



Textile
Exchange

Biodiversity Insights Report

First global baseline of the
apparel and textile industry

Foreword

We have now taken one of the first critical steps and as the saying goes about every journey: this is how it has to start. Under the careful leadership of Textile Exchange, guided by an impressive team of global biodiversity experts and with the courageous collaboration of 157 companies across the fashion sector we have launched the essential work that will take us towards Nature+ and Net Zero. We are embarking on what is, arguably, the most important journey of our lifetimes.

It was perhaps only three years ago that the paradox of biodiversity - its fundamental importance to our survival and the rapid rate at which we are losing and degrading it - was not really on the radar. However, as a consequence of a series of profound and definitive scientific and economic analyses (see reports from IPBES, WEF, Dasgupta, to name a few) along with clear communication from nature leaders like Sir David Attenborough, a broad foundation of awareness has been laid. Building on this we also now have emerging new frameworks such as the Science-Based Targets for Nature (SBTN) and the Taskforce on Nature-related Financial Disclosures (TNFD) to guide a “science-based” way forward for corporate and investor action and reporting on biodiversity.

In this context, one cannot underestimate the importance of this new report and the collective work that went into it. It will help set the direction of travel for our sector and set an example for others to follow. As the first global baseline on biodiversity for the apparel and textile sector it is unprecedented and essential for three main reasons:

Firstly, it highlights the current status on biodiversity action as a sector and gives companies an indication where to go next. Simply by participating in the Benchmark it opens up new avenues of thinking.

Second, it has engaged a broad range of experts from across academic, non-profit, and corporate to focus on how biodiversity can and should be integrated into our business models. This is just the beginning of multi-sectoral and multi-discipline collaboration, which is necessary for co-creating new approaches and solutions.

And thirdly, it shows our stakeholders and the world at large that we are serious in taking on the challenge of restoring and protecting biodiversity as a fundamental part of our businesses.

The call to action is loud and clear: we must all move to a new model based on restoration and regeneration that works with nature. There are, of course, significant challenges ahead but the opportunity is enormous. We have the chance to re-define our businesses and our products - and ourselves - as champions of Nature+ as we deliver significant outcomes for biodiversity, climate, and people.

Congratulations and thanks to the many that were part of this important endeavor. I encourage those who have not yet had the chance to do the Biodiversity Benchmark to dive right in.



Dr. Helen Crowley

Head of Sustainable Sourcing & Nature Initiatives, KERING
Co Chair of the Textile Exchange Biodiversity Benchmark Advisory Group

Cover image: Gregoire Dubois (Forest of Lobéké National Park, Cameroon)

Foreword

I congratulate Textile Exchange and its partners for the Biodiversity Benchmark and the groundbreaking information in the Insight Report, an effort to set SMART targets and monitor progress aligned with the Paris Agreement and the post-2020 Global Biodiversity Framework being developed in the Convention, to be adopted at the 15th Conference of the Parties in April and May 2022, in Kunming, China. The choice of globally recognized partners in expertise, the integrated approach to the nature and climate emergencies you propose, and the commitment of over 50% of your first 157 participants to protecting nature are essential to achieve many of the Framework’s targets related to mainstreaming. We welcome the baseline to be offered by the Benchmark to key global players in this critical sector of our economies. I invite you to share lessons learned through the Convention’s mainstreaming tools and platforms, and I commit the support of the Secretariat towards your goal of getting this key sector to become nature positive by 2030.



Elizabeth M. Mrema

Executive Secretary, Convention on Biological Diversity

Reflections

Biodiversity is both fascinating and fundamental to life as we know it. How these species and dynamic ecosystems interact and evolve continues to inspire us and are behind some of the greatest innovations in the modern world. But the rate at which biodiversity is declining is troubling and we are running out of time to reverse its loss.

As a sustainability practitioner, I believe that it is possible to be both profitable and sustainable when we integrate nature into business decision-making. In fact, this is the key to creating resilience in our changing world.

So where do we go from here? We know the scale of the challenges we face are too big for any one actor to tackle alone, and only through at-scale collective actions and collaboration can we create the systemic changes that will secure our future.

Working together with Textile Exchange on the Biodiversity Benchmark is part of this journey to mobilize the fashion and textile industry to revolutionize its value chain and become a Nature Positive one. With this tool, companies can chart an accountable strategy in managing biodiversity impacts and dependencies, whilst doing their part in transforming the industry.

Congratulations to all participants of the first Biodiversity Benchmark! You are advancing on the track towards Nature Positive. I hope the industry continues to scale up Nature Positive innovations, from creating sustainable business models to conserving and restoring ecosystems on the ground and at sea.

As actors in one of the world's largest industries, participants of the Biodiversity Benchmark have the opportunity to play a pivotal role in changing how businesses interact with and impact on nature.



Tami Putri

Principal Consultant, The Biodiversity Consultancy
Co-author of the Biodiversity Benchmark

Reflections

It is indeed a big year for biodiversity with a plethora of initiatives taking place, as various companies and stakeholder groups step up to the challenge to reverse the unprecedented decline in nature. For Sappi business success relies on maintaining, promoting, and safeguarding biodiversity. This is key to the healthy functioning of the forests and plantations from which we source woodfiber. We also recognize that there is no finish line in this journey hence we remain committed to continuously improving our practices and partnering for change with Textile Exchange and the value chain to improve our understanding of biodiversity as well as climate-related risks and opportunities. We look forward to developing strategic partnerships and continuing to make Verve, our dissolving pulp brand, a Fiber of Choice.



Krellyne Andrew

General Manager Sustainability, Sappi Verve
Co Chair of the Textile Exchange Biodiversity Benchmark Advisory Group

Nature is at the core of fashion – providing the fibers needed to clothe us, the water to dye and wash fabric, and in many cases the inspiration for design. Protecting biodiversity is in the best interest of the fashion sector. In a year that has continued to challenge our global community, we are seeing the catastrophic results of when we fail to conserve this biodiversity. However, through our partnership with Textile Exchange and The Fashion Pact we are witnessing unprecedented momentum in the fashion industry. Together, we are working with companies to design science-based initiatives designed to mitigate the sector's impacts on biodiversity loss and conserve nature. This report is crucial to our understanding the state of play of the fashion industry. It identifies the actions currently underway as well as the need for greater uptake across the sector. This is essential for designing the innovative and urgent solutions needed to safeguard nature, people and fashion.



Bambi Semroc

Senior Vice President, Center for Sustainable Lands and Waters,
Conservation International

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About this report

The Biodiversity Insights section of this report features these complementary components and perspectives:

Analysis

This section provides the Benchmark findings. Following an overview of the development, framework, and methodology, the analysis is organized into the six Benchmark framework themes. Analysis is presented in both quantitative form (charts) and qualitative (anonymized quotes). All participant data is aggregated and reflects the combined responses from the 157 participating companies.

Company Case Studies

Alongside the collective analysis, excerpts from a selection of nine company Case Studies are provided, with links to the full features. Case Studies are presented in Q&A format, exploring aspects of the biodiversity journey through the lens of the company. These company-led insights are designed to enthuse and inform others looking for inspiration from peers and, we hope, encourage action. [View all Case Studies](#).

Expert Spotlights

Textile Exchange looks to experts in the biodiversity field for guidance, resources, and most of all collaboration. We appreciate the depth of wisdom and dedication others are providing as we work to connect our industry to where this expertise is held. There are many more experts (and resources) than those spotlighted in this report, and we hope readers explore the offerings of the organizations covered here and beyond. A big thank you to all our Spotlight providers!



Photo: Gregoire Dubois (Florentine Wool-carder Bee, Italy)

State of the Sector Executive Summary

We need nature

The release of our inaugural Biodiversity Insights Report comes alongside an important shift in the dynamic between business and nature.

Collectively, we are reevaluating our relationship with the life around us. Millions of species on earth have yet to be identified, and of those that have, few have been evaluated for their risk of extinction. It is estimated that one million of the planet's eight million known species are now threatened with extinction, according to a recent report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

We can no longer ignore the consequences of human activity on the natural world. But not only are we acknowledging our impact on nature, we are also getting a better understanding of our dependency on it.

In February, the Dasgupta Review, a UK-commissioned independent study on the economics of biodiversity, was released. Its core message was clear: the natural world underpins our economies. There will be no "business as usual" without a new financial system that is geared in favor of, rather than against, nature.

Then, a landmark joint report by IPBES and the Intergovernmental Panel on Climate Change (IPCC) took the message even further. It is not just our economy that is dependent on nature – the health and future of our planet are too. If we are going to mitigate climate change and its devastating effects on humanity, protecting and conserving biodiversity is non-negotiable.

For fashion and textile companies, there is an increasingly urgent need to act. The industry relies heavily on land-based raw materials — and the healthy, functioning ecosystems needed to produce them — as well as non-renewable, fossil fuel-based materials.

In both cases, there are opportunities to prioritize the protection of natural resources while reducing waste and pollution, which have their own impacts on biodiversity. Sourcing decisions made today will have a direct impact on the resources needed by the industry tomorrow.

As a result, we as a sector are uniquely placed to set a new precedent for businesses. It's time to go beyond simply lowering our impact and instead move towards creating reciprocal relationships with the natural systems at the heart of what we do.

Nature needs us

Giving back to nature means playing an active role in protecting, preserving, restoring, and regenerating it. The good news is that we are already seeing some frameworks emerge that can help us get there.

Launched this year, the Taskforce on Nature-related Financial Disclosures (TNFD) allows companies to report and act on nature-related risks. In turn, it aims to shift global financial flows towards better outcomes for nature. And with Science-Based Targets for Nature currently in development, companies will soon have a methodology to set their biodiversity goals in line with the latest science, in the same way that science-based targets are currently set for emissions reduction. Since climate and nature are inextricably linked, solutions must go hand in hand.

But there is a limit to what we can achieve individually. A free exchange of knowledge and information will be essential to help one another — and the sector as a whole — move forward. That is where the Biodiversity Benchmark and Insights Report comes in.

State of the Sector Executive Summary

Textile Exchange has used data submitted through the new Biodiversity Benchmark to provide an industry-specific assessment of how fashion and textile companies are understanding and addressing their impact on nature. In doing so, we want to help businesses of all sizes formulate where they should be heading and gain insight into what best practice looks like today. By approaching biodiversity through the lens of collaboration, we are facilitating a coordinated response to a complex, nuanced problem. Our vision is a future in which companies' individual material sourcing efforts and investments can evolve into collective, landscape-level action for supply security and nature.

Where we are so far

- **Biodiversity is fast becoming a focus area for fashion and textile companies.** 51% of the 157 participants recognize biodiversity risk as a priority and 59% have made public commitments to address it. And while biodiversity has only recently entered the sustainability conversation for fashion and textile companies, 8% already have an explicit biodiversity strategy in place.
- **Sustainability standards are the most widely used measure by companies seeking to address their biodiversity impact.** An impressive 80% of companies are increasing their uptake of preferred materials as a way of managing their impact on biodiversity. Certified organic cotton and other cotton standards are the most popular.
- **Over a third of companies are starting to take action to remediate biodiversity loss.** Beyond standards, 38% of companies are beginning to implement restorative/regenerative measures in support of biodiversity, opening up opportunities for collaboration across the value chain and within broader landscapes.
- **A growing number of companies are investing in biodiversity either financially or in kind.** 38% of companies are making some kind of investment to improve outcomes for biodiversity, focused on projects within their own supply chain or beyond.
- **Greater transparency is still needed to track biodiversity outcomes.** Impact is still limited by the fact that only 14% of companies know the countries where their key raw materials are grown or extracted. Beyond country of origin, companies should also understand the broader landscape of where they are sourcing their materials, and 15% have already started mapping this against priority areas for biodiversity.

Where do we go from here

Later in the report, we share several "calls to action" for the industry to take these insights further. But here, we want to leave you with a more personal call to action — an invitation to get outside.

More than ever, it is vital that we as individuals take the time to connect to nature in our own lives. The more that we enjoy and appreciate the living world around us and share that experience with others, the easier it will become for us to collectively account for the importance of biodiversity in our actions — and the more motivated we will be to work towards a better future for the planet as a whole.

We acknowledge the generous collaboration with our partners, our advisors, and the companies that took part in this first baseline for industry benchmarking. We look forward to continuing the learning and collaboration in the coming years, knowing that, together, we can be part of the solution.



Liesl Truscott

Corporate Benchmarking Director,
Textile Exchange



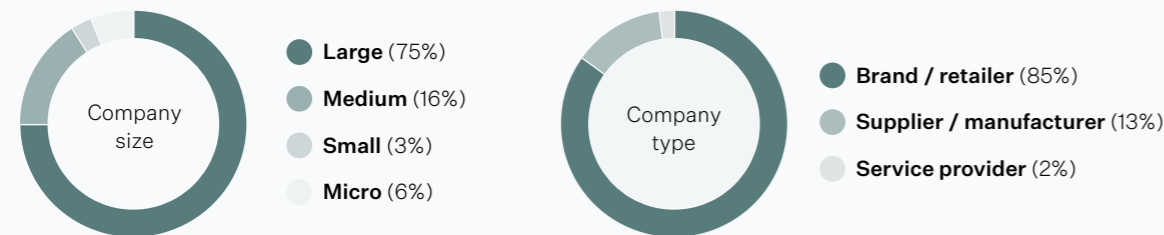
Marissa Balfour

Corporate Benchmarking Biodiversity
Strategist, Textile Exchange

State of the Sector Participant Profile

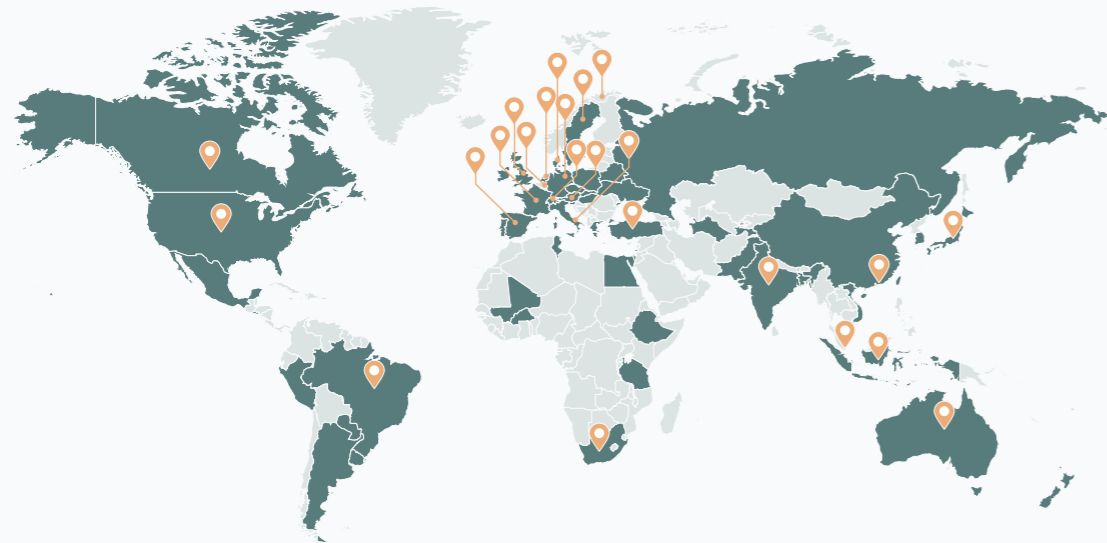
Who took part?

This report is based on the 157 participating companies, of which 59% are Textile Exchange members, and 54% are Fashion Pact signatories, who make up the first industry baseline. Participants have an estimated combined turnover of US\$424 billion and are employing 1.7 million people. Most participants are large-sized brands and retailers.



Where are they operating?

Participating companies are headquartered (📍) in 23 countries and knowingly source raw materials from 52 different countries from around the world.



State of the Sector Topic Summaries

📌 Business Integration

State of play: 8% of companies have an explicit biodiversity strategy and a further 29% have known elements of biodiversity within their materials sustainability strategies. 59% have made public commitments to address biodiversity risk, with over half (54%) being signatories to The Fashion Pact. Almost a third (32%) have plans to align corporate targets with the science-based targets (SBTs) for nature (when released). **Areas for improvement:** Ambitious commitments and “biodiversity by default” must be brought to life and clarified through strategy development, internal capacity building, and target setting.

📍 Transparency

State of play: 34% of companies have high transparency of the countries where some of their key materials are grown or extracted, although very few have transparency of specific locations. 15% have started mapping sourcing locations to biodiversity value. **Areas for improvement:** Transparency of sourcing regions, eventually at a landscape level, will be key to developing appropriate biodiversity priorities and action. Knowledge of sourcing locations allows for identification of the particular biodiversity threats associated with each production context and allows for direct relationships with producers to improve practices. Mapping against biodiversity hotspots and areas of importance will inform companies of areas to pay attention to during the biodiversity assessment.

📄 Materiality

State of play: 51% of companies recognize biodiversity as a priority risk, and 33% have carried out some sort of assessment. Both qualitative and quantitative assessment methods are being used, sometimes simultaneously, with Life Cycle Assessment as the most common approach. 46% have started to engage a few stakeholders on biodiversity-related risk. **Areas for improvement:** Specific biodiversity-related approaches to assessing risk are emerging. Assessing biodiversity risk can be a daunting task, so digging deeper into the tools and services biodiversity experts have to offer, alongside dialogues with a broad range of stakeholders, will help propel companies forward in the right direction.

⚙️ Implementation

State of play: 38% of companies are implementing remediation measures (regenerative and/or restorative) in support of biodiversity. The most reported measure (80%) was the use of sustainability standards. 33% of companies are investing financially or in-kind. However, from details provided, investments ranged widely from significant landscape funds to CSR and conservation schemes, to supporting farmers and the use of standards. **Areas for improvement:** Transitioning to biodiversity “positive” practices will take time, commitment, collaboration, and investment. Looking strategically at opportunities for your company to partner and collaborate will help accelerate, replicate, and scale the right biodiversity outcomes and impacts.

🔍 Monitoring, Evaluation & Tracking

State of play: 11% of companies have a program for monitoring biodiversity-related activities or projects. More commonly (44%) of companies are monitoring projects anecdotally. Similarly, evaluation methods and indicators of progress tend to be anecdotal or project specific. **Areas for improvement:** Formalized (and scientific) monitoring programs will be essential to ensuring the right outcomes for biodiversity can be measured and tracked. Monitoring allows for continuous improvement and adaptive management. Over the longer term, indicators should show positive impacts for biodiversity using methodologies consistent with science and potentially ladder up to local, national, and global biodiversity goals.

