Research Institute

ESG Thematic Research

October 21, 2024 Marketing material



Improving investor understanding when it comes

to nature

Whitepaper #3: Standards, frameworks and tools relating to nature





Steffen Kutscher

Sustainability Frameworks

Lead

Michael Lewis Head of Research ESG



Otar Sarishvili Sustainability Frameworks Specialist



Annekathrin Mueller-Lohmann Senior Sustainability Strategy Manager

IN A NUTSHELL

- In recent years, there has been a noticeable uptick in the evaluation by investors of businesses' dependencies and impacts on nature. We expect this trend will continue helped by action at the COP16 Biodiversity Summit in Colombia which opens today.
- This is being accompanied by an increasing number of nature-related standards and frameworks such as the Task Force on Nature-related Financial Disclosures (TNFD), the Science Based Targets Network (SBTN) and the Finance for Biodiversity Foundation's (FfB) Nature Target Setting Framework.
- These frameworks are helping investors to incorporate nature-related risks and opportunities into the investment decision-making process. However, there remains a notable disparity when it comes to company reporting in the realm of nature compared to climate.
- Despite the challenges, materiality heatmaps and biodiversity footprint analysis are readily available tools that can be deployed to assess nature dependencies and impacts at a portfolio level.
- Of the many dependency and impact drivers¹ on nature, one of the most important is freshwater use, particularly in the agricultural, chemicals, metals & mining and oil & gas sectors. This explains the increasing efforts among investors to assess and manage the water dimension from an investment standpoint.
- While there is work underway which aims to improve the scale of naturerelated reporting, more work needs to be conducted to capture naturerelated dependencies and impacts in a company's supply chain.

Introduction

In our third paper in this biodiversity series², we explore how nature-related standards and frameworks aim to improve investor understanding when it comes to nature. The paper is organized into four sections. The first section examines the steps investors are taking to understand and assess nature-related risk and opportunities at a portfolio level. The second section explores the efforts underway to address the challenges faced by investors to integrate nature-related risks and opportunities. The third section then examines some of the tools available for investors to assess the materiality of nature at a portfolio level. Following the conclusion, the appendix provides an overview of how the main nature-related standards and framework compare.

¹ Impact drivers include land and sea use change, over-exploitation of resources, climate change, pollution and invasive species

² DWS Research Institute (December 2023). Nature-focused regulations start to get serious; DWS Research Institute (April 2024). Why companies are waking up to nature-s value

^{*} We wish to thank Dr. Katja Kirchstein and Matthias Kopp of WWF Deutschland for providing comments on a draft of this report

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas, Inc. and RREEF America L.L.C., which offer advisory services. There may be references in this document which do not yet reflect the DWS Brand.

Please note certain information in this presentation constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this presentation report may differ materially from those described. The information herein reflects our current views only, is subject to change, and is not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein.

For Professional Clients (MiFID Directive 2014/65/EU Annex II) only. For Qualified Investors (Art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA)). For Qualified Clients (Israeli Regulation of Investment Advice, Investment Marketing and Portfolio Management Law 5755-1995). Outside the U.S. for Institutional investors only. In the United States and Canada, for institutional client and registered representative use only. Not for retail distribution. Further distribution of this material is strictly prohibited. In Australia and New Zealand: For Wholesale Investors only. For Asia For institutional investors only. For Sin Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda.

1 / Scoping nature from an investor perspective

1.1 Frameworks to support investor understanding of nature

In recent years, there has been a noticeable uptick in the need to evaluate businesses' dependencies and impacts on nature. According to a study conducted by GARP³, approximately 30% of financial institutions (FI) participating in the study indicated that regulators are now mandating the disclosure of their nature-related risks and opportunities. This figure is expected to rise over time, driven by Europe's Corporate Sustainability Reporting Directive (CSRD), the Sustainable Finance Disclosure Regulation (SFDR) and initiatives by central banks such as the Network for Greening the Financial System (NGFS)⁴.

While there is no one-size-fits-all approach to the incorporation of sustainability factors such as nature into an asset managers' investment process, global initiatives such as the Taskforce on Nature-related Financial Disclosures (TNFD), the Science Based Targets Network (SBTN) and the Nature Target Setting Framework⁵, developed by Finance for Biodiversity Foundation (FfB), are supporting financial and non-financial organisations to incorporate nature considerations into financial and business decision-making processes.

