



# Using transparency to drive action to protect and restore nature

EY Nature Risk Barometer

October 2024



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# Foreword

## Increased company reporting in line with TNFD signals a growing corporate commitment to understanding impact and reliance on nature.

Geared to provide insights into the evolving state of nature-related disclosures, the second annual EY Nature Risk Barometer benchmarks business reporting against the 14 Taskforce on Nature-related Financial Disclosures (TNFD) recommendations finalized in September 2023. Expanded to assess 369 companies spanning 10 sectors in the US, Canada and Latin America in preparation and anticipation of COP16 in Cali, Colombia, in October 2024, the Barometer's key takeaways are clear:

- ▶ **There is room, and need, for companies to better assess and disclose their impact and reliance on nature, and to act on that.** While businesses are making progress on nature-related disclosures, especially since the release of the final TNFD framework in 2023, addressing this framework is only the first step. The ultimate goal is to drive meaningful change in how the corporate world interacts with and depends on the natural environment.
- ▶ **Increased disclosure is often correlated with increased action and performance.** For example, companies that have historically responded to CDP are often those driving the most progress around their greenhouse gas emission reduction targets.<sup>1</sup> Shifting to a nature-positive economy will require increased understanding and transparency in relation to business impacts and dependencies on nature.
- ▶ **Nature-related disclosures are becoming increasingly important to investors and financial institutions,** who seek to mitigate and minimize risk across their portfolios and seize the financial benefits associated with natural capital assets.<sup>2</sup> Companies that can capitalize on this shift in private finance flows through greater focus on nature may benefit from greater access to capital.
- ▶ **Climate change and nature loss need to be tackled together.** Scientific evidence indicates that nature plays a critical role in regulating the climate, absorbing an estimated half of human-made carbon emissions through natural carbon sinks. While company reporting on climate risk continues to mature according to the EY Climate Risk Disclosure Barometer,<sup>3</sup> there is growing recognition of the connection between climate change and nature as well as the need for business to acknowledge this nexus and explore the risks and opportunities that it presents.

### Nature loss is a crisis – there is a lot of talk yet limited action in the private sector

The World Economic Forum (WEF) has shown that \$44 trillion (over half of the world's gross domestic product) is moderately or highly dependent on nature and ecosystem system services.<sup>4</sup> In fact, WEF research indicates that biodiversity loss and ecosystem collapse will be the third-greatest global risk in the next decade behind extreme weather events and critical change to Earth systems. Natural resource shortages follows closely as the fourth-greatest risk in 2024.<sup>5</sup> The loss of biodiversity undermines the natural systems that businesses and societies rely on for resources, climate regulation and resilience. By integrating nature-related considerations into strategic business planning and operations to better protect and restore nature, business can play a vital role in protecting economic stability and prosperity and supporting global goals in line with the Kunming-Montreal Global Biodiversity Framework (GBF) to halt and restore nature loss by 2030.

<sup>1</sup> "Companies and investors support climate disclosure," *Climate Champions*, 4 September 2024.

<sup>2</sup> "Financing the Nature-Positive Transition: Understanding the Role of Banks, Investors and Insurers," *World Economic Forum*, June 2024.

<sup>3</sup> Bell, Matthew and Handford, Matt. "How will understanding climate risk move you from ambition to action?" *ey.com*, 27 November 2023.

<sup>4</sup> Neo, Gim Huay, "Why businesses are waking up to the threat of nature-related risks," *World Economic Forum*, 11 January 2024.

<sup>5</sup> "The Global Risks Report," *World Economic Forum*, January 2024.

The 2024 EY Nature Risk Barometer demonstrates increased company disclosure with respect to nature. The TNFD framework sets out 14 recommendations to guide organizations in reporting and acting on evolving nature-related risk, organized around four key pillars: governance, strategy, risk and impact management, and metrics and targets. In this context, the 2024 Barometer found:

- ▶ **Ninety-four percent** of companies benchmarked are reporting on at least one TNFD recommendation. That's up from 87% in the inaugural edition of the Barometer in 2023.<sup>6</sup>
- ▶ Even so, **an average coverage score of 75% and an average alignment score of 19%** indicate that organizations have more work to do in comprehensively addressing the TNFD framework and reporting on nature-related risks.<sup>7</sup>

The 2024 EY Nature Risk Barometer contributes to the growing body of evidence that companies are continuing to enhance transparency on nature-related risks by aligning to key frameworks such as the TNFD.

## Connected climate and nature strategies are crucial in the face of continuing change

The world continues to grapple with a range of climate change impacts that threatens ecosystem collapse on land and sea. In 2023, temperatures surpassed pre-industrial levels by over 2° Celsius, making it the hottest year on record. Global average sea surface temperatures reached record levels; Antarctic Sea ice reached record low extents; carbon dioxide and methane levels continued to increase and reached record levels; and extreme weather events such as heat waves, floods, droughts and wildfires were experienced around the world.<sup>8</sup> These impacts have limited the ability of many species to adapt to these changing environments because of degraded habitat and increased prevalence of disease, as well as changes in migration and reproduction habits. This in turn threatens the health

of ecosystems and their capacity to provide vital resources and services to people in the form of food, freshwater, fuel, medicines, carbon storage and more.

In addition to climate-related impacts on nature, business as usual will continue to fuel the increasing rate of nature and biodiversity loss as a result of overexploitation and dependency on natural resources. To counteract this trend and to meet country and regional commitments to stop climate change and nature loss, regulators have sought to curb negative business impacts on nature through recent directives, including the European Union (EU) Corporate Sustainability Reporting Directive (CSRD), which will soon require organizations to assess the materiality of both climate and nature-related dependencies, impacts, risks and opportunities and to report on company performance if material. Within the European Sustainability Reporting Standards (ESRS) environmental standards,<sup>9</sup> companies are directed to utilize the TNFD framework to support risk assessment and disclosure, and to acknowledge the interdependencies and trade-offs across these issues.

This regulatory backdrop is taking shape in real time. To succeed now, businesses must continue embracing the TNFD framework, but in bigger, bolder ways that align work with the recommendations, and to broader, organization-wide strategies to protect and restore nature.

This report demonstrates sector and regional trends around nature-related disclosures to encourage collaboration and knowledge-sharing across industries. Our analysis of corporate disclosure coverage and alignment to the TNFD framework monitors how companies in the US, Canada and Latin America with representation across 10 sectors are increasingly focused on nature commitments and positive solutions. **The global path to averting ecosystem collapse – and creating a sustainable future – depends on it.**



**Bruno Sarda**

EY Americas Climate Change and Sustainability Services Leader

<sup>6</sup> US Nature Risk Barometer, ey.com, September 2023.

<sup>7</sup> Alignment and coverage scores are further discussed and defined in Chapter 2.

<sup>8</sup> "WMO confirms 2023 as warmest year on record 'by a huge margin,'" United Nations News, 12 January 2024.

<sup>9</sup> The European Sustainability Reporting Standards issued **five sector-agnostic environmental standards**: Climate Change (E1), Pollution (E2), Water and Marine Resources (E3), Biodiversity and Ecosystems (E4), and Resource Use and Circular Economy (E5).

# About this report

The purpose of this report is to provide companies with an understanding of the current state of the nature-related reporting consistent with the TNFD framework. This report analyzes current corporate disclosures in the US, Canada and Latin America across 10 sectors listed below to provide a snapshot of the coverage and alignment to nature-related reporting against the 14 recommendations within the finalized TNFD framework.<sup>10</sup>

## TNFD recommendations

The TNFD recommendations are distributed across four disclosure pillars:

- Governance
- Strategy
- Risk and impact management
- Metrics and targets

The TNFD follows a similar structure as the Task Force on Climate-Related Financial Disclosures (TCFD) framework but in comparison to TCFD's 11 recommendations, the TNFD framework has added three unique recommendations:

- A description of the policies and engagement activities with respect to Indigenous Peoples, Local Communities and other stakeholders in the assessment of nature-related impacts, dependencies, risks and opportunities
- Disclosure of the priority locations of assets and activities that are significantly affected by or interact with nature
- A description of processes for identifying nature-related dependencies, impacts, risks and opportunities across the upstream and downstream value chain

Additionally, the framework encourages integrated climate-nature disclosures and recommends a four-phased approach for companies to identify and assess nature-related issues across organizations' value chains, referred to as the LEAP (Locate, Evaluate, Assess, Prepare) process.

