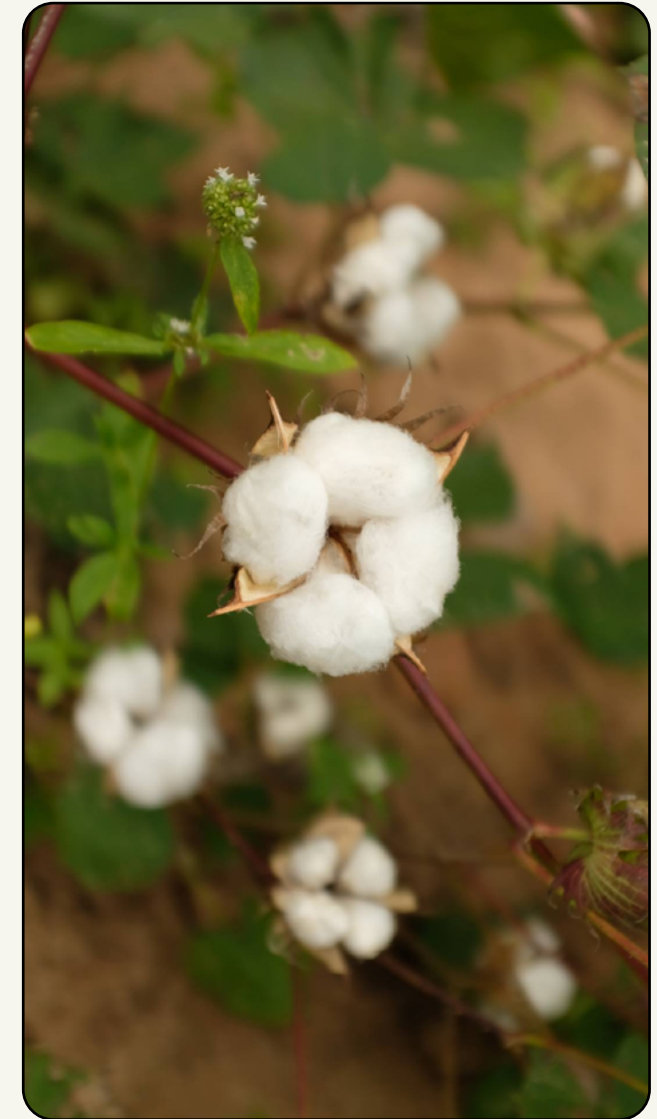- Supporting Indigenous and local communities

Photo: Danilo Arenas

General considerations

Traceability to sourcing origin

SBTN methods require businesses to be able to trace their sourcing to the subnational level.[14] According to the 2024 Textile Exchange Materials Benchmark survey taken by brands and retailers, more than 75% of the cotton, wool, polyester, nylon, and viscose reported comes from an unknown country of origin.[15]

The way that industry supply chains are set up today means traceability to sourcing origin is very challenging at a portfolio level. This affects many industries, but in the context of textiles, materials are often bought through third parties such as auctions and/or dealers, or are combined with other materials, so the ability to trace back to specific origin may be limited.

In the majority of cases, even if traceability back to origin exists, companies may only have country-level sourcing data, meaning only country-level pressure data can be used. It is becoming increasingly important for brands and retailers to work with their sourcing partners and other stakeholders to understand and map their supply chains, as this information is required by different frameworks and regulations, both voluntary and mandatory. Sustainability standards, in particular schemes with chain of custody solutions, can be key partners in enabling supply chain traceability.

Brands and retailers can start supply chain mapping by prioritizing their high-impact materials, using the SBTN's High Impact Commodity List, and high-volume materials/products. As with any supply chain engagement, it is important that brands and retailers work together with supply chain partners to support them with collecting and sharing the required data.

Businesses may wish to start their data collection and supply chain mapping with the production of their highest volume products within their high impact commodities. Working upstream through their supply chain, they may find that this is where the majority of their nature-related impacts originate. When companies have visibility of their raw materials certificate of origin, they can use the Materials Impact Explorer to help identify nature-based impacts and dependencies.

Materiality assessments may also help companies prioritize their focus on supply chains that are both important in terms of impact and future business operations. Advancing traceability is critical for companies to develop a clear understanding of where and how their operations and supply chain impacts nature and gives companies insights into how they can best address those impacts. Specifically for SBTs for nature, companies should prioritize improving traceability to the subnational level for commodities on the High Impact Commodity List.

Inclusion of direct operations in scope

The SBTN methods currently require companies to include direct operations in the scope of their targets. For the textile industry, direct operations may not be one of the highest impact parts of the supply chain—depending on the production mix of the business, the majority of the nature-related impact for textile companies may be within the agricultural production of raw materials. However, this is currently part of the scope of the SBTN methods.

While direct operations may not always be the highest impact part of the supply chain, it is under the direct control and influence of the business. With this in mind, data collection should be more straightforward and targets simpler to set.

Inclusion of materials from the High Impact Commodity List

SBTN requires 90% of the materials used by a company included in the High Impact Commodities List to be assessed as part of its target-setting process. This should allow commodities with very small volumes to be left out of the assessment. For the 90% that is assessed, the methods allow companies to trace high-impact commodities to different levels of specificity and do allow the labeling of some commodities as coming from an "unknown" location (i.e., of global origin).

It is important that the impact of materials is considered when taking action on the ground. The High Impact Commodity List includes materials such as leather and cotton which, even in low volumes, can have a significant impact on nature. The data that will be available through the Textile Exchange fiber and material LCA projects,[16] and Life Cycle Inventory Library,[17] will help to inform the prioritization process of brands for the raw materials within a material category that they use in their value chain.

General considerations

There are many requirements for companies in the industry to implement science-based targets for nature for Tier 4.[18] Some of the key applications and requirements that are relevant and, in some cases, may pose a challenge to the textile industry are described in the table below.

Target	Value chain segment	Target boundary	Step 1 Data requirement	Step 2 Data requirement	Step 3 Data requirement
Freshwater quantity	Direct operations and upstream	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	Companies must demonstrate that targets protect thresholds at either the resolution of local models or at each of the Pfafstetter Level 5 hydrobasins where they use the global model.
Freshwater quality	Direct operations and upstream	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	If companies have access to local models, companies must demonstrate that targets protect thresholds at each of the Pfafstetter Level 5 hydrobasins. If companies cannot find an accurate local model, companies must use Level 4 basins for setting Freshwater Quality targets, consistent with the scale of data provided by the global nutrient modeling of McDowell et al. (2020).
No conversion of natural ecosystems	Direct operations	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	All production units and project sites are demarcated by georeferenced boundaries (i.e., polygons), with the exception of small sites (less than 10 ha), for which one point coordinate near the center of production is sufficient.
	Upstream	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	Subnational (or finer) spatial or statistical data.
Land footprint reduction	Direct operations	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	For producing companies with an agricultural land footprint in direct operations: statistical (nonspatial) data on quantities of land-based products produced, and statistical or spatial data allowing for calculation of total surface area of working lands producing those products.
	Upstream	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	For purchasing companies with an upstream agricultural land footprint: statistical (non-spatial) data on quantities of land-based products sourced, locations (e.g., countries and/or subnational jurisdictions) if known, and yield (output per hectare) of each product for each location.
Landscape engagement	Direct operations and upstream	A	Subnational (or finer) spatial resolution	**Data level 1:** Spatial granularity necessary for Step 3. **Data level 2:** Subnational (or finer) spatial resolution	Operational or sourcing locations at ecosystem level.
All targets	Direct operations and upstream	B	National or less granular	**Data level 3:** National or less granular	Improve traceability and transparency. Further guidance in Step 2.