Of these, the TNFD focuses on improving corporate reporting on nature with the aim of businesses incorporating nature-related risks and opportunities into their strategic planning (Refer to Table 1 in the appendix). The SBTN helps companies set and achieve targets to reduce negative impacts on nature while the FfB's Framework provides asset managers and asset owners with recommended strategies and methodologies for setting nature-related goals, along with assistance in guiding their investment and capital allocation decisions to address nature loss.

1.2 Understanding, assessing and target setting

Investors typically need to adopt a three-step process of understanding nature-related exposures, first at a sector level and second at a location level. This then allows investors the ability to consider setting targets for relevant key performance indicators (KPIs).

The TNFD framework offers guidance on identifying, assessing, managing, and disclosing nature-related dependencies, impacts, risks, and opportunities. This includes the **LEAP assessment**, which encourages organizations to:

- Locate its interface with nature.
- Evaluate its dependencies and impacts on nature.
- Assess its nature-related risks and opportunities.
- Prepare to respond to nature-related risks and opportunities and to report on material nature-related issues.

To better serve the specific requirements of FIs, the TNFD has enhanced the **LEAP approach for financial institutions**, creating **LEAP-FI**. This guidance recommends that FIs disclose all core global risk and opportunity disclosure metrics, along with two core sector disclosure metrics.

These metrics are designed to help FIs disclose their financial exposure to a defined set of sectors considered to have material nature-related dependencies and impacts (Metric 1) as well as sensitive locations (Metric 2). For asset owners and asset managers, Metric 1 could be the absolute amount or percentage of invested or owned assets across priority sectors, Figure 1.

³ GARP (March 2024). Global survey of nature risk management at financial firms. The GARP survey covered 48 firms comprising 37 banks 7 asset managers and 4 insurers around the world https://www.garp.org/hubfs/Website/GRI/PDF/GRI%20Nature%20Risk%20Survey%202024_032524.pdf ⁴ NGFS (September 2023). Nature-related financial risks: a conceptual framework to guide action by central banks and supervisors. ⁵ Finance for Biodiversity (July 2024) Nature Target Setting Framework for Asset Managers and Asset Owners https://connect.financeforbiodiversity.org/hubfs/Docs/FFBI_ExeSummary_Guidance_on_nature_target_setting.pdf

Type of FI	KPI	Priority Sector
		1. Oil, gas and consumable fuels
		2. Chemicals
Banks	Absolute amount or percentage	3. Construction materials
	of lending volume	4. Containers and packaging
		5. Metals and mining
		6. Paper and forest products
Assets Owners	Absolute amount or percentage	7. Construction services (includes manufacture of metal)
and managers	of invested or owned assets	8. Sewerage, waste collection, treatment and disposal
		9. Transport and associated services (includes airlines)
		10. Automobiles
		11. Textiles, apparel and luxury goods
Insurers	Absolute amount or percentage	12. Beverages and food products (includes agriculture)
	of net premiums written or total	13. Personal care products
	sums insured	14. Pharmaceuticals
		15. Semiconductors and semiconductor equipment
		16. Utilities (including electric and gas utilities, independent power and renewable electricity producers, and water utilities)

Figure 1: Priority sectors defined by TNFD for Financial Institutions (Fis)

With regard to the disclosure by FIs of their financial exposure to companies with activities in sensitive locations, this can be defined as outlined in Box 1. Similarly to Metric 1, the relevant KPI could be the absolute amount or percentage of invested or owned assets.

Box 1: Sensitive locations:

Sensitive locations are locations where the assets and/or activities in an organisation's direct operations – and, where possible, upstream and downstream value chain(s) – interface with nature in:

- Areas important for biodiversity; and/or
- Areas of high ecosystem integrity; and/or
- Areas of rapid decline in ecosystem integrity; and/or
- Areas of high physical water risks; and/or
- Areas of importance for ecosystem service provision, including benefits to indigenous peoples, local communities, and affected stakeholders.

