



**Textile
Exchange**

Corporate Fiber & Materials
Benchmark Program

Biodiversity Benchmark Survey Guide



The Biodiversity Benchmark and following guidance have been developed by Textile Exchange in partnership with The Biodiversity Consultancy, and Conservation International. Made possible by the generous support of Sappi Ltd.

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The Biodiversity Benchmark Survey Guide provides pragmatic guidance to help companies complete the survey. While a company's biodiversity strategy is being fully developed and science-based targets confirmed, we advocate for a "no regrets" approach to action. The no-regrets approach (defined by the [UNDP, UNEP, and IUCN](#) and expressed by the [Science Based Targets Network](#)) focuses on *maximizing positive and minimizing negative aspects of nature-based adaptation strategies and options. No-regret actions include [...] measures taken which do not worsen vulnerabilities [e.g., to climate change] or which increase adaptive capacities and measures that will always have a positive impact on livelihoods and ecosystems [e.g., regardless of how the climate changes]*. Textile Exchange is a member of the [Science Based Targets Network Corporate Engagement Program](#).

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Why Biodiversity, Why Now?

“It is the sourcing of raw materials that is the direct interface between business and nature. Through sustainable sourcing and reconfiguring supply chains, we can help drive change in agriculture, mining, and forestry, and promote regenerative, wildlife-friendly approaches to production.”

– Dr. Helen Crowley, Partner, Pollination

Biodiversity – the fabric of life created by genes, species and ecosystems and all their complex interactions – is being lost at an alarming pace.

The links between the COVID-19 outbreak and biodiversity loss are clear ([Nature](#)). Increasing habitat fragmentation, land use change, and wildlife exploitation globally are exacerbating risks for both global biodiversity and human health. Tragically, at the time of writing, the COVID-19 pandemic has resulted in over 6.3 million deaths and 535.8 million cases worldwide ([WHO](#)). This has resulted in increased calls for a One Health approach to disease prevention, which recognizes the interconnection between the health of people, animals, plants, and their shared environment ([CDC](#)). Disease emergence, natural disasters, food insecurity, and other increasing threats have driven the issue of biodiversity loss higher up the political, business, and societal agenda.

In 2019, the scientific community released its latest report ([IPBES Global Assessment](#)) on the status of species and ecosystems. The report found that around 1 million animal and plant species are now threatened with extinction, many becoming threatened within decades, more than ever before in human history. These dramatic results highlight what the [Stockholm Resilience Center](#) has also shown in relation to planetary boundaries: we are beyond the safe operating space for humanity when it comes to the degradation of our biosphere. The [World Economic Forum](#) (WEF) positions nature loss as one of the greatest systemic risks to the global economy and the health of people and the planet.

The time is right to do something about biodiversity.

The [Dasgupta Review](#) released its full report earlier this year. This independent, global review on the Economics of Biodiversity is led by Professor Sir Partha Dasgupta (Frank Ramsey Professor Emeritus, University of Cambridge). The Review was commissioned by the UK Government and is positioned to do for biodiversity what the Stern Review did for climate change in emphasizing that the benefits of strong, early action outweigh the costs.

“As we entered the Decade of Action to deliver the UN Sustainable Development Goals, expectations were high that we would see strides towards a consensus that places nature at the heart of the conversation around the climate emergency.”

– The World Economic Forum

The year 2020 was coined the “super year” for nature by the [United Nations Environment Program](#), among many others. The United Nations Summit on Biodiversity was held in September 2020; in response, 64 world leaders (and counting) from 5 continents have signed the [Leaders’ Pledge for Nature](#), committing to place wildlife and the climate at the heart of post-pandemic economic recovery plans, addressing the climate crisis, deforestation, ecosystem degradation, and pollution.

The 15th Conference of Parties (COP) of the [Convention on Biological Diversity](#) (CBD) was to be held in Kunming, China, in October 2020. There are 196 Parties to the CBD as of November 2020. COP 15 has been rescheduled for the third quarter of 2022, at which time the Parties will review the achievements and delivery of the CBD’s

Strategic Plan for Biodiversity 2011-2020 and are expected to finalize the post-2020 global biodiversity framework.

Biodiversity is also an integral component of the [Sustainable Development Goals](#) (SDGs) 2030 Agenda for Sustainable Development, which are a universal call to promote prosperity while protecting the planet. While Goal 14 “Life Below Water” and Goal 15 “Life on Land” address biodiversity most directly, it is also immediately relevant to many other SDGs, socio-economic and environmental alike ([IISD 2019](#)). The 2030 Agenda for Sustainable Development was adopted by all United Nations Member States in 2015.

At this stage, the focus on biodiversity risks in the textile industry – as with many others - is nascent.

Apparel and textile companies are gearing for action and Textile Exchange can help. Textile Exchange members are starting to set goals and the [Fashion Pact](#) has attracted 70 plus signatories representing over 200 brands to make a biodiversity commitment and set targets in alignment with the [Science Based Targets for Nature](#).

Linking Biodiversity and Climate

“There is no climate solution without the full contribution from nature. If we are able to realize the full contribution of nature to climate change mitigation, we will have also achieved the goal of biodiversity conservation.”

– Inger Andersen, Executive Director, United Nations Environment Programme

Threats to biodiversity and major contributors to the climate crisis are often one and the same. Greenhouse gas emissions from agriculture, forestry, and other land use represent 23 percent of total anthropogenic emissions ([IPCC 2019](#)). Deforestation alone is a major source of global emissions.

Natural ecosystems provide benefits that address climate change, such as carbon sequestration, regulation of local climate air quality, and moderation of extreme natural events. [Conservation International](#) estimates that over 30 percent of cost-effective solutions for climate change are grounded in nature. Natural Climate Solutions (NCS) are a form of Nature-based Solution (as defined by the [IUCN](#)) that allow for the capture of carbon through conservation, ecosystem restoration, and improved land management across global forests, wetlands, grasslands, and agricultural lands. These very same climate actions will also protect the richness and diversity of native wild plants and animals and the habitats on which they depend.

In turn, the protection of biodiversity enables the healthy functioning of [nature’s contributions to people](#) (i.e., ecosystem services): ecological processes which make human life possible ([FAO](#)). Biodiversity plays a key role in benefits such as pollination, erosion prevention, waste-water treatment, biological control of pests and disease, and preventing species extinction, among other natural, economic, health, and cultural benefits. Biodiversity also helps to protect genetic diversity and the availability of raw materials. Combined, the stock of natural resources that provide these contributions to society are also known as natural capital.

“Since the nature and climate crises are deeply intertwined, we must tackle both simultaneously. By setting science-based targets for climate and nature, companies and cities can generate multiple benefits. These include mitigating climate change through increasing carbon sequestration as well as helping stabilizing nature which is the source of the food, fiber and fuel human activities depend on.”

– The Science Based Targets Network

The good news is that there is a great deal that we can do to address climate change effectively by taking actions in three key areas: decarbonization, nature-based/natural climate solutions, and the transition to a circular economy. Each of these areas also enables us to protect biodiversity as irreplaceable natural capital and provides an opportunity to halt the current extinction crisis.

Textile Exchange's Approach to Biodiversity

[Textile Exchange's Climate+ Strategy](#) recognizes that climate change and biodiversity loss are inextricably linked and are best considered within an integrated strategy. Textile Exchange's strategic intent is to be a driving force for urgent climate action in textile fiber and materials production, specifically through:

- Enabling and guiding the textile industry to reduce greenhouse gas emissions by 45 percent by 2030 in the pre-spinning phase of textile fiber and materials production.
- Amplifying positive impacts in soil health, water, and biodiversity.

Prioritizing nature in fiber and materials management and sourcing decisions will bring long-term business benefits, more resilient livelihoods, health and wellbeing for communities, and safer interfaces between wild and managed lands and species. For this to happen, it will require a heightened focus on designing and implementing biodiversity-sensitive raw materials strategies that drive positive action, outcomes and impacts that can ultimately be tracked and measured.

Holistic change model

3-step approach



Figure 1: A holistic approach to transforming materials use, addressing climate change, biodiversity loss and delivering on the SDGs and assuring a just transition for all, Textile Exchange

Figure 1 notes:

Decarbonization refers to the process of reducing “carbon intensity,” lowering the amount of greenhouse gas emissions [produced by the burning of fossil fuels] ([IPCC](#)). **Nature-based Solutions** are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits ([IUCN](#)). **Natural Climate Solutions** are concerned with capturing carbon through conservation, ecosystem restoration and improved land management across global forests, wetlands, grasslands and agricultural lands ([CI](#)). A Circular Economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems ([EMF](#)). **Sustainable Development Goals (SDGs)**: 2020 ushered in a decade of ambitious action to deliver the 17 Goals by 2030 – assuring a “just transition” that leaves no one behind. This “Decade of Action” calls for accelerated sustainable solutions to the world's biggest challenges — ranging from poverty and gender to climate change, inequality and closing the finance gap ([United Nations](#)).

Part I: The Biodiversity Benchmark

According to the [World Benchmarking Alliance](#) (WBA), benchmarking drives a “race to the top” and is one of the ways Textile Exchange (an ally of the WBA) mobilizes the industry to accelerate the uptake of preferred materials. Through Textile Exchange’s Corporate Fiber & Materials Benchmark (CFMB) program and its annually published [Material Change Index](#) (MCI), participating companies are already making significant headway in identifying their portfolio of materials, the sustainability programs they are investing in, and targets for uptake and improvement, including [Science Based Targets](#). The CFMB program also helps companies calculate uptake of preferred fibers and materials and report the extent to which materials are mapped back to the country of origin. This work forms the bedrock for understanding biodiversity risks and building a strategy to limit negative impacts from the company’s supply base.

The Biodiversity Benchmark has been developed in partnership with Conservation International, The Biodiversity Consultancy, and reviewed by a broad multi-stakeholder advisory group. The survey content builds on the reporting framework, themes, and elements of the MCI survey.

The role of the Biodiversity Benchmark is to help companies track how they understand biodiversity risk in their raw materials supply base and how they are addressing these risks through credible, good practice strategies. Our ambition is to help prepare the textile industry for urgent action on this important cross-cutting topic. The Benchmark is designed to help companies compare performance to fundamental elements of good practice biodiversity risk management. Practitioners can use the Biodiversity Benchmark to understand the direction of travel their company needs to commit to and implement in order to become [nature positive](#) by 2030. The Benchmark guidance provides practical knowledge and insights on biodiversity risks, relevance to the apparel and textile industry, and how these risks can best be managed.

The methodology for companies to set targets and track their contribution to the global goals for nature is being developed now through the [Science Based Targets Network](#) (SBTN). This Biodiversity Benchmark will develop alongside the Science Based Targets for Nature and we will work closely with the SBTN on consistency in language, frameworks, and measurements to support our benchmarking participants on their biodiversity journey. Use of this Benchmark - and its future iterations - will help companies prepare for stakeholder (including investor) questions around nature-related risk, such as those being developed by the [Task Force on Nature-related Financial Disclosures](#) (TNFD), [CDP](#), and [Ceres](#). The Benchmark will also help companies in meeting the [Sustainable Development Goals](#) (SDGs).

The Biodiversity Benchmark was piloted in 2021 to establish a baseline of the engagement and effort that companies are starting to put into biodiversity. The findings from this first cycle were published as the first-ever [Biodiversity Insights Report](#) for the apparel and textile industry, helping us formulate where we should be heading and to appreciate what best practice looks like today.

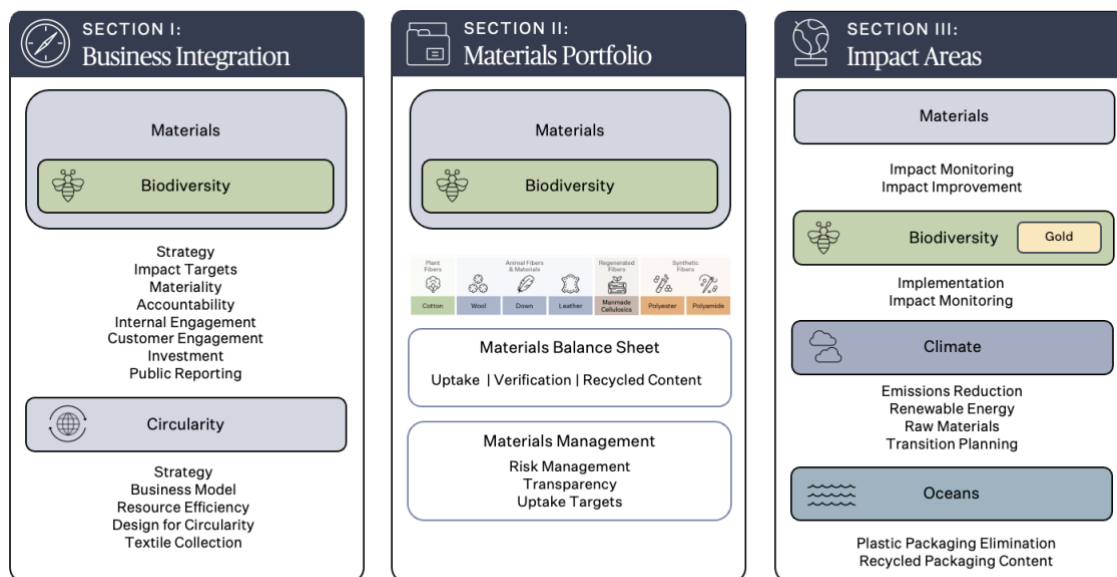
Textile Exchange would like to thank the following individuals who contributed to the revision of the Biodiversity Benchmark survey and guidance content in preparation for the 2022 cycle: Peter Burston, Tami Putri, and Katie Fensome, The Biodiversity Consultancy; Katie Russell, Franklin Holley, and Margot Wood, Conservation International; Payal Luthra, Alexis Morgan, and Rebekah Church, WWF; and Hanna Denes and Anna Heaton, Textile Exchange.

Finally, Textile Exchange is an ally of the [World Benchmarking Alliance](#) (WBA). WBA Allies represent organizations working at global, regional, and local levels to shape the private sector’s contributions to achieving the Sustainable Development Goals (SDGs). Echoing the true spirit of SDG17 – Partnerships for the Goals, WBA Allies are committed to WBA’s mission, vision, and values, and believe in the power of benchmarks and cross-sector partnerships to drive systemic progress on the SDGs. The Biodiversity Benchmark will contribute significantly to corporate exchanges and learning opportunities.

Biodiversity Benchmark framework

Following its inaugural cycle, the Biodiversity Benchmark was integrated into the MCI survey framework and reporting cycle as an optional Impact Area. Biodiversity questions are now nested within Business Integration, the Materials Portfolios (Transparency), and the Biodiversity Impact Area section, and will become visible for those who opt-in to this survey. Companies can complete the Biodiversity Impact Area alongside the Materials Balance Sheet if they do not wish to participate in the full MCI.

The Biodiversity Benchmark is now integrated within three sections of the MCI survey framework: Business Integration, Materials Portfolio, and Impact Area.




 MCI framework is aligned with the Sustainable Development Goals

Figure 2: The Biodiversity Benchmark framework, Textile Exchange

Section I is Business Integration, which starts with how a company is integrating biodiversity into business strategy and operations, setting targets, and aligning with the [Sustainable Development Goals](#) (SDGs). Next comes materiality, incorporating biodiversity risk assessment and the important role of stakeholder engagement. This section also evaluates accountability and internal engagement on biodiversity within the organization. It includes investments, including those that are biodiversity related. Section I concludes with an assessment on reporting, steering companies towards publicly disclosing their biodiversity risks and opportunities, activities underway, and progress on efforts to mitigate those risks.

Section II is Materials Portfolio. Biodiversity Benchmark participants will be required to, at minimum, complete the Materials Balance Sheet, which guides companies in documenting materials uptake. As transparency of sourcing locations is so crucial in ensuring positive outcomes for biodiversity, knowledge of country of origin is assessed within the Transparency sections of a company's selected preferred materials. Then, respondents are asked to report on the mapping of sourcing locations against the biodiversity value of the location. This step is critical to making good intervention decisions, prioritizing, and designing actions.

Section III is the Biodiversity Impact Area, drawing on the AR³T Action Framework as outlined by the [Science Based Targets Network](#) to review actions to mitigate biodiversity risks within supply networks. The Benchmark concludes with monitoring and impact improvement, as those actions are crucial measuring progress towards expected outcomes and targets.

How to use this Survey Guide

The questions in this guide are those that are made available to participants who opt-in to the Biodiversity Impact Area. Respondents completing the full MCI, or the full Business Integration Module, will see these questions nested alongside the questions enabled through those surveys.

Throughout this document, guidance has been provided to help you answer each question. Information has been presented in the following ways.

Why this is important: Provides a brief overview of the relevance of the question to the topic or theme covered in the MCI.

What this question is looking for: Where necessary, question specifications are provided to support your understanding of the question and what is required.

Definitions: For most questions, definitions or short descriptions of important themes have been provided.

Additional reading: Here we provide links to recommended reading and a selection of some of the many important documents available. We attempt to refresh this reference list annually.

For more information on question structure, etc. please refer to the [CFMB Portal Users Guide](#).

Evidence and supporting documentation

Providing supporting evidence is key to a strong survey submission. The quality of your evidence and signposting to specific information, e.g., in documents and on websites, significantly helps the CFMB team during the validation phase and can cut down the number of queries returned to you during this phase. The below list provides examples of how to submit evidence:

Summary/excerpts: Each question has a comment box where you can directly enter short paragraphs of text. Depending on the context, text can be freehand explanations or copy-paste from specific reports/website (with links and page numbers provided) to help the validation team quickly locate information.

Document uploads: Reports in pdf format, data in excel or other commonly used/easy to access formats, are welcome. The validation team would be grateful for any signposting (such as page numbers) to help the team quickly locate information.

Links to webpages: Providing links to webpages can be a quick and efficient way for you to back up your answer. It also proves that information is in the public domain, which demonstrates credibility and transparency.

Important note on providing evidence: If one document is the reference source for multiple questions, it is perfectly acceptable to refer us to the same document. As mentioned earlier, the validation team welcomes any additional signposting such as page numbers to guide validators directly to the specific text or data.

Section I: Business Integration

[S-1 Strategy](#) [S-2 Leadership](#) [S-3 Internal Engagement](#) [S-4 Materiality](#) [S-6 Investment](#)
[S-7 Reporting](#)

The first sections of the Biodiversity Benchmark are embedded in the Business Integration section.

S-1. Corporate Strategy

S-1a. Sustainability Strategy

Why this is important

A strategy to address biodiversity risk (impact and dependencies) is an indicator of how seriously a company takes the issue of biodiversity loss and the opportunity to make a positive contribution to this global crisis. Strategic planning is important because it provides direction and supports day-to-day decision making. A strategy includes longer-term goals, responsibilities, timelines and resource allocation. Importantly, a biodiversity strategy should align with the United Nations Sustainable Development Goals ([SDGs](#)).

Committing your company to the SDG agenda is an excellent first step and, if your company has a mature sustainability strategy, it may not be difficult to find alignment between your business goals and the SDGs. The next step is to prioritize Goals and align on SDG targets and performance indicators to help you track progress over the coming years. There are challenges and gaps for companies to overcome. First, the targets were initially developed to facilitate country-level progress reporting and, secondly, there is no industry framework for reporting (and, therefore, a lack of consistency in the way companies measure and report on progress). We hope the CFMB will help close these gaps for the textile sector.

What this question is looking for

To understand whether your company has established a corporate biodiversity strategy, and any enablers, barriers, and/or challenges that it has identified in relation to developing and implementing such a strategy. Companies are asked to indicate whether they have prioritized specific SDGs, and (within each SDG) have identified specific targets for measuring progress. Further information regarding the United Nations Global Compact and the SDGs can be found [here](#). A list of all 169 targets for the 17 Goals can be accessed [here](#). Please also refer to our [SDG Companion Guide](#).

S-1a-2. Does your company have a biodiversity strategy?

- ☐ No
- ☐ Under development
- ☐ Yes, we have a biodiversity strategy
- ☐ Yes, and our biodiversity strategy is integrated into our overall corporate strategy
- ☐ Yes, biodiversity is integrated, and we are aligning our strategy with the Sustainable Development Goals

S-1a-2a. Is your company's biodiversity strategy internal or public?

- ☐ Internal
- ☐ Public

S-1a-2b. Do you see any barriers/challenges or enablers to developing a biodiversity strategy?

- ☐ No
☐ Barriers/challenges
Please provide details.

- ☐ Enablers
Please provide details.

S-1a-3. Is your company measuring its progress towards the SDGs?

Please provide details to support your answer in S-1a-3a.

- ☐ No
☐ We have identified where our company's priorities lie with respect to one or more SDGs
☐ We have set targets and indicators with respect to one or more of the SDGs
☐ We are tracking the (expected) outcomes and impacts of our company's activities related to the SDGs

S-1a-3a. Our company has prioritized and is progressing the following SDGs.

Please provide details to support your answer in S-1a-3a.