As of June 2024, over 400 organizations had adopted TNFD's recommendations, a 50% increase since the publication of the TNFD Early Adopters list in January 2024. Only 17 of these companies are headquartered in the US; eight are in Canada and 29 are in Latin America.<sup>11</sup>

In June 2024, TNFD published *Additional Sector Guidance* for eight real economy sectors<sup>12</sup> that provided companies with additional considerations for applying the TNFD LEAP approach and recommendations across sector-specific value chains. TNFD also published draft versions of *Additional Sector Guidance* for five new sectors<sup>13</sup> that were open for feedback through September 2024.

Leveraging the TNFD recommendations as a basis for observation, which are consistent with other global disclosure standards and requirements, this report analyzes the rise in corporate disclosures related to nature.

## Structure of the analysis

Our 2024 EY Nature Risk Barometer extends its scope beyond last year's 100 US-based companies to 369 companies across the US, Canada and Latin America.

This expanded geographic focus, in anticipation of the 16th Conference of the Parties (COP16) to the Convention on Biological Diversity (CBD) in Colombia, allowed for a more comprehensive assessment of nature-related disclosures across the Americas.<sup>14</sup>

This report provides an assessment of current nature-related disclosures for companies across 10 sectors, aligned to the Sustainable Industry Classification System® (SICS): Consumer Goods, Extractives and Minerals Processing, Financials, Food & Beverage, Health Care, Infrastructure, Resource Transformation, Services, Technology & Communications, and Transportation.<sup>15</sup>

Similar to last year, this analysis leveraged commonly published reports, such as environmental, social, governance (ESG) and sustainability reports; annual reports; TCFD reports; and CDP (formerly the Carbon Disclosure Project) climate, forest and water questionnaires. Deeper analysis was conducted this year to explore nature-related disclosures across the four pillars under the TNFD framework: governance, strategy, risk and impact management, and metrics and targets.

Company reporting was then analyzed against the TNFD framework<sup>16</sup> and given coverage and alignment scores as defined in Chapter 2 of this report.

<sup>10</sup> "Recommendations on the Taskforce on Nature-related Financial Disclosures," TNFD, September 2023.

<sup>11</sup> "TNFD adoption now over 400 organisations and new sector guidance released," TNFD, 28 June 2024.

<sup>12</sup> TNFD published additional guidance to supplement the assessment of nature-related issues for the following sectors: metals and mining; electric utilities and power generators; financial institutions; chemicals; food and agriculture; oil and gas; forestry, pulp and paper; aquaculture; and biotechnology and pharmaceuticals.

<sup>13</sup> In June 2024, along with finalizing the guidance for the original eight real economy sectors, TNFD issued [draft publications](#) of additional guidance for the following sectors: fishing; engineering, construction and real estate; construction materials; beverages; and apparel, accessories and footwear.

<sup>14</sup> The expansion of the companies included in the analysis coupled with the rapidly evolving nature-related risks reporting landscape, makes direct comparisons between 2023 and 2024 challenging.

<sup>15</sup> The analysis leveraged the [SICS sectors](#); while correlated, they are not framed directly the same as TNFD's sector guidance.

<sup>16</sup> This year's analysis compared company disclosures against the final TNFD Recommendations whereas the 2023 Nature Risk Barometer compared company disclosures against the TNFD's draft beta v0.4 framework.

**Figure 1.** Percentage of companies analyzed per sector

Percentages have been rounded to nearest whole number.





1

Understanding the  
business case for  
protecting nature now



## Nature, climate change and businesses are linked in a complicated matrix of impacts and dependencies.

### Nature risk is a business risk and opportunity. How so?

Nature loss and climate change are inextricably connected, both serving as impact drivers that reinforce changes to Earth's natural systems. For example, our oceans serve as natural carbon sinks.

However, nature-related risks are not synonymous with climate-related risks. Nature loss and damage to ecosystem services can also be caused by impact drivers other than climate change, such as overexploitation of natural resources, land use or pollution. Meanwhile, nature degradation is on the rise. Six of the nine planetary boundaries have already been breached, including those relating to climate change, biosphere integrity, freshwater availability, land use and ocean acidification, which are creating risks to economic stability and prosperity.<sup>17</sup> In fact, land and soil degradation is impacting the market value of companies and accelerating credit risk to lenders.

In September 2023, the Network for Greening the Financial System (NGFS) published a report describing a host of macroeconomic implications associated with nature-related risks, including:

- ▶ **Direct operational risks:** Companies may face direct operational risks due to disruptions caused by nature-related events such as biodiversity loss or ecosystem degradation. For example, a company that relies on a specific species for its products may face supply chain disruptions if that species becomes extinct.
- ▶ **Market risks:** Changes in market conditions and sentiment due to nature-related issues can impact the value of investments. For instance, growing consumer awareness of environmental issues may lead to reduced demand for products seen as unsustainable, negatively impacting the stock price of companies that produce them.
- ▶ **Litigation risks:** Companies may face legal challenges related to their impact on nature. As awareness of biodiversity loss and ecosystem degradation grows, companies may be held legally liable for their role in these issues.
- ▶ **Reputational risks:** Companies seen as contributing to nature-related problems may face reputational damage, potentially impacting their ability to attract customers, talent and investors.

- ▶ **Systemic risks:** Nature-related risks can also have systemic implications for the financial system as a whole. For example, widespread ecosystem degradation could lead to economic instability by disrupting critical industries such as agriculture or fisheries.

Global supply chains are already experiencing disruptions related to extreme weather events, water shortages, water stress, and the availability of commodities and natural resources (e.g., wood pulp, palm and coconut oil). This reality holds real outcomes for businesses and, more broadly, capital markets and consumers around the world.

On the flip side, there is a considerable financial opportunity associated with nature. Nature-positive policies and approaches are expected to generate over \$10 trillion in new annual business value and create 395 million jobs by 2030.<sup>18</sup>

Nature-positive solutions – for instance, conservation and restoration efforts – can support net-zero targets and nature-positive outcomes. This can extend beyond the upsides for the natural environment and set businesses apart from competitors while supporting customer engagement and brand loyalty. Across industries and sectors, businesses have a unique chance to act decisively, transforming nature- and climate-related vulnerabilities into new solutions that shape the future.

<sup>17</sup> "Earth beyond six of nine planetary boundaries," Science Advances, 13 September 2023.

<sup>18</sup> "Moving from agreement to action by closing the global biodiversity finance gap," United Nations Development Programme.

## Snapshot: Nature-related impacts in daily life

### What we eat may change ...

The loss of fruit, vegetable and livestock species as a result of ecosystem failure may drive greater reliance on products that are more vulnerable to disease and pests that can wipe out entire crops or herds. This could lead to a less diverse food supply. For example, if the Cavendish banana (the main variety used in the banana trade) were to become extinct due to disease, banana companies might need to rely on other less tasty or less convenient varieties. If availability of natural vanilla beans were to decline due to a loss of pollinators, ice cream and yogurt companies might need to use more vanilla flavoring. Similarly, if the overfishing of certain species were to continue, seafood companies might need to increase reliance on aquaculture-based products.

### How we develop and make products may change ...

Companies might need to change manufacturing processes to conserve water and marine resources. For example, increasing water scarcity in countries worldwide is driving manufacturing, food and beverage, and other sectors to implement more water-efficient processes. This could involve using recycled water or implementing dry cleaning systems to reduce water use. Similarly, a decline in availability or changing migratory patterns of marine resources (e.g., salmon and trout) may create a need for business and infrastructure relocations.