The final step is target setting. One approach is provided by FfB and their Nature Target Setting Framework for asset managers and asset owners with regard to listed equities and bonds⁶. This has been developed in alignment with key initiatives such as TNFD, SBTN, UNEP FI, and others. The framework outlines three categories of nature targets: initiation targets, monitoring targets, and portfolio targets.

(1) Initiation targets allow investors to assess their exposure to impacts, dependencies, risks, and opportunities related to nature in line with TNFD recommendations and GBF Target 15⁷. In turn, this is then embedded in the governance, strategy, and activities of the organization, in line with an asset manager's or asset owners' fiduciary duty. Hence initiation targets enable asset managers and asset owners to get started in meeting the evolving regulatory integration and reporting requirements. Investors are encouraged to implement and achieve their initiation targets as soon as feasibly possible as these constitute the base assessment required to set Monitoring and Portfolio targets.

⁶ Finance for Biodiversity (July 2024) Nature Target Setting Framework for Asset Managers and Asset Owners https://connect.financeforbiodiversity.org/hubfs/Docs/FFBI_ExeSummary_Guidance_on_nature_target_setting.pdf

⁷ GBF Target 15 relates to businesses assessing, disclosing and reducing biodiversity-related risks and negative impacts

October 2024 – For Qualified Investors (Art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA). For Professional Clients (MiFID Directive 2014/65/EU Annex II) only. For Institutional investors only. Further distribution of this material is strictly prohibited. Australia and New Zealand: For Wholesale Investors only

- (2) Monitoring targets are established to allocate resources for tracking sector specific KPIs in priority areas, supported by stewardship actions to tackle significant impact drivers. From DWS's perspective, monitoring is important for understanding the pressures on nature resulting from investments in individual companies and sectors. It also ensures stewardship target setting is more reliable and can aid disclosure.
- (3) Portfolio targets serve as the final step in reducing the potential negative impact on nature of the portfolio. These involve establishing targets based on previously monitored KPIs and creating a clear action plan through stewardship sub-targets. Investors must set portfolio targets and corresponding stewardship sub-targets, aiming to achieve these by 2030, and are required to report their progress publicly on an annual basis.

Asset managers and asset owners are encouraged to consider a sector-based approach, as sector-specific KPIs facilitate a practical method for identifying and addressing key impact drivers, which can guide engagement and portfolio objectives. The development of sector KPIs involves three recommended steps:

- (i) Identify exposure to the priority sectors
- (ii) Prioritise the main impact drivers per sector, and finally
- (iii) Define relevant sector relevant KPIs.

Following the results of the three steps, investors can begin tracking sector specific KPIs to substantiate their targets, ensuring a consistent approach for each environmental pressure across various sectors. These KPIs can be categorized into four types, as outlined in Box 2, which is recommended to be integrated into the FI's portfolio target framework over time.

Box 2: Typologies of KPIs

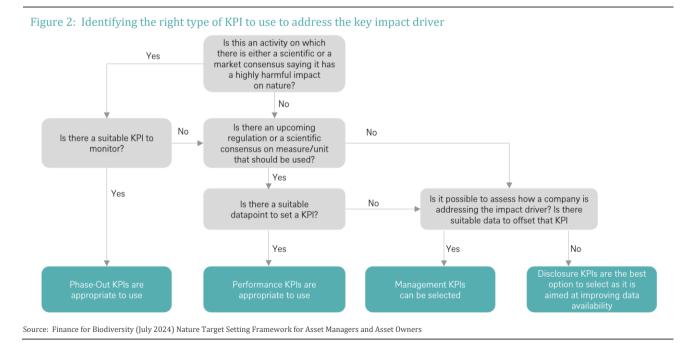
1. Disclosure KPIs help investors track the proportion of companies sharing data on key impact drivers within each sector.

2. **Management KPIs** focus on determining the percentage of companies developing policies and strategies to address potential negative impacts effectively.

3. Performance KPIs aim at screening the evolution of the potential impacts generated by companies on nature.

4. **Phase-out KPIs** focus on identifying companies involved in controversies, particularly harmful practices. These KPIs supported by robust stewardship actions motivates companies to discontinue such activities and promote more sustainable practices.