Sustainable Development Goals	Priority SDG	Set SDG targets	Track outcomes/ impacts	Cotton	Wool	Down	MMCF	Polyester	Polyamide	Leather	Other Fibers/ Materials
Goal 1: No poverty											
Goal 2: Zero hunger											
Goal 3: Good health and well-being											
Goal 4: Quality education											
Goal 5: Gender equality											
Goal 6: Clean water and sanitation											
Goal 7: Affordable and clean energy											
Goal 8: Decent work and economic growth											

Goal 9: Industry, innovation and infrastructure											
Goal 10: Reduced Inequality											
Goal 11: Sustainable cities and communities											
Goal 12: Responsible consumption and production											
Goal 13: Climate action											
Goal 14: Life below water											
Goal 15: Life on land											
Goal 16: Peace and justice, strong institutions											
Goal 17: Partnerships for the Goals											

Please provide an example of your SDG targets and/or further clarification and weblink as supporting evidence

Definitions

Biodiversity strategy: A plan of action designed to achieve biodiversity objectives and commitments. The strategy sets the objectives, scope, timeline, responsibilities, and resources to ensure that change is made.

Barriers/Challenges: lack of internal enabling condition or factor to allow corporate action on biodiversity to take place, such as lack of internal capacity or lack of management support.

Enablers: Internal or external (to the company) factor that enables acceleration or rapid transition for a company to take action on biodiversity, for example, internal dedicated funding made available for corporate biodiversity actions or dedicated human resources (e.g., internal taskforce) to accelerate company's action on biodiversity.

Material: A textile material is a specific substance which is used to make textiles. A material is either a fiber which is transformed into yarn or a "non-fiber" material. "Material" is used as an overarching term for both fiber and non-fiber raw materials.

Materials sustainability strategy: There are many ways companies can build a sustainability (including materials sourcing) strategy – and not one size fits all. A company may – or may not – have integrated a biodiversity strategy into other strategic plans.

Integrated into overall corporate strategy: A company's biodiversity strategy should be embedded into the overall business strategy, and not only executed by the sustainability team.

Alignment with the SDGs: For biodiversity, SDG 6 (clean water and sanitation), SDG 12 (responsible consumption and production), SDG 13 (climate action), SDG 14 (life below water), and SDG 15 (life on land) are key, but there is connectivity between all 17 SDGs. It is important that the progress towards specific SDGs does not negatively impact other SDGs.

Priority SDG: Companies should prioritize SDGs in areas most relevant to their business and where the greatest impact can be made. The process needs to be informed by assessing risks to people and the environment across the company's value chain to ensure that priority SDGs do not offset the positive social and environmental impacts associated with others.

Set SDG targets: Targets demonstrate that the company is serious about optimizing the strategy for financial, environmental, and social value creation. A common starting point is using existing data that is already being collected and expanding from there.

Track outcomes / impacts: Regular (annual or biannual) measurement of progress made against targets and/or KPIs. Measurement should be quantitative and timebound (SMART), and where possible aligned with best practices and commonly agreed metrics (where these exist).

Alignment to fibers and materials: Different fibers and materials are - positively or negatively - linked to different SDGs to different degrees and through different impact paths. If your company aims to contribute to specific SDGs through specific fibers and materials, please select them in the matrix above.

SDG prioritization: Companies are asked in this question to indicate whether they have prioritized specific SDGs, and (within each SDG) have identified specific targets for measuring progress. Further information regarding the United Nations Global Compact and the SDGs can be found [here](#). A list of all 169 targets for the 17 Goals can be accessed [here](#). Please also refer to our [SDG Companion Guide](#).

Additional reading

- [Guidelines for planning and monitoring corporate biodiversity performance](#) (2021) IUCN
- [Developing a Corporate Biodiversity Strategy: A Primer for the Fashion Sector](#), 2020, Biodiversify and the University of Cambridge Institute for Sustainability Leadership (CISL)
- [Kering Biodiversity Strategy](#), 2020, Kering
- [Biodiversity and Fashion](#), The Biodiversity Consultancy
- IFC Performance Standard 1 Guidance Note on [Assessment and Management of Environmental and Social Risk and Impacts](#)
- [A framework to guide biodiversity indicator development for business performance management](#), 2020, Addison et al.
- [The Nature of Fashion Webinar Series and supplementary materials](#), Catapult Project, Conservation International
- [SDG Companion Guide](#), Textile Exchange
- While SDG targets and indicators are customized for country-level reporting, there are many good resources available to help you translate into business language, such as the [SDG Compass](#) and Textile Exchange's [SDGs-Take-Action](#)
- Business for 2030 - Metrics and Indicators [here](#)

S-1b. Global Goals and Commitments

Why this is important

Commitments are important because they guide and influence behavior. As many challenges today require collective action, commitments to global and industry agendas are a powerful approach to collectively address some of the most pressing issues, such as biodiversity. Public and collective commitments improve the chances of scaling and accelerating impact.

Making a specific biodiversity commitment, having it signed off by senior management, preferably by the CEO or the Board of Directors, and publicly communicated demonstrates that the company has recognized the importance of biodiversity and is committed to doing something about it. Measurability (whether or not the commitments are tangible and meaningful) is another important aspect of commitment as this will allow stakeholders to tell whether a company really delivers on its commitments and eventually meets its goals.

What this question is looking for

Whether the company has made a biodiversity commitment and whether this commitment is internal or public. Also, whether a company plans to align with the Science Based Targets (SBTs) for Nature approach. SBT for Nature is a work in progress, though companies can now register to express interest for road testing the methodology. [The initial guidance](#) to applying this methodology was released in September 2020. S-1b-1a asks for specification of any global commitments made by your company.

S-1b-1. Has your company made a commitment and/or is a signatory to important global goals for sustainability commitments?

Please provide details to support your answer in S-1b-1a.

	No	Company-level (internal)	Company-level (public)	Signatory (select in S-1b-1a)	Please copy commitment here or provide link
Climate					
Biodiversity					
Deforestation/Conversion-free					
Circularity					
Water					
Sustainable Development					
Human Rights					
Other					

Please provide details.

S-1b-1a. Please the commitments that your company has signed.

Global commitments	Signatory	Year
Accountability Framework Initiative	<input type="checkbox"/>	
Act4Nature	<input type="checkbox"/>	
Bonn Challenge	<input type="checkbox"/>	
Business for Nature	<input type="checkbox"/>	
CanopyStyle Initiative	<input type="checkbox"/>	
CEO Water Mandate	<input type="checkbox"/>	
Ellen MacArthur Foundation: Make Fashion Circular	<input type="checkbox"/>	
New York Declaration on Forests	<input type="checkbox"/>	
One Planet Business for Biodiversity	<input type="checkbox"/>	
Science Based Targets Initiative	<input type="checkbox"/>	
Tropical Forest Alliance	<input type="checkbox"/>	
UNFCCC Fashion Industry Charter for Climate Action	<input type="checkbox"/>	
United Nations Global Compact	<input type="checkbox"/>	
We Mean Business Climate Pledge	<input type="checkbox"/>	
Other	<input type="checkbox"/>	

If other is selected, please provide details.

Please briefly explain how your company's commitments cover fiber and materials.

Definitions
<p>Act4nature: A collaborative initiative by the French EpE (Entreprises pour l'Environnement) and partners, Act4Nature aims to mobilize companies to protect, promote, and restore biodiversity.</p>
<p>Accountability Framework Initiative: A collaborative effort to build and scale up ethical supply chains for agricultural and forestry products, the Accountability Framework Initiative (AFI) helps companies strengthen their commitments, implementation, and accountability in the areas of deforestation, ecosystem protection, and human rights.</p>
<p>Biodiversity commitment: A public, overarching company obligation to address biodiversity loss, signed by senior management.</p>
<p>Bonn Challenge: A global goal to bring 150 million hectares of degraded and deforested landscapes into restoration by 2020 and 350 million hectares by 2030. More information can be found here.</p>
<p>Business for Nature (BfN): A global coalition bringing together influential organizations and forward-thinking businesses. BfN demonstrates business action and amplifies a powerful business voice calling for governments to reverse nature loss (Business for Nature).</p>
<p>CanopyStyle Initiative: an initiative the brings together fashion's most progressive players and industry giants to ensure we keep the planet looking (and feeling) good too.</p>
<p>CEO Water Mandate: The CEO Water Mandate is a UN Global Compact initiative that mobilizes business leaders on water, sanitation, and the Sustainable Development Goals. Endorsers of the CEO Water Mandate commit to continuous progress against six core elements of stewardship and in so doing understand and manage their own water risks. Find out more here.</p>

Definitions

Ellen MacArthur Make Fashion Circular: Make Fashion Circular drives collaboration between industry leaders and other key stakeholders to create a textiles economy fit for the 21st century. Its ambition is to ensure clothes are made from safe and renewable materials, new business models increase their use, and old clothes are turned into new. More information can be found [here](#).

New York Declaration on Forests; The New York Declaration on Forests (NYDF), endorsed at the United Nations Climate Summit in September 2014, is a voluntary political declaration with over 200 endorsers - including countries, subnational governments, companies, indigenous groups, and NGOs - with ambitious targets to end forest loss. Find out more [here](#).

One Planet Business for Biodiversity: An international cross-sectorial, action-oriented business coalition on biodiversity with a specific focus on agriculture and initiated within French President Macron's One Planet Lab framework. [One Planet Business for Biodiversity](#) (OP2B) was launched at the UN Climate Action Summit in New York, Sept 2019. The coalition aims to drive transformational systemic change and catalyze action to protect and restore cultivated and natural biodiversity within supply chains, engage institutional and financial decision-makers, and develop and promote policy recommendations for the 2021 CBD COP15 framework. It is hosted by the World Business Council for Sustainable Development (WBCSD).

Science Based Target (for climate): Science-based targets are a set of goals developed by a business to provide it with a clear route to reduce greenhouse gas emissions. An emissions reduction target is defined as "science-based" if it is developed in line with the scale of reductions required to keep global warming below 2C from pre-industrial levels. For more information visit the [Science Based Targets Initiative](#) (SBTi).

Science Based Targets Network: The [Science Based Targets Network](#) (SBTN) is a group of organizations working to shape private sector and city impacts on nature by using science-based targets. The SBTi is part of the broader SBTN.

Science Based Targets for Nature: The [Science Based Targets Network](#) (SBTN) is developing a method for companies to ensure that their biodiversity actions are aligned with global goals and a planetary "safe operating space." While climate targets and actions don't necessarily need to be place-specific, targets and actions on water, biodiversity, lands, and oceans will need to be place-based. In order to ready companies to set science-based targets in these areas, understanding connection to place will be essential. The SBTN released its [Science Based Targets for Nature Initial Guidance for Business](#) in September 2020.

The Tropical Forest Alliance: catalyzes the power of collective action to drive the world's transition to deforestation-free supply chains, ensuring a forest-positive future. Find out more [here](#).

UNFCCC Fashion Industry Charter for Climate Action: The charter was launched at COP24, in 2018 and contains the vision to achieve net-zero emissions by 2050. The charter includes a target of 30% GHG emission reductions by 2030 and a commitment to analyze and set a decarbonization pathway for the fashion industry. More information can be found [here](#).

United Nations Global Compact: The UN Global Compact provides a universal language for corporate responsibility and provides a framework to guide all businesses regardless of size, complexity, or location. It helps companies commit to, assess, define, implement, measure, and communicate their sustainability strategy. More information can be found [here](#).

We Mean Business Climate Pledge: Signatories recognizing that the transition to a zero-carbon economy is the only way to secure sustainable economic growth and prosperity for all. More information can be found [here](#).

Other(s): public commitments focusing on progressing towards more sustainable practices, e.g., The Transparency Pledge. Please note that fiber specific commitments (e.g., 2025 Sustainable Cotton Challenge, Recycled Polyester) are covered in the fiber-specific modules and should not be added here.

S-1c. Impact Targets

Why this is important

Biodiversity targets demonstrate your company's "level of ambition" and set tangible goals to aim for when it comes to limiting impacts on biodiversity, or even having a positive impact. Targets are powerful as they can focus attention on achieving desirable outcomes. SMART targets (Specific, Measurable, Achievable, Realistic, and Time-bound) define and quantify precisely what a company wants to achieve and allow to measure progress.

What this question is looking for

- Whether the company has set specific measurable targets that address biodiversity impacts and contributing to positive outcomes.
- While the Science Based Targets for Nature are under development by the SBT Network, their [Initial Guidance for Business](#) provides a five-step process that companies can follow to supplement current strategy (or as first exploration) for addressing nature-related issues that would take companies *in the right direction* to become nature-positive. This five-step process is intended to align corporate efforts with global nature-related sustainability goals, enabling companies to take action on the drivers of biodiversity loss/nature change (e.g., land/water/sea use change, resource exploitation, climate change, pollution, invasive species, etc.) affecting the state of nature (species, ecosystems, and nature's contributions to people).
- A company might also set other biodiversity-related targets to directly protect native species under "do no harm," "no net loss," or "net gain" objectives, such as striving for zero lethal management of native wildlife, ensuring habitat connectivity in land use planning, and facilitating context-specific conservation programs in geographies where raw materials are sourced.
- In addition, a company's preferred material uptake targets *can* be a first step or potentially an integral part of its biodiversity targets *if* the preferred material program (e.g., standard, initiative, process) incorporates criteria that specifically addresses drivers of biodiversity loss, for example Textile Exchange's Responsible Wool Standard (RWS).
- See more examples for nature-related targets in the SBTN Initial Guidance. In addition, the [Biodiversity Companion Guide](#) (accompanying this Benchmark Survey Guide) includes "pointers" to textile-related programs (standards, initiatives, processes) that incorporate biodiversity, at least at the principle-level.

S-1c-2. Has your company set biodiversity-related targets?

- ☐ No
- ☐ Under consideration
- ☐ Targets for protecting endangered or threatened species
- ☐ Avoidance targets e.g., deforestation and/or land use conversion-free supply chains
- ☐ Reduction targets e.g., reduced use of virgin materials
- ☐ Targets for ecosystem restoration e.g., forestry
- ☐ Targets for regenerative farming
- ☐ Science-based biodiversity targets under development
- ☐ Targets aimed to "Do No Harm" to biodiversity
- ☐ Targets aimed for "No Net Loss" of biodiversity
- ☐ Targets aimed for "Net Gain" or "Net Positive" for biodiversity
- ☐ Other, please provide details.

Please describe your company's biodiversity targets.

S-1c-3. Is your company planning to align its biodiversity commitments to the Science Based Targets for Nature?

- ☐ No
- ☐ Under consideration
- ☐ We are a member of the SBTN Corporate Engagement Working Group
- ☐ Yes

S-1c-3a. If your company is considering or preparing to set a Science Based Target for Nature, have you completed any of the steps for any part of your business?

- ☐ No
- ☐ We have not yet completed Step 1, but we are planning to
- ☐ Step 1: Assess (materiality and value chain assessment)
- ☐ Step 2: Interpret & Prioritize
- ☐ Step 3: Measure, Set, and Disclose (target setting)

Definitions

Endangered species: One of the categories of classification by the [IUCN Red List of Threatened Species](#), meaning “considered to be facing a very high risk of extinction in the wild.” Individual countries also maintain national lists of threatened species. The classification of a species may differ between a country’s threatened species list and the IUCN Red List. “Threatened species” is used more generally to describe any species at risk of extinction in the wild.

IUCN Red List of Threatened Species: A critical indicator of the health of the world’s biodiversity. Primarily, it is a mechanism by which species experts assign a threat status level to species around the world. It also provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions to help inform necessary conservation decisions ([IUCN Red List](#)).

Forest: Though definitions vary by government, organization, and intended use, generally an area of land of minimum 0.5 hectares with a tree cover density of 10–30 percent, where trees have potential to reach a minimum height of 2–5 meters at maturity in situ ([FAO](#)).

Conversion: Change of a natural ecosystem to another land use or profound change in a natural ecosystem’s species composition, structure, or function. Deforestation is one form of conversion (conversion of natural forests). Conversion includes severe degradation or the introduction of management practices that result in substantial and sustained change in the ecosystem’s former species composition, structure, or function. Change to natural ecosystems that meets this definition is considered to be conversion regardless of whether or not it is legal ([Accountability Framework Initiative](#)).

Deforestation commitment: No-deforestation commitments are voluntary undertakings by companies that they will eliminate deforestation associated with commodities that they produce, trade and/or sell. Because companies define the terms, goals and implementation mechanisms for their own commitments, no-deforestation commitments vary widely. The [Accountability Framework Initiative](#) helps companies enact robust no-deforestation commitments, improve implementation, and strengthen accountability.

Material uptake targets: Refers to the quantified and time-bound (SMART) targets set for use of preferred materials set by the company. While uptake targets should not be considered biodiversity targets, they may be a step towards identifying where biodiversity criteria are being applied.

No Net Loss: No Net Loss (NNL) is a goal for a development project, policy, plan or activity in which the impacts on biodiversity it causes are balanced by measures taken to avoid and minimize the impacts, to restore affected areas, and finally to offset the residual impacts, so that no loss remains. See [Forest Trends](#) and [IUCN](#).

Definitions

Net Gain (net positive impact): Where the gain from measures taken outweighs or exceeds the loss, the term “Net Gain” (NG) may be used instead of NNL. Biodiversity NG and NNL must be defined relative to an appropriate reference scenario. See [Forest Trends](#) and [IUCN](#).

Conversion: Change of a natural ecosystem to another land use or profound change in a natural ecosystem’s species composition, structure, or function. Deforestation is one form of conversion (conversion of natural forests). Conversion includes severe degradation or the introduction of management practices that result in substantial and sustained change in the ecosystem’s former species composition, structure, or function. Change to natural ecosystems that meets this definition is considered to be conversion regardless of whether or not it is legal ([Accountability Framework Initiative](#)).

Offset targets: The aim of offsets is to achieve No Net Loss (NNL) and preferably a Net Gain (NG) for biodiversity. *Biodiversity offsets must be a measure of last resort; and in certain cases, offsets are not appropriate and should not be used* ([IUCN](#)).

“Other” biodiversity-related targets: There is the option for the company to report alternative or their own biodiversity targets if not included in the answer options. For example, setting targets to increase practices that have a positive biodiversity outcome specifically on working lands such as the use of regenerative agricultural practices e.g., in line with the [European Commission](#). (This example is taken from the SBT for Nature Initial Guidance for Business).

Preferred materials: Textile Exchange defines a preferred fiber or material as one which is *environmentally and/or socially progressive*, the use of which results in positive benefits in comparison to conventional production. Preferred materials are produced to criteria within sustainability “programs” including standards, initiatives, and processes. *Note: not all preferred materials programs will include biodiversity criteria.*

Qualitative only: Targets that are not defined in measurable terms; e.g., “we commit to sourcing more recycled materials.”

Science-based: Underpinned by valid scientific methods or methodologies, i.e., widely referenced in peer-reviewed scientific journals, referred by national/international authoritative scientific/conservation organization, e.g., IUCN, UNEP-WCMC, IMO, or referred in industry guidance issued by industry associations or universities/research institutions, or referred in government publication or laws/legislation.

SMART targets: SMART stands for Specific, Measurable, Achievable, Realistic, and Time-bound. SMART targets define precisely what a company wants to achieve and allow to measure progress.

- **Specific:** clearly defined so that all people involved in the company have the same understanding of what the terms in the objective mean.
- **Measurable:** Definable in relation to some standard scale (numbers, percentage, fractions, or all/nothing states).
- **Attainable:** Achievable related to the available resources and capabilities available at the disposal of the company.
- **Realistic:** Achievable and appropriate within the context of the company/supply chain, and in light of the political, social and financial context of the issue.
- **Time-bound:** Achievable within a specific period of time.

Additional reading

- The [Accountability Framework Initiative](#) provides guidance for setting targets for removing deforestation and conversion from a company's supply base.
- [Science Based Targets for Nature](#)
- [No Net Loss and Net Gain definitions](#) (Forest Trends – Business and Biodiversity Offsets Programme)
- [Ensuring No Net Loss for People and Biodiversity: Good Practice Principles](#) (IUCN)
- Paper on private sector No Net Loss policies ([de Silva et al. 2019](#))
- Paper on the core components of corporate No Net Loss policies ([Bull et al. 2016](#))
- [The EU Guidance on No Net Loss](#) European Commission
- [The Align project](#) is co-developing recommendations for a standard on measurement and valuation of biodiversity.

S-2. Leadership

S-2a. Accountability

Why this is important

Organizational leadership in corporate sustainability is crucial to ensure that the company is run to meet the triple bottom line of social, environmental, and financial performance, beyond the immediate, short-term financial gains. When a company assigns highest-level management to be accountable for performance on sustainability (including on biodiversity risk management), this is a good indicator that the company is operationalizing its commitment to sustainability.

Internal engagement is key to ensuring responsibility is taken for performing day-to-day activities on biodiversity risk management and is assigned to dedicated staff with appropriate knowledge and experience.

What this question is looking for

That there is high-level *accountability* for biodiversity risk management and *responsibility* assigned to staff for performing day-to-day activities. Biodiversity risk management should be embedded into organizational performance through job descriptions, performance indicators, incentives and knowledge management.

S-2a-3. At what level is overall accountability held for the company's biodiversity strategy?

- ☐ Not currently covered
- ☐ Middle management
- ☐ Senior management/directors
- ☐ C-suite (COO, CFO, CSO)
- ☐ Chief Executive Officer (or equivalent)
- ☐ Board member(s)
- ☐ Other. Please provide details.

S-2a-3a. Please provide name of colleague holding overall accountability for biodiversity.

S-2a-3b. Please provide the title of colleague holding overall accountability for biodiversity.

S-3. Internal Engagement

S-3a. Capacity Building

S-3a-3. Is your company building staff capacity to address biodiversity risk? (Select applicable)

Please provide details to support your answer in S-3a-3a.