Source: Science Based Targets Network (2024), Technical Guidance Step 1 Assess (Table 4)

Understanding Steps 1–3

Steps 1 and 2

Step 1 and Step 2 of the science-based targets for nature framework guide companies through the initial phases of understanding and mitigating their environmental impact. For a more detailed understanding of the tasks involved in each step, please see the SBTN Self-Assessment Tool.

Step 1: Assess involves companies evaluating their impacts on nature.[19] This foundational step helps businesses understand how their operations impact and depend on ecosystems, water resources, and biodiversity, identifying areas where they have the most significant environmental impact.

Step 2: Interpret and prioritize takes these insights further by helping companies analyze the data gathered in Step 1 to identify priority areas for action. Businesses then determine which environmental impacts are most urgent and feasible to address, focusing resources on areas that will achieve the greatest benefit for nature.

For more details on Steps 1 and 2 of the SBTs for nature guidance for the fashion, apparel, and textile sector, please see the Raising the Ambition for Nature report by the Cambridge Institute for Sustainability Leadership, The Fashion Pact, and Conservation International.[20]

The paper summarizes that to achieve the aims of the SBTN, it is important that businesses:

- **Understand their impact** on nature by determining which are the highest impact materials used and where they occur in their operations across the value chain (see the "Where to begin" section on page 12 of the report).
- **Understand the data** they have access to and the gaps.
- **Start to trace material sourcing** back to the regional, farm, or site level for one product/unit, initially focusing on the highest volume products/units or products/units with the highest material impacts.
- **Mobilize change**, becoming part of the collaborative actions to address nature loss by joining groups like the Corporate Engagement Program[21] or Business for Nature,[22] among others, that are putting businesses at the forefront of developments and enabling them to contribute, test, learn, and share their experiences with technical experts.

Step 3

After completing Steps 1 and 2, businesses progress to **Step 3: Measure, set and disclose**.

Step 3 of the science-based targets for nature framework is where businesses set and validate their science-based targets. Depending on their material impacts, they can set targets for freshwater, land, and climate (via SBTi). Biodiversity is partially covered within the freshwater and land targets. Technical guidance is currently under development for ocean targets and is expected to be released in 2025.

The Step 3 guidance documents outline the data required and methods that should be followed to measure impact, set, and validate targets.

Step 3: Measure, set, and disclose

- Assess
  - Materiality screening
  - Value chain assessment
- Interpret and prioritize
  - Target boundary delineation
  - Interpolation and ranking
  - Prioritization
- Measure, set and disclose
  - **Baseline calculation and target setting**
- Targets

1 **What is my baseline impact?**

2 **What measurable changes do I need to achieve (or implement) and by when?**
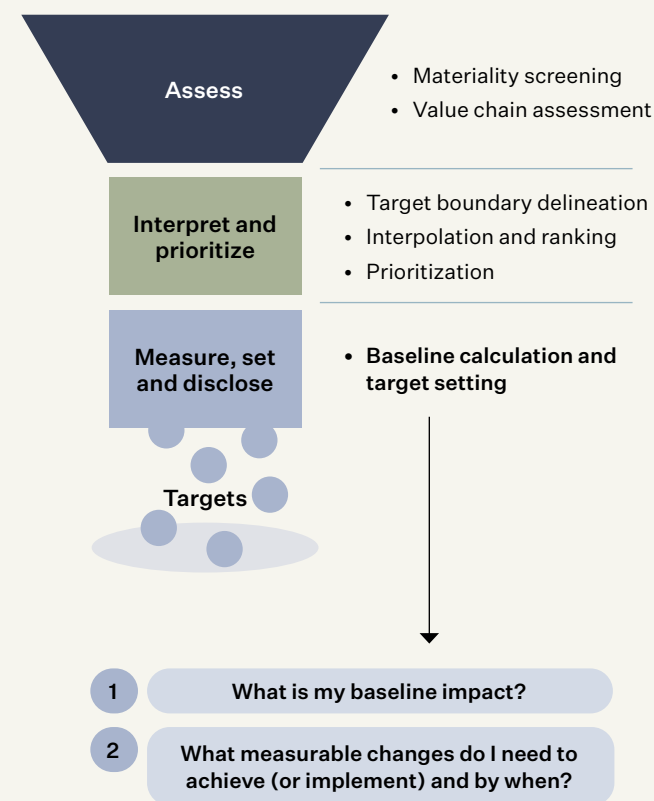
Source: Science Based Targets Network (2024).

Step 3: Freshwater-related targets

Technical Guidance V1.1, July 2024

The first science-based targets for freshwater focus on two key issues that are driving the loss of nature in ecosystems globally:

1. Water use, specifically withdrawals from surface water bodies and groundwater

2. Freshwater pollution, resulting from nitrogen and phosphorus

The process for setting freshwater targets is split into four phases:

1. Hydrological model selection

2. Baseline pressure calculation

3. Environmental thresholds identification

4. Freshwater target setting

Businesses are required to set freshwater targets for priority sites identified within the target boundaries established in Steps 1 and 2. Businesses can set targets for both freshwater quantity and freshwater quality at the basin level.

Relevant areas for target boundaries are likely to include raw material processing facilities (e.g. tanneries, cotton mills) due to effluents and air pollutants; arable farms due to land conversion, fertilizer, and pesticide runoff; and livestock farms due to land conversion and effluent runoff. Freshwater targets may also cover activities beyond the Tier 4 level, such as at the processing and manufacturing levels due to the use of chemicals and dyes.[23]

Freshwater data: Primary versus secondary data considerations

For freshwater guidance, calculating the impact of direct operations requires primary data for water quantity pressures, as there is an expectation that businesses will have increased access to data. When calculating upstream activities (extraction and/or cultivation of raw materials), the guidance offers two paths to calculate impact. For upstream activities, water quantity pressures can be calculated either from primary data (direct measurements) or from secondary data (modeled estimates).