📄 Reporting

State of play: 10% of companies are publicly reporting their biodiversity-related activities. The majority (66%) are disclosing sustainability-related activities more generally through annual and sustainability reports that may incorporate some referencing to biodiversity. **Areas for improvement:** Public disclosure of biodiversity risk, and regular reporting of actions taken to mitigate risk and respond to opportunity, builds trust, and encourages shared learning. The expectation is that companies will increase disclosure as stakeholder expectations grow and as company action increases.

State of the Sector

Why Biodiversity?

What companies are saying:

“As a circular brand, we want to make sure to carry out our business within the planetary boundaries. We understand that biodiversity loss is one of the biggest threats facing humanity. As such we want to be part of the solution and as a business, we want to make sure to find solutions that lower the impact on biodiversity and simultaneously lower our dependency on natural resources.”

“Biodiversity is the backbone of most sustainability policies in our opinion, whether it is stated or not. Biodiversity is about life on earth for plants, animals and microorganisms. This coexistence and interdependence of each species of life towards each other is what keeps our ecosystem in balance. In our mission, we work towards allowing people to experience, respect and engage in the outdoors, learning more about themselves and the world around them. It is our obligation to preserve nature for future generations so they can experience the same feelings as we do. Biodiversity and taking care of the planet and its occupants is a critical part of our company’s beliefs and survival.”

“Our core business rests on the availability of raw materials, which are produced by ecosystems around the world. Therefore, our business relies upon healthy, functioning ecosystems and biodiversity.”

“Our business is in constant interaction with the natural ecosystem and its services, directly and indirectly, and thus there are a lot of points of dependencies and impacts of our value chain on biodiversity: from raw materials, to manufacturing, both of which are significant sources of direct impact, up to products transportation, consumer care and end-of-life. This makes us responsible for the pressure that our operations put on biodiversity, and at the same time, this puts us under different levels of risks due to biodiversity loss from direct operational risks to other associated regulatory, financial and reputational risks throughout our business value chain. Therefore, we recognize our key role as to mitigate those impacts and help go beyond by restoring, preserving and regenerating biodiversity.”

“Biodiversity is one of the best indicators of healthy ecosystem functioning. Although not as easy or straightforward to measure as other key performance indicators such as crop yield or water usage, improvements in biodiversity over time – in soil microbes, mycorrhiza, plant species, and animals – within a farm system is an indicator that water, carbon, and mineral cycles are functioning. Healthy ecosystem functioning correlates to resiliency within that system. Not only within a farm system, but also in planetary functioning. For this reason, biodiversity is an important aspect of agriculture, but also conservation efforts to minimize the current biodiversity loss rates due to land conversion and habitat destruction.”

State of the Sector

Why Biodiversity?

“Maintaining the biodiversity of our planet is vitally important to combatting climate change and to ensuring that Earth’s food systems and natural resources are not further diminished. Within the context of our business specifically, biodiversity helps yield more resilient organic cotton upon which we rely.”

“Biodiversity, in terms of the global health and wellbeing of all plants and animals, is intrinsically important for the earth’s systems, the survival of humanity, as well as the continued capability of our company to operate. In terms of the apparel industry, we recognize we have impacts on land and oceans, and the living ecosystems through our sourcing of raw materials, manufacturing of products, distribution and discard. With challenges such as climate change, increase of waste materials in the environment, dramatic loss of species and biomass, extraction of resources and the continuing encroachment on natural and wild ecosystems, we see our approach to biodiversity as holistic. It will mostly encompass existing work on water issues, climate change, material sourcing and discharge of hazard chemicals. As the industry works jointly to develop roadmaps, benchmarks and targets in this space, we anticipate developing a broader strategy and policy on biodiversity.”

“The loss of biodiversity is significant, and the degradation of nature creates direct risk for human well-being and global economic activities. The World Economic Forum notes that \$44 trillion or over half the world’s total GDP is moderately or highly dependent on nature and its services. Consequently, we and our suppliers have a reason and responsibility to support biodiversity and healthy ecosystems through responsible sourcing of raw materials, responsible production and chemical management practices, effective waste management and other actions.”

“Without biodiversity, there is no future for humanity. Biological diversity on our planet is made up of myriad interactions between different levels of life, such as genes, individual species, communities of creatures and entire ecosystems, such as forests or coral reefs. They have made Earth habitable for billions of years. The huge global biodiversity losses now becoming apparent represent a crisis equaling – or quite possibly surpassing – climate change. Planting trees is one proven measures for limiting global warming. Utilization of forest products to replace fossil-based products with higher greenhouse gas emissions adds to this effect. Wood is also a core resource for the developing bioeconomy. On the other hand, greater utilization of wood resources can lead to unwanted negative effects on biodiversity.”



State of the Sector Call to Action

Keep up with a fast-developing set of risks:

Incorporate biodiversity risk and opportunity into corporate strategies.

Biodiversity risk and climate are inextricably linked. Investing in biodiversity will contribute to climate action, as well as deliver benefits for nature and people. Companies must ensure sourcing strategies take biodiversity into consideration and build awareness to appreciate the connections between biodiversity business risk, and dependencies. Once biodiversity risk is acknowledged, internal accountability, capacity, and reporting practices can be developed to support long-term action. Corporate engagement in conservation projects can inspire colleagues and shine the light on biodiversity opportunities beyond the sourcing gate.

Move from anonymity to clear line of sight:

Link materials sourcing strategies to geographies and consider impact beyond uptake.

For too long supply chains have worked anonymously, which has been considered a competitive advantage among some brands. The call for transparency has led to more supply mapping and line of sight within supply networks, but even this is commodity focused. The next step is to go beyond the raw material production itself and to consider the broader geographical context and landscape, including aspects affecting biodiversity such as impacts to habitat condition and connectivity, proximity to areas of high conservation value, conservation of important watersheds, and other crucial elements, many of which are highly site-specific. Ensuring sustainable livelihoods for workers and their communities is also key to addressing biodiversity risk.

You're already doing some of the right things:

Use production standards as an entry point for managing biodiversity risk but don't stop there.

Sustainability standards will often contain requirements that will be good for biodiversity such as eliminating or reducing the use of agrochemicals, switching out artificial fertilizer for mulches, compost, cover crops to build soil health, and promoting crop rotation, inter-cropping, and nature strips. Argo-ecology, organic agriculture, and extensive low impact farming systems are inherently "safer" for nature, and the use of recycled inputs can reduce the pressure on the land. Now is the time to join up fiber standards and approaches such as organic and regenerative to other complementary initiatives with biodiversity benefits beyond the production system, such as impact incentives, wildlife-friendly practices, and location-based initiatives.

Together we can:

Engage in cross-sector, multistakeholder, and landscape-level approaches

Building on the recommendations above, collaborative landscape-level action will be an important part of the journey and will be key to long term and resilient results where the beneficiaries and the owners of the solutions will be one and the same. Different companies will have different opportunities to create change, but one thing is clear: we need to act in coordinated ways and leverage multiple stakeholders' unique contributions in knowledge, interests, finances, and important relationships with nature and each other. We need to transcend silos and learn from one another's experiences in order to achieve the collective outcomes needed to address global biodiversity loss. These synergies will be essential to finding lasting solutions.

State of the Sector Call to Action

We have the infrastructure to do this:

Use the Biodiversity Benchmark to speed up action and align with global initiatives.

The intensifying attention on biodiversity loss has created a flurry of activity to support business action, and it can be overwhelming for brands and suppliers. On the positive side, collaborations, such as The Fashion Pact and the Science Based Targets Network (SBTN), are working hard to support businesses. Textile Exchange is committed to building bridges between raw material production and biodiversity through our Climate+ strategy. We encourage our members and the wider textile industry to use, and help improve, the Biodiversity Benchmark as a tool for tracking progress towards internal, public, and Global Goals, and as a resource to enable continuous learning. We look forward to the future as we support companies to build on this baseline, share best practices, and create opportunities for improvement. It can be daunting to learn what we don't already know, but only by understanding where we are, can we move forward. Together, we can learn from each other, scale action, and accelerate progress.



Photo: Gregoire Dubois (Orangutan, Danum Valley, Borneo)

State of the Sector

Biodiversity Benchmark Participants

AFIBEL	Etam Group Etam Lingerie, Etam Lifestyle, Undiz, Maison123	Norrøna Sport
Anubha Industries	Gymshark	NORTH SAILS
APRIL Group	H&M Group H&M, COS, Monki, Weekday, & Other Stories, H&M Home, ARKET, Afound	Nudie Jeans
Aritzia LP	Hermès	Oripex Textile
Armani Group	Herno	ORSAY GmbH
Asahi Kasei	House of Baukjen	Prada Group Prada, Miu Miu, Church's, Car Shoe
Asia Pacific Rayon (APR)	IKEA of Sweden AB	Primark
ASICS	Inditex Group Zara, Zara Home, Pull&Bear, Massimo Dutti, Bershka, Stradivarius, Oysho, Uterqüe	PUMA SE PUMA, Cobra
AUCHAN RETAIL	IVY & OAK	PVH Corp. Tommy Hilfiger, Calvin Klein, Van Heusen, IZOD, ARROW, Warner's, Olga, True&Co, Geoffrey Beane
BESSON CHAUSSURES	KALANI-home	Ralph Lauren
BESTSELLER A/S	KARL LAGERFELD	Richemont
Birla Cellulose	Kering Gucci, Saint Laurent, Bottega Veneta, Balenciaga, Alexander McQueen, Brioni, Boucheron, Pomellato, DoDo, Qeelin, Ulysse Nardin, Girard-Perregaux	Salvatore Ferragamo
Burberry	KIABI	Sappi
Burton	Knickey	SULOCHANA MILLS, INDIA
Calzedonia Group Calzedonia, intimissimi, Tezenis, Intimissimi Uomo, Falconeri, Atelier Emé	Kuyichi B.V.	Stanley/Stella S.A.
Capri Holdings Michael Kors, Jimmy Choo, Versace	LACOSTE	Stella McCartney
CELIO	Lenzing	Stio
CHANEL	Levi Strauss & Co.	Tapestry, Inc. Coach, Kate Spade, and Stuart Weitzman
Chloé	Li & Fung	Tchibo GmbH
C&J Clark Limited	MANGO	Tesco Stores Ltd
CottonConnect	Mantis World Limited	The Cotton Group
DAMART	Moncler Group	The Schneider Group
DECATHLON SA	MUD Jeans International BV	umdasch The Store Makers
Desigual	Naturepedic Organic Mattresses	VARNER Dressmann, Cubus, Carlings, Bik Bok, Urban, Volt, Wow, Days Like This
Diesel	Neutral.com A/S	Williams-Sonoma, Inc. Mark & Graham, Pottery Barn, Pottery Barn Kids, Pottery Barn Teen, Rejuvenation, West Elm, Williams Sonoma, Williams Sonoma Home
El Corte Inglés	Next Plc.	World Textile Sourcing (WTS)
ERALDA	NIKE, Inc. Nike, Converse, Jordan	Zimmermann
Zegna	NOABRANDS	
Fjällräven International AB		
GANT		
Gap Inc. GAP, Banana Republic, Old Navy, Athleta, Hill City, Janie and Jack		
Gina Tricot		



Photo: Gregoire Dubois (African Forest Elephant, with tusks seldom seen today due to poaching. Loango National Park, Gabon)

Part A: Analysis



Analysis Introduction

Collaborative and industry-led

The Biodiversity Benchmark has been developed by Textile Exchange in partnership with The Biodiversity Consultancy, Conservation International, and a co-led multistakeholder Biodiversity Benchmark Advisory Group of 60+ organizations, experts, companies, and industry specialists, including the Science-Based Targets Network (SBTN) and The Fashion Pact. The Advisory Group came together over six months (August 2020–December 2020) to support the development and testing of the survey. The Biodiversity Benchmark Beta was [launched](#) in December 2020. The Benchmark is also being used as the reporting platform for The Fashion Pact and the network of partners that have come together to deliver the Global Environment Facility (GEF) project “Transforming the Fashion Sector to Drive Positive Outcomes for Biodiversity, Climate and Oceans.”

This report is the culmination of input and feedback from the collaborative partners, experts, and other stakeholders, but most importantly the companies stepping up to share unique data points and information on biodiversity activities and thus pioneering the first ever biodiversity baseline for the industry.

The Biodiversity Benchmark is going through this initial beta phase to track the level of engagement and effort that companies are starting to put into biodiversity. The beta phase acts as a baseline; it will help us formulate where we should be heading and to appreciate what “best practice” looks like today.

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. The Benchmark is designed to help companies compare performance to the fundamental elements of effective 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, their relevance to the apparel and textile industry, and how these risks can best be managed.

Through Textile Exchange’s Corporate Benchmarking program and its annual 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 setting targets for uptake and improvement. The MCI 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. These methods form the bedrock of the Biodiversity Benchmark, for understanding biodiversity risks, and for building a strategy to limit impacts from the company’s supply base.

The methodology for companies to set targets and track their contribution to the global goals for nature is being developed through the [SBTN](#). The Biodiversity Benchmark will also develop alongside the science-based targets (SBTs) for nature, and we will work closely with the SBTN on alignment, so that our benchmarking participants can be confident that this work lines up and is consistent with the expert’s. 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) and [CDP](#). The Benchmark will also help companies in meeting the [Sustainable Development Goals](#) (SDGs).







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 SDGs. Echoing the true spirit of [SDG17: Partnerships for the Goals](#), 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. According to the WBA, benchmarking drives a “race to the top” and is one of the ways Textile Exchange (as an Ally of the WBA) mobilizes the industry to accelerate the uptake of preferred materials.

Analysis Introduction

Framework

The Biodiversity Benchmark starts with how a company is integrating biodiversity into its business strategy and operations, setting targets, and aligning with the SDGs. Next comes transparency, which explores the mapping of sourcing locations against their biodiversity value. This step is critical to making good intervention decisions, prioritizing, and designing actions. Materiality follows mapping, incorporating biodiversity risk assessment and the important role of stakeholder engagement. Next, the section on implementation draws on the AR3T Action Framework as outlined by the SBTN to review actions to mitigate biodiversity risks within supply networks. The following step assesses monitoring and evaluation, as those actions are crucial to measuring progress towards expected outcomes and targets. The survey 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.

The Biodiversity Benchmark framework incorporates six key themes and 16 elements.

 Business Integration	 Transparency	 Materiality	 Implementation	 Monitoring & Evaluation	 Reporting
<ul style="list-style-type: none"> Leadership Internal Engagement Commitment Strategy Targets 	<ul style="list-style-type: none"> Country of Origin Biodiversity Value Mapping 	<ul style="list-style-type: none"> Risk Assessment Stakeholder Engagement 	<ul style="list-style-type: none"> Implementation measures Investment 	<ul style="list-style-type: none"> Monitoring Evaluation Improvement Tracking 	<ul style="list-style-type: none"> Disclosure Assurance
Integrating biodiversity issues into the business and operations by making a public commitment, setting up a biodiversity strategy and targets, and building staff capacity.	Mapping raw material sourcing volumes and locations to “biodiversity value” to help identify hotspots and opportunities to pay attention to during the biodiversity assessment.	Evaluating biodiversity risks associated with raw materials sourcing through a specific materiality/risk assessment – including consultation with internal and external stakeholders.	Implementing actions to reach targets and deliver outcomes following the “AR3T” Framework: Avoid, Reduce, Restore, Regenerate, and Transform. Tracking investment.	Monitoring activities and outcomes, and evaluating progress allows for continuous improvements and “adaptive management”. Over the longer term, M&E should show positive impacts	Publicly disclosing biodiversity risk – and regularly reporting on actions taken to mitigate risk/respond to opportunity builds trust. Aligning with good practice disclosure standards.

Methodology

157 companies participated in the Benchmark (including subsidiaries), sharing data confidentially to drive the baseline results reported. As a “beta version” there is no allocated scoring. However, all submissions were validated through our comprehensive review process and all participants received a “scorecard” that displays their response alongside the frequency of responses for each answer.

The information presented in this Report is an aggregation of the responses from all participants. There was a recommended reporting period of the calendar year 2019, but the specific reporting scope varied among participants as some report seasonally or according to other timelines.

Going forward, as the Biodiversity Benchmark comes out of its beta phase, it will be integrated more fully into the corporate benchmarking program.

For more information please visit the [Biodiversity Benchmark webpage](#) and the [suite of guides](#), which links to the key products developed by the partners behind the survey: the Biodiversity Benchmark [FAQs](#), the survey and [survey guide](#), and the accompanying [companion guide](#) which gives further details of materials-related risks and opportunities for biodiversity action planning.

Analysis

Business Integration



State of play: 8% of companies have an explicit biodiversity strategy and a further 29% have known elements of biodiversity within their materials sustainability strategies. 59% have made public commitments to address biodiversity risk, with over half (54%) being signatories to The Fashion Pact. Almost a third (32%) have plans to align corporate targets with the science-based targets (SBTs) for nature (when released).

Areas to improve: Ambitious commitments and “biodiversity by default” must be brought to life and clarified through strategy development, internal capacity building, and target setting.

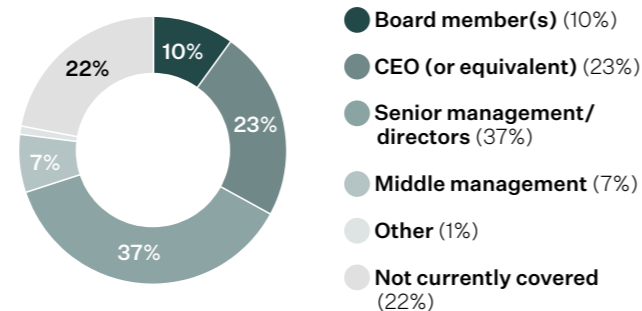
Leadership

Why this is important

Biodiversity is a material risk. Not only is biodiversity negatively impacted by business activities, but biodiversity risk impacts business, and companies must be accountable. Company leaders must take accountability for biodiversity action and ensure biodiversity is given the attention and prioritization needed to reduce business-related pressures.