- ☐ No
- ☐ We work only with external consultants
- ☐ We are building capacity within the sustainability department
Please select all that apply. (Select applicable)
 - ☐ Provide awareness raising/training
 - ☐ Responsibilities are written into job descriptions
 - ☐ Evaluate performance against performance indicators
 - ☐ Provide incentives/rewards for meeting targets/KPIs
- ☐ We are building capacity within and beyond the sustainability department
Please select all that apply. (Select applicable)
 - ☐ Provide awareness raising/training
 - ☐ Responsibilities are written into job descriptions
 - ☐ Evaluate performance against performance indicators
 - ☐ Provide incentives/rewards for meeting targets/KPIs

S-3a-3a. Please select all the responsibilities, support and incentives related to biodiversity that apply.

Department	Relevant	Regular training	Job description	Performance indicators	Incentives
Sustainability	<input type="checkbox"/>				
Sourcing/buying	<input type="checkbox"/>				
Product design	<input type="checkbox"/>				
Marketing/communication	<input type="checkbox"/>				
Sales staff and/or retail staff	<input type="checkbox"/>				
C-suite (CEO, CFO, COO)	<input type="checkbox"/>				
Board member(s)	<input type="checkbox"/>				

Please provide an example of biodiversity training carried out for employees.

Please provide an excerpt of a job description and/or examples of biodiversity KPIs.

Please provide an example of incentives.

S-3a-4. Please report on the number of employees working on biodiversity. (Select one)

- ☐ No planned recruitment
- ☐ Planned for recruitment
- ☐ Currently assigned

Definitions
<p>Accountability: Being answerable for any deviations from a company's stated goals and values and being answerable to company's stakeholders for all actions and results. Accountability links with responsibility through oversight.</p>
<p>Biodiversity risk: Business risks related to biodiversity, in the broadest sense, includes risks due to direct impacts or dependencies on biodiversity or nature's contributions to people, as well as regulatory, financing, reputational and supply chain risks that arise due to business's relationships with biodiversity and ecosystems.</p> <p>The term "biodiversity risk" as used in this Benchmark represents two contexts: (a) business risks arising from global biodiversity loss (dependency); and (b) the impacts the textile industry has on biodiversity. The production of all raw materials depends on biodiversity via nature's contributions to people (ecosystem services). Some raw materials consist of biodiversity directly, such as forest commodities or exotic skins.</p> <p>"Biodiversity risk" is an overarching term, encompassing both the drivers of biodiversity loss relevant to the textile industry and the biodiversity loss itself (e.g., species decline, ecosystem degradation, etc.).</p>
<p>Board members: Group of individuals elected to represent shareholders.</p>
<p>C-suite: Widely used vernacular describing a cluster of a corporation's most important senior executives. C-suite gets its name from the titles of top senior staffers, which tend to start with the letter C, for "chief", as in Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Operating Officer (COO), and Chief Information Officer (CIO) (Investopedia). Chief Sustainability Officer (CSO) is increasingly recognized.</p>
<p>Capacity building program: Capacity building is a systematic approach of knowledge and skills development. It ensures an organization has the internal expertise to effectively implement change and improve performance (BSI).</p>
<p>Incentives: Any form of reward system (often financial) that is tied to (biodiversity) performance. Incentives serve as a motivational device for employees in order to achieve objectives (e.g., bonuses, compensation, recognition).</p>
<p>Performance Indicators: Quantifiable measures that gauge a company's performance against a set of (biodiversity) targets and objectives.</p>
<p>Responsibility: Assigned roles and tasks in order to meet biodiversity management objectives.</p>
<p>Scope: C-suite and the Board of Directors are included in scope for capacity building and training. Although training delivery vehicles may differ, ensuring executives and board members are kept informed and up to date on important risks, opportunities, emerging issues, etc. related to biodiversity, is essential for informed decision-making.</p>

S-4. Materiality

S-4a. Risk and Opportunity Assessment

Why this is important

The decision of whether biodiversity (loss, dependencies, impact) implies a risk (or opportunity) for your company (i.e., whether it is a material risk), should be made through a risk assessment (referred to as materiality assessment within the SBTN [Initial Guidance for Business](#)). Biodiversity is place-specific, and both upstream and downstream impacts may be more significant than direct impacts and may occur in unexpected places. Hence a risk assessment is needed to identify all biodiversity issues, assess the level of risk and opportunity, and determine the company's most material (i.e., most significant) impacts and dependencies on biodiversity, including where they occur in the value chain or geographic locations. There are a range of tools and approaches available to assist companies complete a biodiversity risk assessment. Reaching out to internal and external stakeholders to get their input on this is a good practice to increase credibility and completeness of the assessment undertaken.

By undertaking an initial risk assessment to identify material biodiversity risks and opportunities in the value chain, including production of the fiber/material sourced, the company can identify hotspots within its biodiversity footprint. Prioritization of a short list of potential thematic and spatial areas to focus targets and action on may consider a range of additional factors such as the state of nature in different locations, the relative influence of a company over the state of nature, and the needs of local stakeholders. Ideally a company's biodiversity targets should be set based on a more quantitative assessment of impacts, although this typically requires detailed place-specific data.

What this question is looking for

To understand if a risk or impact assessment has been carried out, and if so to what level of detail.

Initial qualitative risk assessments can be very valuable, especially to identify material parts of the value chain to focus targets and action on. However, the direction of travel in good practice is towards quantitative assessment, using credible methodologies with an appropriate biodiversity metric (or metrics). Since biodiversity is comprised of multiple elements, different methodologies or metrics may pick up on different elements - for example, the area occupied, species present, or intactness of the ecosystem. There are likely to be benefits to using a range of approaches that capture different aspects. Whichever method(s) are used, it is important that the assessment is spatially explicit so it can take the place-specific nature of biodiversity into account.

- **Filling in the table:** Assessment type (qualitative/quantitative). Qualitative approach results in understanding of biodiversity risks at the conceptual level with narrative descriptions describing “what” and “where” risks occur, often using a qualitative scale (e.g., Very Low to Very High). Quantitative approach involves the use of metrics to enable the quantification of “how much” and “how significant” impacts to biodiversity are, e.g., using a specific biodiversity footprinting approach as described in the definitions below.
- **Key findings:** Use this free text field to summarize the key findings of your company's biodiversity risk or impact assessment. Include context and rationale as applicable, and/or upload documentation or link to appropriate place on website.

S-4a-3. Has your company undertaken a biodiversity assessment?

A biodiversity assessment should include an evaluation of a company's impacts, dependencies, risks, and opportunities

- ☐ No
- ☐ Yes, for some of our fibers and materials
- ☐ Yes, for the majority of our fibers and materials
- ☐ Yes, for all of our fibers and materials
- ☐ Yes, by other categorization (e.g., geography)
- ☐ Other

Please provide details.

Please briefly describe what has been included in your biodiversity assessment.

S-4a-3a. Which process has your company used in its biodiversity assessment?

- ☐ No assessment process
- ☐ Qualitative assessment process
- ☐ Quantitative assessment process
- ☐ Other

Please provide details.

Please briefly describe how your company assesses risks and impacts.

S-4a-4. Which tools or frameworks do your company use in its biodiversity-related decision making?

- ☐ No tools or frameworks used
- ☐ Natural Capital Accounting (NCA)
- ☐ Life Cycle Assessment (LCA)
- ☐ Environmental Profit and Loss (EP&L)
- ☐ Global Biodiversity Score (GBS)
- ☐ High-Conservation Value (HCV) and/or High Carbon Stock (HCS) approach
- ☐ Critical Habitat Assessment (IFC PS6)
- ☐ Biological Diversity Protocol (BD Protocol)
- ☐ Biodiversity Impact Metric (BIM)
- ☐ Integrated Biodiversity Assessment Tool (IBAT)
- ☐ Species Threat Abatement and Recovery (STAR) Metric
- ☐ Global Biodiversity Information Facility (GBIF)
- ☐ Global Forest Watch
- ☐ SBTN Materiality Matrix
- ☐ ENCORE
- ☐ Ecosystem Intactness Index
- ☐ UN Biodiversity Lab
- ☐ Biodiversity Footprint Calculator
- ☐ Bioscope
- ☐ Product Biodiversity Footprint (PBF)
- ☐ Geofootprint
- ☐ Other

Please provide details.

S-4a-5. Please provide key findings from your biodiversity assessment.

Materials	Key risks / impacts	Key dependencies
Cotton		
Wool		
Manmade Cellulosics		
Polyester		
Nylon		
Down		
Leather		
Cashmere		
Rubber		
Other 1		
Other 2		
Other 3		

Definitions

Biodiversity assessment: An assessment to understand a company's value chain impacts and dependencies on biodiversity and their relative importance (materiality) when evaluated in the context of the company's business activities.

Biodiversity dependency: Business reliance upon nature's contributions to people (ecosystem services) and the underlying biodiversity-driven processes that support them for production or value-generating systems. Businesses may directly depend on the health of ecosystems, e.g., agriculture and ecotourism. Other industries, such as fashion, pharmaceuticals, and cosmetics, also depend on the biological material and genetic sources in the creation and manufacture of their products ([CBD](#)).

Biodiversity "footprinting approach": Refers to quantification of a company's supply chain impacts on biodiversity, typically using approaches such as the Area x Condition framework that assesses impacts in terms of extent of ecosystem and intactness of ecosystems.

Biodiversity impact: Changes in the state of biological diversity at the level of genes, species, or ecosystems. Changes can be positive or negative. Changes to the state of biological diversity can be the result of the actions of a company or another party, and can be direct, indirect, or cumulative ([TNFD](#), 2022)

Biodiversity Impact Metric (BIM): The Biodiversity Impact Metric ([BIM](#)) is a practical risk-screening tool for supply chain businesses that source agricultural commodities. Developed by the Cambridge Institute for Sustainability Leadership (CISL) in partnership with the Natural Capital Impact Group.

Biodiversity risk: Biodiversity risk in a business context has been defined by the [World Economic Forum's Global Risks Report](#) as: "Business risks related to biodiversity in the broadest sense. This includes risks because of direct impacts or dependencies on biodiversity or ecosystem services [nature's contributions to people], as well as regulatory, financing, reputational and supply chain risks that arise due to business's relationships with biodiversity and ecosystems." (See also: [Biodiversity Risks and Opportunities](#), IUCN/Hugo Boss). The term "biodiversity risk" used in this Benchmark represents two contexts: (a) business risks arising from global biodiversity loss; and (b) impacts the textile/apparel industry has on biodiversity. This is a broad term encompassing both the drivers of biodiversity loss relevant to the fashion sector and global biodiversity loss itself (e.g., species decline, ecosystem degradation, etc.).

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Direct risk: Direct dependencies or adverse impacts to biodiversity due to/from a company's own operations/activities and those of actors within its value chain. Examples of direct risks could include: the clearance of forest to create new agricultural land; loss of predators due to lethal management to protect crops or livestock; the impact of pesticides on habitats adjacent to a field; and toxicity to fish from discharge of factory effluent.

Indirect risk: Induced or triggered by a company's activities, rather than as a direct result of its operations. Predicting indirect risks is more complex as they derive from interactions of multiple factors and stakeholders. Indirect risks result from interactions of the company with social, economic, political, and environmental factors and also with actors such as local communities, migrants, government, and company personnel. Compared to direct risks, indirect risks are often harder to track, affect a broader geographic area, have a lower intensity (a lower impact per unit area affected), and unclear boundaries of responsibility; and thus require more complex mitigation responses.

Examples of indirect risks to biodiversity could include induced human in-migration resulting from a new industrial facility, leading to increased levels of unsustainable natural resource extraction; displacement of economic activity from one area to another, resulting in an increase in habitat conversion or encroachment; and improved access from new roads opening-up previously remote areas increasing hunting along the new route.

Environmental Profit and Loss methodology: [Environmental Profit & Loss](#) (EP&L) is used by the Kering Group to facilitate decision making in the fashion industry context based on supply chain's environmental footprint and valuation of the footprint in monetary value.

Global Biodiversity Score (GBS): the [Global Biodiversity Score](#) was developed by CBC Biodiversity. It is a tool that provides quantification of a company's biodiversity footprint (Scope 1, 2 and 3) by presenting an estimate of the impact of each of the major pressures on biodiversity (land use, pollution, water use, climate change) in terms of Mean Species Abundance (MSA) per hectare.

High Carbon Stock approach (HCSa): [High Carbon Stock approach \(HCSa\)](#) is a methodology that distinguishes forest areas for protection from degraded lands with low carbon values.

High Conservation Value methodology: The [High Conservation Value methodology](#) is a three-step approach in protection, managing, and monitor High Conservation Value (HCV) areas (areas that hold biological, ecological, social, or cultural values of outstanding significance at the national, regional, or global level or of critical importance at the local level).

Integrated Biodiversity Assessment Tool (IBAT): [IBAT](#) provides a basic risk screening on biodiversity. The tool includes a range of globally recognized datasets including the IUCN Red List of Threatened Species, Key Biodiversity Areas, Protected Planet / The World Database on Protected Areas, and the STAR.

Life Cycle Assessment: The [Life Cycle Assessment](#) is a systematic analysis of the potential environmental impacts of products or services during their entire life cycle.

Definitions

Materiality assessment: Materiality assessments help a company identify its most "material issues" There are a range of tools and approaches available to assist companies complete a biodiversity materiality assessment. It can also involve reaching out to internal and external stakeholders to get their input. Materiality assessments also help companies determine what should be prioritized, what should be reported, and to whom. ([GRI G4 Standards](#)).

Materials uptake: Proportion of your company's volume or share of fiber/material in its total portfolio.

Mean Species Abundance (MSA): The Mean Species Abundance ([MSA](#)) is a measure of the average quantity of each species lost for different land-use types. These coefficients are based on reviews of a large number of scientific studies. MSA is used in the [GLOBIO model](#). It is not weighted by species richness or rarity. MSA is a component of the BIM.

Natural capital accounting: The process of calculating the total stocks and flows of nature-related resources and services in a given ecosystem or region. Accounting for such goods may occur in physical or monetary terms. One such natural capital accounting approach is the [Natural Capital Protocol](#) that operates as a decision-making framework to enable organizations to identify, measure, and value their direct and indirect impacts and dependencies on natural capital. The Natural Capital Protocol has also produced a [Biodiversity Supplement](#) to assist companies in better incorporating biodiversity within natural capital accounting.

Share assessed: Scope of the assessment in terms of proportion of your company's volume or share of fiber/material portfolio.

Species Threat Abatement and Restoration (STAR): The Species Threat Abatement and Restoration ([STAR](#)) is a spatially explicit metric combining measures of species richness (number of species), their rarity, and how threatened they are, based on the [IUCN Red List of Threatened Species](#). It can be used to assess both impacts and potential gains from restoring or protecting habitats. For greatest accuracy and effectiveness, STAR can be calibrated at the site level – methodology guidance is forthcoming in 2022. See also the [STAR Data Layer Business User Guidance](#) (IBAT, 2021).

Additional reading

- [EU Business and Biodiversity Platform](#) provides a unique forum for dialogue and policy interface to discuss the links between business and biodiversity at EU level. It aims to work with and help businesses integrate natural capital and biodiversity considerations into business practices.
- [HCV and IFC PS6 – why do the different approaches matter to industry?](#), briefing note by TBC Industry
- [Biodiversity Risks and Opportunities in the Apparel Sector](#), IUCN/HUGO BOSS, 2016
- The Accountability Framework Initiative [Supply Chain Management Operational Guidance](#) includes a section on risk assessment.
- Natural Capital Coalition, [Biodiversity Guidance for the Natural Capital Protocol](#)
- [Good Practices for the Collection of Biodiversity Baseline Data](#): Report by the Multilateral Financing Institutions Biodiversity Working Group and CSBI
- [Indirect impacts on biodiversity from industry](#), 2013, The Biodiversity Consultancy, 2013

S-4b. Stakeholder Engagement

Why this is important

Engaging with stakeholders allows companies to assess the issues that are important to the groups they affect, and to tailor their actions accordingly. Being transparent about who was consulted allows readers and other external parties to judge the range of views represented in the materiality assessment, and thus its completeness.

What this question is looking for

Whether a company consults an appropriate mix of stakeholders, internally and externally, to verify the scope and approach of the biodiversity assessment.

This question asks companies which stakeholders it engages as part of its biodiversity risk and/or materiality assessment. Consulting stakeholders gives the company a chance to incorporate issues important in stakeholders' views as priorities, in addition to those identified as significant through the technical assessment. Most importantly, how stakeholder engagement has influenced and shaped the company's decision-making. As evidence, please provide an example of stakeholder engagement.

S-4b-3. Does your company consult with key stakeholders as part of its biodiversity risk assessment?

- ☐ No
- ☐ Yes

Please indicate the stakeholders your company consults with. (Select applicable)

- ☐ Employees
- ☐ Suppliers
- ☐ Feedstock producers
- ☐ NGOs
- ☐ Board of Directors
- ☐ Customers
- ☐ Governments/regulators
- ☐ Investors/analysts
- ☐ Independent experts
- ☐ Shareholders
- ☐ Local communities
- ☐ Indigenous leaders/communities
- ☐ Other companies active in same location
- ☐ Other. Please provide details.

S-4b-3a. Please provide an example of stakeholder engagement, related to biodiversity risk.

Definitions

Consultation: Stakeholder consultation is a “one-way” process (e.g., survey, poll) and often a “one-off” experience where the company (the consulter) seeks input and insights from identified stakeholders.

Engagement: Stakeholder engagement usually involves a “two-way” dialogue (e.g., interviews, focus groups, community meetings) and aims to be as inclusive as possible, giving stakeholders (including lay people) a more active and participatory role. Engagement is often ongoing and aspires to build a collaborative culture and shared ownership of decision-making.

Indigenous people: Indigenous peoples are distinct communities where the land and resources upon which they depend are inextricably linked to their identities and cultures.

Stakeholder: Stakeholders are those who either affect, or are affected by, the activities of a company.

Additional reading

- [Partnership in Practice: Engagement with Indigenous People](#) is an important report by the Global Environmental Facility (the GEF) explaining the ethical and legal responsibilities of engagement with indigenous communities.
- UN Environment Programme’s [Indigenous peoples and the nature they protect](#) story and links.

S-6. Investment

S-6a. Sustainability Investment

Why this is important

Investment is important in order to scale and accelerate action and improvements. Investment is often necessary to support the capacity, technical and operational development of the biodiversity strategy or program. As the market matures, the onus of responsibility should shift from “development” to business and marketplace rewards and incentives. However, there is likely to be a need for additional investment to bring programs to scale. The activities or focus of the investment may differ depending upon the risk/ opportunity, fiber, or material. Collaborative investment through multi-stakeholder initiatives and partnerships can be particularly effective to address issues which are beyond the direct influence of individual companies.

What this question is looking for

Investment is important in order to scale the uptake of more sustainable fibers, materials, and practices. Additional investment, especially in the early stages, is often necessary to support the capacity, technical and operational development towards enhanced social or environmental outcomes. As the market matures the onus of responsibility should shift from “development” to business and marketplace rewards and incentives. However, there is likely to be a need for additional investment to transform a supply chain or to create benefits in sourcing regions. The activities or focus of investments can differ greatly. Collaborative investment through multi-stakeholder programs and partnerships can be particularly effective to address issues which are beyond the direct influence of individual companies.

S-6a-1. Does your company invest in sustainability beyond the cost of sourcing more sustainable materials?

Provide evidence to support your answer in S-6a-1a.

- ☐ No
- ☐ Yes, we invest in programs/initiatives
- ☐ Yes, we invest in capacity building
- ☐ Yes, we invest in philanthropic spending
- ☐ Yes, we invest in innovation
- ☐ Yes, we invest in corporate financing
- ☐ Yes, we invest in impact
- ☐ Yes, we invest in green bonds
- ☐ Yes, we invest in sustainability-linked bonds
- ☐ Yes, we invest in other investments

Please provide details.

S-6a-1a. Please provide examples of key investments made.

Investment area	Investment type	Description of investment	Investment
(i.e., cotton, wool, manmade cellulosics, polyester, polyamide, down, cashmere, rubber, other fiber/materials, non fiber/material specific)	(i.e. programs/initiatives, capacity building, philanthropic spending, innovation, corporate financing, impact investing, leather impact assessment (LIA), green bonds, sustainability-linked bonds, other)	e.g., Participation in LIA pilot	See Investment Entry table below

Investment entry

	Yes/No	Amount (USD)	ROI Expected
In-kind	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>
Financial	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>
Investment	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>

Definitions

Amount: Financial sum of the investment made in the investment project over the reporting period.

Collaborative initiatives: Refers to investments by the company in collaboration with other stakeholders. Note: collaborative initiatives may include investments in “innovation” or “supply partnerships” (i.e., other options in the dropdown). See question specification above for instructions on how to approach this overlap.

Conservation fund: “Specifically-purposed” capital that is raised and managed by an entity to support lands, water, and resource conservation.

Corporate financing: Corporate financing/investing can be through an investment platform e.g., [1% For the Planet](#) where companies commit to donating the equivalent of one percent of their gross sales through a combination of monetary, in-kind and approved promotional support directly to environmental nonprofits. Other examples include impact investing, sustainability/green or SDG bonds, blending financing and directed philanthropy.

CSR investment: Refers here to investments made within the scope of a company’s Corporate Social Responsibility (CSR) work plan/budget and is related to business outcomes but also having a broader impact e.g., on local communities. CSR is defined as a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders ([UNIDO](#)). Note: CSR “investment” may be differently defined, regulated and/or taxed depending on the company, sector, and/or country.