Companies should try, where it is possible, to obtain good-quality primary data for their upstream activities. They should be working together with their supply chain partners to access this and support any data-sharing processes. Obtaining some impacts requires primary data, such as upstream water pollution data collection from a point source. However, secondary data can be used if primary data is not available. The intention should be to replace this with primary data collection where possible.
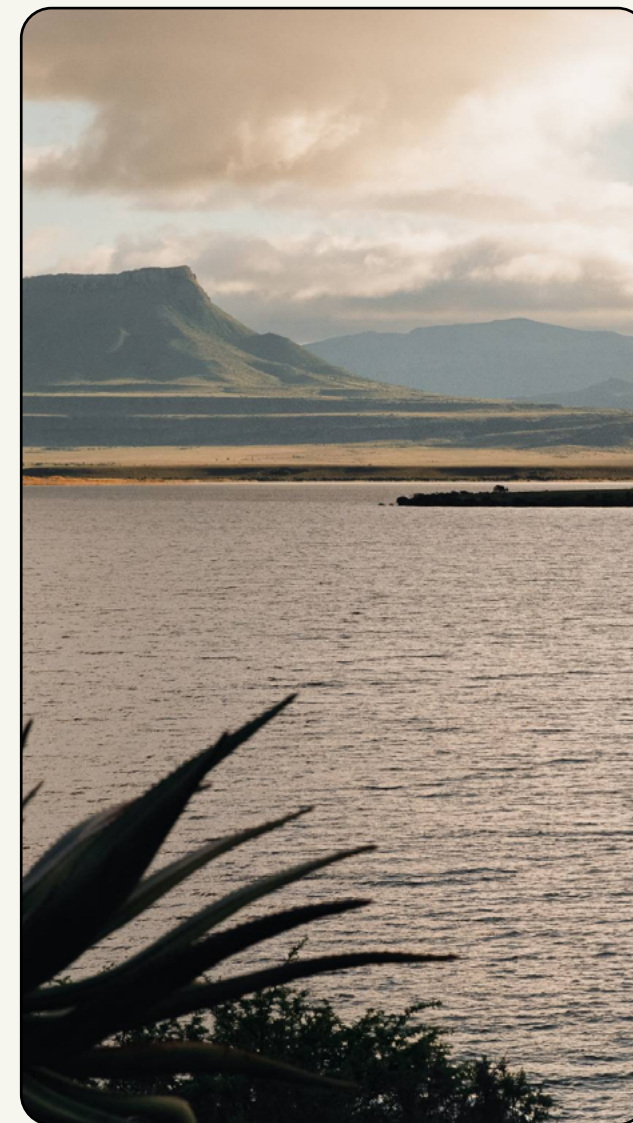

Photo: Carl van der Linde

Step 3: Land-related targets

Technical Guidance Version V1.0, July 2024

SBTN provides a suite of three targets designed to work together to incentivize actions that contribute to nature goals in land systems:

- The **No Conversion of Natural Ecosystems target** addresses land use change. Companies setting this target will avoid further conversion of land that was considered to be natural in 2020 after a target year that will vary between 2025 and 2030, depending on the context.
- The **Land Footprint Reduction target** addresses land use and is focused only on agricultural land. Companies setting this target will reduce the total agriculture land footprint associated with their direct operations and upstream value chain.
- The **Landscape Engagement target** can address different pressure indicators, including land use, land use change, and soil pollution. Companies setting this target will collaborate with established local partners in priority landscapes toward improving a range of ecological and social indicators defined in alignment with these partners.

The three land targets work together to:

- Avoid the loss of nature by addressing land conversion
- Reduce the production pressure of large agricultural areas, whose impact has exceeded the resilient capacity of the natural ecosystems
- Increase landscape-level action by companies that will improve the ecological and social conditions of the landscapes in which they operate and/or from where they source

	No conversion of natural ecosystems	Land footprint reduction	Landscape engagement
Applies to:	Conversion-driving and high land use emission companies	Large agricultural companies	All companies with material pressures on land
Target result	Conservation of neutral land and ecosystems	Reduction in pressures on land from large companies	Engagement in materially relevant, cooperative landscape initiatives to improve ecological and social condition
Timeframe and coverage	Highly dependent on sector and position in value chain. Spans 2025 to 2030.	Allocated based on 500mha reduction by 2050 with incremental targets to 2030	Start with +/- 10% coverage of company land footprint and increase coverage by 2030

Source: Science Based Targets Network (2024), Technical Guidance Step 3 Measure, Set, and Disclose – Land

Companies that identify terrestrial (land-related) ecosystem use or change or soil pollution as impacts associated with their materials during their Step 1 assessment must set all three of the land targets. Targets must be set 5–10 years from the date a company submits the targets to the SBTN for validation, although companies are also encouraged to develop long-term targets e.g., to 2050.

Land target 1: No Conversion of Natural Ecosystems

Companies require subnational information to better understand where land conversion and/or degradation is taking place in their supply chains, and in turn to take effective action on the ground. With this process, it is important to build awareness internally of where their supply chains are linked to particularly vulnerable areas of land conversion and degradation. One useful tool for this activity is the SBTN Natural Lands Map.

Land target 2: Land Footprint Reduction

Land intensive commodities

For this target, companies should consider the trade-offs associated with any changes they take to reduce their land footprint. There are other factors to consider when making these decisions, such as animal welfare, potential for regenerative production systems, food security, and potential unintended social and/or ethical consequences. As seen by users of Textile Exchange's Regenerative Agriculture Outcome Framework, implementing agricultural practices that drive improvement over the long term can lead to beneficial outcomes for land and nature, such as improved soil health and animal welfare.[24]

When considering less land-intensive materials, another option is to consider blending mono materials with recycled content as a solution to support product quality and longevity. However, circularity and product end-of-life trade-offs should be considered as part of

Step 3: Land-related targets

this option, as well as potential impacts on producer livelihoods. The Textile Exchange [Preferred Fiber and Material Matrix](#) is one resource that can be used to view the range of different programs available for a material category from both natural and recycled systems.

Absolute and intensity reduction approaches

Before tracking progress against land target 2, organizations need to identify and measure their land footprint. There are two methods for setting a Land Footprint Reduction target: the absolute reduction approach (recommended for large consumer companies) and the intensity reduction approach. Regardless of the approach chosen, brands and retailers can develop a restoration and regeneration plan by working together with their sourcing partners and relevant stakeholders. It is important to put measurement processes in place to help track progress annually against the 5-10-year reduction target.

Absolute targets are simpler to calculate, but they are quite limiting for smaller organizations that don't have the scope to increase the efficiency of their land use. An alternative approach is the intensity reduction target, which is more complex to communicate and may not guarantee that total agricultural land use will decline even if the targets are met.

There is a risk that both types of targets incentivize unsustainable types of agricultural intensification and/or that these targets incentivize consumer companies to shift their sourcing from lower- to higher-yielding areas. The SBTN provides guidance on how to manage the trade-offs and unintended consequences. It also encourages companies to consider which is the better target-setting approach for their given context.

Absolute land footprint reduction target	Intensity land footprint reduction target
Companies reduce their absolute land footprint at a linear rate of 0.35% per year compared with the base year.	Companies reduce the land footprint per kg of agricultural products produced at a linear rate of 1% per year compared with the base year.