Findings

Almost a quarter of participating companies (23%) said their CEO is accountable for biodiversity oversight. Several companies specified their Chief Sustainability Officer (CSO) and this is incorporated in the count for senior management/directors.



Internal Engagement

Why this is important

For biodiversity to be properly managed, human resources must be allocated, and capacity built. Tried and tested ways to engage and embed biodiversity organizationally include explicit inclusion in job descriptions, performance indicators, and incentive schemes. Onboarding and professional development opportunities for staff to learn more about biodiversity issues will help companies recognize and address the gaps and needs within their organization.

Findings

Over half of companies (54%) have either assigned or are in the process of assigning biodiversity-related responsibilities to staff.

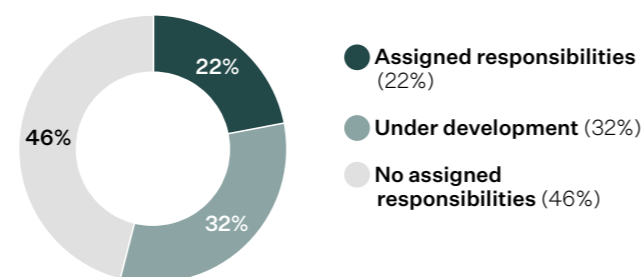


Photo: Gregoire Dubois (Cape Sugarbird, South Africa)

Analysis

Business Integration



On leadership:

“It is our CSO’s ultimate responsibility to ensure biodiversity is integrated into our CSR strategy and goals. Aside from her, our CSR Governance Committee of our Board of Directors is aware of biodiversity as a topic and encourages integration of biodiversity (as well as other topics like deforestation and decarbonization) into our strategy. Our CSR Manager and the Sustainability Director are specifically tasked with integrating biodiversity KPIs into our product/material sourcing strategies as well as deploying education internally on the importance of biodiversity.”

On leadership:

“In 2019 there was no person in charge for biodiversity issues. In 2020 our company created the functions of Sustainability Manager and Supply Chain Sustainability Manager. Our Sustainability team is developing and leading the set-up of our corporate biodiversity strategy, together with R&D and sourcing teams, within the main targets established by the Fashion Pact and by our parent company’s sustainability strategy.”

On leadership:

“We have not yet specified how we want to integrate biodiversity into our sustainability strategies in a more concrete way. We hope that the result of the studies we are doing on biodiversity this spring will be the stepping stone we need to build a more concrete understanding of our business biodiversity impact and how we can work to decrease our negative impacts.”

On internal engagement:

“In May 2021 we carried out a biodiversity risks training with representatives from our style, product development, sourcing, and production teams, so to discuss, analyze and learn more about the biodiversity risks associated to the main material we use (cotton), which accounts for more than 70% of our sourcing. The training was carried out in collaboration with external consultants.”

On internal engagement:

“As a Sustainability Manager, I am responsible to drive the sustainability strategy alongside the Global Sourcing Manager and the Head of Production. While biodiversity isn’t specifically mentioned in our job descriptions, we are responsible for the implementation of any actions required to meet the targets under the Biodiversity Pillar stemming from our Fashion Pact membership.”

On internal engagement:

“We assign responsibilities on biodiversity through the Sustainable Sourcing teams but the incentives are on the share of sustainable products developed not directly on biodiversity risk management.”

On internal engagement:

“Today biodiversity is not included in job descriptions, but it will probably be included in the Environmental Manager’s responsibilities moving forward.”



Photo: Gregoire Dubois (Borneo Forest Dragon, Danum Valley, Borneo)



Analysis

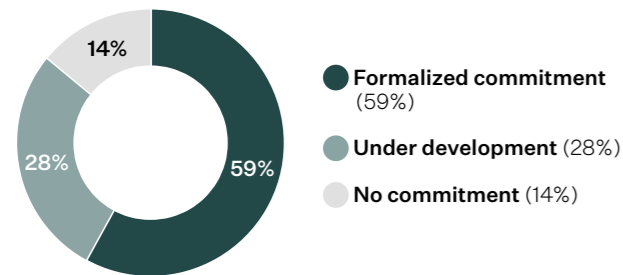
Business Integration



Commitment

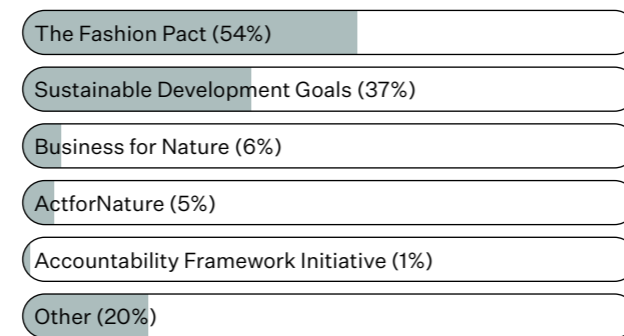
Why this is important

Corporate commitments set the level of ambition. They guide and influence behavior. As many challenges today require joint action, commitments to global and industry agendas are a powerful approach to collectively address some of the most pressing issues faced by business. Public and collective commitments to biodiversity improve the chances of scaling and accelerating impact because they bring transparency and encourage accountability.



Findings

Biodiversity commitments have been made by 59% of participants, 54% of which are Fashion Pact signatories. 36% of companies are committed to working towards the Sustainable Development Goals, demonstrating widespread movement in support of the Global Goals.



Other (20%): One Planet Business for Biodiversity, Accountability Framework Initiative, Water Resiliency Coalition, UNFCCC Fashion Charter for Climate Action, UN Global Compact, and RE 100.

On commitment:

“We are signatories of The Fashion Pact. Through the Pact we commit to joining forces with other leading fashion companies to take action within three main areas: climate, biodiversity, and oceans.”

On commitment:

“In 2020 our company made a public commitment to biodiversity and has signed on to Business for Nature.”

On commitment:

“We follow many of these initiatives through other alliances, but as a small company it is too much to have too many different commitments ongoing. How do we consolidate and improve the scope so there is a more focused road to improvement? We follow many portions and have fully integrated the SDGs, but have not signed the paper.”

Analysis

Business Integration



Expert Spotlight: Accelerating collective action on biodiversity through the Fashion Pact

The Fashion Pact is a global CEO-led coalition across the fashion and textile industry (ready-to-wear, sport, lifestyle, and luxury) leveraging the power of the collective to drive action. It builds upon and goes beyond existing initiatives to accelerate positive impact in three areas: stopping global warming, restoring biodiversity, and protecting the oceans.

Biodiversity is a special focus for the Fashion Pact, given how deeply dependent fashion is on natural ecosystems and their services for its materials and operations. Since October 2020, it has been working with Conservation International and a network of organizations to help signatories convert commitment to action. A jointly awarded grant from the Global Environment Facility (GEF) is helping to bring world-class scientific expertise to the fingertips of Fashion Pact members.

One key element of the Fashion Pact’s success in its collective journey on biodiversity is the sharing of knowledge, scientific approaches, and best practices. For this reason, it is collaborating with Textile Exchange to ensure coherence on reporting and benchmarking on biodiversity engagement across the sector. 54% of the brands that are part of the Biodiversity Insights Report are members of The Fashion Pact.

The unprecedented power of a collective approach is demonstrated by how signatories are sharing information to give science the input it needs to inform guidance on how brands can create effective biodiversity strategies.

In turn, the Biodiversity Insights Report creates a tool to raise awareness and concretely showcases the importance of the topic of biodiversity in fashion. The Report provides both The Fashion Pact signatories and the wider apparel and textile industry with support in highlighting the opportunity to consider and integrate biodiversity into both business and supply chain decision-making and achieve buy-in internally.

The Fashion Pact

Story links

[The Fashion Pact: First Steps to Transform Our Industry](#)



Analysis

Business Integration



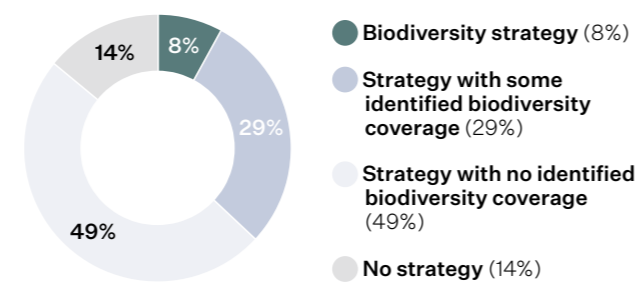
Strategy

Why this is important

A strategy to address biodiversity risks, opportunities, impacts, and dependencies is an indicator of how seriously a company takes the issue of biodiversity loss. Providing direction and supporting day-to-day decision making, a strategy includes longer-term goals, responsibilities, timelines, and resource allocation.

Findings

8% of companies have clearly defined biodiversity strategies, all of whom reported that their strategies are aligned with the SDGs. The majority (78%) have sustainability/materials sustainability strategies with varying amounts of biodiversity coverage.



On strategy:

“We have in place strategies to increase our use of regenerative wool and cotton. One of the key principles underpinning our standard for cotton at the farm is restoring soil health, biodiversity and ensuring no detriment to natural ecosystems around farms. Moreover, by being part of the Fashion Pact we adhere to the commitment of developing and implementing strategies and science-based targets for nature.”

On barriers and challenges:

“The preliminary analysis of the company’s biodiversity footprint shows that the majority of its footprint is linked to the upstream end of its value chain. The main pressures on terrestrial biodiversity are linked to land use (crops, livestock), we are therefore reliant on the food industry for the vast majority of the footprint.”

On strategy:

“Biodiversity is addressed in our holistic approach to all decisions made. The way we currently only source organic cotton, we believe this is the best way we can lessen impact and possibly even help biodiversity in our sourcing locations.”

On enablers and opportunities:

“General enablers at the moment include: Mounting expectations from customers and investors; necessary to integrate biodiversity (and nature) in order to guard against supply chain risk; urgency to play role in addressing biodiversity (and inter-related climate) crisis.”



Photo: Gregoire Dubois (L'Hoest's Monkey, Bigodi Wetland Sanctuary, Uganda)



Analysis

Business Integration



Targets

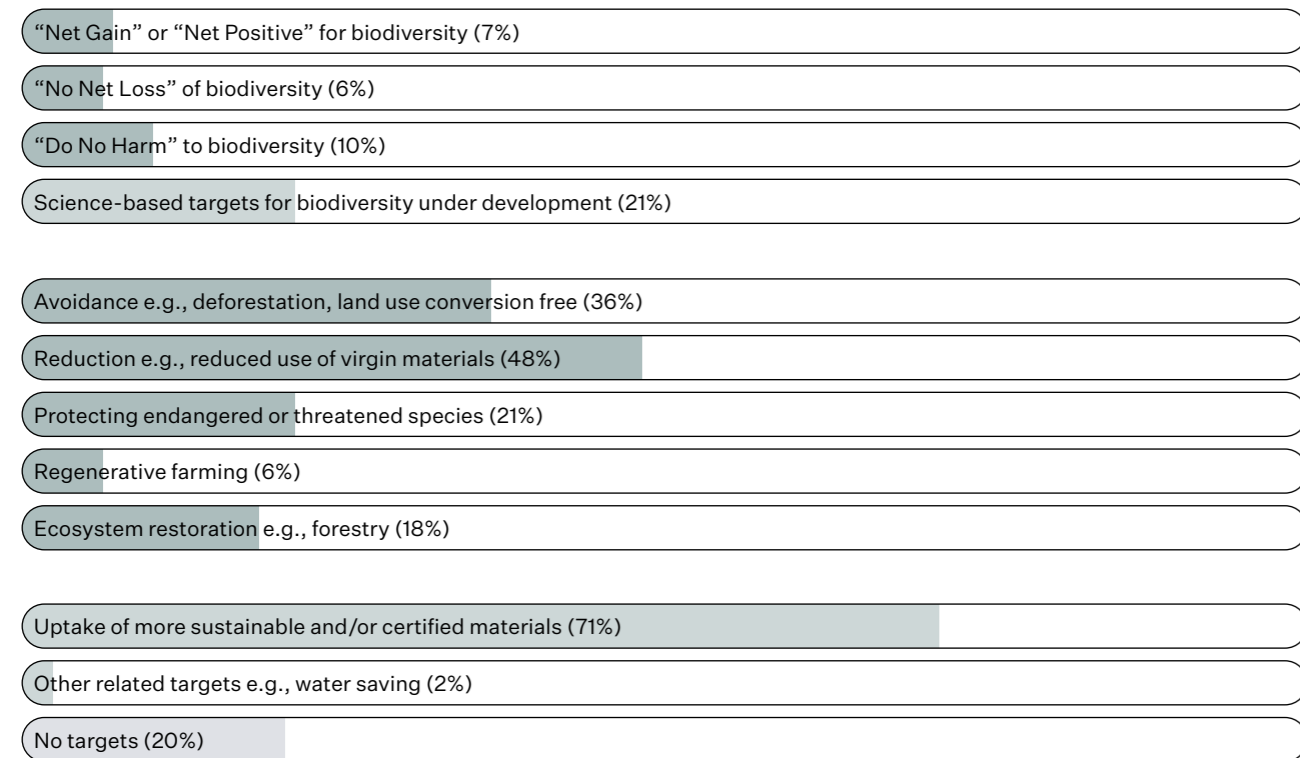
Why this is important

Measurable biodiversity targets demonstrate a company's level of ambition and set tangible goals to aim for. Targets are powerful as they focus attention on achieving desirable outcomes and allow for quantifiable progress tracking. SMART targets (Specific, Measurable, Achievable, Realistic, and Time-bound) define and quantify precisely what a company wants to achieve and enable the measurement progress.

The SBTN is developing science-based targets (SBTs) for nature, expected to be released in 2023. Meanwhile, a ["no regrets" approach](#) to take steps in the right direction (such as no deforestation or sourcing of materials grown using organic and/or regenerative practices) is recommended while waiting for nature-specific targets to be agreed.

Findings

Most participating companies (70%) have targets in place for transitioning to preferred materials, i.e., grown or otherwise produced to a sustainability standard, code, or initiative. While not explicit biodiversity targets per se, these targets are a starting point from which to dig deeper into biodiversity-related benefits and associated outcomes.



The chart shows the range of targets being set by participating companies. Note, many companies have multiple targets. Additional insight into the actions associated with the targets can be found in the Implementation section.

Analysis

Business Integration



On targets:

"Biodiversity targets are currently under development. We do have specific targets to reduce virgin synthetic materials, source more materials grown using regenerative agriculture, and ensure that high-functioning ecosystems such as primary forests are conserved. Our targets for more sustainable materials cover 100% of key materials."

On targets:

"The company has set several biodiversity-related objectives (shift to preferred raw materials sourcing; suppression of exotic skins and furs from our product line; development of insetting projects on our strategic supply chains; entire value-chain carbon footprint compensation through forestry, mangroves and peatlands projects, with high biodiversity value; implementation of regenerative agriculture practices, etc), however these objectives have not been expressed in targets yet."

On transparency:

"For wool, we have mainly a single supplier sourcing from a single market for us, adopting their protocol to trace every single farmer contributing to our supply. For leather and other materials, we asked our major suppliers where they source the materials we purchased as there is no analytical traceability tool available yet."

(Transparency, covered on pages 36-37)

On transparency:

"We believe traceability is a critical first step toward environmental and social responsibility. Having reliable data on each step of our products' life cycles gives us the ability to identify the greatest risks and opportunities in our supply chain. We currently have 100% traceability of finished goods suppliers across all of our brands, and strive to have 95% traceability of fabric, trim and hardware suppliers and processing units by 2025, and 95% traceability of raw material suppliers by 2030."

(Transparency, covered on pages 36-37)

On biodiversity value:

"We have baseline studies for our conservation areas and estate management matrices that address among things threats to biodiversity. We also have in-field monitoring data for our conservation areas and plantation estates."

(Transparency, covered on pages 36-37)

On biodiversity value:

"We do not have any biodiversity value ratings. This will be a good starting point for next year."

(Transparency, covered on pages 36-37)



Analysis

Business Integration



Expert Spotlight: Science-Based Targets for Nature: Contributing to a Nature Positive future for the textile and fashion industry

The Science Based Targets Network (SBTN) together with 80+ partner organizations and 100+ program members, including Textile Exchange, are working together to design methods that companies can use to ensure that they are taking the right actions in the right places to protect nature, and to prevent irreversible destruction of ecosystems and the loss of biodiversity.

How is the SBTN engaging with business?

SBTN is providing a framework of action and guidance for fashion, apparel, and textile companies, as well as companies across all sectors, to set science-based targets (SBTs) for nature and stay within the planetary boundaries of biodiversity, freshwater, land, and oceans. Companies, consultants, industry coalitions, and financial institutions are invited to join the SBTN Corporate Engagement Program to help develop science-based targets for nature through methods, tools, and guidance that build on what companies are already doing.

Why should companies take action on nature?

The climate crisis cannot be solved without addressing the nature crisis, the two are intricately interrelated. A “safe operating” space for humanity entails staying within planetary boundaries of multiple Earth systems, not just one. By linking action on climate and nature, we can design solutions which minimize trade-offs, increase co-benefits, and have a greater overall positive impact on the Earth and its people.

Companies have a vital role to play in the transition to a nature-positive future. By acting now, they can help turn the looming business risk posed by the irreversible loss of nature into an opportunity for sustainable growth and innovation. Companies can begin their journey to setting science-based targets for nature today through no-regrets actions. The SBTN invites companies to join the Corporate Engagement Program to support method development, measure impacts on nature using SBTN’s guidance, set ambitious targets where methods already exist, and start transforming business.

Jess McGlyn, Corporate Engagement lead at Science Based Targets Network

Story links

- [SBTN](#)
- [Corporate Engagement Program](#)



Photo: Gregoire Dubois (Franquet's Epauletted Bat, Omboué, Gabon)



Case Study

Kering



Case Study: Kering

[Read full case study](#)

Kering has been on a ten-year journey to evaluate and improve the way its business interfaces with nature. Now, Kering is focused on giving back to nature.

Driven by a clear vision and framework for action, the global Luxury group has spent the last decade developing the standards and best practices to turn its ambitious goals into concrete impact. In 2020, the company committed to having a net positive impact on biodiversity by 2025. Kering is currently working towards this goal through restoring, protecting and regenerating two million hectares, representing around six times their land footprint for raw materials. However, as they take the journey of establishing science-based targets for nature there will also be other initiatives to deliver positive outcomes.