Impact Incentives: Impact Incentives refer to the certificates that are traded in support of a sustainability claim. The incentives are issued when a set of criteria have been confirmed. The Incentive Certificates represent a specified quantity of verified material that has been produced but has not been physically traded as verified goods. Nevertheless, brands and retailers will have an efficient and effective tool to demonstrate their commitment to their sustainability or CSR goals, and to build up the supply of more sustainable commodities that they can eventually link to with physical sourcing ([Textile Exchange](#)).

In-kind: Refers to investments not involving money or not measured in monetary terms. An in-kind contribution is a non-monetary contribution. Resources (goods or services) offered free or at less than the usual charge result in an in-kind contribution.

Definitions

Innovation: Refers to investment in research and development (R&D) of new ideas, tools, technologies, processes, etc. intended to increase the biodiversity outcomes either directly or indirectly. E.g., “investment in transparency tool” or “investment in an innovative plastic waste recycling initiative”.

Insetting: Environmental programs implemented within a companies’ direct sphere of influence (core business and supply chains) so as to generate multiple positive sustainable impacts on biodiversity and other environmental objectives ([International Platform for Insetting](#)).

Investment: The allocation of resources (in-kind or financial, internal or external, individual or collaborative) in biodiversity-related activities. Please note that while the use of certified products is indeed a positive contribution, investment in the context of this question, goes beyond product procurement (unless there are explicit biodiversity-related requirements that your company has identified and there is specific investment in achieving these requirements).

Investment period: Refers to the timeframe where the investment is made. If it is an ongoing investment, please specify “on-going”; if it is a time-bound investment please specify the timeframe “20XX-20YY.”

Investment type: The investment category as listed in the dropdown options i.e., collaborative initiatives, supply partnerships, innovation, corporate funds, CSR, other.

Mitigation alignment: The mitigation alignment as listed in the dropdown options i.e., avoid, reduce, restore, regenerate, inset, off-set, transform, other. See definitions elsewhere in this guidance.

Not material-specific: There is an option to select “other” i.e., the investment is not related to a single or specific material supply chain, e.g., a global conservation fund, landscape-level watershed restoration, livelihoods initiatives in a certain geography, conservation work for a priority habitat or species not associated with a sourcing region, etc. Please describe in the “description of investment” text box.

Off-setting: Measurable conservation outcomes of actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people’s use and cultural values associated with biodiversity ([BBOP](#)).

ROI expected: Return on Investment (ROI) is the benefit (or return) of an investment divided by the cost of the investment. The checkbox is to be selected if an ROI is expected.

Additional reading

- WWF and BCG, [Beyond Science-based Targets: A Blueprint for Corporate Action on Climate and Nature](#)
- ShareAction, [Investing for Biodiversity](#)
- UNPRI, [Investor Action on Biodiversity Discussion Paper](#)

S-7. Reporting

S-7a. Public Reporting

Why this is important

Reporting on biodiversity risk mitigation demonstrates leadership in this area and creates visibility for the company. It also shows a willingness to “open your books” and communicate risks, challenges, and opportunities associated with biodiversity risk management, as well as progress against key performance indicators (KPIs) and towards targets. Reporting should cover all aspects of a biodiversity program including strategy, implementation, and progress towards targets.

What this question is looking for

Disclosing information to the public related to biodiversity risks management in detail, including: (a) a corporate commitment and elements of strategic intent; (b) materiality (recognition of risk, impacts and dependencies) and stakeholder consultation; (c) key sourcing locations and biodiversity considerations; (d) approach to managing biodiversity risk/impacts e.g., AR³T Action Framework; and (e) monitoring and evaluation activities. Reporting on biodiversity can either be incorporated into sustainability reports, corporate responsibility (CR) reports, or integrated into a company annual report. Providing a level of confidence in the contents and data of such publications can be demonstrated through reporting in accordance with recognized standards of biodiversity or sustainability reporting, such as the Global Reporting Initiative (GRI) or seeking review and assurance by a qualified independent external party.

S-7a-3. Does your company regularly report on its climate-related activities?

- ☐ No
 - ☐ We provide general information only
 - ☐ Yes, we publicly report on our climate-related activities
 - ☐ Yes, we publicly report on our climate-related activities and progress
 - ☐ Yes, we publicly report on our climate-related activities and progress to a recognized framework
- Please provide details.

S-7a-4. Does your company regularly report on its biodiversity activities?

- ☐ No
 - ☐ We provide general information only
 - ☐ Yes, we publicly report on our biodiversity activities
 - ☐ Yes, we publicly report on our biodiversity activities and progress
 - ☐ Yes, we publicly report on our biodiversity activities and progress to a recognized framework
- Please provide details.

S-7a-4b. Please indicate the reporting scope. (Select applicable)

- ☐ Approach to managing risk/impacts
- ☐ Dependencies/impacts associated with materials sourcing
- ☐ Sourcing geographies associated with high biodiversity value
- ☐ Potentially affected threatened species and/or national priority species for conservation
- ☐ Other

S-7b. Assurance

S-7b-3. How does your company assure the quality of its publicly reported biodiversity activities? (Select one)

- ☐ We do not have an assurance system
- ☐ Internal assurance process
- ☐ Standardized internal assurance system according to recognized procedures and principles
- ☐ Independent third-party assurance using a standardized framework
- ☐ Other

Definitions
Activities: Any actions related to fibers and materials sustainability including risk assessments, implementation of programs, or sourcing more sustainable fibers and materials.
Disclosure: Refers to a situation in which an organization makes information available by publishing it or making it available to members of the public.
General information: Information on the website about work in fiber and materials sustainability but without a systematic annual or biannual update.
Integrated reporting: Key reporting organizations have come together to achieve progress towards a single set of comprehensive and global reporting standards. This shared vision is provided by GRI, CDP, Climate Disclosure Standards Board (CDSB), International Integrated Reporting Council (IIRC) and Sustainability Accounting Standards Board (SASB). Read more about this global reporting landscape initiative.
Materiality: Materiality [reporting] should reflect the organizations significant economic, environmental and social aspects; or substantially influence the assessments and decision of stakeholders (GRI). See also: "Biodiversity Loss and Land Degradation: An Overview of the Financial Materiality." University of Cambridge Institute for Sustainability Leadership (CISL 2020).
Progress reporting: Refers here to the measurable movement towards a target over time. This may include progress in management, output, or impact related KPIs.
Regularly report: Implies an annual or biannual update.
Sustainability reporting: "The practices of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. Reporting enhances companies' accountability for their impacts and therefore enhances trust, facilitating the sharing of values on which to build a more cohesive society." (GRI)
Task Force on Nature-Related Financial Disclosures: The Task Force on Nature-Related Financial Disclosures (TNFD) aims to operate alongside of the Task Force for Climate-Related Financial Disclosures (TCFD) to agree the climate reporting "equivalency" for nature. While the TCFD does provide a framework through which to understand and report on nature-related risk, <i>this is only in climate terms</i> . The TCFD framework alone is inadequate for nature, because it excludes other very large and immediate nature-related risks, including plastics in the oceanic food chain, loss of soil fertility, and pathogens such as coronavirus. To capture these risks, and divert finance away from exacerbating them, will require a far wider approach than simply the carbon lens of the TCFD and one metric. The Beta version of the TNFD Nature-Related Risk & Opportunity Management and Disclosure Framework was released in March 2022.

Additional reading

- WWF and BCG, [A Blueprint for Corporate Action on Climate and Nature](#)
- IUCN French Committee, [Corporate Biodiversity Reporting and Indicators](#)
- CDP, [Corporate Disclosure](#)
- IUCN, [Draft Guidelines for Planning and Monitoring Corporate Biodiversity Performance](#)
- Global Reporting Initiative, [GRI 304 \(2016\) on Biodiversity](#)
- Accountability Framework Initiative, [Guidance on Sustainability Reporting](#)
- Sustainability Accounting Standards Board (SASB), [Reporting Framework Alignment](#)
- World Economic Forum, [The Global Risk Report 2020](#)
- Zurich, [The Biodiversity Business – Global Risks](#)
- UNEP-WCMC, [Aligning Biodiversity Measures for Business](#)

Section II: Materials Portfolio

(Transparency)

Transparency-related questions in the Biodiversity Benchmark are embedded in the Material Modules sections. Companies are encouraged to complete the below questions for their priority materials – the full Material Modules will not be required for Biodiversity participants unless participants opt-in. “FM” is used here as a generic label for any of the Material Modules.

Why this is important

From a biodiversity perspective, knowledge of the geographical setting of materials production is essential. As biodiversity has multiple attributes and varying contexts across the globe, it is crucial to identify and evaluate the “value” of the biodiversity impacted by a company’s material use to ensure an appropriate response in mitigation. Impacts to biodiversity associated with textile production are frequently concentrated in feedstock/raw material sourcing (i.e., growing, extracting, and primary processing). A company may source raw materials from multiple locations, and it is important for a company to understand the biodiversity value at each of these locations separately to be able to identify appropriate action.

What this question is looking for

Whether a company has mapped their materials to their sourcing locations (country, landscape, site-level) as an early part of their mitigation planning. A company should identify “what” risks its materials sourcing poses to biodiversity and “where” they occur (i.e., where, geographically, in terms of sourcing/processing locations). This data can then be used to map and investigate the biodiversity “context” of the location.

Please estimate the share (percentage) of material (e.g., cotton, wool, manmade cellulosic fibers, etc.) sourced by your company within a known Country of Origin. You can list up to 10 “key” sourcing countries per fiber/material by share of total material sourced and also by the share within each material program, including the share of conventional material. If you are able to provide more specific details of program location, please indicate from the drop-down options provided and add details in the text box. If no “Country of Origin” information is available, please select “no.”

Note: For companies completing the MCI survey, the table will “auto-populate” your responses to Country of Origin, etc., for each materials module completed in the MCI. Please apply the drop down of “all mapped/majority/minority/not mapped” to each geography. Use the free-text box to clarify interpretations of how the company has approached mapping of sourcing/processing locations with biodiversity value.

FM-2a. Country of Origin

FM-2a-1. Does your company know the countries of origin of its [material] feedstock?

Please provide details to support your answer in FM-2a-2a.

- ☐ No
- ☐ Yes, for less than 25% of our [material] supply
- ☐ Yes, for 26%-50% of our [material] supply
- ☐ Yes, for 51%-75% of our [material] supply
- ☐ Yes, for more than 75% of our [material] supply
- ☐ Yes, for 100% of our [material] supply

FM-2a-2. Can your company estimate its [material] feedstock supply by country and site location?

- ☐ No
- ☐ By country of origin only
- ☐ By program
- ☐ By sourcing region or site location for some supply
- ☐ By sourcing region or site location for all supply

FM-2a-2a. Please indicate country share, program share and knowledge of site location.

Please select the "Country of origin" from the dropdown list (column 1) and indicate the percentage of [material] sourced from each country in the "Country share (%)" (column 2) including "unknown" to capture any [material] sourced from unknown origins, and ensuring the column adds up to 100%.

Country of origin	Sourcing region/site location	Country share (%)	[Fiber program 1] share (%)	[Fiber program 2] share (%)	[Fiber program 3] share (%)
e.g., Unknown		50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.g., China		20%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.g., Egypt		10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.g., India		20%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total		100%			

FM-2b. Supply Chain Mapping

FM-2b-1. Has your company mapped its [material] supply chains?

- ☐ No
- ☐ Yes, we have mapped our supply at CMT level
 - Please indicate the coverage.
 - ☐ Covers a minority of supply at this level
 - ☐ Covers a majority of supply at this level
- ☐ Yes, we have mapped our supply at fabric producer level
 - Please indicate the coverage.
 - ☐ Covers a minority of supply at this level
 - ☐ Covers a majority of supply at this level
- ☐ Yes, we have mapped our supply at spinner level
 - Please indicate the coverage.
 - ☐ Covers a minority of supply at this level
 - ☐ Covers a majority of supply at this level
- ☐ Yes, we have mapped our supply at feedstock supplier level
 - Please indicate the coverage.
 - ☐ Covers a minority of supply at this level
 - ☐ Covers a majority of supply at this level

FM-2b-2. Has your company mapped the biodiversity value of the locations from which its [material] is sourced?

- ☐ No
☐ Some/partial mapping
☐ Yes

FM-2b-2a. Please provide details of the biodiversity value and locations mapped.

Country	Biodiversity mapping	Priority areas/regions identified	Justification for prioritization
e.g., Egypt	[Yes, Early mapping, No]	e.g., Nile River	e.g., Endangered species
e.g., India		e.g., Tamil Nadu (Western Ghats)	e.g., Habitat and corridor

Definitions

Area important for biodiversity: An area of land or sea which is identified as important for biodiversity, and defined as, for example, critical habitats, Key Biodiversity Areas (KBAs), priority ecoregions, biodiversity hotspots, and Alliance for Zero Extinction sites. ([IUCN](#))

Area of opportunity: The area beyond (but usually adjacent to) a company's area of influence in which the company seeks opportunities for biodiversity conservation (e.g., critical habitats, KBAs, protected areas). ([IUCN](#))

Biodiversity value: Biodiversity has a fundamental value to humans because we are so dependent on it for our cultural, economic, and environmental well-being ([Environmental Literacy Council](#)). While all biodiversity is precious, its inherent variability means a specific method is needed to understand its characteristics and relative importance. This is often necessary to make sense of the complexity and interconnectedness of biodiversity in a business context. Understanding biodiversity value can be done through researching the geographical setting/landscape in which a supplier is located and evaluating the relative importance of an area (ecosystems/habitat) to the inhabiting biodiversity, as well as the state/condition of biodiversity itself.

One way to characterize importance is by evaluating the vulnerability and rarity of species and ecosystems impacted by an activity. There are scientifically robust global methodologies available to help in this process; (a) the [IUCN Red List of Threatened Species](#) for assessing presence of threatened species; (b) [Key Biodiversity Areas](#) (other areas of biodiversity importance – may or may not be protected), [Protected Areas](#), [UNESCO World Heritage Sites](#), and [Alliance for Zero Extinction \(AZE\) sites](#) which are helpful for understanding globally important places for biodiversity and (c) global biodiversity data layers (e.g., [Critical Habitat](#) and [Natural Habitat](#) data layers by UNEP-WCMC, [IUCN STAR](#), and others) which are useful for understanding relative global importance of habitat/ecosystems incorporating inhabiting-species' diversity, vulnerability, and rarity.

Relative importance (globally) of the “landscape” to biodiversity, can be approximated by evaluating the presence of: (a) threatened or rare species and (b) [congregatory species](#), including relative global/regional importance of the area (habitat) to the survival of these species, and by evaluating overlap or distance to (c) Protected Areas, Internationally Recognized Areas, and (d) rare, threatened, or endangered ecosystems ([see IUCN Red List of Threatened Ecosystems](#)).

However, it is important to note that seemingly “low priority” areas for biodiversity may provide important contribution to people. Beneficial action such as regenerating productive land and restoring land historically cleared for forestry, plantations or agriculture (cropping, grazing, etc.) therefore remain as potential priorities which would also generate positive outcomes for biodiversity. This is why it is extremely important for a business to understand the geographical context of its value chain and the characteristics of the biodiversity there (see BM - 3a Biodiversity Risk Assessment).

Definitions

Biome: A biome is an area of the planet that can be classified according to the plants and animals that live in it ([National Geographic](#)).

Conservation value: From endemic species to sacred sites, all of the planet's natural habitats (especially forests) inherit conservation values. Those biological, ecological, social or cultural values of outstanding significance are known as High Conservation Values (HCVs) ([Forest Stewardship Council](#)).

Country of Origin: Country of Origin refers to the country where the material is grown, cultivated or otherwise produced. Different countries of origin are associated with different geographical, environmental, socioeconomic, and political risks (for instance, water scarcity in many semi-arid cotton growing regions). Knowledge of feedstock origin will be important to adequately understand and respond to environmental and socioeconomic risks and opportunities, since many are context specific.

Critical habitats: Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes ([IUCN](#)).

Ecoregion: A relatively large area of land or water containing a characteristic set of natural communities that share a large majority of their species, ecological dynamics, and environmental conditions ([IUCN](#)).

Ecosystem: a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit ([IUCN](#)).

Endemic species: A species found within a defined geographic area e.g., a country, an ecoregion, a habitat type ([IUCN](#)).

High Conservation Value (HCV) areas: Natural habitats, which are of outstanding significance or critical importance due to their high biological, ecological, social or cultural values. These areas need to be appropriately managed in order to maintain or enhance those identified values (UNEP-WCMC 2014). There are 6 categories: species diversity, landscape level ecosystems, ecosystems and habitats, ecosystem services, community needs and cultural value ([IUCN](#)).

Key Biodiversity Areas: Sites contributing significantly to the global persistence of biodiversity, in terrestrial, freshwater and marine ecosystems ([IUCN](#)).

Landscape: In this benchmark, "landscape" is broadly defined as a "site location" e.g., an ecoregion, a biome, or any other ecologically significant unit of space on a regional level. In some cases, landscape unit might be defined in terms of an administrative or territorial boundary ([IFC PS6 Guidance Note para.17](#)).

Location: Is the more precise geographical location (e.g., landscape, region, province, state, district, catchment, GPS details, etc.) within the country of origin. Site location provides important background and context for companies to determine environmental (including biodiversity) and socioeconomic impact, risk, and opportunity. Feedstocks may be traceable to i.e., landscape-level or even farm/producer-level. Note: a company's sourcing locations may change frequently or over time.

Mapping: Supply chain mapping is the process of engaging across companies and suppliers to document the exact source of every material, every process and every shipment involved in bringing goods to market ([Sourcemap](#)).

Natural habitats: Areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition ([IUCN](#)).

Definitions

Producer-level: Sometimes referred to as tier 4 in a supply chain or supply network, producer-level mapping is the identification of the owner or producer of the material/feedstock supplying the company's textile processor. Unless companies are working with certified supply chains, vertical suppliers and/or large producers/producer groups it can be challenging to locate tier 4 producers, but not impossible. Some chain of custody models or new traceability tools/technologies support this level of transparency.

Transparency: Transparency of a supply chain is the degree of shared understanding of and access to product-related information, such as site location, as requested by a supply chain's stakeholders without loss, delay, or distortion.

Additional reading

- [Critical Habitat](#) and [Biodiversity Risk Screening](#) Industry Briefing Note by The Biodiversity Consultancy.
- IBAT Alliance, [Integrated Biodiversity Assessment Tool \(IBAT\)](#)
- IUCN, [Forest Landscape Restoration \(FLR\) overview](#)
- IUCN, [Draft Guidelines for Planning and Monitoring Corporate Biodiversity Performance](#)
- Verra's [LandScale](#) is an emerging tool to help drive landscape-scale sustainability outcomes. A shared initiative of the Climate, Community, and Biodiversity Alliance, the Rainforest Alliance, and Verra.
- Verified Sourcing Areas ([VSA](#)) by IDH is a new area-based mechanism to accelerate production and uptake of more sustainable commodities globally.
- The [Accountability Framework](#) is a set of common norms and guidance for establishing, implementing, and demonstrating progress on ethical supply chain commitments in agriculture and forestry.
- USDA Forest Service, [Place-based Conservation overview](#)

Section III: Biodiversity Impact Area

[BI-1 Implementation](#) on [BI-2 Monitoring and Evaluation](#)

BI-0. Perspectives

Why this is important

All companies are dependent on biodiversity and nature's contributions to people (ecosystem services) in some way. A company that recognizes opportunities to address biodiversity risk acknowledges the importance of biodiversity to its business. Each business has its own understandings and values related to its relationship to biodiversity, and its own motivations driving them to create change.

See the CFMB [Biodiversity Benchmark Companion Guide](#) for information on biodiversity-related risks.

What this question is looking for

Question BI-0-1 first seeks to understand a company's unique perspective on why biodiversity matters to them. BI-0-2 asks companies to identify areas where the company sees itself having an opportunity to create change for the benefit of biodiversity.

BI-0-1. What does your company consider to be important about biodiversity and why?

BI-0-2. What do you see as opportunities for your company when it comes to biodiversity?

BI-1. Implementation

The implementation module evaluates the actions taken to reach biodiversity targets. We follow the AR³T Action Framework developed by the Science-based Targets for Nature and used by many initiatives including the Fashion Pact. The AR³T Framework represents a hierarchy of actions that companies should take to limit impacts to biodiversity, by first, Avoiding and Reducing impacts, Restoring and Regenerating biodiversity, and Transforming systems. This framework is a modification of the Mitigation Hierarchy.

The [Mitigation Hierarchy](#) is a widely recognized framework used to mitigate biodiversity risks/impacts associated with business activities. It has been adopted and widely implemented by industry bodies, most major multilateral development banks, including the World Bank and IFC, as well as many multinational companies across a variety of different industry sectors, from infrastructure, energy, to agribusiness and consumer goods. The Mitigation Hierarchy can be applied at a site level or at a more strategic level, including at the value chain level.

According to the [Science Based Targets for Nature Initial Guidance for Business](#) “The AR³T Framework is built on the mitigation hierarchy set out in the International Financial Corporation’s (IFC) Performance Standard 6. As currently used, IFC PS6 helps companies plan for and address their impacts on biodiversity at a project level. The AR³T Framework is also built on the conservation hierarchy, which expanded the mitigation hierarchy concept to include proactive, positive steps for nature.” The Initial Guidance also includes a link to Technical Annex 5 which discusses the relationship between the mitigation hierarchies used to develop the AR³T Action Framework.