### What we pay for products and services may change ...

The loss of biodiversity may also increase procurement and supply chain costs that can be passed to the consumer. For example, cocoa prices have risen in recent years due to the global cocoa shortage. According to a JP Morgan study,<sup>19</sup> droughts are ravaging crops in West Africa, where 80% of the world's cocoa is exported. Many industries rely on biodiversity to provide key ingredients, commodities or services, including food and beverage, pharmaceuticals, fashion, cosmetics, tourism, and building and construction.

## What's more: businesses are increasingly under investor and regulatory pressure to identify and disclose their nature-related risks and opportunities

As businesses recognize their nature-related dependencies, impacts, risks and opportunities, regulatory and investor pressures are simultaneously driving the need for more consistent disclosures. From deforestation and habitat destruction (through activities such as palm oil and soybean production) to pollution from industrial processes and waste, businesses are negatively impacting nature. In the Americas and around the world, countries and regions are strengthening guardrails to minimize these kinds of negative impacts. At COP15 in December 2022, nearly 200 governments committed to the targets set forth under the Kunming-Montreal Global Biodiversity Framework (GBF) with the goal of halting and reversing nature loss by 2030. Within the framework, Target 15 specifically calls for businesses to monitor, assess and transparently disclose risks, dependencies and impacts on biodiversity so that business, society and nature can exist in harmony.

In the two years since, we have seen governments and nongovernmental organizations continue to mobilize policies and introduce new regulations to advance these goals. For example, Nature Action 100, a global, investor-led initiative representing more than 200 institutional investors and nearly \$30 trillion in assets under management, was developed to support investors engaging companies on nature and biodiversity loss and to track corporate performance on nature across 100 companies annually.<sup>20</sup> In February 2024, the S&P Dow Jones Indices launched

<sup>19</sup> Wang, Shirley; Goldman, Ken; and Pannuti, Céline. "How Are Rising Cocoa Prices Impacting Chocolate Brands?" *J.P. Morgan*, April 2024.

<sup>20</sup> Nature Action 100.



the S&P 500 Biodiversity Index and S&P Global LargeMidCap Biodiversity Index to share additional insights for market participants who are seeking to measure, analyze and better understand their investments' impact on the natural world. S&P Global Sustainable research shows that 85% of the world's largest companies have a significant dependency on nature and biodiversity, indicating an even greater need for more standardized and decision-useful data and disclosures in this space.<sup>21</sup>

Meanwhile, regulatory change on nature is accelerating to improve company transparency and standardization of reporting. Case in point: additional EU regulations like the EU Deforestation Regulation (EUDR), the CSRD and EU Taxonomy are poised to underscore the importance of identifying and disclosing biodiversity-related impacts, risks and opportunities. The CSRD will soon require organizations to assess the materiality of both climate and nature-related dependencies, impacts, risks and opportunities and to report on company performance if material. Within the environmental standards set out under the ESRS,<sup>9</sup> companies are directed to utilize the TNFD framework to support risk assessment and disclosure and to acknowledge the interdependencies and trade-offs across these issues. Disclosures may need to include any measures that businesses are taking to protect and restore natural habitats and species. In June 2024, TNFD and the European Financial Reporting Advisory Group (EFRAG) published interoperability mapping between TNFD recommendations and ESRS requirements. This was followed by similar mapping between the Global Reporting Initiative (GRI) Biodiversity 101 Standard and

TNFD recommendations, demonstrating key commonalities and areas of alignment. Additionally, the International Sustainability Standards Board (ISSB) has already signaled that one of its next priorities is the development of an additional reporting standard focused on biodiversity.<sup>22</sup> This has implications for the 20+ jurisdictions around the world that have adopted or signaled their intent to adopt the standards.

Each of these developments further supports the case for businesses to leverage the TNFD as a framework for identifying and reporting on nature-related risks and opportunities.

## A rising tide can, and should, lift all boats

Designed to help corporates and financial institutions assess, report and act on material, nature-related dependencies, impacts, risks and opportunities, the TNFD recommendations have been highlighted as a key tool to marshal progress. Adopting the TNFD recommendations means a business or organization intends to apply the framework's general requirements to support consistency and comparability of nature-related information in the marketplace. There's no deadline for when adopters are required to issue reporting in line with the TNFD recommendations given the voluntary nature of the framework. However, given recent incorporation of TNFD into key regulatory standards, we anticipate increased disclosures on nature in line with TNFD in the coming years.

The TNFD initiative will continue to monitor market adoption rates and publish new adopters monthly.

Where do we stand today? In June 2024, the TNFD announced that:

- ▶ **More than 400 organizations representing \$6 trillion in market capitalization and \$16 trillion in assets under management** have already adopted the TNFD recommendations.
- ▶ This reflects a **30% increase since January 2024**.
- ▶ Of these organizations, **67% are corporates and 27% are financial institutions**.<sup>23</sup>

Other voluntary frameworks have also garnered increased attention and adoption by the business community, including the Science Based Targets Network (SBTN), a network of 45+ organizations with the objective of developing methods and resources for science-based targets (SBTs) for nature for companies. Following COP28's Nature, Land Use and Ocean Day, 150+ companies signaled their ambition to set climate and nature goals under the SBTN and Science Based Targets initiative's Forest, Land and Agriculture frameworks. This was further supported by pledges of \$186 million towards forests, mangroves and the ocean, increasing investments in nature-based solutions.<sup>24</sup>

This momentum points to the business community's desire to act now. This swell of support only strengthens the case for emphasizing nature holistically at the heart of business strategy.


<sup>21</sup> "S&P Dow Jones Indices Launches Biodiversity-Focused Benchmarks," spglobal.com, 27 February 2024.

<sup>22</sup> Chan, Victor, "What you need to know about ISSB's new research projects | EY - Global," ey.com, 12 June 2024.

<sup>23</sup> <https://tnfd.global/engage/tnfd-adopters/>

<sup>24</sup> United for Nature: COP28 mobilizes action to protect and restore forests, mangroves, land and ocean





# 2

## Exploring TNFD coverage, alignment and progress at scale



Companies across the US, Canada and Latin America are progressing against nature-related disclosure recommendations under the TNFD framework. Even so, we see disconnects emerging between the kind of results achieved, as well as notable differences across geographic regions.

## How is TNFD progress assessed?

Two factors were assessed across companies' nature-related disclosures:

### 1. Coverage

Company disclosures were assigned a score (as a percentage) based on the number of TNFD recommendations that they addressed. A score of 100% indicates that the company disclosed some level of information with respect to each of the recommendations, regardless of the extent to which the information provided aligns with the TNFD recommendations.

### 2. Alignment

Company disclosures were given a rating (0 to 5) based on the extent to which the disclosure aligned to the TNFD recommendations, expressed as a percentage of the maximum score. A score of 100% indicates that the company included disclosures aligned to all recommendations, and the alignment of the disclosures met the maximum score of 5 for each of the recommendations.

Companies were given a rating based on the extent to which the disclosures aligned to the TNFD recommendation, using the following scoring system:

- ▶ **0** - No evidence of disclosure alignment
- ▶ **1** - Underdeveloped, limited discussion of the recommendation components (or only partially discussed)
- ▶ **2** - Basic, general discussion or disclosure of the recommendation components
- ▶ **3** - Developing, detailed discussion or disclosure of the recommendation components
- ▶ **4** - Well-developed, well-articulated detailed disclosure of the recommendation components
- ▶ **5** - Market-leading, addressed all components of the recommendation in detail

## What is the difference between TNFD coverage and alignment?

Coverage reflects that a company provided at least some level of information toward each of the 14 TNFD recommendations, regardless of the quality of the information provided.

Alignment evaluates the quality of a company's disclosures in relation to the TNFD recommendations, considering the level of detail and how well the disclosures meet the recommendations.



75%

of companies across the US, Canada and Latin America have disclosed some degree of nature-related information associated with one or more of the 14 TNFD recommended disclosures (referred to as “coverage” throughout the report)

By the numbers, TNFD coverage is further along than overall alignment.