Source: Science Based Targets Network (2024), Technical Guidance Step 3 Measure, Set, and Disclose – Land (Table 11)

Land considerations for the textile industry

Direct operations	Location of operation	Deforestation- and conversion-free (DCF) target*
Site owners/operators	All natural lands**	**2025:** 100% DCF across all sites
Producers	All natural lands	**2025:** 100% DCF across all conversion-driving commodities
Upstream	**Origin of commodities**	**Deforestation- and conversion-free (DCF) target***
Sourcing from producers and from first point of aggregation	Natural forests and conversion hotspots	**2025:** 100% Deforestation-free and DCF in conversion hotspots for soy, cattle, oil palm, wood, cocoa, coffee, and rubber
	All natural lands	**2027:** 100% DCF in all natural lands for all other conversion-driving commodities
Sourcing from stages downstream of first point of aggregation	Natural forests	**2025:** 100% Deforestation-free for soy, cattle, oil palm, wood, cocoa, coffee, and rubber
	Conversion hotspots	**2027:** 100% DCF in conversion hotspots for soy, cattle, oil palm, wood, cocoa, coffee, and rubber
	All natural lands	**2025:** 100% DCF in all natural lands for all other conversion-driving commodities

* Cutoff dates must not be later than 2020

** For conversion that is not linked to commodity production (e.g., facilities, retail locations, offices), site owners and operators may follow the alternative no-conversion pathway described for metals, infrastructure, construction, and extractives (MICE) sectors.

Source: Science Based Targets Network (2024), Technical Guidance Step 3 Measure, Set, and Disclose – Land (Table 5)

Step 3: Land-related targets

Allocation methods

When estimating land footprint, companies should consider the effect of the allocation method used in their calculations. Factors to consider in these decisions include the standard practice for allocation by the industry in life cycle assessment studies for a particular fiber or material and consistency of approach. It must be reiterated that the land footprint target should be used as a measurement tool within a company, from setting a baseline to showing continued progress against it—rather than as a comparative tool to evaluate impact across different industry actors.

It is important to recognize that different interventions and targets may be better suited to different production systems and contexts. In some landscapes, where agriculture is largely incompatible with natural ecosystems—leading to unmitigated negative impacts and routine land conversion—reducing land footprint or intensity may be necessary. However, the opposite can also be true: some production systems can coexist with natural ecosystems and, when managed in alignment with ecosystem processes, can provide beneficial outcomes for climate, nature, and yields.

Even in historically converted landscapes where agriculture may have been incompatible with ecosystems, opportunities exist to enhance biodiversity and unlock ecosystem services through improved management. Regenerative production approaches can contribute to long-term sustainability without requiring further land conversion while maintaining livelihoods and local economies. Notably, this ability to support biodiversity and ecosystem health presents an opportunity to meet restoration targets without removing production from the landscape, aligning with the Landscape Engagement Target.

While established methodologies exist to calculate footprint and intensity reductions under SBTN, there is still room for further discussion. Specifically, there is an opportunity to recognize production systems that, through effective management, mitigate the negative impacts of agriculture as a valid contribution to reduction targets. Additionally, large companies should have the ability to acknowledge these systems separately within their overall footprint assessments.

It is essential that companies retain the flexibility to choose the most appropriate interventions for sustainably supporting the commodities they produce or source—leveraging strategies that align with the risks and opportunities of the local context. As SBTN continues to refine land target methodologies, we are committed to engaging in this process to clarify the approach and to avoid unintended negative consequences.

Step 3: Land-related targets

Land target 3: Landscape Engagement

Two approaches for selecting material landscapes

Approach 1	Approach 2
Choosing landscapes for engagement in connection with SBTN Steps 1 and 2 and in connection with a Land Footprint Reduction Target.	Choosing landscapes for engagement in connection with a No Conversion of Natural Ecosystems target.
This approach is for companies who **have low levels of conversion in their operations or supply chains and for those who have to set a Land Footprint Reduction target**. This approach links back to analysis carried out in Steps 1 and 2 of the SBTN methodology.	This approach is suitable for companies with **significant amounts of conversion** within their operations or supply chain.

*Source: Science Based Targets Network (2024),
Technical Guidance Step 3 Measure, Set, and Disclose – Land (Table 13)*

Methodology

The Landscape Engagement target can address different pressure indicators, including land use, land use change, and soil pollution. Companies setting this target should collaborate with established local partners in priority landscapes to improve a range of ecological and social indicators defined in alignment with these partners.

Companies must engage in either one landscape initiative that covers an equivalent of 10% of the company's estimated land impact area footprint or two landscape initiatives, regardless of their size, in landscapes relevant to their materials.[25]

For companies that find it difficult to measure 10% of their footprint to set a Landscape Engagement target, it is acceptable under the land methods to instead engage in two landscape initiatives, regardless of size, so long as they are in materially relevant landscapes. These initiatives can be supported by external organizations to help identify and manage them for the relevant materials and landscapes in question.

Textile Exchange's Biodiversity Action Map can be used to connect brands and retailers to organizations that carry out projects on the ground working toward positive outcomes for biodiversity.[26] Whenever companies are looking into potential landscape initiative projects the SBTN Technical Guidance for land should be reviewed to check compliance requirements.
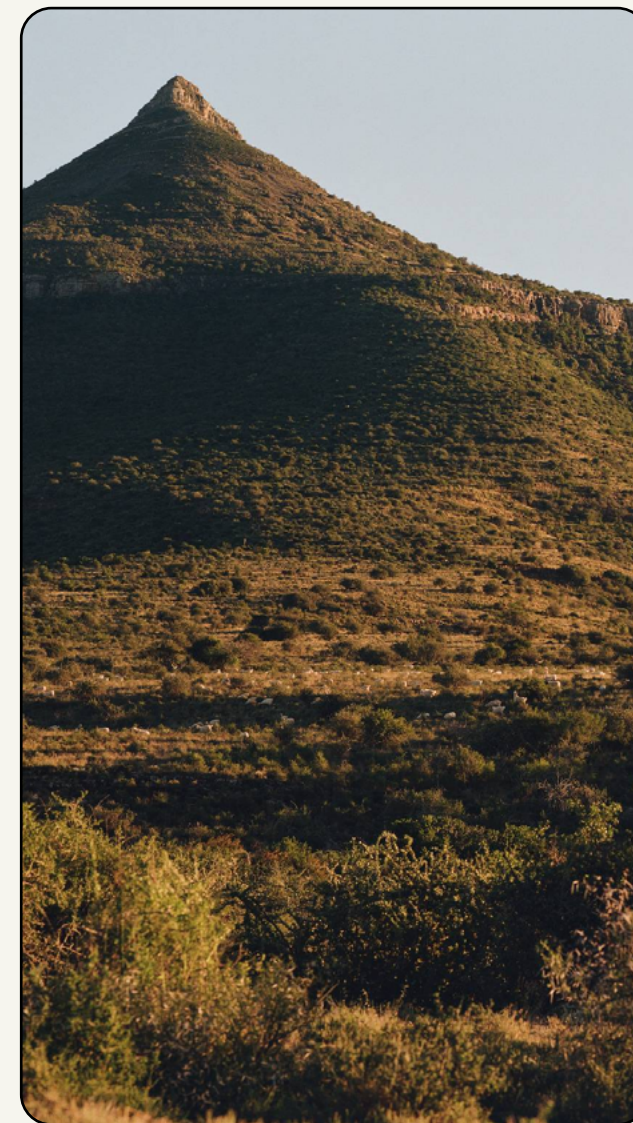
Photo: Carl van der Linde

Textile Exchange tools and the science-based targets for nature framework

Textile Exchange tools and the science-based targets for nature framework

Textile Exchange is dedicated to deepening the fashion, apparel, and textile industry's understanding of Tier 4 impacts and aligning it on how to address them.[27] As part of this, we encourage a holistic view of impact that we refer to as an "LCA+" approach. This means looking not only at climate and greenhouse gas emissions, but also at biodiversity, soil health, freshwater, human rights and livelihoods, and animal welfare.