Additional reading

- Science-based Targets for Nature [Initial Guidance for Business](#) provides details of the AR³T and helpful examples of how companies can implement the framework.
- A practical guide to site-based application of the Mitigation Hierarchy, Publication by [CSBI and TBC](#).
- The [Accountability Framework Initiative](#) (AFi) offers a practical guide to build and scale up ethical supply chains for agricultural and forestry-based products.

BI-1a. Avoidance Measures

Why this is important

Avoidance measures are aimed at preventing impacts from happening in the first place, i.e., to eliminate the impact entirely. Avoidance measures are often the most effective and have the highest chance of success. They are also often the mitigation option with the lowest cost and are perceived by stakeholders as the most tangible evidence of a company's commitment. Avoiding some kinds of impacts to biodiversity is critical because: (a) some impacts are irreversible; (b) some impacts are poorly understood and thus require a precautionary approach; and (c) in some locations, biodiversity loss must be completely avoided to prevent unacceptable outcomes, such as ecosystem collapse or species extinction, and to maintain the contribution that biodiversity provides to human wellbeing (nature's contributions to people). Avoidance can also involve specific conservation techniques to circumvent any potential impacts on native flora and fauna.

What this question is looking for

We are looking to understand what avoidance measures your company has implemented. This could include categorical exclusions of particular materials (e.g., exotic skins), geographic areas, or ecosystems, or exclusions of particular types of impacts by avoiding specific technologies, land management practices, or processes.

Examples of avoidance include:

- A formalized policy or similar not to source from production within or in the buffer zones of World Heritage Sites (WHS) or other categories of protected area (PA), or from within Key Biodiversity Areas (KBA).
- A formalized policy or similar to avoid conversion of natural habitats and/or areas providing important "contribution to people" (NCP – see definition below). A no-deforestation policy with clear pathways and measurable actions is one example.
- A formalized policy or similar requiring non-lethal management strategies.
- A formalized policy or similar requiring use of specific fencing types to ensure safe passage of native wildlife across production lands.
- Banning fur or exotic skins from endangered species (note however that an outright ban may not be the best outcome for the species, and there may be conservation opportunities within a sustainable/conservation-focused sourcing program).
- Using only recycled materials or having a circular business model.
- Using closed-cycle processing techniques that avoid any release of effluent into river systems.

BI-1a-1. Does your company set any sourcing restrictions due to its biodiversity risks?
(Select applicable)

- ☐ No
- ☐ Restrictions are under consideration
- ☐ Formalized policy to avoid sourcing "high risk" species
- ☐ Formalized policy to avoid sourcing "high risk" materials
- ☐ Formalized policy to avoid sourcing from areas of high ecosystem services (Nature's Contributions to People)
- ☐ Formalized policy to avoid sourcing from "high risk" areas or regions
- ☐ Formalized policy to avoid sourcing from "high risk" suppliers
- ☐ Other measures to avoid sourcing impacts to biodiversity

BI-1a-2. Does your company know how much embedded deforestation is in its supply chains? (Select one)

- ☐ No
- ☐ Partial assessment
- ☐ Yes

BI-1a-3. Does your company set any restrictions on raw material production techniques to avoid impacts on biodiversity? (Select one)

- ☐ No
- ☐ Restrictions are under consideration
- ☐ Formalized policy to avoid “high risk” (harmful) production techniques
- ☐ Other measures to avoid production impacts to biodiversity

Definitions

AR³T Action Framework: An effective guidance tool for projects and operations aiming to reduce their impacts on biodiversity and to achieve positive outcomes. The AR³T Action Framework consists of the steps Avoid, Reduce, Restore and Regenerate, and Transform.

Avoidance: Measures that are aimed to avoid risk/impact to biodiversity before the risk/impacts occur (i.e., before the impact/risk generating activity is carried out). This is the most effective measure and most preferred measure in the AR³T Action Framework as it can also be the most cost effective in some circumstances and is essential for credibility.

Conservation: Conservation is defined as the protection, care, management, and maintenance of ecosystems, habitats, wildlife species, and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence ([IUCN](#)).

Embedded deforestation: Associated with deforestation or exposure to deforestation risk. A company’s supply chain may be exposed to deforestation risk (embedded deforestation) through forestry-based or commodity-based raw sourcing material. For example, sourcing of pulp in viscose supply chain. To understand how much a supply chain is exposed to deforestation risk, companies can use tools such as the [Global Forest Watch](#) to understand history of land use in sourcing area, historical rate of deforestation, whether area is located in deforestation “hotspot,” and whether the remaining forest is intact (and therefore relatively of high value).

High-risk areas or regions: Areas or regions where the risk of production-related biodiversity loss is high. The production of raw materials is closely linked to impacts on wild species and ecosystems in some parts of the world. If there is little or no transparency to sourcing locations and there are concerns about practices that may be taking place on-the-ground, policies to avoid sourcing in these geographies may be put into place. There may also be policies to avoid sourcing from in areas like Protected Areas, Key Biodiversity Areas, and World Heritage Sites, and/or from the buffer areas surrounding them. Encroachment of raw materials production into these areas is a serious threat to high biodiversity areas in many places, and may be illegal. However, when permitted by regulation, sustainable production can lead to regeneration or restoration of ecosystems and can be crucially important for the livelihoods of the people who coexist with these landscapes and their wild species.

High-risk materials: Materials which are associated with significant risks to biodiversity or ecosystems. For example, some raw materials are linked to greater risk of deforestation. Particularly if there is limited transparency on sourcing locations, policies to avoid certain materials may be implemented if it cannot be determined that the materials are not associated with biodiversity impacts.

Definitions

High-risk species: Endangered or threatened species. Examples of high-risk species that may be sourced for the textiles industry include certain types of tropical trees which are sourced for MMCF production, or reptiles that are sourced for their skins. The Convention on International Trade in Endangered Species of Wild Fauna and Flora ([CITES](#)) regulates the international trade of many high-risk species. Not all endangered species are protected under CITES, and the process of listing a species under the Convention can be lengthy. In some cases, even species that are bred or cultivated in captivity may be high-risk due to corruption in the CITES documentation process.

High-risk production techniques: Production techniques (see definition below) that are destructive or harmful to biodiversity and the environment. For example, excessive usage of agrochemicals that could lead to freshwater eutrophication, use of fencing that causes mortality to wildlife, and unsustainable grazing practices that lead to the collapse of natural grassland ecosystems.

Key Biodiversity Areas (KBA): represent the most important sites for biodiversity conservation worldwide, and are identified nationally using a [Global Standard](#) for the identification of KBAs. The IUCN has developed [guidelines for businesses](#) operating within or around KBAs to reduce impacts.

Nature's contributions to people (or also known as ecosystem services): [Nature's Contributions to People](#) (NCPs) are all the contributions, both positive and negative, of living nature (i.e., diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to the quality of life for people ([IPBES Glossary](#)). NCP types range from provisioning NCPs, like wild-harvested foods, cultural NCPs like sacred groves, to regulating NCPs like carbon storage. NCPs may have global beneficiaries or more locally specific beneficiaries, with areas of diffuse or defined areas of provision.

Production techniques: Methods used in the cultivation, harvesting, processing, or manufacturing of fibers and materials (used for the production of textile products).

Protected areas: The IUCN define protected areas as “a clearly defined geographical area, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem and cultural values. The [IUCN define six categories of protected areas](#), including strict nature reserves and wilderness areas.

BI-1b. Reduction Measures

Why this is important

Not all impacts can be avoided, so the next priority is to reduce them. Good practice is to reduce impact to "As Low as Reasonably Practicable" (ALARP). This principle recognizes that there is a trade-off between the cost and benefits of reducing impacts. This principle implies that relative greater effort is warranted to reduce impacts that are of greater magnitude or which affect areas of high biodiversity significance. This may include making changes to reduce impacts from existing practices on native species.

What this question is looking for

Actions implemented by company to reduce impacts to biodiversity across broad categories including:

- Eco-efficiency: Using same products but with less impact, e.g., decrease use of fiber/material associated with high biodiversity loss.
- Process changes: Changing the production process in some way to minimize impact, e.g., working with suppliers to optimize productivity of lands aligning with [sustainable agricultural approaches](#).
- Sourcing/supplier engagement: Encourage more sustainable practices in the supply chain by working with suppliers, for example, helping them to develop environmental policies and targets, increasing the use of materials from certification programs that address biodiversity risk, increasing traceability, or working with them to engage in the production base. The extent to which certification programs address biodiversity risk varies considerably. WWF have developed the [Certification Assessment Tool \(CAT\)](#) to assess which schemes achieve conservation goals and objectives. Working with vetted suppliers to increase traceability is also important in reducing biodiversity risk.
- Other reduction measures: May include product design changes, changing materials, designing for less material use, changing business models to rental rather than selling products.

BI-1b-1. Does your company implement measures to reduce raw materials related impacts on biodiversity? (Select applicable)

- ☐ No
- ☐ Reduce the use of virgin materials
- ☐ Reduce the use of virgin fossil fuel-based materials
- ☐ Increase the use of recycled materials
- ☐ Increase the use of materials from certification programs addressing biodiversity risk
- ☐ Increase traceability of our materials suppliers
- ☐ Source only from suppliers vetted by our company
- ☐ Work with suppliers to optimize productivity
- ☐ Work with suppliers to reduce impact on ecosystems
- ☐ Work with suppliers to implement wildlife-friendly production practices
- ☐ Other measures to reduce impacts on biodiversity

BI-1b-2. Does your company implement measures to reduce manufacturing-related impacts on biodiversity? (Select applicable)

- ☐ No
- ☐ Water management
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ Chemical management
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ Waste management
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ Energy management
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ End of life reuse, recycling, etc.
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ Other measures to reduce manufacturing-related impacts on biodiversity
- ☐ Indirectly through sourcing requirements/policy
- ☐ Directly with suppliers/stakeholders
- ☐ We are a raw materials producer only

BI-1b-2a. Please indicate share of your manufacturing base covered by reduction measures. (Select one)

Please note that supply coverage includes share deemed “no risk.”

- ☐ 0%
- ☐ <25%
- ☐ 26%-50%
- ☐ 51%-75%
- ☐ 76%-99%
- ☐ 100%

Definitions

ALARP (As Low as Reasonably Practicable): The principle that the residual risk shall be reduced as far as reasonably practicable (i.e., to a point when costs of further mitigation are grossly disproportionate to the benefits). Costs might, for example be financial costs, opportunity costs, time delays, or negative impacts to another aspect (such as local communities customary rights). An important element when applying [ALARP](#) is transparent demonstration of how decisions and compromises have been made, including documenting the severity of the risk and assessing alternatives. Biodiversity has intrinsic and intangible values which may be important to stakeholders (e.g., indigenous communities in impacted landscape) and thus requires a holistic perspective when considering the “costs” related to specific mitigation measures. Respecting the intrinsic values of biodiversity in business decision making is an indicator of transformative value systems change and is good practice.

Reduction: When avoidance is not possible, measures should be aimed at reducing impacts/risks to biodiversity. Note that “sustainability programs” such as standards and certifications (with criteria for biodiversity and/or land use requirements), in this Benchmark, are considered as “reduce” under the AR³T Action Framework. This is mainly for simplicity while recognizing that each standard or certification may have specific criteria to avoid impacts or restore/regenerate nature. It is important to examine the quality of the

Definitions

criteria in the standard (initiative, code, etc.) and the requirements for auditing/assessment. Standards may also be a viable tool for administering “avoidance,” “restorative,” and/or “regenerative” actions.

Manufacturing base: Factories or other facilities a company use to make the goods or part of the goods it is selling to its customers. One-hundred percent (100%) manufacturing base covered by reduction measures means all factories/facilities that are making or processing (after raw material production) the textile/garment or parts of it are engaged in a program that reduces impacts to biodiversity.

Wildlife-friendly agriculture: Agricultural production practices that are directly linked to on-the-ground conservation actions and the abatement of threats to key species (i.e., those which are threatened or play a functional role in the ecosystem or local context). Note that there is no universal definition of wildlife-friendly agriculture and that many sustainable practices help to protect wildlife in both direct and indirect ways. The definition of wildlife-friendly agriculture overlaps with that of regenerative agriculture – although the latter often treats biodiversity as a co-benefit resulting from certain agricultural practices (e.g., reduced tillage), as opposed to active habitat or species-specific management with conservation outcomes.

BI-1c. Measures to Restore and Regenerate

Why this is important

Actions taken to restore, and regenerate biodiversity are necessary because globally, we have exploited nature (the biosphere) [beyond the safe operating space for humanity](#). Total human extraction of natural resources from the environment is greater than the rate at which nature can regenerate itself. In other words, we take more from the Earth than it can replenish naturally. Therefore, without scaled up actions to restore and regenerate, humanity will not be successful in “bending the curve” of nature loss. Native species should be prioritized in these types of practices whenever possible to facilitate the protection of global biodiversity.

It is important that companies avoid and reduce negative impacts to ecosystems as much as possible in addition to any restoration and regeneration activities, as outcomes from these measures are more uncertain and take time to realize. To achieve biodiversity targets, companies may (also) need to implement measurable conservation outcomes designed to compensate for “residual impacts,” also known as [biodiversity offsets](#) or [target-based ecological compensation programs](#) (which may involve restoration or regenerative actions).

What this question is looking for

Actions companies implement to restore, regenerate, or compensate for biodiversity impacts within or beyond a company’s supply chain. Actions include regenerative agriculture programs, protection, or restoration of natural habitats, and supporting nature-based solutions or conservation programs. Other actions to restore, regenerate, or compensate may include supporting individual species recovery plans, rewilding, regenerative agroecology, and rehabilitation of degraded habitat.

Restoration primarily aims to return degraded ecosystems to its near-original natural state, while regenerative actions, which are mainly applied in productive landscapes, aim to increase ecological integrity in providing nature’s contributions to people.

BI-1c-1. Does your company implement measures to remediate (i.e., restore/regenerate) biodiversity risks/impacts?

- ☐ No
- ☐ On productive lands (e.g., agricultural lands and forests)
 - ☐ Within our supply chains
Please provide the approximate total hectares.
 - ☐ Outside of our supply chains
Please provide the approximate total hectares.
- ☐ On non-productive lands
 - ☐ Forests
Please provide the approximate total hectares.
 - ☐ Freshwater systems (e.g., watersheds, wetlands, riparian areas)
Please provide the approximate total hectares.
 - ☐ Other priority ecosystems
Please provide the approximate total hectares.
- ☐ Other measures to remediate risks/impacts

BI-1c-2. Does your company invest in compensatory or proactive conservation measures beyond its own supply chain? (Select applicable)

- ☐ No
- ☐ In conservation programs (e.g. a conservation fund)
 - Are investments linked to residual impacts?
 - ☐ No
 - ☐ Investments are explicitly linked to our residual impacts
 - ☐ Other
 - Please provide details in the “Investment” question. See Business Integration Module.
- ☐ In inseting programs
 - Are the insets verified?
 - ☐ No
 - ☐ Insetting Project Standard (IPS)
 - ☐ Pur Project
 - ☐ REDD+
 - ☐ Other program
- ☐ In offsetting programs
 - Are the offsets verified?
 - ☐ No
 - ☐ Gold Standard
 - ☐ Climate, Community & Biodiversity Standards (CCB)
 - ☐ Plan Vivo
 - ☐ REDD+
 - ☐ Verified Carbon Standard
 - ☐ Other program

Definitions

Conservation fund: “Specifically-purposed” capital that is raised and managed by an entity to support lands, water, and resource conservation.

Impact Incentives: Impact Incentives refer to the certificates that are traded in support of a sustainability claim. The incentives are issued when a set of criteria have been confirmed. The Incentive Certificates represent a specified quantity of verified material that has been produced but has not been physically traded as verified goods. Nevertheless, brands and retailers will have an efficient and effective tool to demonstrate their commitment to their sustainability or CSR goals, and to build up the supply of more sustainable commodities that they can eventually link to with physical sourcing ([Textile Exchange](#)).

Insetting: Environmental programs implemented within a company’s direct sphere of influence (core business and supply chains) so as to generate multiple positive sustainable impacts on biodiversity and other environmental objectives ([International Platform for Insetting](#)).

Nature-based Solutions (NBS): Actions to protect, sustainably use, manage, and restore natural or modified ecosystems, which address societal challenges, effectively and adaptively, providing human well-being and biodiversity benefits. The fundamentals of NBS are derived from established practices such as forest landscape restoration, integrated water resource management, ecosystem-based adaptation and mitigation, and ecosystem-based disaster risk reduction programs ([IUCN Global Standards for Nature-Based Solutions – 2020](#)).

Non-productive lands: Lands that presently are not used for the production of commercial agricultural or forest products. The natural habitat in these areas may have been lost as a result of land clearing, soil degradation, or other impacts over time. Their restoration supports a healthy ecosystem, which benefits productive lands as well.

Definitions

Offsetting: In this question offsetting is meant as twofold:

- (I) Biodiversity offsets are measurable conservation outcomes designed to compensate for adverse and unavoidable impacts of projects, in addition to prevention and mitigation measures already implemented. Biodiversity offsetting requires a quantification of residual impacts to inform the magnitude and characteristics of any “gains” that need to be generated by an offset program. Biodiversity offsets should be based on the explicit calculation of biodiversity losses and gains at matched impact and compensation sites--this is what distinguishes offsetting from other conservation measures. Many offsetting measures will be explicitly linked to a company’s supply chain or the region and/or landscape in which it sources and operates, with a further link made to direct compensation for residual impacts not able to be mitigated through other steps in the AR³T Action Framework. Offsets are only appropriate for projects which have rigorously applied the AR³T Action Framework. They should be a last resort and in certain cases may not be appropriate. Companies should seek external expert support when designing and implementing offsets.
- (II) Carbon or GHG offsets which has demonstrated direct benefits to biodiversity, e.g., through Nature-based Solutions (see definition above). Carbon or GHG offsets broadly refers to a reduction in GHG emissions – or an increase in carbon storage (e.g., through land restoration or the planting of trees) – that is used to compensate for emissions that occur elsewhere.

Proactive conservation measures: Measures not specifically aimed to directly compensate or remediate a company’s own biodiversity impacts, but that involve actions to reduce threats and improve outcomes for biodiversity whether linked to their supply chains or not. An example might be where a company implements natural climate solutions (e.g., reforestation programs) to offset global GHG emissions and these also contribute to conserving biodiversity. Another example might be working to support a community-based conservation project in communities neighboring production areas.

Productive lands: Lands that are currently producing, or capable of producing, commercial agricultural or forest products.

Restoration: Initiate or accelerate the recovery of an ecosystem with respect to its health, integrity, and sustainability, with a focus on permanent changes in state (adapted from International Principles and Standards for the Practices of Ecological Restoration. [Society of Ecological Restoration](#) cited in SBT for Nature Initial Guidance for Business).

Regeneration: Take actions designed within existing land uses to increase the biophysical function and/ or ecological productivity of an ecosystem or its components, often with a focus on a few specific nature’s contributions to people (e.g., regenerative agriculture often focuses on carbon sequestration, food production, and nitrogen and phosphorus retention) (adapted from Regenerative Agriculture, Identifying the Impact, enabling the potential. [FOLU](#) 2019, cited in SBT for Nature Initial Guidance for Business).

Proactive conservation measures: Measures not specifically aimed to directly compensate or remediate a company’s own biodiversity impacts, but that involve actions to reduce threats and improve outcomes for biodiversity whether linked to their supply chains or not. An example might be where a company implements natural climate solutions (e.g., reforestation programs) to offset global GHG emissions and these also contribute to conserving biodiversity. Another example might be working to support a community-based conservation project in communities neighboring production areas.

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Definitions

Standards for the Practices of Ecological Restoration. [Society of Ecological Restoration](#) cited in SBT for Nature Initial Guidance for Business).

Regeneration: Take actions designed within existing land uses to increase the biophysical function and/ or ecological productivity of an ecosystem or its components, often with a focus on a few specific nature's contributions to people (e.g., regenerative agriculture often focuses on carbon sequestration, food production, and nitrogen and phosphorus retention) (adapted from Regenerative Agriculture, Identifying the Impact, enabling the potential. [FOLU](#) 2019, cited in SBT for Nature Initial Guidance for Business).

Regenerative Agriculture: There is no universal definition of regenerative agriculture, however scientific literature and practitioners tend to characterize it either in terms of management practices or in terms of intended outcomes. Management practices described as regenerative include: no or low use of external inputs; integration of livestock and crop farming; and reduced tillage. The intended outcomes of regenerative agriculture practices typically include improved soil health, increased biodiversity, increased carbon sequestration and improved social and/or economic wellbeing of communities. Textile Exchange has recently published the [Regenerative Agriculture Landscape Analysis](#). The report provides the fashion and textile industry with a framework and toolkit to credibly understand, implement, and describe the benefits of regenerative agriculture. It also emphasizes the roots of regenerative agriculture in Indigenous and Native practices and promotes a holistic approach that puts humans and ecosystems at the center.

Residual impacts: Impacts that remain after all other measures of avoidance, reduction, regeneration, and/or restoration have been fully exerted. A residual impact assessment uses qualitative or quantitative approaches. Qualitative approaches identify “what” residual impacts occur and “where” but do not quantify them. Quantitative approaches involve undertaking a [loss-gain accounting](#) to quantify both biodiversity losses and predicted gains from offset programs to enable evaluation against No Net Loss or Net Gain targets.