Across EY analysis, the numbers indicate companies are moving forward with TNFD disclosure:

Coverage levels, or the levels to which a company addressed all the TNFD recommendations in their disclosures regardless of the quality of the information provided, vary among the three regions assessed.

Figure 2. Companies’ TNFD disclosure coverage across regions

- US companies 66%
- Canada companies 72%
- Latin America companies 89%





## Drivers behind increased coverage and alignment in Latin America

Latin America's unique and vast biodiversity landscapes place companies operating in the region in proximity with nature and likely under heightened scrutiny regarding the disclosure of nature-related risks. This increased pressure stems from the region's deep-rooted economic dependence on natural resource extraction and agriculture – sectors intrinsically linked to environmental degradation.

For example, fires and droughts in Brazil are disrupting entire value chains in the North and Midwest regions, where rivers are the unique means of transportation. Meanwhile, severe floods in Southern Brazil are devastating nearly 300 municipalities. The rich diversity of ecosystems, ranging from the expansive Amazon rainforest to the towering Andean highlands, holds both global and local ecological and economic significance.

What's more, the nature-related dependencies that underpin these risks are gaining leaders' attention, raising awareness and triggering discussions on new business models across companies in Latin America. And therein lies the potential to create meaningful solutions. As more companies assess and disclose their nature-related impacts and dependencies, our analysis shows increased corporate action to support regional water availability, reduce the exploitation of virgin raw materials from natural resources, and recover and conserve forests, ultimately minimizing nature loss.

The availability of natural capital in Latin American countries that house critical ecosystem services has also ignited new trading schemes around ecosystem-based investing. Financial instruments referred to as "biodiversity credits" allow for private companies to finance nature-positive

activities such as forest conservation or restoration.<sup>25</sup> Companies are becoming increasingly aware of rising biodiversity and nature credits, but these markets are still restricted to select countries in Latin America. While there is debate around the effectiveness of biodiversity credits, discussions around financing nature-positive solutions continue to remain on market leaders' agendas.

In addition to discussions around the Global Biodiversity framework's Target 15,<sup>26</sup> we anticipate heightened focus on Targets 18 and 19 as incentive reforms and capital investment will be of the essence to move on with GBF's goals in emerging economies.

<sup>25</sup> Rao, Radhika Rao; Choi, Esther and Czebiniak, Roman Paul, "Can 'Biodiversity Credits' Boost Conservation?" World Resources Institute, 12 March 2004.

<sup>26</sup> "Target 15," Convention on Biological Diversity.



## Interoperability between regulated reporting and TNFD's voluntary framework

In the past year, many US companies have been subject to new and evolving regulations around sustainability-related disclosures. The European Commission has established a handful of new laws in line with the European Green Deal objectives that apply to thousands of US companies with subsidiaries in the EU.<sup>27</sup> Regulations such as the ESRS under the CSRD, EU Taxonomy<sup>28</sup> for sustainable activities and the EU Regulation on Deforestation-free Products<sup>29</sup> are encouraging organizations to take a closer look at their environmental impacts and dependencies, inclusive of those around nature and biodiversity.

Under the CSRD, ESRS 1 requires organizations to review their financial risks and opportunities, as well as their impacts on society and the environment, across a variety of sustainability matters under the double materiality framework.<sup>30</sup> The ESRS prescribed a set of sustainability matters for consideration that aligns back to the 10 topical standards, one of which is centered on biodiversity and ecosystems (ESRS E4).<sup>31</sup> As teams evaluate their companies' potential impacts on biodiversity and ecosystems, as well as potential risks and opportunities stemming from dependencies

on natural resources and ecosystem services, many are looking to the TNFD LEAP framework as a guide to identify and assess the materiality of such impacts and dependencies. The ESRS state that companies may conduct their materiality assessment on the sustainability matters under pollution (ESRS E2), water (ESRS E3), biodiversity and ecosystems (ESRS E4), and circular economy (ESRS E5) using the TNFD LEAP approach<sup>32</sup> to assess both impact materiality (covered within the 'Evaluate' phase of LEAP) and financial materiality (covered within the 'Assess' phase of LEAP).

Further, in June 2024, TNFD and EFRAG jointly issued an interoperability guide to draw the connection between the TNFD disclosure recommendations and the disclosure requirements under the ESRS – not only against E4, but also the other environmental topical standards (E2, E3 and E5). This correspondence mapping is helping European undertakings, inclusive of US companies, to consider greater alignment with TNFD. As organizations refresh their annual double materiality assessments to comply with ESRS and other regulatory requirements, we anticipate seeing more teams leverage the TNFD guidance and LEAP approach to delve deeper into understanding their companies' nature-related impacts, risks and opportunities.

## Increasing awareness around risks posed to Canada's mining sector

Canada is home to almost half of the world's publicly listed mining and mineral exploration companies<sup>33</sup> and a key global producer of critical materials including copper, aluminum, cobalt, nickel, lithium and graphite.<sup>34</sup> Protecting Canada's natural environment is fundamental to creating a responsible, sustainable and competitive mining industry. The Canadian Minerals and Metals Plan (CMMP) aims to minimize and mitigate environmental impacts and restore lands previously used for mining to a natural state.<sup>35</sup>

According to the United Nations Environment Programme, 40% of global mining activity occurs in ecoregions with strong declining trends in integrity and 50% of the mining sector's potential for reducing species extinction risk lies with over 2% of mines globally.<sup>36</sup> Most large financial institutions are considering or have started assessing their portfolios to understand their baseline exposure to nature loss and ecosystem damage. TNFD lists ENCORE as a nature-related data tool to assess natural capital assets and drivers of environmental change, as well as qualitative impact and dependency ratings that link ecosystem services to production processes.<sup>37</sup>

Many Canadian mining companies focus efforts on sustaining nature and biodiversity, but data availability and quality can hinder analysis. TNFD recommendations support greater market transparency and data availability through a consistent disclosure framework at the corporate level. Companies are taking a progressive approach to TNFD adoption, planning for greater implementation over time.

<sup>27</sup> "CSRD Compliance: A Stitch in Time Will Save Nine," Harvard Law School, 23 January 2024.

<sup>28</sup> "EU taxonomy for sustainable activities," European Commission.

<sup>29</sup> "Regulation on Deforestation-free Products," European Commission.

<sup>30</sup> "Materiality Assessment Implementation Guidance," efrag.com.

<sup>31</sup> "ESRS E4 Biodiversity and Ecosystems," efrag.com.

<sup>32</sup> "Guidance on the identification and assessment of nature-related issues: the LEAP approach," TNFD, October 2023.

<sup>33</sup> Minister Wilkinson Releases Canada's \$3.8-billion Critical Minerals Strategy to Seize Generational Opportunity for Clean, Inclusive Growth - Canada.ca

<sup>34</sup> Canadian Mining Assets (canada.ca)

<sup>35</sup> Home (minescanada.ca)

<sup>36</sup> Spotlight on biodiversity risk and opportunity in the mining sector - UNEP-WCMC

<sup>37</sup> ENCORE - TNFD



That said, a considerable gap exists between the coverage and the quality of the disclosures against TNFD recommendations. In fact, alignment scores are much lower than coverage scores, showing only:

# 19%

Overall alignment of TNFD recommendations across three regions.

# 29%

Alignment among Latin American companies

# 15%

Alignment among Canadian companies

# 13%

Alignment among US companies

This gap between coverage and alignment underscores that simply acknowledging the recommendations is not enough. Companies need to substantively incorporate nature-related considerations into their decision-making and reporting. So, what does this mean? It signals that investors and stakeholders may not be getting the comprehensive, decision-useful information they need to fully assess companies' nature-related risks and opportunities. This could have implications for how capital gets allocated and how effectively companies are held accountable for their impacts on nature.

## Looking one level deeper, we also see differences in how companies are progressing within each of the four TNFD pillars.

The 14 TNFD recommendations are grouped into four overarching pillars:

### 1. Governance pillar

Supports companies in maintaining strong oversight and management of nature-related issues. Speaks to clear accountabilities, sufficient expertise to make informed decision-making and the resulting ability to integrate nature right into core business strategy and operations.