Kering's journey has been rooted in an in-depth understanding of its supply chain impacts and dependencies on nature and climate, made possible by its Environmental Profit and Loss (EP&L) accounting tool. The EP&L measures carbon emissions, water consumption, air and water pollution, land use, and waste production, making the environmental impacts of its activities visible, quantifiable, and comparable.

Textile Exchange spoke to Helen Crowley, Head of Sustainable Sourcing & Nature Initiatives, and Yoann Regent, Sustainable Sourcing, Biodiversity & Animal Welfare Specialist, about how the EP&L tool has been integral in its biodiversity journey so far, and the new collaborative opportunity that transformative and regenerative action represents in the fashion industry and further afield.

[Read the full interview.](#)



Photo: Kering (Sheep farming, Argentina)



Analysis Transparency



State of play: 34% of companies have high transparency of the countries where some of their key materials are grown or extracted, although very few have transparency of specific locations. 15% have started mapping sourcing locations to biodiversity value.

Areas for improvement: Transparency of sourcing regions, eventually at a landscape level, will be key to developing appropriate biodiversity priorities and action. Knowledge of sourcing locations allows for identification of the particular biodiversity threats associated with each production context and allows for direct relationships with producers to improve practices. Mapping against biodiversity hotspots and areas of importance will inform companies of areas to pay attention to during the biodiversity assessment.

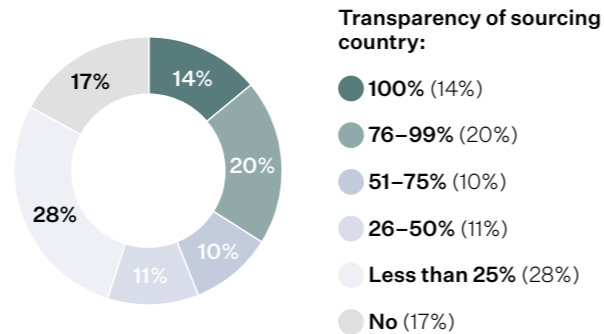
Country of Origin

Why this is important

From a biodiversity risk and opportunity perspective, knowledge of the geographical setting of materials production is essential. Building transparency of sourcing locations, beyond country-level to specific jurisdictions, is intensive work. However, this landscape-level view is the first step in analyzing the potential and actual impacts on biodiversity, which is necessary to understand the biodiversity value (or importance) of the region and ensure an appropriate response.

Findings

34% of participants have high transparency of production countries, and 45% have very little. Few companies could report actual production locations or farms.



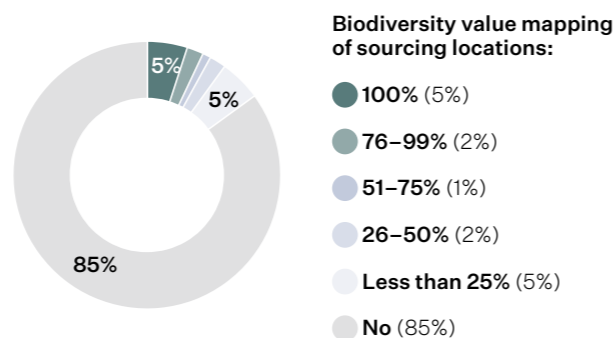
Biodiversity Value Mapping

Why this is important

Companies source raw materials from multiple locations. As biodiversity has many attributes and varying contexts across the globe, it is crucial to identify and evaluate the most critical places for biodiversity-focused action (i.e., those with high “value”). Variables related to biodiversity “importance” include high levels of species richness, proximity to protected areas, habitats for endangered species, migratory corridors, and others. Identification of high value areas is needed to appreciate the risks and opportunities associated with sourcing locations and to be able to identify appropriate action.

Findings

The majority of companies (85%) have yet to begin mapping biodiversity value to sourcing locations.



Analysis Transparency



A closer look at four key materials

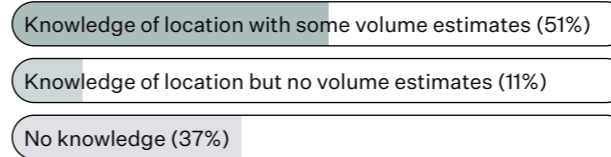
The heat maps show the countries where the participating companies know that they are sourcing and have reported their country of origin. The maps look at four key land-based materials (cotton, woodfiber, wool, and leather). The color saturation reflects the share of the material, i.e., the darker the color saturation, the greater the volume reported.

Cotton (cropping, primary processing)



Top 5 sourcing countries reported:

India, China, USA, Pakistan, Turkey

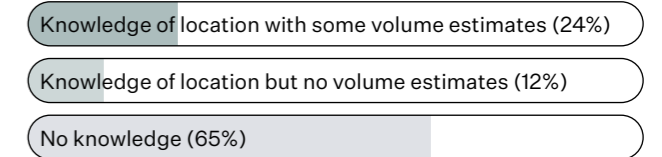


Manmade Cellulosics (forestry, primary processing)



Top 5 sourcing countries reported:

Indonesia, South Africa, Austria, Germany, Slovakia

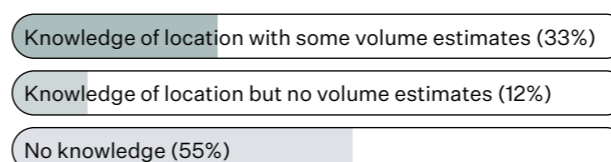


Wool (farming, primary processing)



Top 5 sourcing countries reported:

Australia, South Africa, Argentina, New Zealand, Uruguay

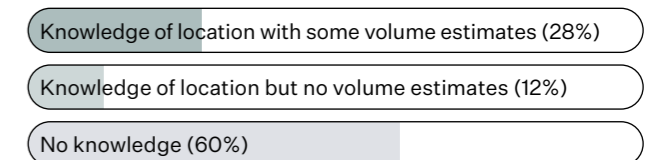


Leather (farming, primary processing)



Top 5 sourcing countries reported:

Australia, UK, Netherlands, France, Italy, USA





Expert Spotlight: Leadership and transformation for a net positive future

The University of Cambridge's Institute for Sustainability Leadership (CISL) is committed to working with its partners in business, government, and the finance system to achieve a nature-positive future. Developing leadership capacity, both at the individual and organizational level, is where CISL's unique contribution and strength lies.

CISL focuses on the intersection of business and biodiversity in a variety of ways: by working with leaders to develop nature-positive strategies and plans; by supporting business with implementation challenges so they are able to turn commitment into practice; by creating actionable pathways for financial institutions to fund a nature-positive economy; by accelerating enterprises and collaborative initiatives with potential to offer breakthrough solutions; and by building evidence and insight to inform decision making. CISL is currently working with members of The Fashion Pact to help them take better account of biodiversity in their strategies and initiatives, and is delighted that so many have taken the opportunity to use Textile Exchange's Biodiversity Benchmark.

"We must act urgently to reverse the nature-climate crisis by 2030. The global fashion sector is uniquely positioned to lead and inspire collective imagination on how we view and value nature. This transformation must start now and mobilize people and resources along the design, supply and retail chain." Clare Shine, CEO of University of Cambridge's Institute for Sustainability Leadership (CISL).

University of Cambridge's Institute for Sustainability Leadership (CISL).

Story links

- [Nature-Positive Hub, Cambridge Institute for Sustainability Leadership](#)
- [Developing a corporate biodiversity strategy: A primer for the fashion sector, Cambridge Institute for Sustainability Leadership](#)
- [The CISL Accelerator experience: Innovators for sustainable fashion, Cambridge Institute for Sustainability Leadership](#)



Photo: Gregoire Dubois (Waterbucks, Lake Naivasha, Kenya)

Analysis

Materiality



State of play: 51% of companies recognize biodiversity as a priority risk, and 33% have carried out some sort of assessment. Both qualitative and quantitative assessment methods are being used, sometimes simultaneously, with Life Cycle Assessment as the most common approach. 46% have started to engage a few stakeholders on biodiversity-related risk.

Areas for improvement: Specific biodiversity-related approaches to assessing risk are emerging. Assessing biodiversity risk can be a daunting task, so digging deeper into the tools and services biodiversity experts have to offer, alongside dialogues with a broad range of stakeholders, will help propel companies forward in the right direction.

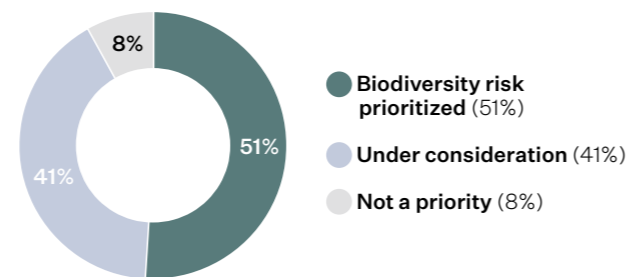
Prioritization

Why this is important

A company is exposed to many risk types with different intensity levels and potential consequences for the business. Biodiversity risk is important for a company to understand and address, as it leads to further business, reputational, financial, and reputational risks, since most businesses are directly or indirectly dependent on biodiversity and nature's contributions to people (ecosystem services). A company that recognizes biodiversity risk as a priority would acknowledge the importance of biodiversity to its business, and how the business affects biodiversity.

Findings

Almost all participants recognized biodiversity-related risk, with 51% having identified biodiversity risk as a priority, and 41% reporting that its prioritization was under consideration.



Reported biodiversity-related risks:

- **Cotton:** Chemical use; water use and contamination; soil degradation; habitat conversion.
- **Manmade cellulosic fibers:** Risk to ancient and endangered forests; habitat loss and degradation; pollution and natural resource use in processing.
- **Wool:** Land degradation and desertification; predator control and harmful wildlife management practices; habitat encroachment and land conversion.
- **Leather:** Deforestation and land degradation; intensive and hazardous chemical use in tanning; water (usage, contamination, eutrophication); soil contamination; methane/GHG emissions, and climate change.
- **Synthetic fibers and materials:** Fossil fuel use/GHG emissions, climate change; mining for non-renewables impacts on habitats and ecosystems; use of hazardous chemicals; microplastics and marine pollution; land use biodiversity impacts from biobased synthetics.



Photo: European Outdoor Conservation Association (Fix the Fells staff and volunteers stabilizing loose areas at Brown Tongue, United Kingdom)

Analysis Materiality



Risk Assessment

Why this is important

By undertaking an initial assessment to identify biodiversity risks, dependencies, and impacts within the supply base, a company can identify the highest priority “hotspots” within its “biodiversity footprint” and create a short list of potential thematic and spatial areas to focus on. There are many ways to approach this, and new methods are now emerging to support both biodiversity value and materiality assessments, such as the [Species Threat Abatement and Restoration \(STAR\) metric](#), which helps identify the places and actions with the most potential to benefit biodiversity. Biodiversity risk, in the context of materiality, also includes exposure to regulatory, reputational, and supply security risks.

On risk assessment:

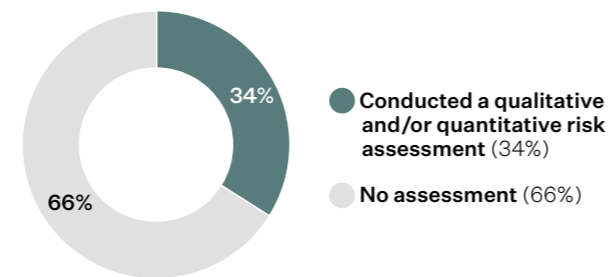
“We have a risk management framework detailing the controls we have in place and those responsible for managing both the overall risk and the relevant mitigating controls. We monitor risks throughout the year to identify changes in the risk profile. We have initiated a piece of work to calculate our biodiversity footprint in relation to our raw material consumption.”

On risk assessment:

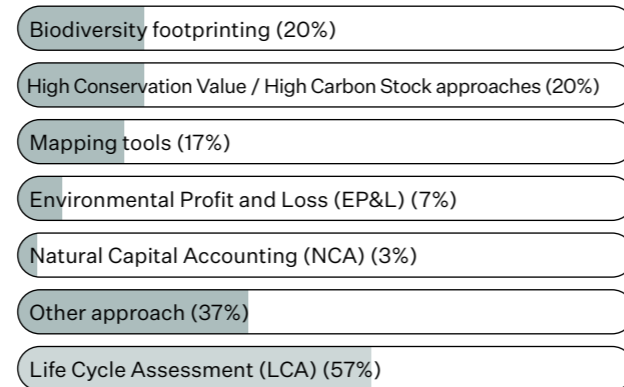
“We used existing qualitative assessments from the sector to validate our own assessment. Moreover, within the corporate engagement program of the Science Based Targets Network, we are currently working on a validation based on the Sectoral Materiality Matrix of the program for our specific sector.”

Findings

Most companies have not yet carried out an assessment of the biodiversity-related risks. Those that have are using Life Cycle Assessment (LCA). While LCA helps understand environmental impact potential for important areas for biodiversity, such as water scarcity and greenhouse gas emissions, it does not explicitly assess or measure biodiversity impact.



Tools and frameworks most commonly used by participating companies to understand impacts:



Mapping tools included: Global Forest Watch, IBAT.

Other approaches included: the Biodiversity Impact Metric (BIM), Global Biodiversity Score (GBS), Higg MSI, Impact World+, Textile Exchange resources, and customized assessment tools.

Some companies are currently using multiple tools in assessing their biodiversity risk.

Analysis Materiality



Details on tools and frameworks most commonly used by participating companies to understand impact:

Biodiversity Impact Metric (BIM)

The BIM is a practical risk-screening tool for supply chain businesses that source agricultural commodities.

Developed by: *Cambridge Institute for Sustainability Leadership (CISL)*

[Quick link](#)

Environmental Profit & Loss (EP&L)

The EP&L measures impacts along the supply chain. Impacts are then converted into monetary values to quantify the use of natural resources.

Developed by: *Kering, with support from PwC, for its brands and other companies to use*

[Quick link](#)

[Explore the tool](#)

Global Biodiversity Score (GBS)

The GBS is a biodiversity footprint assessment tool: it can be used to evaluate the impact or footprint of companies and investments on biodiversity.

Developed by: *The Biodiversity Economy Mission (MEB), CDC Biodiversité with input from the “B4B+” Club*

[Quick link](#)

High Conservation Value (HCV) and High Carbon Stock (HCS) Approach

The HCV Approach helps identify and protect these values in places where there is rapid expansion of agriculture, forestry and aquaculture.

[Quick link \(HCV\)](#)

[Quick link \(HCSA\)](#)

Integrated Biodiversity Assessment Tool (IBAT) & Species Threat Abatement Recovery (STAR) Metric

IBAT generates biodiversity risk screening reports based on locations. It provides access to data on Protected Areas, Key Biodiversity Areas, and the IUCN Red List of Threatened Species. IBAT hosts the STAR metric, which focuses on addressing the threats driving species extinction risk. See the [STAR Industry Briefing Note](#).

Developed by: *The IBAT Alliance (includes IUCN, Conservation International, UNEP-WCMC, and other conservation experts)*

[Quick link](#)

[Explore the tool](#)

Life Cycle Assessment (LCA)

LCA measures the potential environmental impacts of products along their life cycle (from cradle to grave). While LCA covers a broad range of environmental impacts, biodiversity loss is not commonly addressed due to the lack of an appropriate methodology. The *World Biodiversity Forum* is a good reference on the status of LCA for biodiversity assessment. See also [Higg MSI methodology](#), page 10.

[Quick link](#)

Natural Capital Accounting (NCA)

The [Natural Capital Protocol](#) is a decision-making framework that enables organizations to identify, measure and value their direct and indirect impacts and dependencies on natural capital. See also [Biodiversity Guidance](#).

Developed by: *The Capitals Coalition*

[Quick link](#)

Analysis Materiality



Stakeholder Engagement

Why this is important

Engaging with stakeholders on biodiversity risk allows companies to assess the topics that are important to the groups they affect, and to tailor their actions and reporting accordingly. Consulting with a range of entities, both internal and external, brings new perspectives and information to a company's understanding of biodiversity risk, and helps to inform the subsequent choices they make. Stakeholder engagement also demonstrates a company's consideration of biodiversity risk as a real issue, and a willingness to collaborate in order to create change.

On stakeholder engagement:

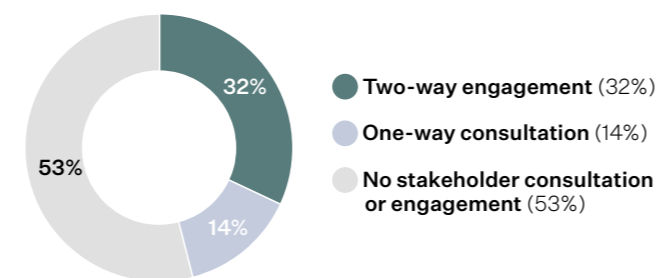
"To prepare for the development of our biodiversity strategy, we have engaged with numerous NGOs, biodiversity, wildlife, and conversation experts, and we participate in multi-stakeholder initiatives. We are using these learnings to deploy a comprehensive strategy that will result in positive impact across our value chains and the regions in which we rely on for material sourcing."

On stakeholder engagement:

"We have conducted a customer survey on the most important sustainability topics, including biodiversity. Company experts on specific materials and environmental topics, such as climate and water, were consulted and contributed to the assessment."

Findings

46% of companies have started talking to stakeholders about biodiversity risk. Comments from participants suggested they were at the early "discovery" stages of consultation, and this was often internal or with a limited number of externals. It is worth noting that in some cases the responses reflect more general stakeholder engagement on biodiversity rather than engagement as part of a biodiversity risk assessment specifically.



Stakeholder consultation and/or engagement included: NGOs, independent experts, employees, boards of directors, feedstock producers and suppliers, investors and risk analysts, regulators, customers (including B2B), local communities, and other companies

On stakeholder engagement:

"We have had the opportunity to connect and interact with several organizations that were introduced to us during Fashion Pact workshops and webinars. At this stage we haven't worked with these organizations to conduct an in-depth Biodiversity Risk Assessment that is context and fiber specific. However, the high-level/qualitative risk assessment that we have completed as an initial step to build a business case for biodiversity was conducted based on publications from those organizations."