Additional reading

- [BBOP Biodiversity Offset Design Handbook](#)
- [BBOP Principles on Biodiversity Offsets](#)
- Paper on the limits to biodiversity offsets ([Pilgrim et al. 2013](#)).
- [Paper on marine biodiversity offsets: Pragmatic approaches toward better conservation outcomes](#).
- [TBC Industry Briefing Note: Social consideration when designing and implementing biodiversity offsets](#)
- ARC 2020, three-part series comparing [organic, agroecological and regenerative agriculture](#).
- WRI's article on [regenerative agriculture and its climate change mitigation potential](#)
- [Agrobiodiversity Index](#), a tool to help ensure biodiversity in agriculture for a more resilient food system.
- [NativeEnergy](#) provide insights and support on carbon offsetting and inseting among other topics.
- [The Bonn Challenge](#) is a global effort to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030.
- [New York Declaration on Forests](#) (NYDF) is a voluntary and non-binding international declaration to halt global deforestation. See also the NYDF [Global Platform](#).
- [Trillion Trees](#) is a joint venture between BirdLife International, Wildlife Conservation Society and WWF.
- The [UN REDD Programme](#) on Reducing Emissions from Deforestation and Forest is a collaborative program of the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).
- See Appendix 1 for more information on terms such as regenerative agriculture and agrobiodiversity.

BI-1d. Transformative Measures

Why this is important

Science has shown that in order to avoid runaway climate change and irreversible biodiversity loss, we need to transform the key systems which give structure to our world, including food, land and ocean use, infrastructure and the built environment, energy and extractives. Avoidance and reduction of impacts by a company may still be ineffective in limiting biodiversity loss because of the potential for “leakage.” Many impacts at the global level are not diminishing due to other companies’ activities which may not be as robust as your company in managing biodiversity risks. Transformational change is thus needed to meet global and societal sustainability goals. Companies can play an important role in catalyzing such change.

What this question is looking for

Actions taken by a company to ensure systemic change within the apparel and textile industry. This includes contributions to changing the fundamental drivers of biodiversity loss. Companies should consider transformative measures within and beyond their own supply chain, based on their control and influence in the sector.

Transformative actions can be broadly categorized into the following three categories ([Science Based Targets for Nature Initial Guidance for Business](#)):

- Enabling desired outcomes, e.g., engage in partnerships and landscape-level initiatives to tackle challenges that cannot be addressed by one company alone and advocating for greater climate change and biodiversity loss ambitions at a government-level.
- Ensuring longevity, e.g., a multi-year biodiversity program for all employees, by adjusting incentives for staff and executives, as well as working with industry associations to engage suppliers to change their practices; and
- Amplifying positive impact, e.g., engage in multi-stakeholder spatial planning, and promoting and participating in industry-wide transparency efforts.

BI-1d-1. Is your company actively involved in “transformational” activities when it comes to addressing biodiversity risks? (Select applicable)

- ☐ No
- ☐ Offer financial incentives to producers/suppliers to scale up actions that improve biodiversity outcomes
- ☐ Conduct/fund research and development (R&D) or other forms of innovation to improve biodiversity outcomes
- ☐ Engagement or advocacy with peer companies and other industry stakeholders
- ☐ Engagement in multi-stakeholder jurisdictional/geography-based initiatives
- ☐ Advocacy with governments and policymakers
- ☐ Raise awareness/engage with customers and communities
- ☐ Other

Definitions

Transformative measures: Actions that support systemic change of the textile/apparel industry, beyond a companies' own impacts, by addressing the root causes or indirect drivers of biodiversity loss or catalyzing collective change for improved outcomes for biodiversity.

Advocacy: Seeking broad public support for, or recommending of, [in this case] a particular conservation and/or biodiversity cause or policy change.

Additional reading

- [Act4Nature](#) is led by EpE (Entreprises pour l'Environnement) under a multi-stakeholder steering committee and though aimed at global actors, is a French collective initiative run by French partners. Companies sign up to the act4nature's ten common commitments, together with their own SMART commitments, all signed by their CEO.
- [Business for Nature](#) is a global coalition bringing together influential organizations and forward-thinking businesses. Together, signatories demonstrate business action and call for governments to reverse nature loss.
- The [European Union Business and Biodiversity Platform](#) The EU Business @ Biodiversity Platform provides a forum for dialogue and policy interface to discuss the links between business and biodiversity at EU level. It was set up by the European Commission with the aim to work with and help businesses integrate natural capital and biodiversity considerations into business practices.
- The [Fashion Pact](#) is a global coalition of companies in the fashion and textile industry including their suppliers and distributors, all committed to a common core of key environmental goals in three areas: stopping global warming, restoring biodiversity and protecting the oceans.
- The [Natural Capital Coalition](#) was launched in January 2020 and hosts over 370 leading organizations to accelerate the use of capitals thinking. (See also the [Apparel Sector Guide](#)).
- [One Planet for Business and Biodiversity](#) is an international cross-sectorial, action-oriented business coalition on biodiversity with a specific focus on agriculture, initiated within French President Macron's One Planet Lab framework, launched at the United Nations Climate Action Summit in New York on 23 September 2019. The coalition is determined to drive transformational systemic change and catalyze action to protect and restore cultivated and natural biodiversity within the value chains, engage institutional and financial decision-makers, and develop and promote policy recommendations for the 2021 CBD COP15 framework.

BI-2. Monitoring and Evaluation

BI-2a. Monitoring Framework

Why this is important

Monitoring is necessary to allow a company to track progress towards targets. A robust monitoring framework is designed to track outputs on intervention, attainment of desired outcomes, and broader-level impacts against the overall goal. The results of monitoring should be used to inform adaptive management.

What this question is looking for

Whether a company has developed and implemented a monitoring program, and what framework was used; for example, the Pressure-State-Response (PSR) framework (see the [Draft monitoring, reporting, and verification \(MRV\) requirements for SBTs for nature – Table 9](#)).

Applying the PSR framework to designing a monitoring program means measuring the following aspects:

- Pressure (the causes of biodiversity loss): The outcome of the mitigation measures implemented is reflected in changing pressures on biodiversity. Monitoring “pressure indicators” helps a company track progress toward set targets, e.g., changes in deforestation rates or hunting rates as a result of the risk/impact mitigation the company implemented.
- State (condition of the biodiversity in question): The species or ecosystem that was targeted by the company’s mitigation program as a way of confirming that the mitigation is indeed effective, e.g., area and condition of forest, water quality and species abundance in a catchment.
- Response (intervention): The intervention/action output that is taken by the company is typically monitored using key performance indicators (KPIs), e.g., number and area of farms switching to low-input techniques. When responses are occurring, but pressure is not changing then this gives an indication that the mitigation may not be fully effective.
- Your company may use similar approach in designing the monitoring program for biodiversity activities analogous to the underpinning framework of PSR. The PSR framework has many modifications (e.g., the [DPSIR framework](#)) and may be known under different names.

Therefore, the question aims more towards assessing the comprehensiveness behind a company’s monitoring program, whether it has specific indicators to:

- measure the pressure behind biodiversity loss as a way to demonstrate that the activities are effective in addressing these threats.
- measure the condition of biodiversity the activities are intended to improve (to know whether indeed they are improving or not).
- measure implementation consistency (key performance indicators to record whether the activities are implemented purposively).

Please indicate accordingly which element is covered in your company’s monitoring program even though they may not be known to you as “Pressure-State-Response.” Overall, the monitoring framework should enable the company to track (and eventually report) progress towards its set targets.

BI-2a-1. Does your company monitor its biodiversity-related activities and progress?
(Select applicable)

- ☐ No
- ☐ We collect anecdotal information only
- ☐ Yes, our biodiversity monitoring program includes:
 - ☐ Qualitative assessments
 - ☐ Quantitative assessments

BI-2a-2. Does your company monitor pressure, state, and/or response to biodiversity loss? (Select applicable)

- ☐ Threats to biodiversity or drivers of biodiversity loss (Pressure)
- ☐ Condition (e.g. abundance, rarity, and vulnerability) of biodiversity (State)
- ☐ Outcomes of interventions aimed at addressing biodiversity loss (Response)

Definitions
Adaptive management: A systematic process of continually improving management policies and practices by learning from the outcomes of existing programs (IUCN Glossary).
Goals: High-level statement of ambition, including a timeframe, e.g., (by 2020) no development of... and the conservation of... HCS forests (SDG 14) (SBT for Nature Initial Guidance for Business).
Indicators: Specific metric by which a target is measured, e.g., changes in the IUCN Red List status for a species (SBT for Nature Initial Guidance for Business).
Measurement: The process of collecting data for baseline setting, monitoring, and reporting.
Metric: A standardized and objective means to measure biodiversity and its complexity. Metrics relate to the use of a specific unit of measurement of biodiversity.
Monitoring and Evaluation (M&E): Together M&E allows companies to track results, suggest corrections or improvements during implementation, and assess success (Adapted from IUCN Glossary).
Monitoring: Focuses on tracking inputs, outputs, outcomes, and impacts as interventions are implemented.
Evaluation: Assesses the efficiency and impact of interventions (typically after they have been implemented).
Pressure-State-Response framework: This framework links the <i>pressures</i> on biodiversity that are due to business/human activities, with the changes in the <i>state</i> (condition) of the biodiversity itself.
Pressure: Threats to biodiversity or driver of biodiversity loss
State: Condition (abundance, rarity, and vulnerability) of biodiversity
Response: interventions aimed at addressing biodiversity loss

The Pressure-State-Response framework was first introduced by the OECD in 1993 and has since been adopted by many countries and multilateral development banks for environmental monitoring and reporting. Modifications of it have also been referred to in the Conservation Measures Partnership (CMP) [Open Standards for the Practice of Conservation](#) and the new SBTs for Nature Initial Guidance for Business.

Additional reading

- IUCN, [Guidelines for Planning and Monitoring Corporate Biodiversity Performance \(draft\)](#)
- UNEP-WCMC: [Aligning Biodiversity Measures for Business](#)

BI-2b. Evaluation Process

Why this is important

Evaluation is the process to assess the effectiveness of a particular mitigation measure or program. Through this process, a company will be able to evaluate the “cost” and “benefit” of a mitigation measure and adapt and improve by deprioritizing/removing ineffective measures and/or focusing on scaling up effective measures or finding a more effective alternative. Companies may opt for certain tools like Cost-Benefit Analysis for evaluation.

What this question is looking for

Whether a company has a formal and robust process for evaluating progress against biodiversity targets. Good practice would be a formal process (i.e., part of the company’s management system and involving decision-makers) with clear mechanisms to enable continual improvement (e.g., process for nominating corrective action or improvement and the decision-making process to affect this change). Companies may consider consulting with a team of independent experts (e.g., an advisory committee) as part of the evaluation process to verify the internal evaluation results and any assumptions made.

BI-2b-1. Does your company evaluate the effectiveness of its biodiversity monitoring program? (Select applicable)

- ☐ No evaluation
- ☐ Ad-hoc process
- ☐ Internal evaluation process
- ☐ Independently verified evaluation process
- ☐ Other process

Definitions

Ad-hoc process: An informal, irregular process to conduct evaluation, only prompted when the responsible person “feels” that it is needed. This ad-hoc process is not integrated into the company’s management system or the performance management system.

Internal evaluation: The company has set up an internal procedure to evaluate the success of the project or intervention.

Verification: An independent third-party confirmation of either (a) baseline values of a target indicator (e.g., a company’s water or GHG inventory), and/or (b) progress made toward achieving the target (SBT for Nature Initial Guidance for Business).

BI-2c. Improvement tracking

Why this is important

Being able to demonstrate that action taken results in real and meaningful change is probably the most important aspect of a company's work in sustainability.

Much literature on the topic of impact points to: (a) the complexity of measuring impact; (b) the time frame (which is often long term since impact needs to be sustained); and (c) the difficulty in identifying the specific cause of change. Another challenge is ensuring that one positive impact is not achieved at the expense of another. This is particularly important when it comes to sustainability, and the consideration of the interconnectivity between the environmental, social, and economic pillars. However, complexity should not deter companies from striving to understand and account for the impact of their interventions.

What this question is looking for

This question is deliberately kept open for companies to respond to in any way they like. At this point in the benchmark development, we are interested to hear *if* companies are able to measure outcomes and impact as well as what the outcomes/impacts are, and the indicators selected.

BI-2c-1. Can your company show progress or improvements through its biodiversity activities? (Select applicable)

- ☐ No
- ☐ Yes, through evidence provided by industry tool
- ☐ Yes, we can show improvements through anecdotal feedback
- ☐ Yes, we can show qualitative evidence of a positive impact
- ☐ Yes, we can show quantitative evidence of a positive impact

Definitions

Challenges in measuring improvements: Measuring and proving impact at site level is not easy. Challenges range from agreeing the best indicators, to ensuring the impact is long-term (sustained post-intervention), comparative (against a control group), and robust (having the rigor and scale to be confident in the results).

Measuring improvements: Requires knowing who your suppliers are and where they are located around the world. Impacts are contextual, climate, geographical, socio-political, cultural, and educational, and all these variables come into play, and need to be considered when thinking about setting Key Performance Indicators (KPIs) and measuring improvements.

Progress: Refers to measurable movement towards a target over time. This may include progress in management, output, or impact related Key Performance Indicators (e.g., investment, uptake, or impacts).

Progress tracking: Refers to tracking a measurable movement towards a target over time.

Additional reading

- TBC Industry Briefing Note: [How to make biodiversity surveys relevant to your project](#)
- Open Standards for the Practice of Conservation ([Conservation Measures Partnership](#))
- UNEP-WCMC: Aligning Biodiversity Measures for Business

Part II: Appendix

Glossary

Biodiversity: The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variation in genetic, phenotypic, phylogenetic, and functional attributes, as well as changes in abundance and distribution over time and space within and among species, biological communities, and ecosystems ([CBD](#), [IPBES](#)).

Biodiversity loss: The reduction of any aspect of biological diversity (i.e., diversity at the genetic, species, and ecosystem levels) in a particular area through death (including extinction), destruction, or manual removal; it can refer to many scales, from global extinctions to population extinctions, resulting in decreased total diversity at the same scale.

Circular economy: An economy based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems ([Ellen MacArthur Foundation](#)).

Climate+: Textile Exchange’s strategic intent is to be a driving force for urgent climate action in textile fiber and materials production, specifically: enabling and guiding the textile industry to reduce GHG emissions (CO₂ equivalents) by 45 percent by 2030 in the pre-spinning phase of textile fiber and materials production; and amplifying positive impacts in soil health, water, and biodiversity ([Textile Exchange](#)).

Conservation: The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence ([IUCN Glossary](#)).

Conversion: Change of a natural ecosystem to another land use or profound change in a natural ecosystem’s species composition, structure, or function. Deforestation is one form of conversion (conversion of natural forests) ([Accountability Framework](#)).

Corporate Fiber & Materials Benchmark (CFMB) Program: Textile Exchange’s robust benchmarking structure that helps companies systematically measure, manage and integrate a preferred fiber and materials strategy into mainstream business operations, to compare progress, and to transparently communicate performance to stakeholders. The CFMB program generates the [Material Change Index](#), the Materials Impact Dashboard, confidential company scorecards, and data-driven insight reports ([Textile Exchange](#)).

Decarbonization: The process of reducing “carbon intensity,” lowering the amount of greenhouse gas emissions produced by the burning of fossil fuels ([IPCC](#)).

Deforestation: Loss of natural forest as a result of: i) conversion to agriculture or other non-forest land use; ii) conversion to a tree plantation; or iii) severe and sustained degradation. ([Accountability Framework](#)).

Materials program: Refers to a material produced according to sustainability specifications (in an industry standard, certification scheme, regulation, initiative or process) and distinguished by the company to have a higher sustainability performance than conventional materials. Textile Exchange classifies a “conventional” material as a material which is not produced to the specifications of a sustainability program i.e., standard, certification, regulation, initiative or process ([Textile Exchange](#)).

Nature: All non-human living entities and their interaction with other living or non-living physical entities and processes ([IPBES Glossary](#)). This definition recognizes that interactions bind humans to nature, and its subcomponents (e.g., species, soils, rivers, nutrients), to one another. This definition also recognizes that air

pollution, climate regulation, and carbon are part of “nature” more broadly, and therefore, when we talk about acting for nature, we are talking about acting on issues related to climate change as well ([SBTN](#)).

Nature’s contributions to people: All the contributions, both positive and negative, of living nature (i.e., diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to the quality of life for people ([IPBES Glossary](#)).

Natural capital: The stock of living and non-living, renewable and non-renewable natural components of ecosystems that enable nature’s contributions to people ([Natural Capital Coalition](#)).

Natural climate solutions: Actions which are concerned with capturing carbon through conservation, ecosystem restoration and improved land management across global forests, wetlands, grasslands, and agricultural lands ([Conservation International](#)).

Natural ecosystem: An ecosystem that substantially resembles—in terms of species composition, structure, and ecological function—one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are present. ([Accountability Framework](#)).

Preferred material: Textile Exchange defines a “preferred” fiber or material as one which is environmentally and/or socially progressive, the use of which results in positive benefits in comparison to conventional production ([Textile Exchange](#)).

Priority material: For the purposes of benchmarking, Textile Exchange defines a priority material by the scale, risk and opportunity it represents to the company.

- Scale: The “fiber” represents a percentage of volumetric use beyond a threshold of 10 percent of overall fiber use e.g., cotton, polyester, manmade cellulosic fibers, nylon, and wool. Or, in the case of “non-fiber” materials (e.g., leather, down), it represents 10 percent of the final product range (i.e., by “count of products” with “major components” of non-fiber materials e.g., down or leather).
- Risk: The raw material represents a “material” risk to the company. Risks associated with a minority (low volume) raw material include sourcing from environmentally and/or socio-economically high-risk sourcing regions, animal welfare risk, reputation risk, etc.
- Opportunity: The module should also be selected if the company has seized the opportunity to advance the sustainability of the raw material even if the material is below the volumetric use threshold or is not considered a risk ([Textile Exchange](#)).

Raw Material: A textile material is a specific substance which is used to make textiles. A material is either a fiber which is transformed into yarn or a “non-fiber” material ([Textile Exchange](#)).

Species: An interbreeding group of organisms that is reproductively isolated from all other organisms, although there are many partial exceptions to this rule in particular taxa. Operationally, the term species is a generally agreed fundamental taxonomic unit, based on morphological or genetic similarity, that once described and accepted is associated with a unique scientific name ([IPBES Glossary](#)).

Sustainable Development Goals: The SDGs are a set of 17 goals that were adopted by all 193 Member States of the United Nations on September 25th, 2015, to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved by 2030. Fulfilling these ambitions will take an unprecedented effort by all sectors in society – and business has to play a very important role in the process ([United Nations](#)).

Wildlife: Living things that are neither human nor domesticated. This includes both fauna and flora, as well as wildlife living in the wild (in-situ) and in captivity (ex-situ). For the purposes of this Biodiversity Benchmark, we focus primarily on in-situ wildlife and its conservation (adapted from [IUCN Glossary](#)).

Appendix 1: Key Terms and Definitions

AR3T Action Framework

In this Benchmark, we follow the AR³T Action Framework (Avoid, Reduce, Restore and Regenerate, and Transform), aligning with the Science-based Targets for Nature [Initial Guidance for Business](#), the main methodology referred to by the Fashion Pact. Developed by the Science Based Targets Network, the AR³T Action Framework is an effective guidance tool for projects and operations aiming to achieve no overall negative impact on biodiversity or, on balance, a net gain. Companies may already be carrying out several actions that can be mapped against the AR³T Action Framework's sequential steps:

- **Avoid:** Prevent impact happening in the first place, eliminate the impact entirely. Avoidance applies to new or potential impacts.
- **Reduce:** Minimize impacts, but without necessarily eliminating them. Reduce applies to existing impacts.
- **Restore:** Entails bringing a natural system (like a watershed or peatland) back to a certain condition or state of integrity.
- **Regenerate:** Increasing the functionality of an ecosystem, with focus on specific stocks (like soil) or services (like pollination).
- **Transform:** Take action that contributes to an “enabling environment” and likelihood of success of a company’s own actions using the other elements of the AR³T Action Framework, and for others beyond

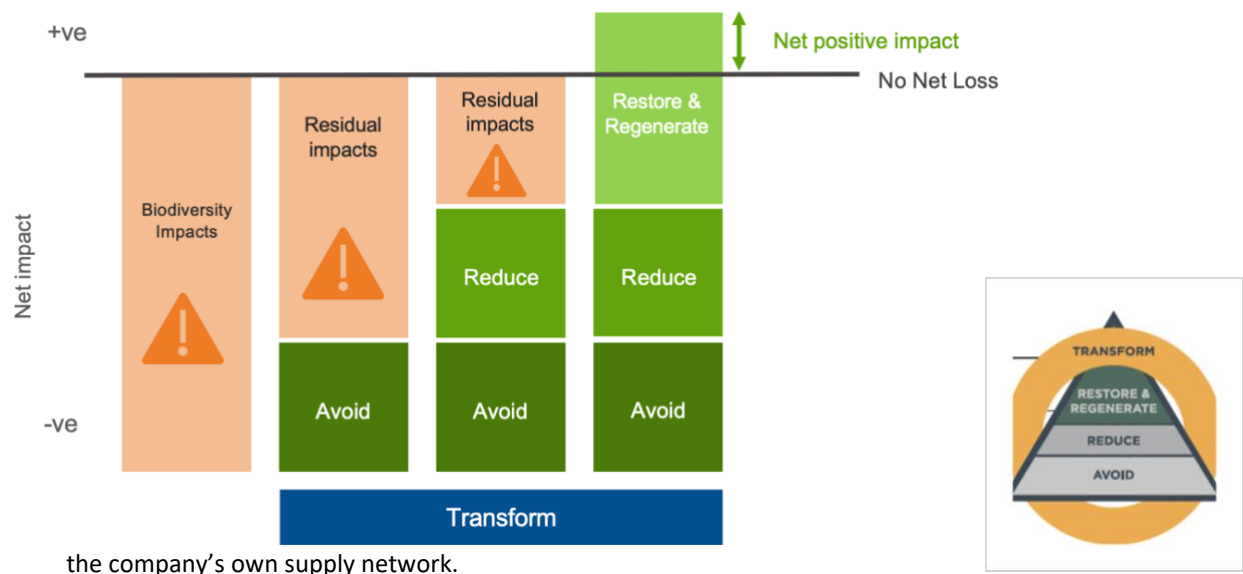


Figure 3: The Mitigation Hierarchy (The Biodiversity Consultancy) and the “insignia” of the AR³T Framework (SBTN)

The AR³T Action Framework is based on the Mitigation Hierarchy, which was originally applied in the extractive sectors and later in other sectors as well. The Mitigation Hierarchy lays out a sequence of actions to anticipate and avoid impacts on biodiversity; and where avoidance is not possible, minimize; and where impacts occur, rehabilitate or restore; and where significant residual impacts remain, offset ([CSBI, 2015](#)). Another variation of the Mitigation Hierarchy is the [Conservation Hierarchy](#). This concept has been put forward as a way to help structure and mobilize coherence on conservation actions at the regional, and eventually, global scale ([Arlidge et al. 2018](#)).