Textile Exchange and other organizations have tools and resources available to support the industry in its adoption of the SBTN methods, which are outlined in more detail below. For more information about Textile Exchange tools, please see the Appendix.

The graphic below shows how each of the Textile Exchange tools and resources can be used in the first three steps of the SBTN five-step process. Full details of the tools available through SBTN can be found in the SBTN Toolbox.

Photo: Carl van der Linde

1 Step 1: Assess
Understand impacts

2 Step 2: Interpret and prioritize
Develop strategy with objectives and identify the locations where action is needed most urgently for nature and people

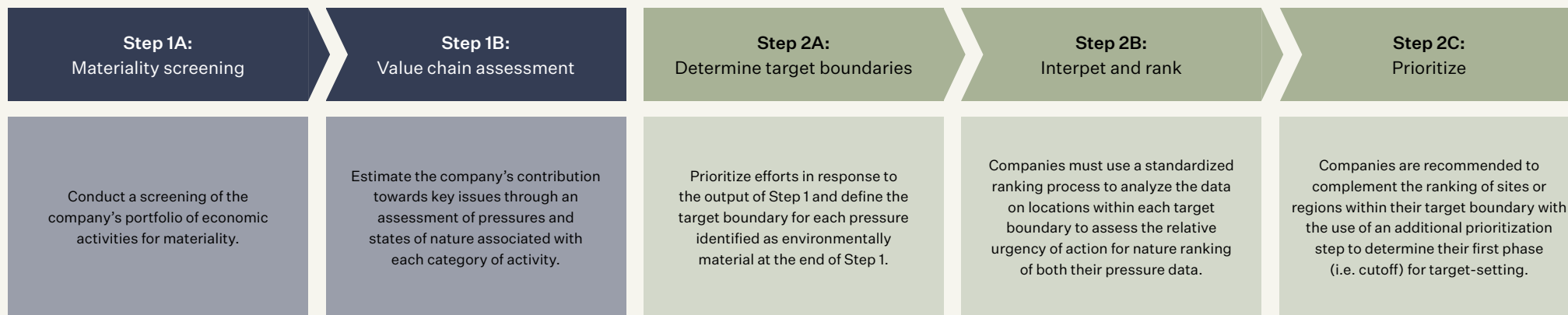| Step 1A: Materiality screening	Step 1B: Value chain assessment	Step 2A: Determine target boundaries	Step 2B: Interpet and rank	Step 2C: Prioritize
Conduct a screening of the company's portfolio of economic activities for materiality.	Estimate the company's contribution towards key issues through an assessment of pressures and states of nature associated with each category of activity.	Prioritize efforts in response to the output of Step 1 and define the target boundary for each pressure identified as environmentally material at the end of Step 1.	Companies must use a standardized ranking process to analyze the data on locations within each target boundary to assess the relative urgency of action for nature ranking of both their pressure data.	Companies are recommended to complement the ranking of sites or regions within their target boundary with the use of an additional prioritization step to determine their first phase (i.e. cutoff) for target-setting.

TEXTILE EXCHANGE RESOURCES

Material Impact Explorer (MIE)
Supports the process to identify, assess and manage impacts, risks and/or opportunities for nature.

Biodiversity Dashboard
Supports the process to identify biodiversity hotspots for sourcing locations.

OTHER RESOURCES

SBTN's High Impact Commodity List (HICL)
Identify high impact commodities in your activities.

SBTN Materiality Screening Tool
Understand materiality against each pressure category for your activities.

TEXTILE EXCHANGE RESOURCES

Textile Exchange Fiber and Material LCAs
Estimate how much land or water was used, or the amount of pollutant emissions generated, in these value chain stages.

OTHER RESOURCES

Data and metrics on the state of nature include:

- Forest Watch
- Species Threat Abatement and Restoration (STAR) metric
- SBTN Natural Lands Map
- WWF Biodiversity Risk Filter
- WWF Water Risk Filter
- WRI Aqueduct

TEXTILE EXCHANGE RESOURCES

N/A

OTHER RESOURCES

N/A

TEXTILE EXCHANGE RESOURCES

N/A

OTHER RESOURCES

N/A - This is an internal traceability exercise.

TEXTILE EXCHANGE RESOURCES

N/A

OTHER RESOURCES

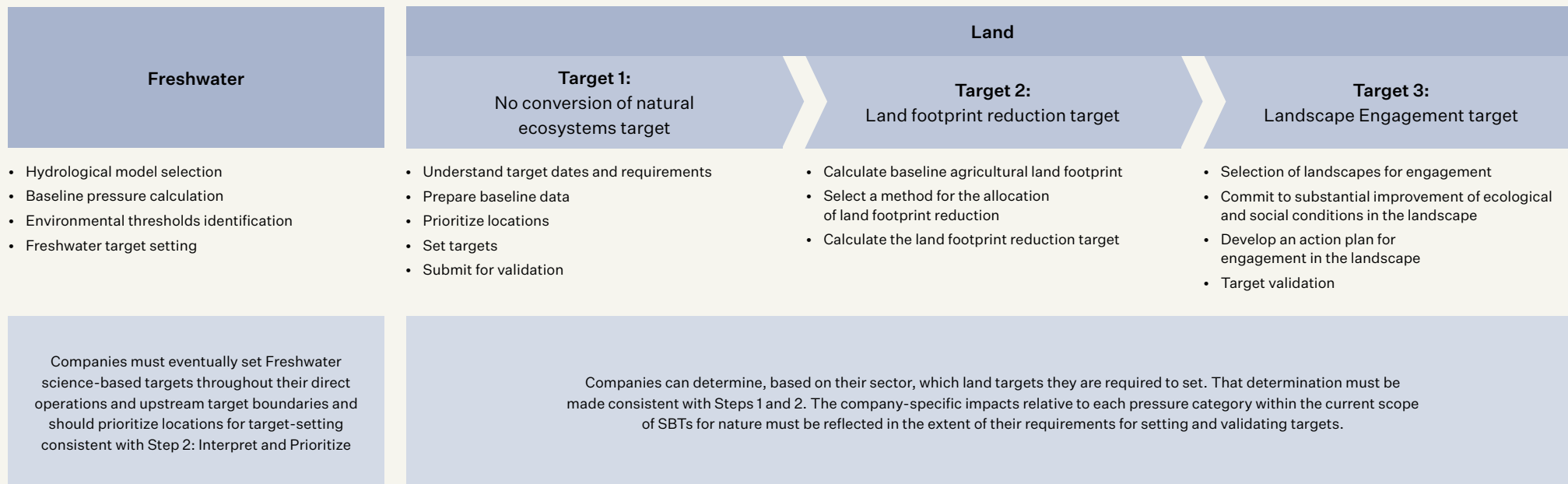*ENCORE*
Datasets such as ENCORE support the screening of activities at the sector-average level.