Analysis Materiality



Expert Spotlight: Human and Indigenous rights and biodiversity

Biodiversity makes it possible to access human rights such as clean air, water, and health by supporting nature's natural ability to regulate, heal, and regenerate.

Indigenous lands account for over 80% of global biodiversity and include around 22% of the world's land. Global communities who have historically been underrepresented include those who are the strongest stewards of the land and biodiversity. Protecting the rights of Indigenous peoples and turning towards their leadership is vital to protecting biodiversity as well as protecting their livelihoods and cultural identity.

Living in a balanced relationship with the land, including concepts such as responsible forest management, regenerative agriculture, permaculture, and agroforestry, are all vital for reversing biodiversity loss. These concepts are not new innovations but rooted in practices that have existed for millennia; recognizing the origins of these concepts and ongoing stewardship of these practices is essential.

Acknowledging the rights and knowledge of Indigenous peoples is essential to any biodiversity strategy to ensure maximum impact and to protect the communities who live most directly with the land for sustenance.

Siobhan Cullen, Human Rights Strategist, Textile Exchange
Amira Dhanoa, Preferred Fiber Matrix Intern, Textile Exchange
Siena Shepard, Climate+ Strategy Manager, Textile Exchange

Story links

For further reading on the importance of Indigenous Peoples' rights and knowledge of biodiversity:
[Why traditional knowledge and Indigenous Peoples' rights must be integrated across the new global biodiversity targets](#), International Institute for Environment and Development, 2021

For further reading on the interdependence of human rights and biodiversity:
[Human Rights and Biodiversity - Key Messages](#), UNEP and OHCHR, 2021
[Policy brief No.1, Human rights-based approaches to conserving biodiversity: equitable, effective and imperative](#), UN Special Rapporteur on Human Rights and the Environment, 2021



Analysis

Materiality



Expert Spotlight: Te toto o te tangata he kai; Te oranga o te tangata te whenua

Aotearoa New Zealand is a global leader when it comes to the integration of Indigenous epistemology into the many aspects of our nation's communities and ways of life.

From an Indigenous Māori perspective, the health and wellbeing of our human population depends on that of the land and natural *taonga* (treasures). Core concepts and values that underpin this way of thinking and living are: *kaitiakitanga* (stewardship), *manaakitanga* (care), and *mauri* (life force). As a nation whose economy is deeply rooted in the value of our natural assets, food and fiber sector leaders look to these values to inspire innovative ways of managing our relationship with land and water.

At the New Zealand Merino Company, the ZQ program began as an accreditation program to recognize the ethical production of merino wool and has now evolved into an innovative platform pursuing the regenerative potential of growers across the country. The ZQ program provides a foundation to drive continual improvement in environmental performance, animal welfare, and social responsibility. The ZQ Regenerative Index (ZQRX) takes this further through recognizing the work that growers do to actively improve the environmental, animal welfare, and social outcomes.

ZQRX seeks to capture the unique value of growers, like those of Māori land collectives whose ethos is to nurture the land that gives back to them as they give to it, to be custodians of the land for future generations, and to live intrinsically connected to the land and all living things on it.

Within the ZQRX program, biodiversity outcomes concern the protection, restoration, and enhancement of the biodiversity value on farms. These practices embrace a *te ao Māori* perspective (a Māori worldview) with the understanding that these *taonga* for which biodiversity encompasses have inherent natural and cultural worth.

It is perhaps this *whakatauki* (proverb) used by one of our growers, that best captures the essence of this:

“Te toto o te tangata he kai; Te oranga o te tangata te whenua”
“While food provides the blood in our veins; Our health is drawn from the land.”

Dave Maslen and Miro Harré, *The New Zealand Merino Company*

Story links

[The Mauri Model – A decision making framework created by Dr Te Kipa Kepa Morgan to measure impact and determine sustainability over time](#)

[ZQ Regenerative Index](#)



Photo: New Zealand Merino (Flock of sheep in landscape, New Zealand)



Case Study

Levi Strauss & Co.



Case Study: Levi Strauss & Co.

[Read full case study](#)

For the global leader in jeanswear that is Levi Strauss & Co., addressing its impact on the natural world starts with a deep dive into its supply chain.

The company is working with its suppliers to support biodiversity and healthy ecosystems by placing raw materials sourcing, production and chemical management practices and effective waste management among its key priorities.

With its full biodiversity strategy currently in development, Levi Strauss & Co. has been focusing its efforts on strategic materials including cotton and manmade cellulosic fibers (MMCs). It is increasing its use of organic and in-conversion cotton, and sources 100% of wood-based fibers from Canopy's highest rated suppliers.

Textile Exchange spoke to Kathleen Lynch, Manager of Sustainability - Materials and Circular Economy, about the importance of starting with metrics to quantify and measure impact, and why now is the time to move away from an approach based on mitigating that impact towards one that builds symbiotic relationships with the systems that sustain us.

[Read the full interview.](#)



Photo: Gregoire Dubois (Insects on wildflowers)



Analysis Implementation



About this section

The Implementation Section follows the AR3T Action Framework. This Framework was developed by the SBTN, builds on the Mitigation Hierarchy and Conservation Hierarchy, and is included in the SBTN Initial Guidance for Business. The model below has been adapted by Textile Exchange and can be found on page 12 of the [Biodiversity Benchmark Companion Guide](#).

The AR3T Action Framework



Avoid

Prevent impact from happening in the first place, eliminating the impact entirely. Avoidance applies to new or potential impacts and can include categorical exclusions of particular materials, geographic areas or ecosystems, or exclusions of particular types of impacts by avoiding specific technologies, land management practices, or processes. Avoiding some kinds of impacts on 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. This is the most effective measure and most preferred measure in the AR3T Action Framework, and it can also be the most cost effective in some circumstances.



Reduce

Minimize impacts, but without necessarily eliminating them. Reduce applies to existing impacts. 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, which may involve changes in practices. Examples of reduction actions include improving eco-efficiency, production process changes, sourcing or supplier engagement (including sourcing from, or working towards, certified suppliers), and changes in product design.



Restore

Entails bringing a degraded natural system (like a watershed or peatland) back to a near-original natural condition or state of integrity. This can include initiation or acceleration of recovery, with a focus on permanent changes in state. Restorative actions may include supporting individual species recovery plans and rehabilitating degraded lands. It is important that companies avoid and reduce impacts as much as possible first, before moving onto restoration and regeneration, as outcomes from these measures are far more uncertain and take time to realize.



Regenerate

Increasing the functionality of an ecosystem, with focus on specific stocks (like soil) or services (like pollination). Regenerative actions are mainly applied in productive landscapes/seascapes and aim to increase biophysical function and/or ecological productivity by providing nature’s specific contributions to people without changing the land/sea use. Regenerative agriculture often focuses on carbon sequestration, food production, and nitrogen and phosphorus retention.



Transform

Take action that contributes to an “enabling environment” and the likelihood of success of a company’s own actions (using the other elements of the AR3T Action Framework), and success for others. Transformative actions are 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.



Photo: Gregoire Dubois (Great and Long-tailed Cormorants, Debre Zeit area, Ethiopia)

Analysis Implementation



State of play: 32% of companies are implementing remediation measures (regenerative and/or restorative) in support of biodiversity. The most reported measure (80%) was the use of sustainability standards. 33% of companies are investing financially or in-kind. However, from details provided, investments ranged widely from significant landscape funds to CSR and conservation schemes, to supporting farmers and the use of standards.

Areas for improvement: Transitioning to biodiversity “positive” practices will take time, commitment, collaboration, and investment. Looking strategically at opportunities for your company to partner and collaborate will help accelerate, replicate, and scale the right biodiversity outcomes and impacts.

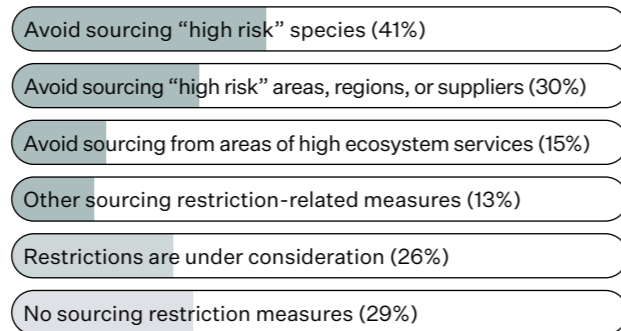
Avoidance measures

Why this is important

Avoidance measures include restrictions to the sourcing of specific materials and the use of specific production techniques. Avoidance policies are often the most effective approach and can have the highest chance of success. Avoidance 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. In the Benchmark, avoidance actions are divided into sourcing restrictions and production restrictions.

Findings: Sourcing restrictions

By far the most frequent response was having formalized policies relating to the avoidance of sourcing “high risk” species (41%). This nearly always involves policies not to source [CITES-listed](#) species or those classified as threatened on the [IUCN Red List](#). Often this was included in animal welfare policies. A smaller number of companies restrict the use of specific materials (e.g., fur, all exotic skins, down, mohair, angora).



Other common responses (30%) related to policies to avoid sourcing from “high risk” areas (including HCVs: areas of high conservation value), regions, and suppliers. Measures reported include forestry policies, such as eliminating sourcing from forests that are old-growth, endangered, illegally logged, or recently converted. Some companies have made [CanopyStyle commitments](#) and some source only FSC-certified products or other certified materials as a way of avoiding biodiversity risks. (The sourcing of certified materials is assessed directly in the Reduce section). Some restrict sourcing from specific countries or landscapes (e.g., prohibition of sourcing leather from the Amazon biome).

15% of companies have formalized policies to avoid sourcing from areas of high ecosystem services, including multiple companies with policies not to source from endangered species’ habitats, but it is unclear how this is determined. Some policies have specific language regarding sourcing from areas of cultural importance and/or related to land use rights.

Analysis Implementation



Expert Spotlight: Moving fashion from being part of the problem to the solution

Tell us about how your work connects to biodiversity and your unique contribution to this area.

Global Fashion Agenda’s (GFA) vision is of a thriving fashion industry that creates prosperity for people and communities while working within planetary boundaries, reversing its impact on climate change and protecting biodiversity.

Our mission is to guide and mobilize the fashion industry to take bold action on sustainability.

We do so by convening the industry and its stakeholders, facilitating precompetitive collaboration to scale and accelerate impact reduction and conducting research to pinpoint and prioritize areas of action. By sharing insights and tools broadly, we aim to educate and empower more informed and better decision making.

Examples of how GFA contributes to protecting biodiversity:

- Biodiversity was spotlighted in our CEO Agenda
- Demystifying the topic, for instance through our explainer video and masterclasses for various audiences, such as media
- Presenting innovative solution providers in our Innovation Forum that are paving the way for industry-wide transformation by supporting and preserving biodiversity worldwide.

Tell us about the connections between your work in biodiversity and the textile industry.

Sustainability is a delicately webbed interplay of different factors, and at its core, a mission to protect this planet and all its lifeforms. Biodiversity loss is a corresponding disaster that takes place globally, risking utter devastation imminently if we fail to preserve it. Each and every ecosystem is paramount to supporting our planet and the life that occupies it. Without it we risk losing the very components that ensure our existence, such as water, food and essential resources that we utilize every day.

The profound impact fashion has on global biodiversity is undeniable. It plays a role in biodiversity loss at every stage of the supply chain, right from the production and processing of textiles to the packaging of clothing and the transportation of the garments and their subsequent wear, care, and disposal. The industry must therefore rethink its practices in order to stop contributing to major biodiversity loss. In order to address the crisis, we must reimagine resource use, and look towards innovative, nature-based solutions that preserve and support our ecosystems and biodiversity.

Holly Syrett, Senior Sustainability Manager, Global Fashion Agenda

Story links

- [What do we mean when we talk about biodiversity?](#)
- [Fashion solutions to protect biodiversity](#)
- [Watch explainer video](#)





Expert Spotlight: How the circular economy tackles biodiversity loss

Tell us about your work in biodiversity and your unique contribution to this area.

With more than 90% of biodiversity loss attributable to the extraction and processing of natural resources, our extractive, wasteful, and polluting linear economy is increasingly recognized as one of the main underlying causes of the biodiversity crisis today. To halt and reverse biodiversity loss and create an economy that can work in the long term, we need to transform the way we make and use products and grow food.

In the recent report, *The Nature Imperative: How the circular economy tackles biodiversity loss*, the Ellen MacArthur Foundation outlines how applying the three principles of the circular economy across sectors can help tackle biodiversity loss: eliminating waste and pollution to reduce threats to biodiversity, circulating products and materials to leave room for biodiversity, and regenerating nature to enable biodiversity to thrive. Industry deep-dives on the built environment, fashion, and plastic packaging sectors highlight the circular opportunities which players in those fields can turn to in order to generate economic and biodiversity-related benefits, and recommendations on how both businesses and policymakers can help accelerate this shift are also provided. The circular economy opportunities for the food sector are explored in more detail in another paper, *The big food redesign: Regenerating nature with the circular economy*, with an emphasis on the Fast-Moving Consumer Goods (FMCGs) sector and retailers employing circular food design to create a food system that benefits business, people, and the environment.

Tell us about the connections between your work in biodiversity and the textile industry.

The deep-dive presents three circular economy opportunities to help tackle the sector's impact on biodiversity: keeping clothes and fibers in use, shifting to safe chemistry and designing out microfiber release, and producing materials regeneratively. It also provides inspiring case studies of companies already applying these levers, and outlines a set of recommendations to help businesses make this transition with tangible examples to help practitioners get started.

Cindy Venho, Research Analyst, Ellen MacArthur Foundation

Story links

[🔗 The Nature Imperative: How the circular economy tackles biodiversity loss](#)

[🔗 The big food redesign: Regenerating nature with the circular economy](#)



Photo: Gregoire Dubois (Coral reef, Ras Mohammad National Park (Sharm El Sheikh), Egypt)



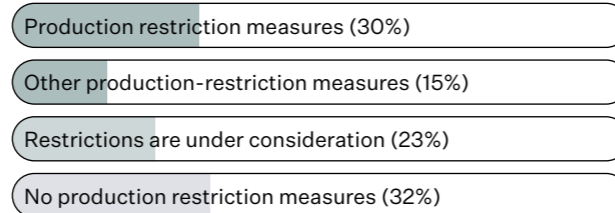
Analysis Implementation



Avoidance measures

Findings: Production techniques

Most commonly (32%), companies reported not yet having a formalized policy restricting “high risk” production techniques to avoid impacts on biodiversity. However, nearly as many (30%) did report having a formalized policy. Of those reporting restrictions in place, many of the formalized policies mentioned were related to manufacturing or to broader environmental restrictions that also reduce impacts on biodiversity. 23% of companies reported that production-related restrictions are under consideration. In a few cases, companies also mentioned downstream activities such as reducing impacts from textile processing, leather tanning and leather manufacturing, and banning certain activities like the sand blasting of denim. Multiple companies mentioned sourcing certified materials as a means of reducing production-related impacts.



Production restrictions reported include:

- Elimination of hazardous materials including pesticides, process chemicals, silver ions, biocides, and/or dyes
- Improved water usage, management, and treatment practices
- Improved energy efficiency
- Sustainable construction
- Eliminating the use of genetically modified organisms (GMOs)

On sourcing restrictions:

“We have a permitted sourcing countries list which is signed by our suppliers covering risk regions. Our company is committed to eliminating deforestation and we require our suppliers to ensure that hides sourced from Brazil are not from farms involved in any form of deforestation in the Amazon biome.”

On technique restrictions:

“We have an RSL, including the ZDHC MRSL, and have a chemical policy in place. We also work actively on improving wash recipes of our jeans with our suppliers and work with certifications like GOTS and GRS as well to minimise chemical impact.”

On sourcing restrictions:

“We continue to ensure that all plant and animal-based raw materials in our supply chain come from legal, verifiable sources at a minimum, closely adhering to guidance issued under CITES, the IUCN Red List, and other relevant national and international conventions. We continue to ensure our viscose and other wood-pulp based materials come from supply chains that avoid sourcing from ancient and endangered forests, using the CanopyStyle methodology and/or FSC certification. Furthermore, we do not work with suppliers that source leather from farms involved in any form of deforestation, such as in the Amazon Biome, and enforce this principle through contractual clauses which include traceability measures.”

Analysis Implementation



Expert Spotlight: The ZDHC Roadmap to Zero Programme implements Sustainable Chemical Management to reduce the negative impact of the fashion industry on biodiversity

Tell us about the connections between your work in biodiversity and the textile industry.

Apparel and footwear supply chains are linked, as are all other manufacturing processes to degrading soils, water pollution, and disrupting natural ecosystems; all of which can decrease biodiversity.

Improper disposal of waste or (waste)water treatment, and the failure to replace harmful chemicals with safer alternatives, can cause systemic pollution of soil and water, threatening entire species leading to a loss of biodiversity and damaged ecosystems.

Tell us about your work in biodiversity and your unique contribution to this area.

ZDHC’s suite of tools and guidance are uniquely positioned to enable brands and retailers in the fashion industry to implement sustainable chemical management best practice across the value chain. These practices are fundamental to reducing the impact of toxic chemicals on the environment, which in turn impacts biodiversity.

Scott Echols, Senior Director, Roadmap to Zero Programme, ZDHC

Story links

- [ZDHC Roadmap to Zero](#)
- [Video](#)
- [Impact Report](#)



Analysis Implementation



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 implies that greater relative effort is warranted to reduce impacts of greater magnitude, or which affect areas of high biodiversity significance. This includes making changes to reduce impacts from existing practices on native species.

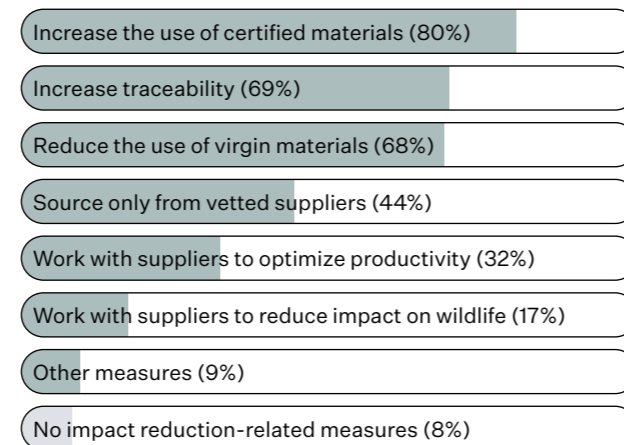
On reduction measures:

“We are working towards:

- reducing the volumes of our collections (and therefore the uptake of raw materials)
- achieving 25% of sustainable products across our lines by 2025 (sustainable products are so because they are certified/come with internationally recognized sustainability certifications)
- moving from a “sustainable products” approach to a “sustainable raw materials” approach (to stick to the goal set by the Fashion Pact - 25%).”