#### *What did our analysis find?*

#### ► Board oversight for nature-related issues remains limited.

Five percent of companies assign the Board of Directors direct oversight for nature or biodiversity beyond ESG and sustainability, highlighting a potential gap in governance over this increasingly important area.

#### ► Companies with the strongest TNFD coverage and alignment often have dedicated working groups focused on nature-related issues.

These working groups bring together relevant expertise from across the organization to help drive action on specific priority areas, for example:

- Biodiversity
- Deforestation
- Water stewardship
- Ecosystem restoration



- **Increased engagement with Indigenous communities on nature is starting to take shape.** In many cases, working groups are forming to manage nature-related dependencies, impacts, risks and opportunities by also engaging Indigenous communities. Companies that lead in this space conduct meaningful consultations with these groups prior to initiating projects or activities that may affect their rights and interests. Leading companies also may make accessible grievance mechanisms that allow Indigenous Peoples and Local Communities to raise concerns and seek resolution.

## 2. Strategy pillar

Guides companies in developing and implementing nature-focused strategies that go beyond risk mitigation alone. By integrating nature considerations into core business approaches and decision-making, companies can build long-term resilience and create shared value for both business and nature.

### *What did our analysis find?*

- **Companies increasingly recognize the importance of addressing biodiversity within the sustainability agenda.**

Twenty-seven percent of companies (101 of 369) are explicitly focused on biodiversity as part of their overall sustainability agenda. While this indicates progress, there remains a considerable gap around recognizing the vital role that biodiversity must play in addressing sustainability and core business strategy overall.

## 3. Risk and impact management pillar

Helps companies maintain robust processes for identifying, assessing and managing nature-related risks as they seize opportunities and work to reduce impacts across their direct operations and value chain (upstream and downstream) activities. For example, using scenario analysis to anticipate future trends and shifts in the natural world. By modeling different plausible scenarios, businesses can better prepare for a transition that mitigates nature-related risks and integrates nature conservation and restoration into core business strategies.

### *What did our analysis find?*

- **Nature-related risks aren't typically integrated into broader enterprise risk management and impact assessment frameworks.** That's a gap that companies should work to close. Still, doing so requires a thoughtful approach, including leveraging the qualitative scenario analysis guidance developed by TNFD, considering the full value chain and utilizing location-specific information and tooling to identify and manage local impacts and risks.
- **Across the three regions, we see a notable lack of disclosures concerning the financial repercussions or effects of nature-related dependencies and impacts.**

## 4. Metrics and targets pillar

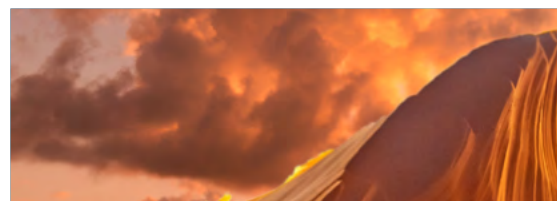
Informs effective tracking, managing and disclosure of meaningful, nature-related metrics and targets to support a nature-positive transition. This helps companies to set ambitious, measurable targets for reducing negative impacts and contributing positively to nature.

### *What did our analysis find?*

- **A growing but still incomplete trend toward quantifying nature-related impacts and dependencies is taking hold.**

Forty-three percent of companies (157 of 369) are disclosing nature-related metrics. Which areas are most commonly reported?

- Water use, discharge and withdrawal
- Afforestation, deforestation and identification of key species and habitats under threat
- **Companies are setting targets on key areas like watershed remediation, habitat restoration, ecosystem preservation and conservation of species on the International Union for Conservation of Nature's (IUCN's) Red List.**





For example, companies are committing to sourcing key commodities like timber, palm oil, soy and cattle products in ways that prevent deforestation and promote sustainability. This trend reflects a broader industry movement. Companies are increasingly focused on supply chain impacts on the loss of forests and natural habitats.

Our inaugural analysis showed similar uptake around conserving and restoring natural habitats and biodiversity. Approximately 15% of companies benchmarked disclosed nature-positive targets or measurable initiatives to support nature-positive outcomes, such as planting trees, protecting species and habitats, investing in conservation and restoration projects – all in the spirit of achieving a net-positive impact on nature.

- ▶ **Organizations across the US, Canada and Latin America are embracing regenerative and circular economy practices.**

This approach moves companies beyond simply reducing environmental footprints to actively supporting the circular economy, reusing and recycling resources to minimize waste, and having a restorative impact on the world.

For example, our analysis showed companies are establishing targets and articulating ambitions to:

- ▶ Reduce water use by set percentages on specific timelines
- ▶ Halt deforestation entirely by a given date, or set clear reduction targets for deforestation overall
- ▶ Commit to sourcing 100% certified-fiber paper, with a focus on creating a deforestation-free future
- ▶ Avoid sourcing beef products from geographic areas with high risks of deforestation
- ▶ Avoid conversion of natural ecosystems attributed to company activities or sourcing

When companies set clear oversight and accountability for nature, integrate nature into enterprise risk management processes and develop robust metrics for measuring progress, they can integrate nature more systematically into core business strategies and operations.

This integration is a turning point. Here, companies can hit their stride by unleashing a new ability to go beyond simply meeting stakeholder expectations and generate trust in their nature stewardship approach overall.







# 3

## Gaining a sector-level view of TNFD momentum



## Not all sectors are approaching TNFD and nature-related disclosures in the same way or at the same pace.

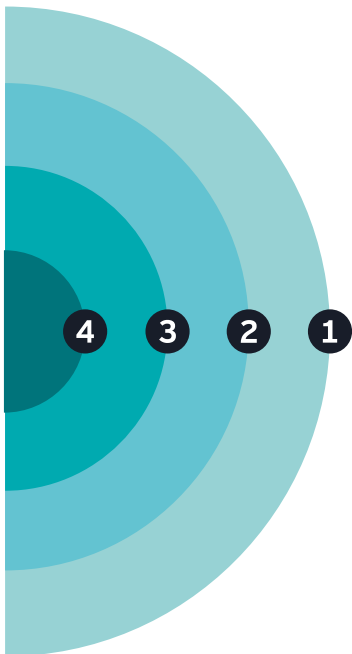
Zooming in to gain a stronger understanding of how, and how well, different industries are addressing TNFD recommendations reveals a number of gaps. Layered within the data, though, are opportunities for sectors to share leading practices and, in some cases, even collaborate to drive positive change.

### How did we analyze nature-related disclosures for companies in the US, Canada and Latin America?

We assessed current nature-related disclosures for companies across 10 sectors, aligned to the Sustainable Industry Classification System® (SICS):<sup>38</sup>

- ▶ Consumer Goods
- ▶ Extractives & Minerals Processing
- ▶ Financials
- ▶ Food & Beverage
- ▶ Health Care
- ▶ Infrastructure
- ▶ Resource Transformation
- ▶ Services
- ▶ Technology & Communications
- ▶ Transportation

**Figure 3.** Core elements of the TNFD recommended nature-related financial disclosures



<b>1</b>	<b>Governance</b>	The organization's governance around nature-related dependencies, impacts, risks and opportunities
<b>2</b>	<b>Strategy</b>	The actual and potential impacts of nature-related dependencies, impacts, risks and opportunities on the organization's businesses, strategy and financial planning where such information is material
<b>3</b>	<b>Risk and impact management</b>	How the organization identifies, assesses and manages nature-related dependencies, impacts, risks and opportunities
<b>4</b>	<b>Metrics and targets</b>	The metrics and targets used to assess and manage relevant nature-related dependencies, risks and opportunities where such information is material

<sup>38</sup> "ESRS E4 Biodiversity and Ecosystems," efrag.com.