Nature Risk Profile
The Nature Risk Profile can help you calculate your impacts and dependencies in specific locations.

3 Step 3: Set targets: Measure, set and disclose

Take action

Freshwater	Land		
	Target 1: No conversion of natural ecosystems target	**Target 2:** Land footprint reduction target	**Target 3:** Landscape Engagement target

Freshwater

- Hydrological model selection
- Baseline pressure calculation
- Environmental thresholds identification
- Freshwater target setting

Target 1:
- Understand target dates and requirements
- Prepare baseline data
- Prioritize locations
- Set targets
- Submit for validation

Target 2:
- Calculate baseline agricultural land footprint
- Select a method for the allocation of land footprint reduction
- Calculate the land footprint reduction target

Target 3:
- Selection of landscapes for engagement
- Commit to substantial improvement of ecological and social conditions in the landscape
- Develop an action plan for engagement in the landscape
- Target validation

Companies must eventually set Freshwater science-based targets throughout their direct operations and upstream target boundaries and should prioritize locations for target-setting consistent with Step 2: Interpret and Prioritize

Companies can determine, based on their sector, which land targets they are required to set. That determination must be made consistent with Steps 1 and 2. The company-specific impacts relative to each pressure category within the current scope of SBTs for nature must be reflected in the extent of their requirements for setting and validating targets.

TEXTILE EXCHANGE RESOURCES

Preferred Fiber and Material Matrix
To identify standards systems that are taking strong actions in relation to freshwater.

OTHER RESOURCES

Hogeboom's water quantity global model
For the globally developed approach for freshwater quantity.

McDowell's global water quality model results
For the globally developed approach for freshwater quality.

TEXTILE EXCHANGE RESOURCES

Preferred Fiber and Material Matrix
To identify standards systems that are taking strong actions in relation to land.

OTHER RESOURCES

Natural Lands Map
To identify priority areas related to direct operations sites and upstream activities and determine the required and phased approach to target setting.

TEXTILE EXCHANGE RESOURCES

Textile Exchange Fiber and Material LCAs
To support the estimation of an organizational agricultural land footprint.

OTHER RESOURCES

SBTN Target Validation Process
To go through the independent process of validating science-based targets, involving expert review of corporate submissions, ensuring they meet all requirements outlined in the SBTN methods.

TEXTILE EXCHANGE RESOURCES

Biodiversity Action Map
For identifying partners on the ground for landscape initiatives.

OTHER RESOURCES

There are many organisations that can support the identification and implementation of landscape level engagement and action on the ground.

Next steps and recommendations

Next steps and recommendations

Moving toward nature-positive principles in the fashion, apparel, and textile industry, including the use of science-based targets for nature, will involve rethinking the entire supply chain—from raw material sourcing to production, consumption, and end-of-life management. This is by no means an easy task and requires supply chain stakeholders to support and align across all tiers and levels.

By doing so, the industry can reduce its ecological footprint, contribute to biodiversity conservation, and support the regeneration of natural systems, aligning its economic activities with the broader goal of a nature-positive future.

For the most recent available guidance and updates on all future guidance, please see the Science Based Targets Network website.

Photo: Danilo Arenas

Next steps for Textile Exchange

Convene SBTN and the industry to continue refining the methods

Textile Exchange is a member of the SBTN Corporate Engagement Program. We will continue working together with the industry and SBTN to identify specific challenges and potential solutions to implementing science-based targets for nature in the textile industry. Potential topics for further discussion could include:

- The development of approaches for creating realistic supply chain estimates to a subnational or farm level where traceability to Tier 4 is incomplete.[28]
- Recommendations for how companies can connect and collaborate with their landscape engagement target initiatives.
- Potential pathways for recognizing landscape-level interventions where full traceability to national or subnational level is not yet possible.

Carry out nature assessment footprinting to capture industry progress and trends

Textile Exchange is working with Conservation International to map the nature-related impacts of the global textile industry. This will involve identifying and prioritizing key commodities and geographies to develop an action map. The output will include landscape-level data collection and progress tracking.

Assess the Materials Matter Standard against different frameworks

Textile Exchange will map the Materials Matter Standard against the SBTN and TNFD frameworks and data requirements to better understand the data currently collated/required and opportunities for greater alignment. We will also explore the potential to foster partnerships between certified entities/sites to fill any data gaps.

Advance the Biodiversity Action Map

Textile Exchange will continue to add to and improve the Biodiversity Action Map that links users to organizations implementing nature-related action on the ground. Potential improvements include identifying investment opportunities in priority basins and land areas.

Fill impact data gaps

As of November 2024, Textile Exchange is actively working on five LCA studies, including cotton, polyester, cashmere, Responsible Wool Standard certified wool, and Responsible Mohair Standard certified mohair, taking an "LCA+" approach where possible. We will continue to support the industry to fill impact data gaps related to preferred management practices at landscape level (such as the differences between regenerative or organic impacts), which will be helpful secondary data to use when setting SBTs for nature. It is important to remember that LCAs are one tool within a decision-making process for raw material sourcing and should be used in conjunction with other insights in order to take a more holistic approach and consider the broader impacts on biodiversity and nature.

Photo: Danilo Arenas

Next steps for brands and retailers

Work to understand business impact on nature

Companies need to be informed about their business' impact on nature, what the key impact areas are, and where they are geographically, in order to take informed action. This will require mapping their supply chains back to the raw materials and working together with supply chain partners. In the meantime, supply chain partners can be using existing tools to estimate their impacts and prioritize action on the ground.

Companies can get a quick estimate of their direct operations and upstream materiality using the SBTN Materiality Screening Tool. For a more comprehensive approach, they can use Steps 1 and 2 of the SBTN's methodology to quantify their company's impacts and prioritize where to take action. This process will help companies comply with CSDDD. SBTN Validation Services, starting in the first quarter of 2025, will provide validation and claims for these steps.

Take a science-based approach to inform decisions and actions

Companies should use science-based frameworks and guidance to inform decision-making, ensuring that their strategy and targets reflect planetary boundaries, align with global biodiversity priorities, and adequately address your company's impact on nature.

Recognize the need to engage on a landscape level

The health of the whole ecosystem is important for biodiversity outcomes, meaning that companies need to take action at a landscape level. This should consider areas in need of protection, restoration, and regeneration.

Accept that there is no one-size-fits-all solution for biodiversity and nature

There is no single solution available to guide action for nature and no single strategy will be suitable for all materials or subnational locations. With subnational variability in nature risks and opportunities, strategies need to be carefully structured to align with the size and scope of impact in the relevant locations.

Build strategic collaborations to enable impact at scale

Collaboration is the key to driving collective action and impact at scale, particularly at the landscape level. Success in reaching positive outcomes for nature cannot be achieved by any one company or organization, meaning that the industry needs an outreach and engagement strategy to enable impact at scale. Local, on-the-ground knowledge partners such as ecologists, grassroots conservation groups, and local communities offer a great potential network between conservation and business communities.