Findings

Nearly all respondents (92%) reported taking at least one action to reduce sourcing impacts on biodiversity. The most common reduction action is to increase the uptake of certified materials (80%), and there are a great variety of certification programs in use which address biodiversity-related risks through different approaches, some more directly than others. The use of certified organic cotton and other cotton standards were the most cited, followed by certified forestry inputs for manmade cellulosics and the use of wool standards.



On reduction measures:

“As well as sourcing recycled fibers whenever possible, we are piloting fiber to fiber recycling technologies to recycled unused fabrics into new yarns that can be used in our collections. Our aim is to maximize the uptake of recycled fibers while addressing the end-of-life of overstock materials. We are committed to increasing the uptake of better cotton alongside organic and fair trade. Our designers are aware of the sustainability standards that should be met when sourcing materials, standards that have been formalized in a document listing preferred material certifications and sources.”



Photo: Chetna Organic (Field bunding to prevent soil erosion, Odisha, India)



Expert Spotlight: Responsible Animal Fiber Standards and biodiversity

The Responsible Animal Fiber (RAF) Standards comprising the Responsible Wool Standard (RWS), Responsible Mohair Standard (RMS), and Responsible Alpaca Standard (RAS) all contain a module addressing biodiversity. The desired outcome of this module is that farmers understand what will impact the biodiversity of their land and have a strategy to protect and improve it over time. Specifically, all the standards contain requirements to ensure good practices for biodiversity, summarized as follows:

- Biodiversity Management Plan (BMP): An implementation plan to conserve, restore, and enhance biodiversity on and around the farm.
- Forage resources are monitored, and livestock numbers and grazing are managed to avoid negative impacts and encourage positive biodiversity outcomes.
- Invasive alien species of flora or fauna are monitored and managed with measures taken to eradicate these from natural ecosystems.
- Livestock-wildlife conflicts are minimized, with the population and behavior of predators monitored.
- Hunting, fishing, or gathering protected, threatened, or endemic plant or animal species is prohibited.
- Lethal control of predators is only permitted as a measure of last resort, if permitted legally and when carried out humanely with no traps, snares or poison permitted.
- Deforestation and the conversion of natural ecosystems to agricultural land is prohibited, and native vegetation must be protected.
- Protected Areas or Key Biodiversity Areas are not degraded or significantly impacted by production activities.
- Aquatic ecosystems and water bodies are conserved and enhanced.

Next steps: The standards on their own are robust tools to mitigate biodiversity risk and to support improvements over time. In addition, there are opportunities for leveraging the infrastructure that is in place as a result of the certification. Most RAF farm certification is done through the group model. In this approach each group has a centralized management and coordination system that is responsible for training group members and ensuring that requirements are met. While groups vary in size and location, they all have this administrative infrastructure and resources suitable for their group and region. This can be used as a foundation for additional engagement beyond the requirements for certification.

Collection of spatial data has recently been implemented as part of the Farm Questions that are submitted annually by each RAF-certified farmer. Leveraging relevant contextual geospatial data sets will allow farm groups to deepen their understanding of biodiversity hotspots and priority areas within their group member's land. This gives the ability to prioritize protection and restoration interventions across the group, as well as informing ongoing training and extension support.

Hanna Denes, Climate+ Strategy Senior Manager, Textile Exchange

To learn more or to explore opportunities for connecting with RAF certified farmers and farm groups to deliver biodiversity impact contact: ResponsibleWool@TextileExchange.org



Photo: BKB South Africa (Angora goat kid, South Africa)



Analysis Implementation



Expert Spotlight: Creating a Wildlife Friendly™ World: Sustainable sourcing that benefits biodiversity

Tell us about your work in biodiversity and your unique contribution to this area.

The Wildlife Friendly Enterprise Network (WFEN) conserves threatened wildlife while contributing to the economic vitality of rural communities. Our mission is to protect wildlife in wild places, and on agricultural and private lands in-between, by certifying enterprises that assure people and nature coexist and thrive.

Our work in partnership with farmers, herders, ranchers, and harvesters around the world helps to ensure wildlife corridors through working lands. Use of wildlife-friendly practices on these lands enables resilience for biodiversity while contributing to the SDGs and climate goals.

Tell us about the connections between your work in biodiversity and the textile industry.

We empower companies, consumers, and local communities to catalyze change by providing incentives for the protection of biodiversity around the world. We work with brands and suppliers, including those in the textile/apparel sector, to improve outcomes for biodiversity by advising on sourcing and production practices. Our work uses the power of the marketplace incentivizing producers and rewarding implementation of science driven standards while celebrating these unique stories of coexistence ensuring that wildlife not only survives but thrives in working landscapes.

Julie Stein, WFEN Executive Director and Co-founder

Story links

[Wildlife Friendly Enterprise Network](#)



Photo: Gregoire Dubois (Guanaco, Torres del Paine, Chile)



Analysis Implementation



Remediation measures

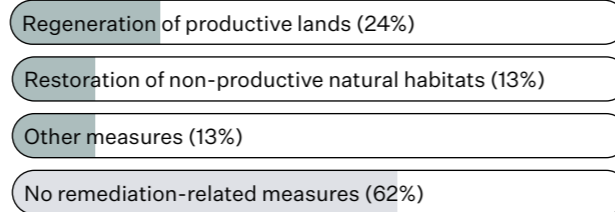
Restorative and Regenerative Measures

Why this is important

Actions taken to remediate (restore and regenerate) biodiversity are necessary because, globally, humans have exploited nature (the biosphere) [beyond the safe operating space for humanity](#). Natural resources are being extracted from the environment at a greater rate than 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 nature, humanity will not be successful in “bending the curve” of biodiversity loss. Native species should be prioritized in these practices in order to facilitate the protection of global biodiversity.

Finding

A large majority of companies (62%) are not presently implementing restorative or regenerative measures to remediate biodiversity impacts. Some (24%) are working with their supply chains to implement these practices on productive lands. 13% are working to restore non-productive habitats at their sourcing origins, such as through invasive species removal programs and restoration of natural forest.



Other remediation measures reported include:

- Collaborative initiatives at the landscape level
- Engaging communities in conservation action
- Developing and managing Funds or foundations focused on regeneration
- Choosing suppliers that use restorative or regenerative practices
- Reducing the impacts of retail stores and processing locations on biodiversity, such as through the creation of habitat
- Preparing for the launch of regenerative projects

Some respondents are implementing multiple types of remediation measures.

On restorative measures:

“Invasive alien plants (IAPs) are widely considered as a major threat to biodiversity, human livelihoods and economic development. As a result of their high diversity and far-reaching distribution, they are extremely difficult to control. We combat weeds by implementing control programs, managing natural areas to maintain healthy vegetation (weeds generally spread into disturbed areas) and reducing sources and avenues of seed dispersal.”

On regenerative measures:

“We launched a Regeneration Fund to support a portfolio of carbon insetting projects to directly tackle the environmental impact of our operations, starting with wool producers in Australia. The insetting projects will work to promote biodiversity, restore ecosystems and support livelihoods”

Analysis Implementation



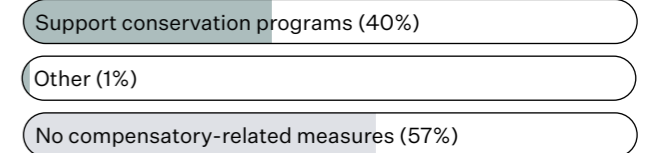
Compensatory or Proactive Conservation Measures

Why this is important

It is important that companies avoid and reduce impacts as much as possible first, before moving on to restoration and regeneration, as outcomes from these measures are far more uncertain and take time to realize. To achieve biodiversity targets, companies may also need to implement conservation measures designed to compensate for “residual impacts,” such as [biodiversity offsets](#) or [target-based ecological compensation programs](#) (which may involve restoration or regenerative actions). A company’s conservation programs may or may not be explicitly linked to its residual impacts.

Findings

Most companies (57%) are not implementing compensatory or proactive conservation measures within or beyond their own supply base, but 40% of them are. Of those that are, the nature, scale, and location of the programs were not explicitly linked to residual impacts in most cases (62%).



Reported measures that are explicitly linked to residual impacts include:

- Establishment, protection, and management of conservation areas
- Collaborative initiatives to restore and protect landscapes and support communities (especially related to water and forests)
- Offsetting emissions and other impacts, including through nature-based offsets
- Creation and management of targeted Funds
- Supporting sustainable livelihoods and the policies enabling them
- Protection of cultural heritage

On compensatory measures:

“While our company continues to prioritize avoiding impacts and reducing its footprint across the supply chain, we also offset remaining annual emissions in Scope 3 of the GHG Protocol, primarily through verified best-in-class REDD+ projects that conserve critical forests and biodiversity, and support the livelihoods of local communities.”

Reported measures that are not explicitly linked to residual impacts include:

- Financial support for biodiversity work through initiatives including 1% for the Planet, The Lion’s Share Fund, and others
- Financial contributions to NGOs working to protect particular species or ecosystems that are meaningful to the company
- Tree planting or restoration activities not located near sourcing areas
- A few companies reported their offsetting as not linked to residual impacts

On compensatory measures:

“We supported the permanent protection of 80,000 hectares of biodiverse wetlands and floodplains in a region with intensive agriculture. This will help to restore cultural heritage sites and medicinal food plants; transfer ownership to the local indigenous community, unlock perpetual conservation funding, and protect the habitat of hundreds of species.”



Analysis Implementation



Expert Spotlight: Changing lives and protecting oceans through plastic recycling

Tell us about your work in biodiversity and your unique contribution to this area.

Plastics For Change has developed an ethical sourcing platform to create sustainable livelihoods for the urban poor, while transitioning the industry towards a circular economy. The deal process and mobile platform provides waste pickers with access to fair and consistent income opportunities.

Similar to fair trade agriculture, the platform creates transparency and accountability from the base of the supply chain to the store shelf. This results in more efficient shared-value chains and higher quality recycled plastic.

Plastics For Change provides expertise to help catalyze brands and manufacturers to replace the use of virgin plastic with ethically sourced recycled plastic, thereby immediately improving the social and environmental impact of their products.

Tell us about the connections between your work in biodiversity and the textile industry.

Plastics For Change set up plastic recovery centers across the coastal belt in India, as this is the last point to stop plastic from entering the ocean. We are the world's first World Fair Trade Organization (WFTO) certified plastic recycler and Ocean Bound Plastic (OBP) certified company. The Plastics For Change Foundation was also set up to provide holistic development opportunities in the communities.

Andrew Almack, Founder, Plastics For Change

Story links

[Plastics For Change](#)

[World Fair Trade Organization](#)

[Ocean Bound Plastic Certification](#)



Photo: Plastics For Change (Beach clean-up, India)



Analysis Implementation



Expert Spotlight: Biodiversity benefits through the holistic vision of Chetna

Chetna Organic is the non-profit arm that invest in innovation that may not be immediately monetized by its farmers' associations of growers across rainfed regions of India. Agroecology and fair trade are part of Chetna's foundation, and biodiversity is deeply embedded. Here's how:

- Seed security is a top priority for Chetna and links to food security, health, and trade – as well as biodiversity. Chetna invests in seed-saving and women-led seed trading, prioritizing indigenous, often more nutrient-rich varieties, such as local millets over wheat and other cereals. Home kitchen gardens and school vegetable gardens for lessons and lunches are other ways Chetna adds to the food and nutrition security basket as well as vocational skills for communities.
- Multi-cropping and sustainable land use management are usually considered as barriers / challenges for efficient commodity trading that depends on large scale production of single crops. Chetna has always insisted they are a food and fiber cooperative and that a commodity is an artificial concept that will eventually lead to soil degradation and therefore efficiencies of scale have a limited life over an economy of scope. The biodiversity benefits of multi-cropping and rotation of crops and agroforestry especially in the commons (including nature strips with native trees) create co-benefits for carbon sequestration, soil health and long-term productivity which is good for business. Orchestrating a landscape-level approach creates efficiencies by allowing for aggregation at harvest as well as a joined-up view of biodiversity action.
- Livestock, local economies and culture: The shortcomings of the Green Revolution are amplified by the White Revolution in India, with compromised native and highly resilient cattle breeds affecting ecology, local economies and culture. Chetna is focusing on promoting local and stress-resilient livestock breeds among women farmer groups for production of bio-inputs, collection and use of Non-Timber Forest Produce (NTFP) as enterprise models.
- Social inclusion is another priority for Chetna, and one that is fundamental to biodiversity. Chetna works with Adivasi (tribal) farmers and leverage governmental, bilateral and intergovernmental schemes for women's self-help groups (SHGs). Through the SHGs, women farmers are now investing in wasteland development and water harvesting, another critical biodiversity as well as water security issue, especially with a changing climate and unpredictable monsoon.
- Systems change underpins Chetna's progressive business model. Big sustainability threats, such as climate change, biodiversity loss, and social justice are starting to merge in our understanding of a system change we do not want, and there must be common solutions that deliver co-benefits across all risk areas.

Chetna Organic brings holistic thinking into its production model and for years it has been difficult to monetize in the business-as-usual paradigm. The investments and proof-of-concept Chetna has been able to make over the past 10 years, with its progressive business partners, funders and researchers, now need to be unlocked and replicated for more to benefit.

Arun Ambatipudi, Executive Director, Chetna Organic



Photo: Chetna Organic (Grain preparation, Odisha, India)



Analysis

Implementation



Expert Spotlight: Regenerative Production Landscape: A program for people, nature, and economy

Chhindwara district in Madhya Pradesh is an ecologically important region which is part of a wildlife corridor that connects two key Tiger Reserves in Central India. It is also home to small and marginal farmers for tribal communities. Promoting sustainable agriculture practices are critical to maintaining the land use and forest cover. Over the last five years, Laudes Foundation and WWF India have worked towards creating a positive impact on the region's ecology and building resilience of communities by supporting organic cotton production with 6,000 smallholder farmers in the region and connecting them to companies such as Neutral, a market leading producer of sustainable apparel and accessories in the B2B-space.

Having committed buyers such as Neutral during the transition phase to organic helped in encouraging farmers to adopt organic cotton farming practices and also improved livelihoods of these farmers. Now with our move to a landscape approach, there is an opportunity to develop business models across commodities that contribute to conserving natural resources such as soil, water and biodiversity while empowering the producers who are lowest in the supply chain so that they can get a fair value for their efforts. This holistic approach will shift from a commodity focused lens to an area-based sustainable agriculture model, bring companies together to source responsibly and make inclusive decisions with communities and producer organisations.

Way forward: Building on this work, Laudes Foundation, IDH The Sustainable Trade Initiative and WWF India, launched the "Regenerative Production Landscape: People, Nature, Economy" to scale regenerative and restorative farming principles in Madhya Pradesh, India. It is a first step towards a reimagined future for small scale farmers and landscape conservation. The three organisations plan to use innovative landscape thinking to create system level change that will foster an agricultural ecosystem where:

- a locally driven, multi-stakeholder governance structure drives market transformation of commodity value chains like cotton, food crops, fruits, and vegetables;
- producers grow agri-commodities using natural and regenerative farming principles that restore natural resources and reduce emissions from farming systems;
- smallholder farmers and communities thrive, through improved economic stability, enhanced livelihoods and greater participation in decision making;
- government institutions enable sustainable and green growth;
- businesses are able to source responsibly while creating inclusive supply chain relationships;
- conservation of the landscape and its biodiversity is enhanced, ensuring a sustainable and resilient future for people and nature.

Litul Baruah, Program Manager, Laudes Foundation | Jasmer Dhingra, Senior Program Manager, IDH, the Sustainable Trade Initiative | Murli Dhar, Director, Sustainable Agriculture Program, WWF India

Story links

[Powering a regenerative production landscape](#)



Photo: Joseph Vattakaven @ WWF India (Sunset over Kanha National Park, Madhya Pradesh)



Analysis Implementation



Industry Transformation

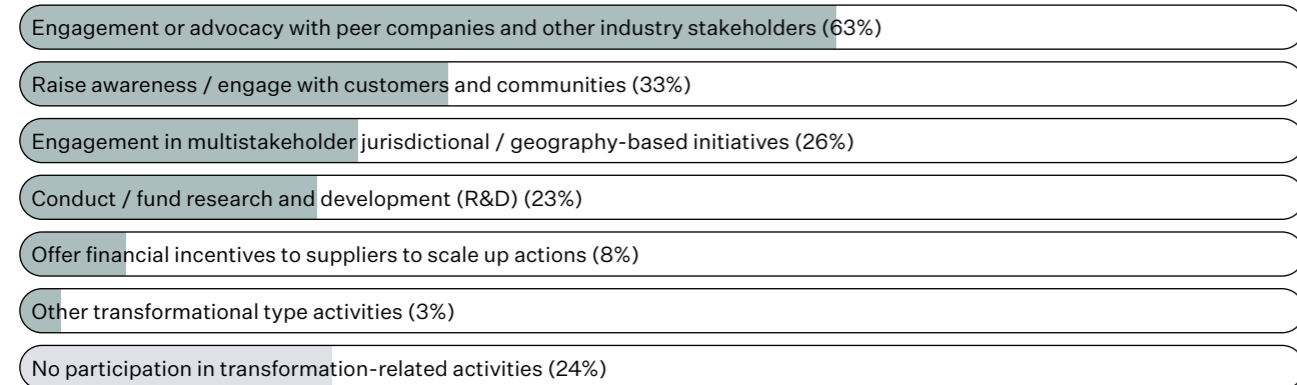
Why this is important

Science has shown that to avoid irreversible climate change and biodiversity loss, we need to transform the way we interact with the living world, including our food and fiber production, land and ocean use, infrastructure and the built environment, energy, and extractives. One company cannot succeed in isolation. Coming together to achieve “transformational change” at the system level is needed to meet global and societal sustainability goals. Companies working together can play an important role in catalyzing such change.