Figure 4. Mean total coverage scores by sector

	Mean of coverage overall	Average of alignment overall	Count of coverage overall
Consumer Goods	75%	21%	35
Extractives & Minerals Processing	91%	27%	29
Financials	48%	8%	58
Health Care	63%	10%	49
Infrastructure	65%	13%	31
Resource Transformation	79%	18%	38
Services	67%	10%	15
Technology & Communications	63%	11%	64
Transportation	59%	9%	19
Food & Beverage	88%	24%	31

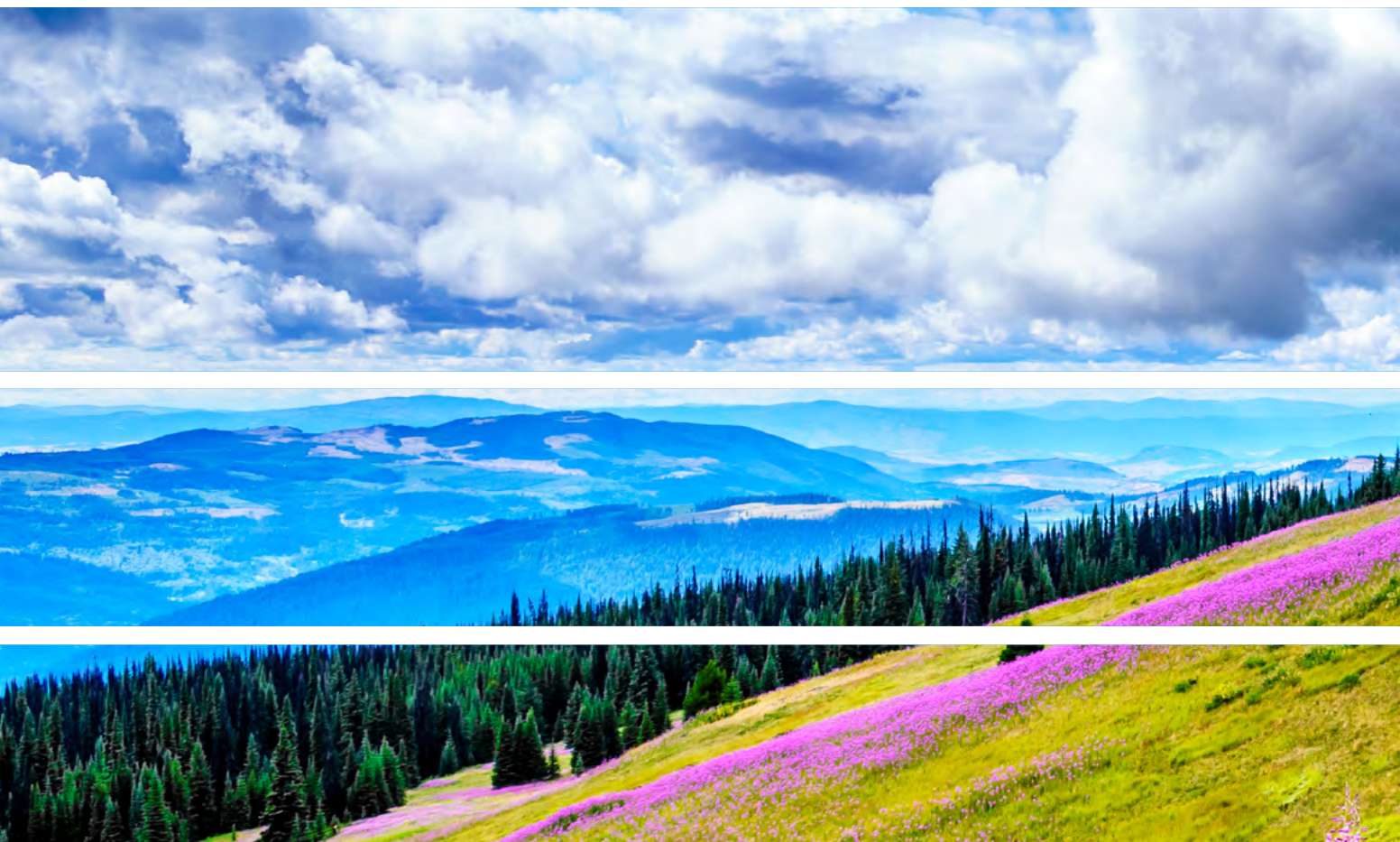




Figure 5. Coverage scores by sector

	Mean of governance	Mean of strategy	Mean of risk & impact management	Mean of metrics & targets
Consumer Goods	70%	40%	45%	63%
Extractives & Minerals Processing	80%	61%	66%	63%
Financials	42%	14%	22%	26%
Health Care	55%	26%	22%	41%
Infrastructure	53%	27%	36%	46%
Resource Transformation	62%	39%	47%	66%
Services	62%	27%	22%	33%
Technology & Communications	59%	24%	31%	40%
Transportation	44%	22%	16%	44%
Food & Beverage	77%	53%	62%	71%

Figure 6. Alignment scores by sector

	Average of governance	Average of strategy	Average of risk & impact management	Average of metrics & targets
Consumer Goods	30%	18%	19%	20%
Extractives & Minerals Processing	35%	24%	28%	21%
Financials	14%	4%	8%	6%
Health Care	17%	8%	8%	10%
Infrastructure	17%	9%	14%	13%
Resource Transformation	21%	14%	18%	19%
Services	21%	8%	7%	7%
Technology & Communications	18%	8%	11%	10%
Transportation	15%	7%	6%	11%
Food & Beverage	33%	19%	24%	22%



## Specifically, what stands out between sectors?

**In terms of TNFD disclosure, the extractives and mineral processing sector outperforms all others.**

Traditionally associated with highly visible impacts on the natural environment (e.g., mining operations that disrupt habitats, processing that pollutes waterways), companies in the extractives and mineral processing sector have long faced significant community opposition and reputational risks associated with nature. Interestingly, the sector now prevails in terms of TNFD disclosures, achieving:

**91%**

Coverage against TNFD recommendations

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**27%**

Alignment with TNFD recommendations

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This may be a result of the sector facing greater pressure to take proactive action on nature and promote transparency, compared to other areas of the economy. For example, in efforts to meet stakeholder demands and calls for improvements, the sector may have shifted toward voluntary reporting on nature (in conjunction with mandatory requirements). That has, in turn, created momentum – and moved extractives and mining processing companies into a leadership position among sectors. Breaking down the findings by TNFD pillars, our findings reveal that:

**Extractives and mining processing ranked the highest within the Governance pillar of the TNFD recommendations.**

**35%**

Companies within the sector aligned to TNFD recommendations tied to Governance

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What's more, those numbers were even higher in terms of coverage:

**80%**

coverage – the majority of companies in the sector are taking steps to govern nature-related issues, even if there's room for improvement in the depth of that governance.

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**Leading practices are emerging in how the extractives and mineral processing sector approaches TNFD.**

Within the sector, companies are establishing designated committees to go beyond climate and focus on nature and biodiversity matters. These committees are playing a critical role in management and oversight of nature-related risks and opportunities. In some cases, they also convene quarterly to review risks and set targets.

**These businesses create high-level ownership of nature and biodiversity, right at the top of the house.**

Some companies have established executive committees to focus on nature and biodiversity. These committees include executive-level management, including the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO) to the Chief Sustainability Officer (CSO). This executive-level oversight is encouraging. It means that nature-related issues are gaining necessary attention by leadership, which sets a clear tone from the top for the rest of the organization, too.

**Most extractives and mining processing companies are focused on water, historically, one of the sector's greatest risks.**

Given the extractive sector's significant water footprint, it's encouraging to see companies identifying water as a key nature-related risk. Across this space, we see businesses disclosing that they have mechanisms in place to monitor and implement measures related to water.



## Where can the extractives and mining industry improve the most?

Of the four TNFD pillars, extractives and mining companies showed the lowest alignment with the Strategy pillar, at only **24%** Coverage was **61%**. Admittedly, these values are higher still than any other sector analyzed.

Nonetheless, few extractives and mining processing companies have stand-alone biodiversity strategies or policies in place. Rather, biodiversity considerations are often integrated into broader environmental strategies and policies. Integration can be beneficial. But stand-alone policies reinforce the need for dedicated attention to biodiversity.