Take action

Companies should adopt a continuous improvement approach—taking action, monitoring, adapting their strategy, and ensuring reduction. They can participate in learning sessions and collaborative discussions organized by Textile Exchange and other organizations to work through challenges and advance the use of SBTs for nature toward a nature-positive future.

Photo: Angela Ponce

Appendix

Textile Exchange tools and resources

CLIMATE+ STRATEGY

Greenhouse gas emission dashboard	To track and report progress against the industry's 45% reduction in GHG emissions by 2030.
Water hot-spot dashboard	To hotspot water impacts for the industry across fiber and material types.
Biodiversity dashboard	To support the prioritisation of on the ground action based on current sourcing strategies.

PREFERRED FRAMEWORK

Regenerative Outcome Framework	To inform and guide positive and holistic action within agricultural supply chains.
Preferred Fiber and Materials Matrix	To support more informed sourcing decisions.

IMPACT MEASUREMENT

Fiber and Material Life Cycle Assessments	To inform strategy and sourcing decisions.

STANDARD SYSTEM

Materials Matter Standard	As a potential option to include in sourcing strategies.

TOOLS

Material Impact Explorer	To understand the potential risks of fibers and materials in your supply chain (Climate, Freshwater, Forests, Air pollution, Biodiversity).
Biodiversity Action Map	To connect brands and retailers with organisations working on the ground to improve the state of biodiversity.
Materials Benchmark	Provides a standardized framework for companies to complete information about their preferred fibers and raw material uptake and how they are addressing areas such as circularity, biodiversity, land, freshwater and forests.

REPORTS

Materials Market Report	To understand the direction of material production towards preferred fibers and materials.
Materials Benchmark Report	To understand the direction of brands and retailers towards preferred fibers and materials.
Regenerative Landscape Analysis	To educate on regenerative agriculture and what it means for the textile industry.
Biodiversity Landscape Analysis	To educate on biodiversity and what it means for the textile industry.

Textile Exchange tools and resources

Biodiversity Action Map

The Biodiversity Action Map is a dashboard that presents active biodiversity and nature projects in key production landscapes for different fibers and raw materials. The dashboard is a tool to connect brands and retailers to projects that deliver biodiversity and nature outcomes through restoring and regenerating ecosystem integrity and/or biodiversity intactness. It can be used to identify potential biodiversity projects to get involved with and provide a way to connect with the organizations delivering them.

Biodiversity Landscape Analysis

The Biodiversity Landscape Analysis is a report written to help brands and retailers protect, restore, and regenerate biodiversity on a landscape level. The report presents information about the responsibility of brands and retailers for protecting and managing biodiversity and highlights the common steps that are needed by the industry to achieve this.

Climate+ Dashboard

The Climate+ Dashboard tracks fiber and material production data against a 2019 baseline and calculates the associated GHG emissions, water, and biodiversity impacts.

- The Climate+ Biodiversity Dashboard presents global production data by geography for various fibers and materials. The production data (at a national or subnational level) can be overlaid with biodiversity data layers to help identify priority areas for on-the-ground action and biodiversity interventions. The information in the dashboard can be used to prioritize biodiversity action that should be taken on the ground based on current sourcing strategies.

- The Climate+ Greenhouse Gas Emissions Dashboard presents the GHG emissions results for the fashion, apparel, and textile industry to track progress against Textile Exchange's 45% emissions reduction target. It also provides sector-level impacts, as well as a subset from companies that participate in the Materials Benchmark, which can be viewed at the material category level.

- The Climate+ Water Dashboard presents the freshwater impacts for hot spotting across fiber and material categories. This dashboard can be used for hot spotting analysis across fiber and material categories at an industry, sector, or global level.

Fiber and Material Life Cycle Assessment Studies and Life Cycle Inventory Library

Textile Exchange has created an open-source library of Life Cycle Inventory data. This is pre-existing data that has already been collected, to which companies can apply their relevant parameters/assumptions and reduce the burden of primary data collection which is typically the most time- and resource-intensive step of an LCA study. Additionally, Textile Exchange is facilitating a number of fiber and material life cycle assessments with the help of project sponsors. The data and reports will provide a data-driven view of the impacts of different fibers and material used by the fashion, apparel, and textile industry and include insights on LCA+ areas such as soil health and social livelihoods. Brands and retailers will be able to use the information provided by these projects to inform their strategy and sourcing decisions.
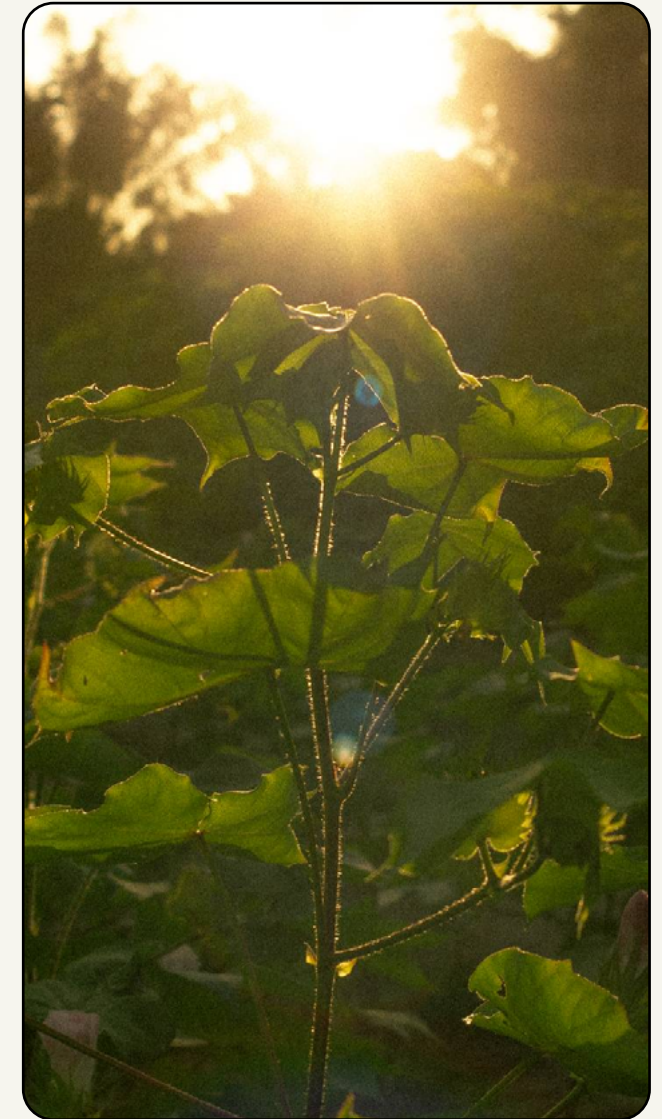

Photo: Sofia Tercarolli

Textile Exchange tools and resources

Materials Benchmark

The Materials Benchmark is the largest peer-to-peer comparison initiative in the fashion, textile, and apparel industry. Every year, it tracks the uptake of fibers and raw materials from recognized programs, as well as how companies are addressing areas like circularity, biodiversity, land, freshwater, and forests. This information can be used to understand the direction of brands and retailers toward preferred fibers and materials.