To choose the most suitable KPI for addressing each environmental pressure, investors can consider the approach outlined in Figure 2. FIs can then adapt their Portfolio targets to align with emerging scientific consensus and widen the scope and depth as data availability increases. This includes incorporating more sectors, impact drivers, and stewardship actions. In the next section, we examine the complexities that FIs face in assessing nature-related risks and opportunities in their portfolios.

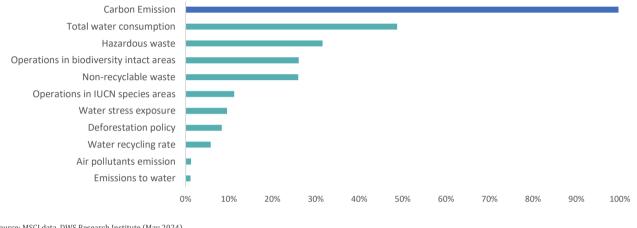


2 / Challenges to assess nature-related risks and opportunities

2.1 Improvements needed in reporting and disclosures

The ability to effectively assess nature-related risks and opportunities hinges on the accuracy, completeness, and reliability of the data reported by a company. While there has been a significant increase in corporate climate disclosures, there remains a notable disparity when it comes to company reporting in the broader realm of nature. Figure 3 reveals how far behind the reporting of broader nature-related metrics, such as the water recycling rate, hazardous waste generated or operations near areas of endangered species, are compared to climate and specifically carbon emissions.





Source: MSCI data, DWS Research Institute (May 2024).

This disparity between climate and other nature-related reporting by companies may help to understand why only 20%⁸ of FIs are evaluating their portfolio exposures to nature-related risks, compared to 85% assessing their climate-related risks and opportunities. In addition, information gaps resulting from inadequate disclosure of other nature-related risks and impacts may also lead to, for example, the under-pricing of risks if or when they are measured.

A study9 by CDP similarly revealed that most companies disclosing data to CDP are primarily focused on climate risk, leaving much to be desired in terms of assessing and publicly reporting on the impacts and interdependencies of their operations on water, forests, and nature. The study highlights that only 38% of companies reporting information to CDP in 2023 included data beyond climate considerations.

One emerging role of non-financial reporting, in addition to improving risk management, is to convey credible climate and nature transition plans to stakeholders. The disclosure of transition plans and other sustainability related KPIs are essential for providing valuable information to stakeholders. Yet very few¹⁰ companies currently have a credible climate transition plan in place, let alone a plan to reverse nature loss. Stakeholders are calling on companies to disclose their strategies for achieving climate and nature targets through effective communication of transition plans. To start with, the incorporation of reliable nature transition plans into existing climate transition plans can serve as a valuable foundation for assessing the climate and nature alignment of assets or portfolios using specialized tools and methodologies.

A significant 66% of the annual revenue¹¹ generated by the world's largest 2,000 companies are now committed to achieving net zero targets, which indicates climate action is gaining traction. However, despite the importance of addressing deforestation and nature-related considerations such as biodiversity loss in reducing global carbon emissions and delivering an effective net

- ⁸ CDP (April 2023). Financial institutions failing to integrate nature and climate https://www.cdp.net/en/articles/media/financial-institutions-failingto-integrate-nature-and-climate-new-report-warns-inaction-on-nature-impedes-net-zero-ambitions
- ⁹ CDP (December 2023). New data reveals critical gaps in corporate action, identifying key areas to be tackled at COP negotiations

https://www.cdp.net/en/articles/investor/new-data-reveals-critical-gaps-in-corporate-action-identifying-key-areas-to-be-tackled-at-cop-negoatiations

¹⁰ CDP (February 2023). Climate transition plans https://www.cdp.net/en/guidance/guidance-for-companies/climate-transition-plans

¹¹ Net Zero Trackers (November 2023). Half of world's largest companies are committed to net zero https://zerotracker.net/analysis/new-analysis/ half-of-worlds-largest-companies-are-committed-to-net-zero

zero strategy, for example, only 30% of the Forest 500¹² companies, which drives tropical deforestation, have publicly declared commitments to combat deforestation for high-risk commodities. Furthermore, a concerning 63% of Forest 500 companies with deforestation commitments are lacking sufficient evidence of implementation, highlighting a gap in their sustainability efforts.