Importantly, the Barometer does indicate companies in this sector are leading the way and integrating nature-related risks and financial estimates. This practice helps businesses and stakeholders understand the potential financial impacts of nature-related risks and factor this information into decision-making.

Target-setting is also taking place within the sector. Some companies we analyzed are setting short-, medium- and long-term targets for nature and biodiversity. Targets may include achieving zero deforestation for all raw materials, reducing water usage and restoring habitats, for instance. This is crucial to tracking progress and creating accountability for nature-related goals.



**Food and beverage companies followed closely, averaging with the second-highest coverage and alignment scores.**

**88%**

coverage

**24%**

alignment

Given this sector's complex global supply chains (often visible to stakeholders), companies are moving to better assess and manage nature-related risks like:

- ▶ Responsible sourcing of nature-related commodities
- ▶ Deforestation
- ▶ Misuse of water

Meanwhile, emerging regulatory trends – including proposed EU legislation stipulating requirements for deforestation-free products – will require food and beverage companies that sell their products on the European market to make sure they are not contributing to deforestation.

Similarly to the extractives and mining processes sector, food and beverage companies ranked highest on TNFD recommendations within the Governance pillar.

**77%**

– the majority of companies are taking steps to govern nature-related issues, even if there is room for improvement in the depth of that governance.

**33%**

Of food and beverage companies demonstrated strong alignment with the Governance pillar. That means those focused on governing nature-related issues are embracing and following leading practices.

**Across the food and beverage sector, select companies are committing to responsible sourcing practices and transparency in the supply chain.**

We're seeing this take shape in disclosure regarding increasing use of certifications, like the Roundtable on Sustainable Palm Oil (RSPO) and Forest Stewardship Council (FSC).

What's more, the Barometer shows companies that had policies in place to address sustainability-related areas (e.g., water quality, biodiversity, conservation, ethical supply chain practices) are also better equipped to manage nature-related risks and opportunities.

**Where can the food and beverage industry improve the most?**

Of the four TNFD pillars, food and beverage companies showed the lowest alignment with the Strategy pillar, at only **19%**. Coverage was also relatively low, at **52%**.

This could mean that companies in the sector are struggling to fully integrate nature-related considerations into short-, medium- and long-term strategies.

In addition, some companies in this space have failed to identify nature-related dependencies, (whether short-, medium- or long-term), impacts, risks and opportunities. While water dependencies, impacts, risks and opportunities may be included in climate-related time horizon analyses, the sector shows a general lack of nature-specific time horizon analysis overall.

**Financial companies demonstrate the lowest TNFD coverage and alignment of all sectors.**

Within the 10 sectors that we assessed through the Barometer, financial services organizations ranked the lowest where TNFD recommendations are concerned at just:

**26%**

coverage

**8%**

alignment



### The real question is: why?

Until recently, the financial sector has faced limited regulatory guidance specific to nature-related risks – as opposed to climate risks. This may be contributing to the slower uptake of nature-related risk management and disclosure practices across the market.

Compounding this reality is the fact that financial companies don't have as many direct operational impacts on nature as other sectors (e.g., extractive and mining processes) but are impacted indirectly, and often much more significantly, through exposure to nature-related risks born by companies within their lending and investment portfolios. Assessing and managing these risks across diverse industries and geographies is complex and challenging, particularly in the absence of standardized measurement of nature and biodiversity impacts and dependencies. This may also be influencing the sector's ability to address TNFD recommendations now.

Our analysis of 369 companies' current sustainability reporting found that more companies are acknowledging nature in their disclosures than ever before, which appears to be encouraging nature-positive actions and investments. However, while more companies are sharing information around their nature-related impacts, dependencies, risks and opportunities, most have yet to directly align to TNFD's 14 disclosure recommendations.

Similar to the evolution of the TCFD recommendations, we anticipate that the rise of nature-related regulatory requirements,<sup>39</sup> heightened investor pressure in response to evolving financial risk associated with nature,<sup>40</sup> and increased awareness and commitments in line with the Global Biodiversity Framework<sup>41</sup> will continue to drive more companies to assess and disclose their nature-related impacts, dependencies, risks and opportunities in alignment with the TNFD framework.

<sup>39</sup> "Global Risks Report 2024," World Economic Forum, 10 January 2024.

<sup>40</sup> Craig, David and Mrema, Elizabeth, "Businesses must address nature-related financial risks. Here's why," World Economic Forum, 8 January 2024.

<sup>41</sup> "Kunming-Montreal Global Biodiversity Framework," Convention on Biological Diversity, 1 October 2024.







# 4 Taking sustained action to integrate nature into business strategy



There's no one right way to evaluate nature-related risks and opportunities and integrate into a broader business strategy. Doing so requires organizations to get a big-picture view of where they stand with nature, informing strategies with meaningful data, insight and perspectives. From there, the goal should be developing a plan that's measurable, sustainable and flexible enough to evolve over time.

We see core leading practices emerging across the market. These key takeaways may help organizations assess, build, refresh and implement a sustainable approach to addressing nature-related risks and opportunities in alignment with the TNFD framework:

**1. Monitor the regulatory landscape around nature.**

Knowledge is critical in this evolving environment. As regulatory bodies accelerate their focus on nature-related risks and disclosures, businesses will need a clear process for staying abreast of regulatory changes. For example, in the EU, the CSRD and EU Taxonomy will soon require companies to report on environmental impacts if material to the business. Operating effectively in this landscape requires companies to be aware of these upcoming regulations in order to prepare for associated compliance obligations.

**2. Educate management on the growing significance of nature to business.**

Disruptive forces continue to redefine the priority list at every level of an organization, including management. As senior leaders seek to balance competing priorities, they will need a robust understanding of how the business depends upon nature and the financial risks that presents, as well as the way in which nature-positive strategies can help businesses achieve critical goals such as emission-reduction targets and net-zero commitments. Successfully mitigating nature-related risks and maximizing related opportunities means many organizations will need to help management educate themselves in this area.

**3. Understand how nature impacts across the value chain.**

Nature- and climate-related risks mean the value chain may look very different for businesses than it has in the past. As companies work to address these priorities in a concerted and cohesive way, leadership and functional groups will need a clear map forward. That means demonstrating how business activities could potentially affect stake holders across the upstream supply chain and internal operations, as well as downstream customers and

end users. Gathering existing data (e.g., supplier spend, material spend, water consumption, waste produce) to support understanding of regional and commodity-based impacts is fundamental. Greater visibility of impacts and dependencies on nature across the value chain will inform the path forward.

**4. Assess data availability across the business.**

Setting solid strategies requires businesses to understand where they are starting from, then validate progress going forward. Monitoring and benchmarking key indicators across the organization and the sector overall can help businesses measure performance around nature-impact drivers (such as climate change, pollution, land and sea use, over-exploitation of natural resources, invasive alien species and more). To do that, organizations must monitor innovation in data collection, analysis and reporting tools in the spirit of generating more accurate and comprehensive nature-related disclosures. Continuing to learn how technologies like satellite imaging, environmental DNA testing, AI and blockchain can support the business in tracking nature-related impacts, managing risks and identifying opportunities.

### 5. Leverage technology to assess localized biodiversity impacts and dependencies.

Technology enables businesses to leverage geospatial and global datasets, narrowing the focus on nature-based assessments. It also enables teams to consider the proximity of direct and indirect locations to ecologically sensitive ecosystems, areas of high biodiversity importance or water-stressed regions. This capability represents a compelling tool in mitigating nature-related risks. Businesses have never been here before. Technology means companies across the Americas can clearly visualize these areas in entirely different ways. Imbuing plans and strategies with this unparalleled insight can go a long way toward achieving risk mitigation goals.