Biodiversity

The Convention for Biological Diversity (CBD) defines “biological diversity” (biodiversity) as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”

In contrast, nature is a wider term that for many people encompasses everything that is not man-made, including both natural biotic and abiotic elements (see definition for Nature below).

However, the CBD and its Aichi Targets also address biodiversity as an entity at a global scale, with the entire “variability among living organisms from all sources... and the ecological complexes of which they are part.” In that sense, polar ecosystems make an important, unique contribution to biodiversity even though they are not as biologically diverse as, for instance, tropical rainforests or coral reefs.

Analogously, “green” and “blue” spaces in cities contribute more to biodiversity than the surrounding concrete. Both common and rare species, and the genotypes of horticultural cultivars, crops and livestock are also all integral parts of biodiversity.

In this Benchmark, we use the term “biodiversity” and “nature” interchangeably to represent the variability of life on Earth and the natural systems it formed. Biodiversity is specifically referred to as a global entity with three key components (that is, ecosystems, species, and genes), while acknowledging that these components are characterized by attributes, such as diversity, abundance and composition.

- Referenced definitions for key biodiversity terminology hosted by UNEP-WCMC at [Biodiversity A-Z](#)

Biodiversity Risk

Biodiversity risk in a business context has been defined by the [World Economic Forum’s Global Risks Report](#) as: “Business risks related to biodiversity in the broadest sense. This includes risks because of direct impacts or dependencies on biodiversity or ecosystem services [nature’s contributions to people], as well as regulatory, financing, reputational and supply chain risks that arise due to business’s relationships with biodiversity and ecosystems.” (See also: [Biodiversity Risks and Opportunities](#), IUCN/Hugo Boss)

The term “biodiversity risk” used in this Benchmark represents two contexts: (a) business risks arising from global biodiversity loss; and (b) impacts the textile/apparel industry has on biodiversity. This is a broad term encompassing both the drivers of biodiversity loss relevant to the fashion sector and global biodiversity loss itself (e.g., species decline, ecosystem degradation, etc.).

Impacts to biodiversity from the fiber/materials sourcing and processing are relevant under the following key risk categories:

- Biodiversity loss
- Land use change
- Logging of HCV forests
- Land use related risks (biobased)
- Deforestation
- Species endangerment
- Species extinction
- Loss of habitat

These risk categories represent risks from:

- Human-induced conversion of natural terrestrial ecosystems to non-natural systems (i.e., production systems). This includes human-induced conversion of forested land to non-forested land (deforestation). Deforestation can be permanent, when this change is definitive, or temporary when this change is part of a cycle that includes natural or assisted regeneration.

- Risks from losses associated with the amount of land the production of feedstock occupies. It is assumed that this land “occupancy” for production takes up space from what originally was natural ecosystems thus contributing to residual impacts to biodiversity even with optimum implementation of mitigation measures.
- Management practices that might result in direct impacts to species, e.g., lethal management of predators that may threaten livestock, loss of habitat connectivity, reduced access to sources of water, and other impacts.
- Land occupancy: Land occupancy is broader than land use conversion/land use change risks. Land occupancy represents biodiversity loss caused by “historical land use change,” i.e., the actual removal of natural primary ecosystems to make the space for cultivation. This “historical” aspect is specifically important when understanding the limited effectiveness of certification tools to address biodiversity loss. The majority of companies apply for certification only after the real removal of natural primary ecosystems has taken place (by following a cut-off date for company's activities over which the certifications criteria are applied). There is no clear mechanism of accountability that ensures the company is “indebted” to compensate for the “real” biodiversity loss from original land cover (e.g., through compensatory restoration such as through the use of biodiversity offsets) under most certification and related voluntary commitments such as the No Deforestation, No Peat, and No Exploitation (NDPE) policy.

Note that there is no consensus as to how far back we must account for and attribute biodiversity loss to a company (often referred to as the “cut-off date”). The general good practice in tropical regions is to use that date when the company started operating in the area as the cut-off date (or in some contexts use cut-off dates agreed within certification schemes). A best practice is to account for all loss from when the primary natural ecosystem was first converted to production systems. This is not directly applicable to the European context however, as landscapes have generally been influenced by anthropogenic activities from many centuries ago. An awareness of this aspect of “time” in evaluating land use change to biodiversity is important to allow proportionate actions to be taken by the private sector.

- Land degradation/soil degradation/soil contamination: Refers to the many processes that drive the decline or loss in biodiversity, ecosystem functions or their benefits to people and includes the degradation of all terrestrial ecosystems (broad term to also include terrestrial habitat degradation, forest degradation and so on). We use this term broadly to also include risks related to the use of harmful agrochemicals in agricultural production that have been proven to generate adverse effects on biodiversity due to toxicity effects, persistence in the environment, and bioaccumulation.
- Pesticides exposure/water pollution: Addition of any substance or form of energy to the environment at a rate faster than it can be dispersed or stored in a harmless form causes pollution. Pollution has adverse effects on living organisms and thus is a driver of biodiversity loss. Particularly relevant from the processing of both natural and synthetic materials and in the production of the feedstock itself (i.e., fate of pesticides and other harmful agrochemicals used in producing feedstock from natural fibers, when “released” into the natural environment (controlled and uncontrolled)). This term is used here to also represent the effects of pollution, particularly eutrophication (i.e., excessive richness of nutrients in a lake or other body of water, frequently due to runoff from the land, which causes a dense growth of plant life and death of animal life from lack of oxygen).
- The term water pollution is also used to represent issues related to persistent plastics, that includes any fragment of a type of plastic that pollutes the environment with an estimated lifetime for degradation of hundreds of years in marine conditions ([Gallo et al. 2018](#)), including microplastics (fragment of <5mm in diameter) and nanoplastics (<100 nm in at least one of its dimensions). Persistent plastics causes adverse effects to biodiversity, particularly marine organisms, from physical effects (through ingestions, bioaccumulation) and the transfer of associated chemicals, including persistent organic pollutants (POPs) and endocrine disruptor chemicals (EDCs) which have certain toxic effects.

Biodiversity Threats

Nature is declining at an unprecedented rate, with more than one million species threatened with extinction, 75 percent of terrestrial ecosystems and 66 percent of marine ecosystems have been significantly altered by human activities. These declines are due to harmful human activities (“threats”) that degrade, fragment, and remove biodiversity. The health of ecosystems on which humans and other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of economies, livelihoods, food security, health and quality of life worldwide ([IPBES](#)).

Globally, the key “threats” to biodiversity (causes of biodiversity decline) are overexploitation and agriculture, along with invasive species, pollution and disturbance, and climate change ([Maxwell et al. 2016](#)). These threats vary in terms of significance and consequences, specific to the biophysical, and socio-economic context of any one location. It is important for companies to proportionately assess their impacts, considering these major drivers of biodiversity loss while capturing important contextualities in the geographic locations of sourcing or processing where impacts to biodiversity are concentrated.

Threats to nature and the drivers and pressures behind them:

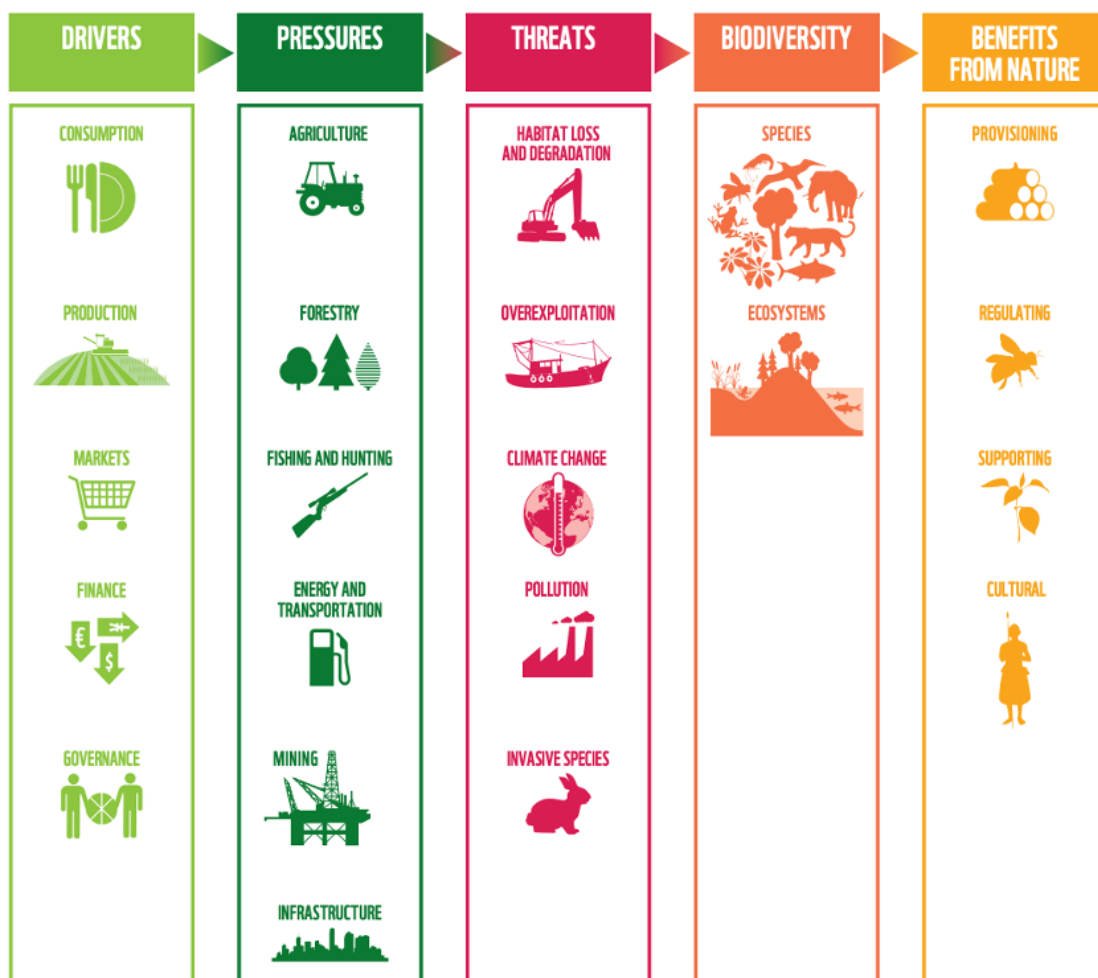


Figure 4: Threats to nature and the drivers and pressures behind them. Habitat loss due to agriculture and overexploitation remain the biggest threats to biodiversity and ecosystems. Source: ZSL/WWF [Living Planet Report](#), (2018 edition)

Biodiversity and Regenerative Agricultural Practices

The term “regenerative” is increasingly a feature of conversations about material choices. While the definition and science on regenerative is evolving, it is important for companies to approach this step with flexibility and a willingness to adapt.

Regenerative agriculture aims to positively influence biological carbon sequestration, agricultural biodiversity, ecotoxicity, climate resilience, water systems, micronutrients, soil health, and nature’s contributions to people. Practices include organic techniques, cover cropping, multi-crop/use systems, agroforestry, rotational farming, conservation tillage, precision practices, integrated pest management, and intentional use of inputs that are local/landscape specific.

Regenerative agriculture is not a “one size fits all” prescriptive practice. Instead, it looks at the combination of methods that support resilience as well as build and nourish ecosystems.

Regenerative practices can increase production and naturally reduce the need for external inputs. When these are implemented successfully, the health of the agriculture ecosystem and farmer economic stability can be improved. Keeping the concept of regeneration and continuous improvement at the forefront of production systems is essential to addressing climate change and land degradation.

Additional Reading:

- [Regenerative Agriculture Landscape Analysis](#), Textile Exchange
- [Organic Cotton Market Report 2020](#) and the [2025 Sustainable Cotton Challenge Annual Report 2020](#), Textile Exchange
- [Regenerative Agriculture Identifying the impact; enabling the potential](#), Cranfield Environment and Agrifood
- [Ecological focus areas show potential for helping biodiversity](#) (EU), Agriculture and Development
- [Sustainable Fibers and Textiles](#), Sustainable Agriculture and Food System Funders (SAFSF)
- See also [Savory Institute](#), [Rodale Institute](#), and [Regeneration International](#).

Biodiversity and Indigenous People

Diversity of nature is declining less rapidly on indigenous peoples’ lands than in other areas. This clearly shows that the world’s 370 million to 500 million indigenous people play a critical role in conserving biodiversity. This data is backed up by extensive research. According to several studies, traditional ecological knowledge is effective in conserving biodiversity and regulating sustainable resource use, including hunting, wild harvesting, fishing, farming and pastoralism, a form of animal husbandry. Living in harmony with nature is a fundamental part of indigenous peoples’ core values and beliefs.

Similar ecological values and worldviews can be seen across indigenous cultures, from southern China to the Americas. Among Andean peoples, for example, the world is divided into three parts: the human and domesticated; the wild (species, ecosystems, water); and the sacred and ancestral. Rather than focusing on economic development, their goal is holistic wellbeing, which is achieved through balance between these three worlds.

Up to 80 percent of biodiversity is located on indigenous peoples’ lands, while at least a quarter of all land is traditionally owned or managed by indigenous peoples. Evidently, these cultures need to be protected. This should be part and parcel of broader tactics to conserve biodiversity. New biodiversity targets, for example, must protect indigenous cultures.

Companies must respect [customary tenurial systems](#) and engage with suppliers and other stakeholders using participatory processes that uphold indigenous people’s rights. When setting goals and targets, designing, and

implementing strategies, the principles of [Free, Prior, and Informed Consent \(FPIC\)](#) must be adhered to. Companies must also uphold equity and rights-based approaches when addressing issues related to indigenous people.

Efforts to save the rich variety of nature cannot be achieved without working to save indigenous cultures. Governments must legally recognize and protect indigenous peoples' rights to territories, natural resources, traditional knowledge and self-determination. And indigenous peoples must be fully and effectively involved at every level in efforts to save biodiversity.

This position will be particularly important when the new global biodiversity targets are negotiated. Not only is this key to humankind living in harmony with nature, it is also vital for enhancing support for poor and marginalized indigenous peoples in order to achieve the UN 2030 Sustainable Development Goals.

Measures to protect both biodiversity and indigenous cultures must be included across all of the sectors that are driving their loss, including agriculture, mining and forestry, if the diversity of life is to survive.

Adapted excerpt from an article by Krystyna Swiderska, PhD Candidate in Biocultural Heritage, Coventry University, printed in [The Conversation](#), Feb 2020. See also [National Geographic](#), 2018.

Biodiversity and Sustainability Standards

Standards provide the industry with a way to verify sustainability claims from the raw material to the final product, and certification is a tool for companies to validate and communicate sustainability claims about their products ([Textile Exchange](#)). Different standards address different aspects of sustainability, from environmental to social and/or animal welfare. There are also different standards for different materials, products, systems, and landscapes, with varying levels of strictness in terms of criteria. compliance, and traceability, etc.

Put simply, there is no “one size fits all” when it comes to standards and meeting the industry’s sustainability needs. Textile Exchange recognizes standards and certifications as tools to potentially accelerate uptake of more sustainable materials and lead to meaningful change. In this benchmark, standards/certifications are recognized under “reduction” measures of the AR³T framework, equally certain standards/certifications may include elements to “avoid” impacts or “restore/regenerate” nature.

A standard or certification may or may not include biodiversity or nature-related requirements. It is important for companies to exercise diligence in choosing certifications to understand the comprehensiveness of its requirements, and limitations brought by its method. Companies should review the standards they use (or choose) to ensure biodiversity risk is covered, whether directly (e.g., non-lethal management practices, habitat protection and connectivity) or indirectly (e.g., chemical use) and actively look to supplement certifications with other mitigation measures commensurate with a company’s biodiversity risks and impacts.

Another important consideration is the difference between standards that focus on “standardized practices” (i.e., most standards) and those that attempt to capture “outcomes and/or impacts.” Once again, there are different benefits attached to different approaches. Most importantly, standards (or the context in which they are used) do not exist in a vacuum, and good standards are regularly being reviewed and improved. Furthermore, as technology improves, the chances are that outcome/impact metrics will be more easily and accurately available across all certification programs.

While standards/certifications are a crucial aspect of a company’s sustainability journey, they alone will not be enough to help companies achieve a nature-positive position. New opportunities for nature are opening through networks and communities, innovative financial incentive schemes, and stakeholder convening platforms. It is important to explore a variety of ways to act and contribute to industry transformation.

Dependencies on Nature

Business reliance upon nature's contributions to people (ecosystem services) and the underlying biodiversity-driven processes that support them for production or value-generating systems. Businesses may directly depend on the health of ecosystems, e.g., agriculture and ecotourism. Other industries, such as fashion, pharmaceuticals, and cosmetics, also depend on the biological material and genetic sources in the creation and manufacture of their products ([CBD](#)).

Ecosystem

A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. Examples of ecosystems include deserts, coral reefs, wetlands, rain forests, boreal forests, grasslands, urban parks and cultivated farmlands. Ecosystems can be relatively undisturbed by people, such as virgin rainforests, or can be heavily modified by human activity, such as farms ([World Economic Forum/PWC](#)).

Materiality

The term "materiality" is used in different ways. The Textile Exchange Corporate Fiber & Materials Benchmark (CFMB) program follows the Global Reporting Initiative (GRI) guidelines and definition of materiality and is mindful of the definition used by the Sustainability Accounting Standards Board (SASB), while acknowledging that the Science Based Targets Network also use the term.

CFMB definition: Materiality assessments help a company identify its most "material issues." The process of identifying these issues (including risks and opportunities associated with fiber/materials use) involves reaching out to internal and external stakeholders to get their input. Materiality assessments also help companies determine what should be prioritized, what should be reported, and to whom.

GRI definition: Materiality [reporting] should reflect the organizations significant economic, environmental and social aspects; or substantially influence the assessments and decision of stakeholders ([GRI](#)).

SASB definition: For the purpose of SASB's standard-setting process, information is financially material if omitting, misstating, or obscuring it could reasonably be expected to influence investment or lending decisions that users make on the basis of their assessments of short-, medium-, and long-term financial performance and enterprise value. ([SASB](#)).

SBT for Nature definition: Significance of an entity's environmental impact in its entirety. This includes operations and supply chains, impacts and dependencies, across different locations in space ([SBT for Nature Initial Guidance for Business](#)).

Nature

All non-human living entities and their interaction with other living or non-living physical entities and processes ([IPBES](#)). This definition recognizes that interactions bind humans to nature, and its subcomponents (e.g., species, soils, rivers, nutrients), to one another. Biodiversity forms the biotic (living) part of nature.

Nature-based Solutions

The IUCN defines [nature-based solutions](#) as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits." Nature-based solutions provide an integrated approach to deliver on climate mitigation and adaptation. In order to ensure that Nature-based Solutions (NbS) reach their potential to address societal challenges, IUCN has developed the Global Standard for Nature-based Solutions for use by governments, businesses, investors, communities and NGOs.

Natural Capital

Natural capital is another term for the stocks of renewable and non-renewable resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. Natural capital is a stock, and from

it flows benefits to ecosystems and people. These services (where service is defined as “a system supplying a public need”) can provide economic, social, environmental, cultural, spiritual, or eudemonic benefits, and the value of these benefits be understood in qualitative or quantitative (including economic) terms, depending on context ([Natural Capital Coalition](#)). Biodiversity is an essential component of natural capital stocks and an indicator of their condition and resilience. Biodiversity itself provides benefits directly to people. The Natural Capital Coalition has released a Series of [Biodiversity Guidance](#) to accompany the Natural Capital Protocol and assist companies in incorporating biodiversity into natural capital accounting.