Findings

Many Benchmark participants (63%) are engaging with peer companies and industry stakeholders on the topic of biodiversity. It is promising that 26% of companies are already engaging in multistakeholder geography-based initiatives, as this is such an integral aspect of ensuring global biodiversity outcomes. Nearly a quarter (24%) are conducting and/or funding research and development or other forms of innovation. Potentially transformative activities range from developing new materials and dyes that can reduce biodiversity impacts to publishing tools, and research that enable change for the entire industry.

Least commonly, 8% are providing financial incentives to producers or suppliers to scale up actions to reduce biodiversity risk. This can only be done once there is transparency, and long-term commitments are often needed to make these changes viable for producers. Impact incentives are another approach to support change when transparency does not yet exist.



On transformation:

“We are continuing to engage with scientific, academic and industrial partners to create tools, reports and insights that can be made freely available to the general public in order to drive change. We also promote ‘natural capital accounting’, which calculates the stocks and flows of natural resources. In addition, we will work to create open-sourced, operational tools for use by the industry as a whole.”

On transformation:

“We are pursuing further development of investments in recycling technologies to widen scopes of usable materials from post-consumer recycling. Our vision is to make cellulose fiber recycling as common as paper recycling, therefore we have implemented a sustainability target to offer viscose, modal and lyocell staple fibers with up to 50% post consumer recycled content on a commercial scale by 2025.”

Analysis Implementation



Expert Spotlight: Business can and must contribute to both halt and reverse the loss of nature

Tell us about your work in biodiversity and your unique contribution to this area.

World Business Council for Sustainable Development (WBCSD), a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world, has more than 15 years of experience in the business and biodiversity space. As set out in WBCSD’s Vision 2050, global progress on tackling the challenges of climate, nature loss, and inequality remains significantly off track. Through our Nature & Nature-based Solutions project, we respond to member needs on scaling up action on nature.

The global goal for nature was launched in May 2021 by a number of organizations including WBCSD. It sets a north star for all actors to aim for a nature-positive world by 2030. The Science Based Targets Network (SBTN) is working to define what the business contribution is to Nature Positive. To guide action in a consistent and credible way, we need a shared understanding of what nature-positive means for business. WBCSD convened a series of multi-stakeholder dialogues, culminating in six “building blocks” to help business raise the level of ambition and direct aligned, meaningful action across value chains to contribute towards the global goal for nature. In this way, we can help member companies to get ready and be prepared to adopt the SBTs for nature as soon as they launch. Companies that are new to their nature journey are also supported through the We Value Nature campaign, which helps companies to identify their current barriers and means to overcome them, such as through training materials developed with and for businesses to introduce them to nature and first assessments.

Tell us about the connections between your work in biodiversity and the textile industry.

Land-based sectors, through agricultural and forestry supply chains, have been identified as one of three priority value-chains for action due to their potential for nature-loss through pressures on land-use change and pollution especially. However, done well, land-based sectors have the opportunity to be solution providers for people, climate and nature.

Tom Williams, Director, Nature Action and Water, World Business Council for Sustainable Development (WBCSD)

Story links

- [Nature Action](#)
- [We Value Nature campaign](#)
- [Global Goal for Nature](#)



Analysis

Implementation



Expert Spotlight: Protecting biodiversity through water stewardship

Tell us about your work in biodiversity and your unique contribution to this area.

Freshwater, biodiversity, and climate are inextricably linked, but there are still many opportunities to better connect corporate action on these highly connected subject areas. The Freshwater Living Planet Index shows an average decline of 84% since 1970 (WWF, 2020), signaling a catastrophic trend across the globe. At the same time, global textile demand is increasing at an unprecedented rate, with water use and impacts being growing areas of concern.

Whilst intensive water use in textile value chains has the potential to negatively impact biodiversity, those who follow a water stewardship approach have the potential to halt and even reverse this worrying trend.

Water stewardship is the use of water that is socially and culturally equitable, environmentally sustainable, and economically beneficial, achieved through a stakeholder-inclusive process that involves both site- and catchment-scale actions. It requires water users to take responsibility for their own water use and impacts, and to work with their peers and stakeholders to collectively address 'shared water challenges'.

As a result, any responsible water steward will consider whether they are impacting biodiversity through their organization's owned operations, or through their supply chain—and, if they do, take action to address this, working with others in their catchment, as part of their water stewardship plan.

The International Water Stewardship Standard (AWS Standard) provides an approach that can help water users connect the dots between their different water-related activities through its five outcomes: good water governance, sustainable water balance, good water quality status, protected important water-related areas, and access to safe water, sanitation, and hygiene. Leaders in this space are already recognizing the benefits that come from a holistic approach, connecting company activities to the communities and environments that they work in through collaboration.

Sarah Wade, Sector Lead, Alliance for Water Stewardship

Story links

[Alliance for Water Stewardship](#)

[AWS Standard](#)

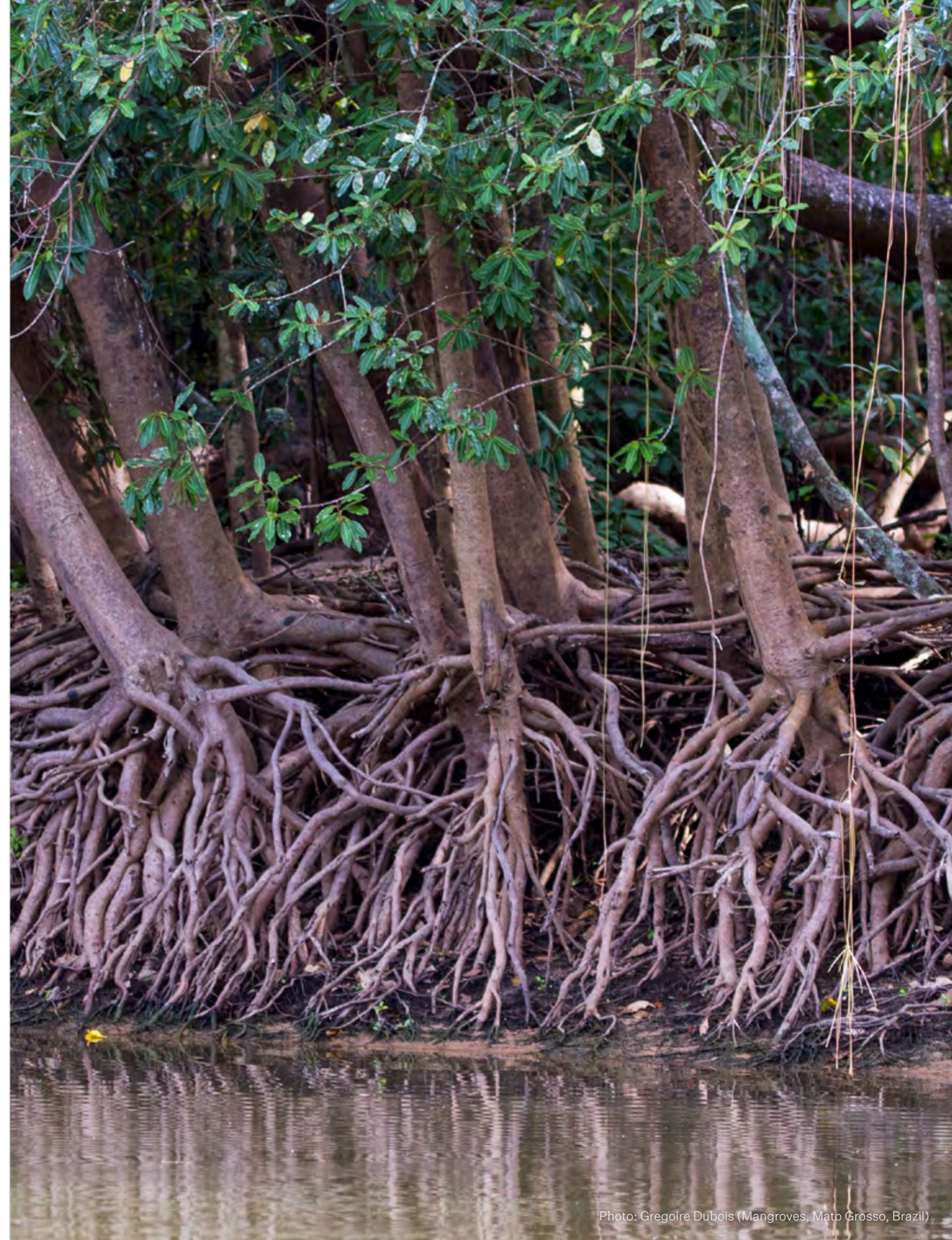


Photo: Grégoire Dubois (Mangroves, Mato Grosso, Brazil)



Analysis

Implementation



Investment

Why this is important

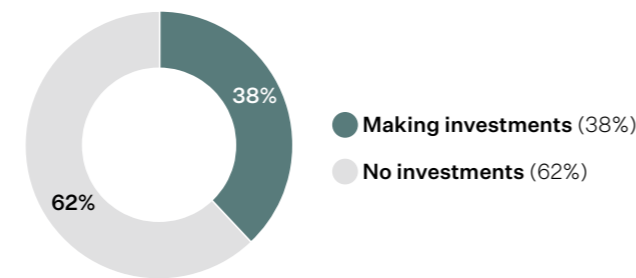
Investment is important to scale and accelerate action and improvements, and is often needed to build capacity and enable technical and operational execution of a biodiversity strategy or program. As the business model or market for biodiversity “beneficial” products and services matures, the onus of responsibility should shift from “development” investments to business and marketplace rewards and incentives. However, whether it is philanthropic or market-based, 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 geography and/or raw material risk and opportunities presented. Collaborative investment, such as through multi-stakeholder initiatives and private-public partnerships, can be effective to address issues which are beyond the direct influence of individual companies.

Investments reported include:

- **Raw materials standards and initiatives:** Sustainability programs and standards, Organic Cotton Accelerator, farmer training, nominating long term supply partners, sourcing coalitions
- **Innovation:** research and development (R&D), technology, traceability
- **Partnerships:** NGO-partnered (e.g., WWF), The Fashion Pact, CanopyStyle, Fashion for Good
- **Implementation projects:** Biodiversity monitoring, restoration and regeneration, sustainable livelihoods, inseting, offsetting, safeguarding and protection of forests and watersheds
- **Corporate funds, philanthropic spending, and CSR:** 1% for the Planet, The Lion’s Share, Ocean Family Foundation, WaterAid.

Findings

38% of participating companies have begun to invest in biodiversity in one form or another. Investment is both in-kind and financial. Companies reported dedicating funds to one fiber type or project associated with a geographical area. Investment focused on projects within a company’s own supply chain or beyond. Funding can be made by single companies or aggregated through coalitions. A few companies have publicly announced regenerative and restorative funds, while others chose not to reveal investment figures. Several companies chose not to respond to this question due to confidentiality.



On investment:

“We are investing 5M euros from 2021–2025 on projects in wool, cotton, cashmere and leather. Amongst other things, these grants will support ground-level activities that work to improve biodiversity outcomes - both ‘on-farm’ and in surrounding ecosystems, with the goal to transform 1 million hectares of farms/rangelands. In addition to this, we invest in projects that have dual climate and biodiversity benefits, and will protect an additional 1 million hectares outside of our supply chain landscapes through such programming (primarily REDD+). Individual brands also run numerous programs with direct biodiversity impacts.”

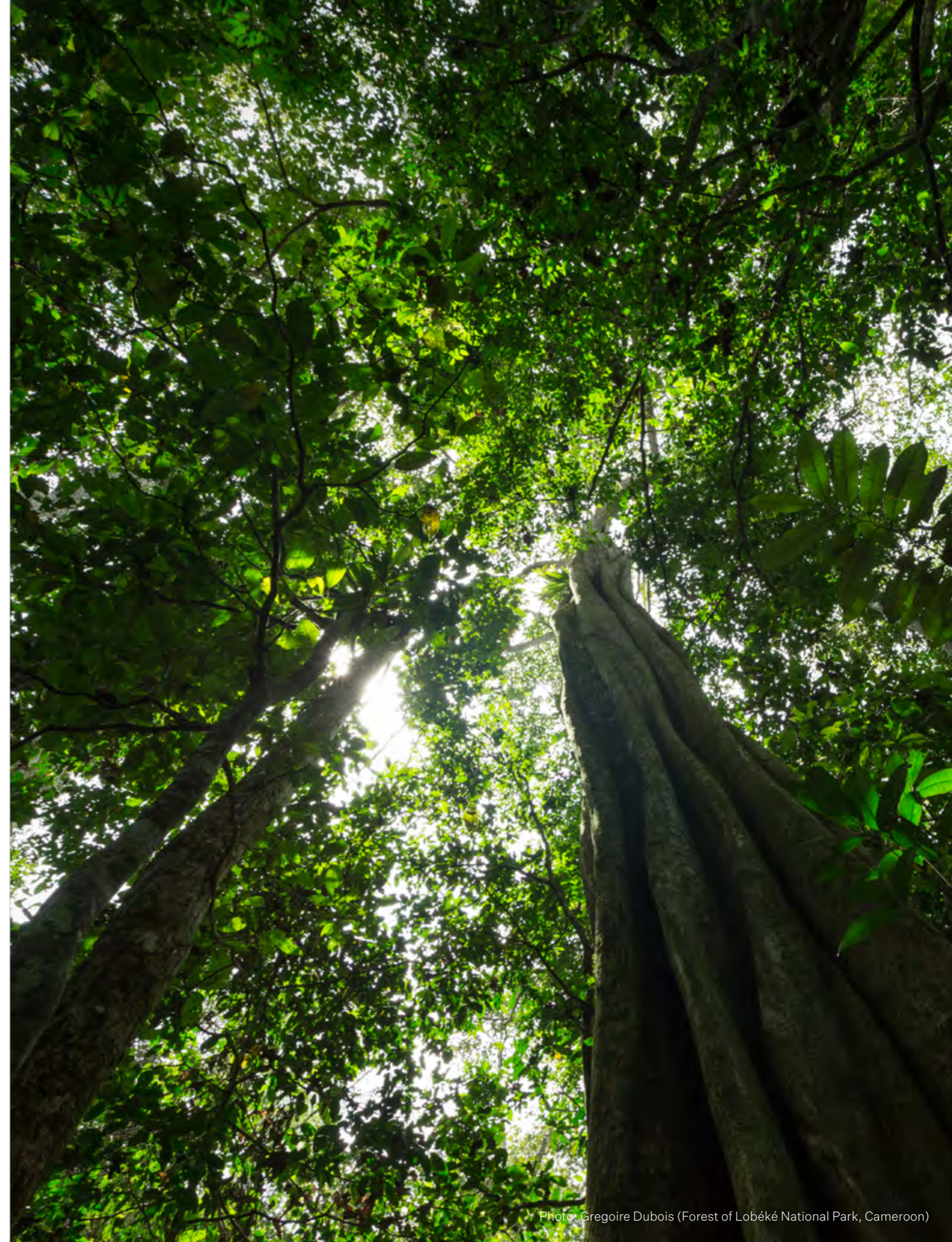


Photo: Gregoire Dubois (Forest of Lobéké National Park, Cameroon)

Analysis

Implementation



Expert Spotlight: Outdoor industry conservation collaboration proactively helps to reverse nature loss and climate change

Tell us about your work in biodiversity and your unique contribution to this area.

There is an increasing urgency and awareness of the double threat that our world currently faces: climate change, and the loss of biodiversity. These two issues are intrinsically linked, and both are of enormous importance to wildlife, nature, people, and the future of our planet, and both require urgent action on a global scale.

The European Outdoor Conservation Association (EOCA) is a nature conservation charity, working within the European outdoor industry, funding a broad range of conservation projects across Europe and beyond. It raises funds through membership fees, 100% of which go into the conservation projects the association funds. Any company operating within the sector can join EOCA, which has funded over four million euros (US\$4.6 million) of conservation projects around the world to date. By working together, companies can have a much bigger impact than by all working separately.

Connecting biodiversity and climate action for the textile industry.

The association's current focus is called 'Wild for Nature: EOCA's Landscape Legacy Project'. This means that EOCA will ensure that the outdoor industry focuses its funding on addressing the double threat of biodiversity loss and climate change. By conserving, restoring and protecting healthy habitats, the nature conservation projects funded by the association will help protect against loss of species and ensure that the habitats are able to draw down and store carbon, therefore helping to address the climate emergency.

Tanya Bascombe, General Manager, European Outdoor Conservation Association (EOCA)

Story links

[European Outdoor Conservation Association](#)

[Wild for Nature](#)



Photo: European Outdoor Conservation Association (Identifying lynx tracks, Hnutí DUHA, an environmental movement in the Czech Republic)





Expert Spotlight: Revolutionizing the market through Impact Incentives

What are Impact Incentives?

Impact Incentives refer to the certificates that are traded in support of a sustainability claim. The certificates are issued when a set of sustainability criteria have been confirmed to have been met, and the physical goods and the Impact Incentives are traded separately from each other. The Impact Incentive certificates represent a specified quantity of verified material that has been produced but has not been physically traded as verified goods.

Impact Partnerships are a tool to help brands work with on-the-ground Program Partners to support farmers to meet sustainability best-practice thresholds and set themselves up for Incentive's trading and/or physical trading. The Program Partners can deliver support and training, provide verification, and collect data with the farmers, while offering stories, data, and credibility back to the brands.

Why do we need them?

A core issue with today's market system is that the cost and risk of meeting "best practices" is born by the producer: they make the financial and time investment to meet a given standard; they then have to wait until they sell their products to see how much, if any, premium they will even receive for their certified product.

Another challenge is that many supply chains are simply not traceable back to the original producers. They may be long, complex, and even opaque at stages. Brands and retailers do not have a way to communicate their expectations to the producers, let alone reward them. Impact Incentives solve for this by leap-frogging the supply chain, connecting the two ends through the certificate trading.

A third issue is the way that subsidies work. While they provide much needed financial support for producers to use best practices, they do not create a market mechanism that will ensure that the practices continue over the long term. With the Impact Partnership model, once producers meet the threshold for practices, they can then shift to either selling their physical product at a premium or move to Impact Incentives if they are not part of a connected supply chain.