### 6. Bring external stakeholders into the conversation to accelerate action.

Business investors, suppliers, customers and other stakeholders, including Indigenous Peoples and Local Communities, will have a unique perspective of nature-related impacts, dependencies risks and opportunities and how to manage them. Now is the time to actively engage these stakeholders in organizational dialogue. Bringing a diverse chorus of voices from across the value chain – and, in fact, the broader community – helps businesses develop and implement more targeted and resilient nature-related strategies. This can also foster a much-needed collective approach to environmental stewardship at scale.

### 7. Take an integrated approach to nature, climate change and human rights.

Nature cannot be addressed in isolation from other business issues like climate change, human rights or supply chain resilience. It must be woven right into the fabric of business decision-making. How? Map priority organizational impacts and dependencies on nature to risk and opportunities as part of the broader risk management approach. Develop a holistic sustainability strategy that incorporates biodiversity, climate change and human rights considerations, aligning also to business objectives. This process should include setting clear targets, timelines and initiatives for how the organization will conserve and restore natural habitats while protecting human rights and combating climate change.





# Glossary



**Biodiversity:** The variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.\*

### Corporate Sustainability Reporting

**Directive (CSRD):** An EU-led directive by the European Commission that replaces the EU's Non-Financial Reporting Directive (NFRD). It establishes enhanced environmental, social and governance (ESG) reporting requirements for companies. While originating from the EU, the CSRD has a global reach, impacting not only EU-based companies but also companies outside the EU.<sup>1</sup>

**Dependencies:** Aspects of environmental assets and ecosystem services that a person or an organization relies on to function. A company's business model, for example, may be dependent on the ecosystem services of water flow, water quality regulation and the regulation of hazards like fires and floods; provision of suitable habitat for pollinators, who in turn provide a service directly to economies; and carbon sequestration.<sup>2</sup>

**Double materiality:** Double materiality has two dimensions: impact materiality and financial materiality. European Commission (2023) Annex 1 to the Commission Delegated Regulation, supplementing Directive 2013/34/EU as amended by Directive 2022/2464 (CSRD), as regards sustainability reporting standards (ESRS E1).

**Ecosystem assets:** A form of environmental assets that relate to diverse ecosystems. These are contiguous spaces of a specific ecosystem type characterized by a distinct set of biotic and abiotic components and their interactions.\*

**Ecosystem services:** Ecosystem services provide benefits to business through various categories defined by the TNFD:\*

- ▶ **Provisioning services:** Benefits obtained by extracting or harvesting resources from ecosystems, such as timber and fuel wood from a forest, or freshwater from a river.
- ▶ **Regulating and maintenance services:** Benefits derived from ecosystems' ability to regulate biological processes and influence climate, hydrological and biochemical cycles. These services help maintain environmental conditions that are beneficial to individuals and society. For example, the provision of freshwater relies on forests' capacity to absorb carbon and regulate climate change.
- ▶ **Cultural services:** Experiential and intangible services associated with the qualities of ecosystems. The existence and functioning of ecosystems contribute to various cultural benefits. Examples include the recreational value of a forest or a coral reef for tourism.

**Environmental assets:** The naturally occurring living and non-living components of the earth, together constituting the biophysical environment, may provide benefits to humanity.\*

### Global Biodiversity Framework (GBF):

The Kunming-Montreal Global Biodiversity Framework is an international agreement signed by 196 nations to address biodiversity loss by 2030. It aims to protect 30% of land and sea areas. The GBF has important implications for the financial sector, highlighting the role of finance in both perpetuating biodiversity loss and finding solutions.

**High-risk natural commodities:** High-risk natural commodities refer to commodities or products where production has significant negative impacts on nature. Organizations should refer to the SBTN High Impact Commodity List in the first instance, supplemented by TNFD sector-specific guidance for details on the types of high-risk natural commodities for each sector, where relevant.<sup>3</sup>

**Impacts:** Changes in the state of nature (quality or quantity), which may result in changes to the capacity of nature to provide social and economic functions. Impacts can be positive or negative. They can be the result of an or another party's actions and can be direct, indirect or cumulative. A single impact driver may be associated with multiple impacts.<sup>4</sup>

**Indicator:** A quantitative or qualitative factor or variable that provides a simple and reliable means to measure performance. An indicator can be measured through one or multiple metrics.

\* As defined by the TNFD

<sup>1</sup> Corporate sustainability reporting - European Commission (europa.eu)

<sup>2</sup> SBTN Steps 1-3 Glossary\_2022 .docx (sciencebasedtargetsnetwork.org)

<sup>3</sup> SBTN-High-Impact-Commodity-List-v1.xlsx (live.com)

<sup>4</sup> SBTN Steps 1-3 Glossary\_2022 .docx (sciencebasedtargetsnetwork.org)



**Indigenous Peoples:** According to ILO Convention 169, Indigenous Peoples are descendants of a population “which inhabited a country or geographical region during its conquest or colonisation or the establishment of present state boundaries’ and ‘retain some or all of their own social, economic, cultural and political institutions.’”<sup>5</sup>

**International Sustainability Standards Board (ISSB):** A global body established in November 2021 during the UN Climate Change Conference (COP26) in Glasgow. The ISSB’s primary goal is to develop and promote global standards for sustainability disclosures, ensuring that companies provide high-quality and comparable information on sustainability-related risks and opportunities that meet the needs of investors and financial markets.

**International Union for Conservation of Nature (IUCN):** The global authority on the conservation status of species. Through its species survival commission, it maintains the IUCN Red List of Threatened Species, which categorizes species based on their conservation status.

**Natural capital:** The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals) combined to yield a flow of benefits to people.\*

**Natural commodities:** Natural assets (raw materials) occurring in nature that can be used for economic production or consumption.<sup>6</sup>

**Nature:** The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment.\*

**Nature loss:** The loss and/or decline of the state of nature. This includes, but is not limited to, the reduction of any aspect of biological diversity, such as diversity at the genetic, species and ecosystem levels in a particular area through death (including extinction), destruction or manual removal.<sup>7</sup>

**Nature-related disclosures:** Nature-related disclosures refer to the reporting of information by companies and organizations about their impacts on nature, biodiversity and ecosystem services. These disclosures provide transparency and enable stakeholders to assess environmental performance and sustainability. They cover aspects such as resource use, conservation efforts, habitat management and integration of nature considerations into business strategies. Standardized frameworks like the TNFD guide these disclosures, promoting accountability and conservation of the natural environment.

**Opportunities:** Potential positive outcomes for the organization that arise from its dependencies and impacts on nature. Opportunities can include new revenue streams (e.g., from sustainable products), cost reductions (e.g., from resource efficiency) and enhanced reputation and market positioning.\*

**Pollutants:** Substances and heat in air, water and/or land whose nature, location or quantity produce harmful and undesirable environmental effects.<sup>8</sup>

**Risks:** Potential negative impacts on the organization that arise from its dependencies and impacts on nature. Risks can be physical/operational (e.g., supply chain disruptions due to climate change), regulatory (e.g., fines for environmental non-compliance), or reputational/market (e.g., loss of customers due to perceived environmental harm).\*

**Science Based Targets Network (SBTN):** A collaboration of global nonprofits and organizations working together to help companies and cities set science-based targets for earth’s systems. It aims to guide them in addressing their impacts and dependencies on nature across their value chains.

**Science-Based Targets Network (SBTN) mitigation hierarchy:** The SBTN mitigation hierarchy functions as a framework that directs companies in their endeavors to decrease greenhouse gas emissions and address environmental impacts. It offers a structured approach for companies to prioritize their actions, ensuring they align with scientific targets and adhere to the best practices of environmental sustainability.

**Task Force on Nature-related Financial Disclosures (TNFD):** An initiative that provides a standardized approach for companies and financial institutions to assess and disclose risks, opportunities and impacts related to nature. By integrating nature-related considerations into financial decision-making, the TNFD aims to enhance transparency and enable informed choices.

<sup>5</sup> UNDRIPManualForNHRIs.pdf (ohchr.org)

<sup>6</sup> OECD Glossary of Statistical Terms | OECD iLibrary (oecd-ilibrary.org)

<sup>7</sup> Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat

<sup>8</sup> SeriesF\_67E.pdf (un.org)

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