Materials Impact Explorer

The Materials Impact Explorer is a country-level risk assessment tool, designed to help brands and retailers to understand the on-the-ground risks and opportunities of the raw materials they source. The tool provides tailored recommendations for a given material category based on the sourcing country of origin. The risk ratings provided in the tool are framed around potential impacts and dependencies as outlined by the Taskforce for Nature-related Financial Disclosures and Science Based Targets Network and can be used to inform internal decision-making processes.

Materials Market Report

The Materials Market Report was launched in 2013 and is a comprehensive, annual publication that provides unique data and insights into global fiber and raw materials production, helping the industry to measure and make progress toward its goals. We believe that climate action starts at the source of the materials we choose. The Materials Market Report shares the best available data on global fiber and material production volumes alongside program-specific volumes and other insights such as the number of certified sites.

Materials Matter Standard

The Materials Matter Standard is a voluntary standard to align the fashion, apparel, and textile industry with what best practice looks like for different materials, from farms to recycling facilities. The standard covers human rights and livelihoods, land use, animal welfare, and organizational management to highlight best practices that should be followed in the production of various materials.

Preferred Fibers and Materials Matrix

The Preferred Fibers and Materials Matrix is an interactive tool intended for programs to view their performance across impact areas in a standardized way and toward a shared "direction of travel," as well as for brands to inform and guide material sourcing decisions. The tool can be used to evaluate raw material programs available for various material categories across climate, nature, people, animals, and governance.

Regenerative Agriculture Landscape Analysis

The Regenerative Agriculture Landscape Analysis was written to help brands and retailers understand, communicate, and invest in regenerative agriculture. The report provides readers with information about where to begin with regenerative agriculture and can be helpful to understand what regenerative agriculture means for the fashion, apparel, and textile industry.

Regenerative Agriculture Outcome Framework

The Regenerative Agriculture Outcome Framework is a tool to assess the holistic benefits of regenerative agriculture. It can inform and guide positive and holistic action within agricultural supply chains. The framework provides a common language for brands to use with their sourcing and supply chain partners to support the implementation and achievement of positive agricultural outcomes.

Photo: Alejandra Orosco

Endnotes

Endnotes

1   Supply chain tiers are defined in the Supply Chain Taxonomy framework developed by the apparel alliance, December 2024: textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

2   Nature Positive Initiative. (2024). A Global Goal for Nature: Nature Positive by 2030. naturepositive.org

3   Nature Positive Initiative. (2024). What is Nature Positive: Halt and Reverse Nature Loss by 2030. naturepositive.org/what-is-nature-positive

4   The Nature Positive Initiative recently launched the first universal approach to measuring progress toward a nature-positive future. Organized around four core indicators related to ecosystem extent, ecosystem condition, landscape intactness, and species extinction risk, the State of Nature Metrics are the product engagement with more than 100 stakeholders to define a checklist of metrics that can provide the scale, diversity, credibility, and completeness needed to give a sufficiently accurate picture of change in the state of nature. Learn more at naturepositive.org/metrics

5   Locke, H., et al. (2021). A Nature-Positive World: The Global Goal for Nature. nature.org/content/dam/tnc/nature/en/documents/NaturePositive_GlobalGoalCEO.pdf

6   International Union for Conservation of Nature. (2022). Towards an IUCN nature-positive approach: a working paper. [Summary highlights]. iucn.org/sites/default/files/2022-10/nature-positive-summary-highlihgts-oct-2022_0.pdf

7   Science Based Targets Network. (2023). Science Based Targets for Land Version 0.3. sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/Technical-Guidance-2023-Step3-Land-v0.3.pdf

8   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

9   Textile Exchange. (2023, September 27). Biodiversity Landscape Analysis. textileexchange.org/knowledge-center/reports/biodiversity-landscape-analysis

10   Textile Exchange. (2024). Insights from the Textile Exchange Materials Benchmark, calculated from 140 brands and 37 suppliers that completed the Impact Area module of the Material Benchmark survey.

11   For more details on the complementarity between the CSRD and science-based targets for nature in helping companies achieve their sustainability objectives, please refer to this blog post: sciencebasedtargetsnetwork.org/company/why-set-sbts/initiatives/csrd

12   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

13   University of Cambridge Institute for Sustainability Leadership, et al. (2023). Raising the ambition for nature: A fashion, textile and apparel sector primer on the first science-based targets for nature. thefashionpact.org/wp-content/uploads/2023/07/raising-the-ambition-for-nature.pdf

14   The term "subnational" should be understood in its broad definition: it refers to local or regional jurisdictions, meaning administrative divisions below the national level. As a result, subnational data refers to data that is granular and specific to these levels of governance.

15   Textile Exchange. (2024, October). Materials Benchmark Insights and Trends. [Factsheet]. textileexchange.org/app/uploads/2024/10/Materials-Benchmark-2024-Factsheet.pdf

16   Textile Exchange. (2024). Climate+ Vision. textileexchange.org/climate-vision

17   Textile Exchange. (2024). Life Cycle Inventory (LCI) Library. textileexchange.org/lci-library

18   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

19   Definitions for impacts and dependencies are taken from the Taskforce for Nature-related Financial Disclosure (TNFD) Glossary of Terms released in August 2024: tnfd.global/wp-content/uploads/2023/09/TNFD-Glossary-of-terms_V2.0_June_2024.pdf?v=1720508574

20   University of Cambridge Institute for Sustainability Leadership, et al. (2023). Raising the ambition for nature: A fashion, textile and apparel sector primer on the first science-based targets for nature. thefashionpact.org/wp-content/uploads/2023/07/raising-the-ambition-for-nature.pdf

21   Science Based Targets Network. (2022). Corporate Engagement Program. SBTN Corporate Engagement Program Overview and Terms of Use (last updated 08/08/2022). sciencebasedtargetsnetwork.org/wp-content/uploads/2022/08/SBTN-Corporate-Engagement-Program-Overview-and-Terms-of-Use-last-updated-08_08_2022.pdf

22   Business for Nature. (n.d.). Homepage. www.businessfornature.org

23   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

24   Textile Exchange. (2023, July 12). Regenerative Agriculture Outcome Framework. textileexchange.org/knowledge-center/reports/regenerative-agriculture-outcome-framework

25   More information on the requirements for the landscape engagement initiative can be found on page 75 of the SBTN Land guidance v1, July 2024: sciencebasedtargetsnetwork.org/wp-content/uploads/2024/09/Technical-Guidance-2024-Step3-Land-v1.pdf

26   Textile Exchange. (2024). The Biodiversity Action Map. textileexchange.org/biodiversity-action-map

27   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf

28   Textile Exchange and apparel alliance. (2024, December). Supply Chain Taxonomy. textileexchange.org/app/uploads/2024/12/Supply-Chain-Taxonomy.pdf