Impact Incentives can work hand-in-hand with standards. One challenge in getting standards use up to scale is the issue of timing. There must be a system to deliver certified goods through the supply chain from producer to brand. In addition, producers are waiting to get a demand signal from brands before investing in certification, and brands are waiting to see that there will be sufficient supply before committing to buy certified materials. Impact Incentives offer a means to grow supply and demand efficiently by leap-frogging the middle of the supply chain and giving everyone the time to set up the systems for physically trading traceable materials.

Another advantage that Impact Incentives offer is that brands will know the identity of the producers or producer groups that they are supporting and will have verified data so that they can make credible claims about the support they are providing.



How will impact incentives address or contribute to reversing biodiversity loss?

One of the current scopes for Impact Incentives is Deforestation/Conversion-Free (DCF): producers are rewarded for zero gross deforestation or conversion of their land. This is critical, as producers often face economic pressure to clear their land, but once that is done, it is also impossible to recover the lost biodiversity (and stored carbon).

The Impact Alliance is also looking at adding another scope for regenerative practices to the Impact Incentives. This would allow brands to give producers the financial support they need for training, infrastructure investment (e.g., fencing off riparian zones) and to handle data collection and verification.

The verified data collected through Impact Incentives and Impact Partnership Incentives will not only provide brands with credible impact stories, but it will also be of great value to regional governments, NGOs, and Industry.

- Stop deforestation and land use change: already in motion
- Supporting progress towards new practices: may need farmer investment up front to buy new equipment or deal with lower yields during the transition – and risk to not be able to sell at a premium
- Collect data: brands can tell stories about the farms and their activities supported by verified data
- Data will also be shared with governments, NGOs and industry to help inform new strategies

If Impact Incentives start to make traction – how will we know they are working?

The advantage of the Impact Incentives is that all farmers are required to submit verified farm data. The Impact Alliance and its members are therefore able to collect aggregated data, including farm polygons, that will allow everyone to see the total area of land addressed and to track the quantitative and qualitative impacts, that have all been third-party verified.

We will also know that the Impact Incentives are working by the number of producers, Program Partners and brands that choose to use them. Furthermore, we are already seeing interest from NGOs working with other commodities to join the Impact Alliance. We are encouraging the widespread use of Impact Incentives, as we have an urgent need to address the critical issues facing this planet as aggressively as possible.

Anne Gillespie, Head of Impact Acceleration, Textile Exchange

Story links

[Leather Impact Accelerator](#)

[Impact Incentives](#)

Contact info@impactincentives.org to find out more.



Case Study

Sappi



Case Study: Sappi

[Read full case study](#)

There is an intrinsic link between fashion and forestry, and it's one that the South African diversified woodfiber company Sappi is taking full accountability for.

The company's dissolving pulp products are used to create viscose fibers for clothing and textiles, as well as pharmaceutical products, packaging and specialty papers. It sources its wood pulp either from its own sustainably managed forests and plantations, or from accredited suppliers around the world.

Out of the 390,000 hectares of land that the company owns and leases, approximately 135,000 hectares are set aside and maintained by its sub-division Sappi Forests, a leader in research and development, to conserve the natural habitat and biodiversity found there.

Textile Exchange spoke to Hlengiwe Ndlovu, Divisional Environmental Manager; Krellyne Andrew, General Manager - Sustainability Dissolving Pulp; and Peta Hardy, Environmental Analyst to find out more.

[Read the full interview.](#)



Photo: Sappi (Inspecting a section of the Umkhomazi catchment area, South Africa)



Analysis

Monitoring & Evaluation



State of play: 11% of companies have a program for monitoring biodiversity-related activities and projects. More commonly (44%) of companies are monitoring projects anecdotally. Similarly, evaluation methods and indicators of progress tend to be anecdotal.

Areas for improvement: Formalized (and scientific) monitoring programs will be essential to ensuring the right outcomes for biodiversity can be measured and tracked. Monitoring allows for continuous improvement and adaptive management. Over the longer term, indicators should show positive impacts for biodiversity using methodologies consistent with science and potentially ladder up to local, national, and global biodiversity goals.

Monitoring & Evaluation

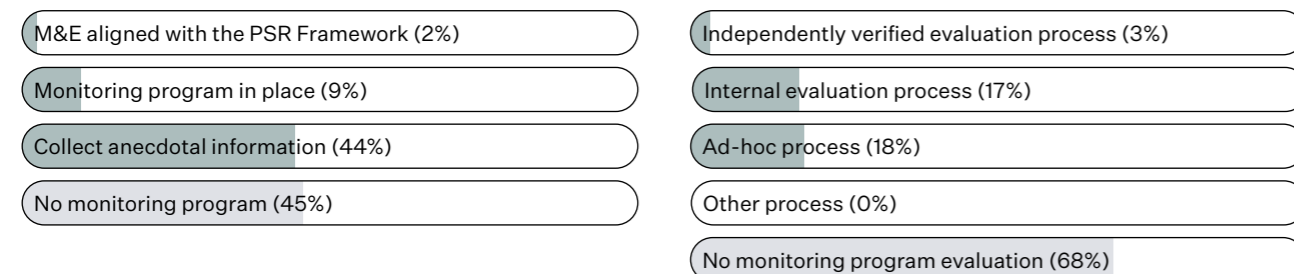
Why this is important

Monitoring is necessary to allow a company to track progress towards targets. A robust monitoring framework, such as Pressure State Response (PSR), monitors how a change in one type of indicator is expected to lead to a change in another. Monitoring should be designed to track outputs on intervention, attainment of desired outcomes, and broader level “impacts” against the overall goal. Ongoing monitoring of biodiversity and natural resources at sourcing origins, when possible, is extremely valuable for monitoring of interventions, evaluation, and improvement tracking.

Evaluation is the process of assessing the effectiveness of a particular mitigation measure or program. Through this process, a company will be able to evaluate the “costs” and “benefits” of a mitigation measure. This allows them to adapt and improve through adaptive management, 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.

Findings

Most companies are yet to engage in a Monitoring and Evaluation (M&E) program. Where M&E is happening, it is usually associated with a specific sustainability project or biodiversity-related initiative and not an overarching or strategic process.



Analysis

Monitoring & Evaluation



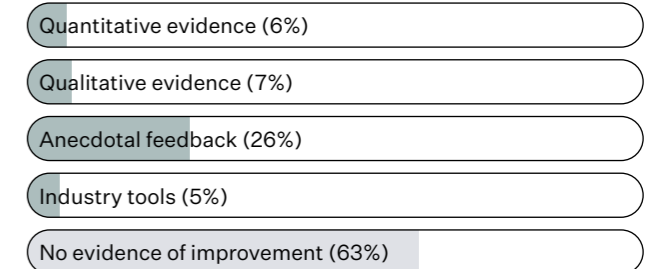
Improvement Tracking

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.

Findings

Progress tracking follows a similar pattern to M&E and is associated with specific projects rather than an overarching system. Most companies are yet to demonstrate improvements (63%) and those that do conclude positive outcomes from anecdotal feedback (25%).



On monitoring and evaluation:

“The cotton farmers that are participating in our regenerative pilot program are monitoring their observations qualitatively, e.g., number of worms in topsoil, returning insect and bird species.”

On monitoring and evaluation:

“We can measure our progress toward our global environmental impacts but not yet specifically on biodiversity activities. It is under development.”

On monitoring and evaluation:

“It is recognized that measuring and proving impact at the site level is not easy. There are many different ways of measuring and monitoring outcomes of activities but they may not be placed on a continuous improvement spectrum. In order to start the process of evaluation, in 2020 a simple subjective assessment of each of the important conservation areas on our was undertaken. This was done in order to determine their baseline condition and to identify actions that can be taken to improve their status in the long term.”



Analysis

Monitoring & Evaluation



Expert Spotlight: Measure, manage, maximise biodiversity and SDG impacts – The role of standards in incentivizing greater biodiversity ambition

Tell us about your work in biodiversity and your unique contribution to this area.

Gold Standard was established in 2003 to prevent a race to the bottom in carbon markets. The standard not only shows what is best-in-class, but makes achieving this possible through clear guidance and clarification within its standards. Gold Standard therefore rewards and incentivizes project developers, corporates, and investors to deliver maximum impact. Today, Gold Standard continues to ensure effective identification, assessment, and management of credible sustainable development impact claims for corporates and investors, both public and private.

As part of our work on biodiversity, Gold Standard is currently working with the International Union of Conservation and Nature (IUCN) and exploring collaboration with the World Wildlife Fund (WWF) to develop standards to support investments in nature-based solutions and biodiversity. A notable program is our involvement, as part of a consortium, in delivering the Subnational Climate Finance initiative (SCF) which is a blended finance vehicle providing USD 750 million equity and nearly USD 30 million towards technical assistance to support small and medium companies in developing nature-based solutions across agriculture, aquaculture, energy, waste optimization, and sustainable city infrastructure sectors globally.

Tell us about the connections between your work in biodiversity and the textile industry.

Gold Standard supports smallholder farmers producing cotton, and as part of a Value Change Initiative we are supporting the Fashion Pact and the Ethical Fashion Initiative. These are networks that work with smallholders and corporates to incentivize sustainable agriculture practice.

Some of the tools that Gold Standard and IUCN are developing for fund managers and investors will enable companies to identify the best nature-based climate mitigation and adaptation solutions in textile production and agriculture. Leveraging these tools can help conserve biodiversity and drive money where it can most effectively catalyze sustainable development.

Felicity Spors, Head of Sustainable Finance, The Gold Standard Foundation

Story links

[Subnational Climate Fund](#)

[IUCN announcement of collaboration with Gold Standard and other ISEAL Standards to deliver NBS certification](#)



Photo: Gregoire Dubois (Monarch Butterfly, Ragged Point, California, USA)



Case Study

Hermès



Case Study: Hermès

[Read full case study](#)

Silk is a signature part of the Hermès identity, making it a key focus area for the company to drive its biodiversity objectives forward.

It sources most of its silk through a local partner in Brazil, which works with smallholder farmers in the state of Paraná in the Atlantic Forest region. Working in the world's most biodiverse country comes with a profound opportunity for positive impact, and Hermès are approaching it with a collaborative, research-based framework.

In 2020, the company collaborated with the University of Cambridge Institute for Sustainability Leadership (CISL) to conduct a conclusive study titled Hermès Silk Supply Chain: Impacts on Biodiversity. From cultivating the mulberry plants to rearing the silkworms and processing the fibers, it assessed the risks and opportunities for biodiversity loss and gain throughout the silk production process in Brazil.

Textile Exchange spoke to Hermès about some of the natural ecological benefits of silk production, the key takeaways from the study, and the actions that its production partner is already taking on the ground to protect and conserve biodiversity in the area.

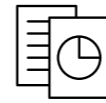
[Read the full interview.](#)



Photo: Hermès © Mathieu Ridelle (Silkworm cocoons)



Analysis Corporate Reporting



State of play: 10% of participating companies are publicly reporting their biodiversity-related activities. The majority (66%) are disclosing sustainability-related activities more generally through annual and sustainability reports that may incorporate some referencing to biodiversity.

Areas for improvement: Public disclosure of biodiversity risk, and regular reporting of actions taken to mitigate risk and respond to opportunity, builds trust, and encourages shared learning. The expectation is that companies will increase disclosure as stakeholder expectations grow and as company action increases.

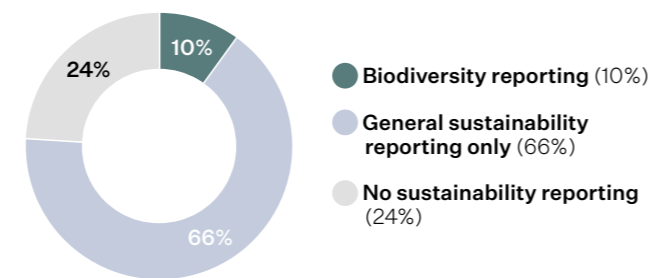
Disclosure

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 the challenges and opportunities associated with biodiversity risk management, as well as progress against key performance indicators (KPIs) and targets. Reporting sends a message to stakeholders, including customers and investors, that a company is actively working on addressing critical risk and important issues. Published reports are also an opportunity for a company to raise awareness of biodiversity to other companies.

Findings

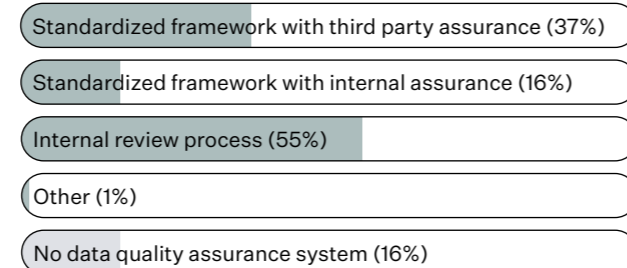
Two-thirds of companies (66%) are reporting on sustainability generally, but only 10% are reporting explicitly on biodiversity at this time. We expect this number to grow as companies solidify their biodiversity strategies, action plans and targets.



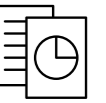
Assurance

Why this is important

Reporting should eventually cover all aspects of a company’s biodiversity activity including strategy, implementation, and progress towards targets. Publicly reported data should also undergo a quality assurance process to ensure that the information being provided is accurate and demonstrable. Independent third-party reviews against a standardized framework are most recommended for quality assurance, particularly for large companies.



Analysis Corporate Reporting



Expert Spotlight: Aligning accounting approaches for nature – measuring the unmeasurable

Tell us about your work in biodiversity and your unique contribution to this area.

Biodiversity is declining at an unprecedented rate. The value of nature is not currently embedded within economic thinking. Approaches to measure corporate biodiversity performance are emerging but are not aligned. Clarity and consensus on how business and financial institutions can measure and report on performance is still needed. Only then will biodiversity be fully embedded into corporate decision-making.

The Aligning Accounting Approaches for Nature (Align) project has a hugely ambitious objective: to help the European Commission support business by standardizing this evolving landscape of natural capital accounting and biodiversity measurement.

As part of a collaboration between WCMC Europe, the Capitals Coalition, UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), Arcadis and ICF, we are drawing on the recent advances in biodiversity measurement approaches to develop recommendations to standardize corporate biodiversity measurement and valuation by the end of 2022. In parallel, we are facilitating best practice exchange among business practitioners and relevant stakeholders through a natural capital management accounting platform.

Tell us about the connections between your work in biodiversity and the textile industry.

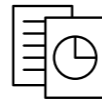
Members of the textile/apparel industry are engaging with the Align Community of Practice and Technical Hub. In doing so, industry representatives are lending practical insight and experience into the development of our recommendations on biodiversity measurement and valuation. Align will be creating guidance for companies with complex supply chains, helping them to understand available approaches for measuring biodiversity impacts and dependencies across value chains. We look forward to engaging with the textile community, to ensure the guidance is fit-for-purpose and informative. If interested in joining, please contact [Elise Belle](#).

Annelisa Grigg, Technical Advisor, Align

Story links

- [Align project](#)
- [Flyer](#)
- [WCMC-Europe](#)
- [Biodiversity Measures For Business](#)
- [Capitals Coalition](#)





Expert Spotlight: The journey to effective corporate biodiversity performance disclosure and improvement

Biodiversity underpins the generation of environmental goods and services society needs to thrive. Economic development has driven massive and irreversible losses of species and ecosystems, but it is now recognized that those same losses are in turn threatening the future of the global economy itself. The World Economic Forum estimates \$44 trillion of business value—over half of world GDP—is exposed to risks through biodiversity loss. Its annual Global Risks Report now places biodiversity losses amongst the top five risks to society in terms of both likelihood and impact.

Disclosing environmental performance is one of the key steps in driving performance improvement. The CDP disclosure system is the largest platform for corporate environmental disclosure in the world, with a focus on climate, water, and forests. In 2021 over 14,000 companies, cities, states, and regions disclosed their environmental performance through CDP. The results drive better environmentally focused decision-making across investment, supply chain management, and policy.

As understanding of the importance of biodiversity to business develops, interest is growing in how and where to report specific impacts and dependencies on biodiversity. In response, CDP is exploring how to better integrate biodiversity into the annual disclosure cycle. However, compared to other environmental factors, understanding, and measuring biodiversity performance can be extremely challenging.

Various initiatives are under way to clarify and standardize approaches and metrics, but most remain a work in progress. There is no single, globally agreed target for what level of biodiversity performance companies should achieve, nor is there a single, clear approach for how to measure progress. CDP is therefore partnering with BNP Paribas Asset Management to understand the developing landscape of metrics and methods and to develop market confidence and capacity to report on biodiversity performance. This includes working closely with Textile Exchange. As part of this, CDP will be introducing its first biodiversity-focused questions into the 2023 disclosure cycle. These questions, which are closely aligned with the Textile Exchange Biodiversity Benchmark, represent the first steps towards a more holistic approach to environmental disclosure at CDP that will enable companies to report across the full range of relevant environmental impacts and dependencies.

Marcelo Gonçalves de Lima, Biodiversity Expert at CDP and Thomas Maddox, Global Director Forests and Land at CDP

Story links

[CDP Nature Based Solutions, Forest Report](#)



Photo: Gregoire Dubois (Tiger, Tadoba National Park, India)

Part B: Acknowledgements



Acknowledgements

Biodiversity Advisory Group

Laila Petrie,
2050

Mukul Agrawal,
Aditya Birla

Jo Mourant,
Advisor

Karen Steer,
Accountability Framework initiative (AFI)

Lucita Jasmin,
Felicia Tang Pui Leng,
Cherie Tan,
Craig Tribolet,
APRIL

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Burberry

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Chetna Organic

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Cath Tayleur,
Cambridge Institute for Sustainability Leadership (CISL)

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Country Road, David Jones

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Earthworm Foundation

Brittany Di Benedetto,
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Fashion Pact

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IKEA

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Inditex

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International Platform for Insetting (IPI),

NativeEnergy

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KALANI-home

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Tchibo

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Tentree

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The Dragonfly Initiative

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UNDP, Mongolia

Corli Pretorius,
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VF Corporation

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Elayne Masterson,
Marianna Sousa,
World Textile Sourcing

Alexis Morgan,
World Wildlife Fund (WWF)

Oliver Cupit
Maggie FitzHerbert,
Zoological Society of London (ZSL)

Acknowledgements

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Plastics For Change

Special thank you to:

Gregoire Dubois

Partners and collaborators

The Biodiversity Consultancy



Conservation International



Sappi



Reconsidered



Technology solution provider:
73bit



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