Figure 5: Benefits to business and society derived from natural capital as described in the natural capital protocol, [Natural Capital Coalition](#)

Natural Climate Solutions

Natural Climate Solutions (NCS) are proven ways of storing and reducing carbon emissions in the world’s forests, grasslands, and wetlands. Published in the [Proceedings of the National Academy of Sciences](#) (PNAS), a study examined the global carbon storage and reduction potential of 20 conservation, restoration and improved land management practices, collectively called “Natural Climate Solutions.” The study concluded that their combined power was surprisingly high, providing 37 percent of the cost-effective CO₂ mitigation needed by 2030 for a greater than 66 percent chance of keeping warming below 2°C, the target agreed to at the 2015 Paris climate talks. The mitigation potential of natural climate solutions in 2030 represents 11.3 billion tons of greenhouse gases, equivalent to stopping burning oil globally ([Land Trust Alliance](#)).

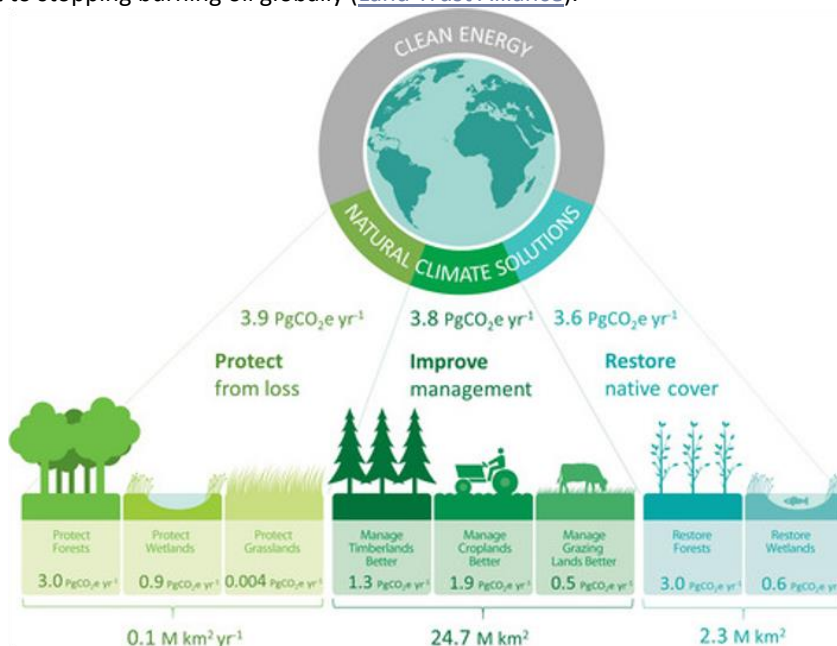


Figure 6: Natural Climate Solutions, Conservation International ([Griscom et al., PNAS](#))

Nature's Contributions to People

Nature's contributions to people (NCP) are all the contributions, both positive and negative, of living nature (i.e., diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to the quality of life for people. Beneficial contributions from nature include such things as food provision, water purification, flood control, and artistic inspiration, whereas detrimental contributions include disease transmission and predation that damages people or their assets. Many NCPs may be perceived as benefits or detriments depending on the cultural, temporal or spatial context ([IPBES Glossary](#)).

“Nature's contributions to people were previously referred to as “ecosystem services,” defined as the benefits that people and economies obtain from ecosystems”

– [2005 Millennium Assessment](#)

As Dr. Sandra Díaz, IPBES Global Assessment Co-Chair and author of an article on this topic in the journal *Science* elaborates: “The vibrant research developed from this ‘ecosystem services’ approach – popularized by the landmark 2005 Millennium Ecosystem Assessment – has advanced sustainability, but largely excluded insights and tools from the social sciences, humanities and other key worldviews. The much broader notion of **nature's contributions to people** emphasizes that *culture* is central to all of the links between people and nature, and recognizes other knowledge systems, for example those of local communities and indigenous peoples, much more than before.” ([Nature's Contributions to People](#), IPBES)

Other examples of positive natural contributions to people include fresh water, direct provision of goods (timber, fisheries, medicines), genetic resources, climate regulation, protection from natural hazards (floods), soil fertility and erosion control, nutrient cycling, decomposition processes, prevention of disease outbreaks, and recreational and spiritual benefits ([World Economic Forum/PWC](#) and the [National Wildlife Federation](#)).

Some contributions (e.g., food provision) can be quantified in units that are easily comprehensible by policy makers and the general public, for use in ecosystem service accounting and economic valuation. Other services, for example, those that support and regulate the production levels of crops and other harvested goods, are more difficult to quantify. If a definition based on accounting is applied too strictly there is a risk that ecosystem service assessment could be biased toward services that are easily quantifiable, but with inadequate consideration of the most critical ones for human well-being.

Since NCPs are defined in terms of their benefits to people, it should be recognized that ecosystem services are context dependent, that is, the same feature of an ecosystem can be considered a contribution by one group of people but not valued by another group (adapted from [UNEP-WCMC](#)).

Planetary Boundaries

The [framework](#) that defines a “safe operating space” for humanity, based on nine key natural processes that regulate the stability and resilience of the Earth system. First coined in 2009 ([Rockström et al. 2009](#)) with an updated framework in 2015, humanities have pushed climate change, biodiversity loss, shifts in nutrient cycles (nitrogen and phosphorus) and land use into “unprecedented territory” ([Steffen et al. 2015](#)).

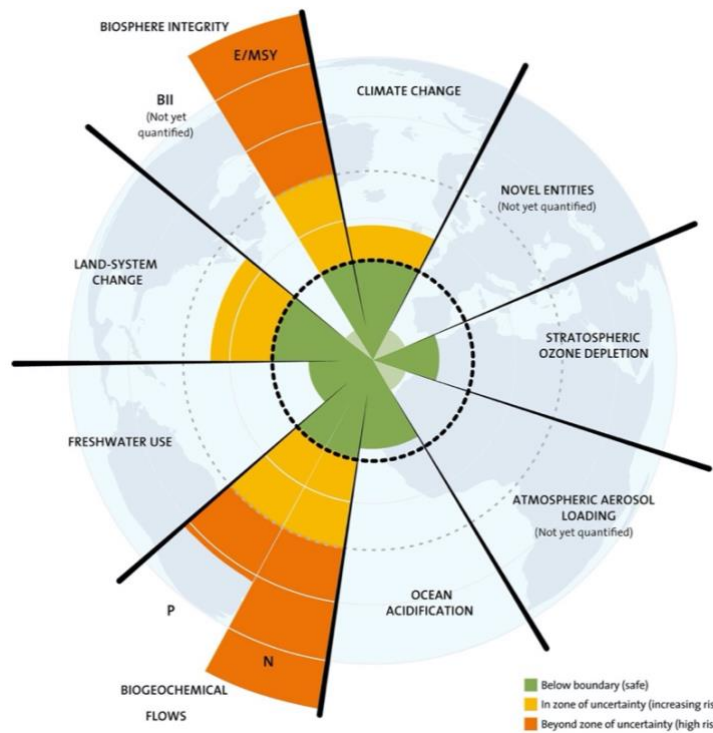


Figure 7: Estimates of how the different control variables for seven planetary boundaries have changed from 1950 to present. Green shaded polygon represents the “safe operating space” (Source: Steffen et al. 2015, [Stockholm Resilience Centre](#)).

Appendix 2: Key Initiatives

The Fashion Pact

The Fashion Pact is a CEO-led global coalition of companies in the fashion and textile industry (ready-to-wear, sport, lifestyle and luxury) including their suppliers and distributors, all committed to a common core of key environmental goals in three areas: reducing carbon emissions, restoring biodiversity and protecting the oceans. Launched as a mission given to Kering Chairman and CEO, François-Henri Pinault by French President, Emmanuel Macron, the Fashion Pact was presented to Heads of State at the G7 Summit in Biarritz.

In recognition of the United Nations Sustainable Development Goals (UN SDGs) and the interrelatedness of global challenges and solutions, signatories of the Fashion Pact recognize that our living natural capital is in danger and that this needs to be remedied to have a foundation for a thriving society and business.

Global commitments respond to the priorities set by the global community through the UN SDGs, Planetary Boundaries and all the UN Conventions. They include commitments in three main areas pointed out by the One Planet Lab, as well as actions that are not mandatory but serve as examples of potential initiatives to reach the commitments: Climate: mitigating and adapting to climate change, Biodiversity: bending the curve on biodiversity loss within 10 years. Oceans: addressing the critical loss of ocean functionality due to climate change and pollution.

Targets should be quantitative, based on science and can be achieved by both individual companies as well as the industry as a whole. The targets are broad enough to be meaningful to a group of fashion brands that account for a significant share of the fashion industry. Through collaborative actions and a CEO-led approach, The Fashion Pact aims to support the fashion industry in its existing ambition to improve. See the first Fashion Pact report: [First steps towards industry transformation](#).

Conservation International and the Fashion Pact Association co-sponsored a [webinar series on Fashion and Biodiversity](#) The Nature of Fashion Series. Through Catapult, Conservation International invest in tools and services that inform sustainability decision-making and engage companies, foundations and individuals committed to identifying, testing and amplifying innovative solutions.

Science Based Targets Network

The Earth's interrelated systems of water, land, biodiversity and ocean are facing unsustainable pressure. We cannot win the fight against climate change without addressing nature loss. Building off the success of the Science Based Targets initiative and in response to business demand to set targets for the whole Earth system, a group of organizations have come together to form the [Science Based Targets Network](#) (SBTN).

The SBTN is developing methods and resources to enable companies and cities to set science-based targets for the interrelated "systems" of freshwater, biodiversity, land and the ocean across their supply chains aligned with the societal goals for sustainability and to be within the "safe operating space" for humanity. These will be informed by current science along with reports to be produced by the [Earth Commission](#).

Science-based targets are measurable, actionable, and time-bound objectives, based on the best available science, that allow actors to align with Earth's limits and societal sustainability goals.

- **Science:** Biophysical limits and societal sustainability goals. The scientific thresholds that define a safe space for humanity, and societal sustainability goals/targets that define a just development future for nature and people.
- **Based:** "Aligned with." The scope and ambition of the targets at actor level is aligned with the ambition of the underlying societal goal/target.
- **Targets:** "Voluntary, measurable and actionable targets." Actors must be able to measure a baseline, take action, and track progress with a reasonable level of effort.

What are the societal goals for nature?

The global goals will be set up by the [Convention of the Biological Diversity \(CBD\) post-2020 Global Biodiversity Framework](#) (likely to launch in 2021), and are likely to focus around five components: species, ecosystem and genetic diversity, nature's contributions to people, and equitable benefit sharing. The SBTs for Nature will draw on these global goals, but also on scientific understanding of the "safe operating space" that will be developed by the Earth Commission.

To achievement alignment with the global goals, Earth's limits and societal sustainability goals must be "translated" into terms that are relevant for companies to set targets and actions. Concepts related to how to "translate" can be found in the [Initial Guidance for Business](#).

United Nations Convention on Biological Diversity

- Signed by 150 government leaders at the 1992 Rio Earth Summit, the [Convention on Biological Diversity](#) (CBD) is dedicated to promoting sustainable development. Conceived as a practical tool for translating the principles of Agenda 21 into reality, the Convention recognizes that biological diversity is about more than plants, animals and microorganisms and their ecosystems – it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live.
- The processes and meetings of the Convention on Biological Diversity and of its Cartagena Protocol on Biosafety and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization provide critical guidance to Parties, Indigenous Peoples and Local Communities (IPLCs) and other stakeholders on actions to promote the conservation and sustainable use of biodiversity, while equitably sharing the benefits from the use of genetic resources.
- Implementation of the Convention and its Protocols is guided by the advice, recommendations and decisions provided by the Conference of the Parties, the Conference of the Parties serving as the meeting of the Parties to the Protocols, the various subsidiary bodies, open-ended working groups, expert groups and informal advisory committees.
- Other processes include national reporting, assessment and review, and the development and implementation of thematic and cross-cutting programs of work, initiatives and a variety of principles, guidelines, action plans and frameworks.
- The current overarching framework for action is the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets. Governments are in the process of developing a post-2020 global biodiversity framework that will guide actions in the decades to come.

Read about the [Global Biodiversity Framework](#) and to find out how to get involved see [A Business Guide to the United Nations Convention on Biological Diversity](#) (Business for Nature, October 2020).

United Nations Sustainable Development Goals

There is growing evidence of the interrelationship and the recognition that the environment, particularly its biodiversity, provides benefits that help to support our society and economy. In 2008, the Millennium Development Goals incorporated the Convention on Biological Diversity (CBD) target “to achieve by 2010 a significant reduction of the current rate of biodiversity loss [...] as a contribution to poverty alleviation and to the benefit of life on earth.”

The subsequent 2030 Agenda for Sustainable Development (the 2030 Agenda) embraces 17 Sustainable Development Goals (SDGs), including SDG 15 (Life on land). [SDG 15](#) is devoted to protecting, restoring and promoting the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. While [SDG 14](#) (Life below water) aims to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The SDGs are presented as an interconnected whole, however, by only explicitly considering biodiversity at the goal level in the wording of SDGs 14 and 15, the breadth of ways in which it can contribute to human well-being, the key rationale of the CBD Strategic Plan (2011–2020) and post-2020 activities (a worldwide framework for biodiversity conservation), may not be fully acknowledged.

The SDGs as a three-tiered structure emphasizes business dependency on nature

The SDG model below developed by the [Stockholm Resilience Centre](#) displays the Goals as a three-tiered structure, emphasizing how economies and societies are dependent on a healthy and functioning biosphere. Presenting the SDGs as three tiers resonates well with the central premise of the CFMB Biodiversity Benchmark because it highlights the dependencies (and impacts) the textile industry has on the natural world for its supply of fibers and materials.

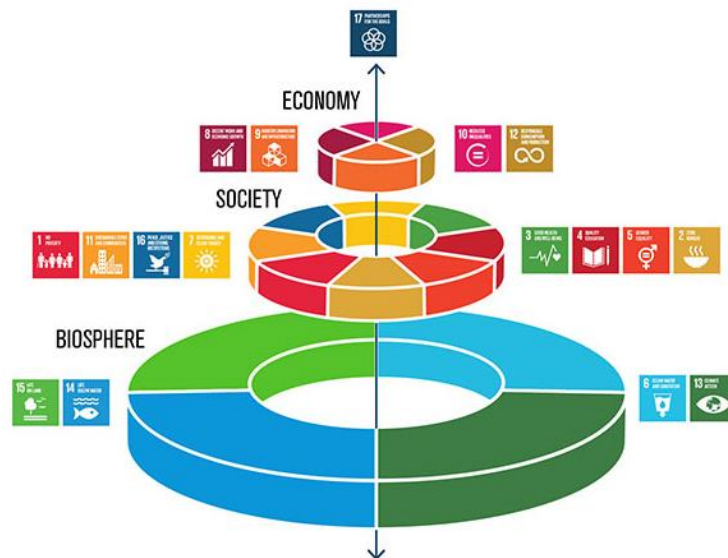


Figure 8: The SDGs as a three-tiered structure emphasizes business dependency on nature Credit: Azote Images for [Stockholm Resilience Centre](#). See also the [SDG Companion Guide](#) to find out how the SDGs are integrated into the Corporate Fiber & Materials Benchmark.

A closer look at Goal 15 Life on Land

The UN has defined 12 Targets and 14 Indicators for SDG 15. Targets specify the goals and Indicators represent the metrics by which the world aims to track whether these Targets are achieved. The [SDG Tracker](#) is a good place to find more information on Goal 15 Targets and Indicators – and how the world is doing.



Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

And its Targets

The icon for Target 15-1 is a green square. It features the text 'TARGET 15-1' in white at the top left. In the center is a white silhouette of a mountain range with a river flowing through it. Below the mountain is the text 'CONSERVE AND RESTORE TERRESTRIAL AND FRESHWATER ECOSYSTEMS' in white. At the bottom right is a small white icon of a tree and a cloud.	<p>15.1: Conserve and Restore Terrestrial and Freshwater Ecosystems</p>	<p>By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.</p>
The icon for Target 15-2 is a green square. It features the text 'TARGET 15-2' in white at the top left. In the center is a white silhouette of three trees. Below the trees is the text 'END DEFORESTATION AND RESTORE DEGRADED FORESTS' in white. At the bottom right is a small white icon of a tree and a cloud.	<p>15.2: End Deforestation and Restore Degraded Forests</p>	<p>By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.</p>
The icon for Target 15-3 is a green square. It features the text 'TARGET 15-3' in white at the top left. In the center is a white silhouette of a tree and a cloud. Below the tree is the text 'END DESERTIFICATION AND RESTORE DEGRADED LAND' in white. At the bottom right is a small white icon of a tree and a cloud.	<p>15.3: End Desertification and Restore Degraded Land</p>	<p>By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.</p>
The icon for Target 15-4 is a green square. It features the text 'TARGET 15-4' in white at the top left. In the center is a white silhouette of a mountain range with a river flowing through it. Below the mountain is the text 'ENSURE CONSERVATION OF MOUNTAIN ECOSYSTEMS' in white. At the bottom right is a small white icon of a tree and a cloud.	<p>15.4: Ensure Conservation of Mountain Ecosystems</p>	<p>By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.</p>
The icon for Target 15-5 is a green square. It features the text 'TARGET 15-5' in white at the top left. In the center is a white silhouette of a tree and a cloud. Below the tree is the text 'PROTECT BIODIVERSITY AND NATURAL HABITATS' in white. At the bottom right is a small white icon of a tree and a cloud.	<p>15.5: Protect Biodiversity and Natural Habitats</p>	<p>Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p>

	15.6: Promote Access to Genetic Resources and Fair Sharing of the Benefits	Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.
	15.7: Eliminate Poaching and Trafficking of Protected Species	Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.
	15.8: Prevent Invasive Alien Species on Land and in Water Ecosystems	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
	15.9: Integrate Ecosystem and Biodiversity in Governmental Planning	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.
	15.A: Increase Financial Resources to Conserve and Sustainably Use Ecosystem and Biodiversity	Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.
	15.B: Finance and Incentivize Sustainable Forest Management	Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.
	15.C: Combat Global Poaching and Trafficking	Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

Biodiversity Benchmark Development Team

Dr. Helen Crowley Principle, Pollination
Dr. Helen Temple Chief Executive Officer, The Biodiversity Consultancy
Peter Burston Senior Principal Consultant, The Biodiversity Consultancy
Tami Putri Principal Consultant, The Biodiversity Consultancy
Katie Fensome Principal Consultant, The Biodiversity Consultancy
Malcolm Starkey Chief Technical Officer, The Biodiversity Consultancy
Liesl Truscott Corporate Benchmarking, Director, Textile Exchange
Marissa Balfour Corporate Benchmarking, Biodiversity Specialist, Textile Exchange
Jessica Garcia Lama Corporate Benchmark Manager, Textile Exchange
Hayley Warren Corporate Benchmarking, Senior Manager, Textile Exchange
Madeline Heun Corporate Benchmarking, Program Coordinator, Textile Exchange
Prerna Pandey Corporate Benchmarking, Senior Coordinator, Textile Exchange
Hanna Denes Senior Standards Specialist, Textile Exchange
Anna Heaton Fiber & Materials Lead: Animal Materials, Textile Exchange
Sophia Opperskalski Data Intelligence, Senior Manager, Textile Exchange
Evonne Tan Data and China Strategy Director, Textile Exchange
Suet Yin Siew Data and Technology, Senior Analyst, Textile Exchange
Phil Bettany Graphic Design Manager, Textile Exchange
Hope Foster Junior Graphic Designer, Textile Exchange

Conservation International works to spotlight and secure the critical benefits that nature provides to humanity. Building upon a strong foundation of science, partnership and field demonstration, Conservation International's mission is to empower societies to responsibly and sustainably care for nature, our global biodiversity, for the well-being of humanity.

Visit: <https://www.conservation.org/>

The Biodiversity Consultancy works with sector-leading clients to integrate nature into business decision-making and build sustainable pathways to positive environmental outcomes. Through our strategic, technical and policy expertise, we guide clients in the fashion and textile sector through biodiversity risk and develop project- and corporate-level biodiversity strategies, risk screening programs, value chain footprinting, and resilient management plans. Our science-based, pragmatic approach delivers robust solutions to complex biodiversity challenges such as achieving Net Gain for biodiversity, creating science-based targets for nature, developing biodiversity offsets, metrics and indicators, and discovering opportunities to go Nature Positive. Visit:

<https://www.thebiodiversityconsultancy.com/>

Textile Exchange is a global nonprofit that creates leaders in the preferred fiber and materials industry. We build a community that can collectively accomplish what no individual or company can do alone. We develop, manage, and promote a suite of leading industry standards, as well as collect and publish critical industry data and insights that enable brands and retailers to measure, manage, and track their use of preferred fiber and materials. With a robust membership representing leading brands, retailers, and suppliers, Textile Exchange is positively impacting the climate through accelerating the use of preferred fibers across the global textile industry.

Climate+ With our new Climate+ strategy, Textile Exchange is the driving force for urgent climate action on textile fiber and materials with a goal of 45 percent reduced greenhouse gas (CO₂e) emissions from textile fiber and material production by 2030. By benchmarking the industry and providing actionable tools for improvement, Textile Exchange is driving a race to the top.

Visit: <https://textileexchange.org/about-us/>

For all inquiries, please contact CFMB@TextileExchange.org



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