Furthermore, among the companies identified by the Nature Action 100 investor initiative as being crucial for tackling nature loss, 74% of these companies have not disclosed information regarding their operations' exposure to areas of high or extremely high-water stress. Additionally, of the 26% of companies that did disclose this information, only 12% have water management policies in place¹³. What is required for companies is to set time-bound, context-specific, science-based targets informed by risk assessments on nature-related dependencies, impacts, risks, and opportunities. This should be done with an objective to integrate nature into climate transition plan as well as to integrate nature positive objectives. This captures the nexus between climate change and nature loss. For example, after fossil fuel burning deforestation is the second most important driver of climate change, which in turn is one of the most important drivers of nature loss.

2.2 Assessing supply chain risks

As outlined in our second whitepaper, a high proportion of a company's environmental impact resides in its supply chain¹⁴. For example, one out of every five companies reporting to CDP¹⁵ identifies water risks in the supply chain as posing a substantial threat to their operations. However, for many companies, the reporting requirements on supply chain related indicators, and targets remains optional for companies to disclose. This makes comparison and benchmarking difficult even for two companies within the same sector.

In fact, in 2023, out of 3,163 companies reporting to CDP on water, 28% of companies stated that they do not currently interact with their supply chain and have no plans to do so in the next two years. Alarmingly, 21% of these companies believe that supply chain engagement is not a priority, even though most are involved in high-risk water activities¹⁶. Including suppliers in water risk assessments could reveal additional supply chain risks, highlighting the importance for companies to understand the vulnerability and potential of their supply chain.

In July 2024, EFRAG published a study on the early adoption of European Sustainability Reporting Standards (ESRS), offering insights into the developing practices of 28 large companies¹⁷ from various sectors at a particular stage of their CSRD implementation journey. The study indicates that value chain analysis continues to be one of the most difficult and least developed aspects of ESRS implementation, with over 90% of the companies stating that they are in the process of improving their methods for mapping and analysing their value chains. Currently, 45% of these companies have implemented a more detailed mapping strategy, yet they still face challenges in addressing relationships beyond their direct operations.

The TNFD recognises that financial institutions have several data dependencies on their investees, customers, and clients; and when obtaining data on portfolio exposures, financial institutions will often rely on external data providers, and at times, proxy and/or modelled data¹⁸.

As a result, financial institutions may need to make estimates based on the best available information about the locations and activities of companies. While obstacles remain, including the poor level of nature-related disclosures, including companies' nature-related dependencies and impacts along its supply chain, tools such as ENCORE and the WWF Biodiversity Risk Filter and Water Risk Filter are available to financial institutions and/or corporates to help perform materiality assessments. In the next section, we examine the tools available to screen investor portfolios on nature-related dependencies and impacts.

- ¹² Forest 500 (February 2024). 2024: A decade of deforestation data https://forest500.org/reports/?_sft_category=report
- ¹³ DWS analysis (May 2024)

¹⁴ DWS Research Institute (April 2024). Why companies are waking up to nature's value. Nature impacts at deeply rooted at the bottom of the pyramid with over 90% of the overall nature impact of a French luxury goods company and German sporting goods company attributable to their supply chains ¹⁵ CDP (March 2024). Stewardship at the source: Driving water action across supply chains https://cdn.cdp.net/cdp-production/cms/reports/documents/000/007/620/original/CDP_Water_Global_Report_2023_pdf?1711030114

¹⁶ CDP (March 2024).Stewardship at the source: Driving water action across supply chains https://cdn.cdp.net/cdp-production/cms/reports/documents/000/007/620/original/CDP_Water_Global_Report_2023_pdf?1711030114

¹⁷ EFRAG (July 2024). Insights from Selected EU Companies for Q2 2024 https://www.efrag.org/en/news-and-calendar/news/efrag-releases-study-on-earlyimplementation-of-esrs-insights-from-selected-eu-companies-for-q2#:

3 / Tools for dependencies and impact screening

FIs have a range of tools¹⁹ at their disposal to measure dependencies, impacts, risks, and opportunities as they relate to nature. Figure 5 provides an overview of the most prominent biodiversity measurement tools that are currently in use.

		ENCORE ²⁰	IBAT ²¹	BFFI ²²	BIA-GBS ²³	GBSFI ²⁴
Approach		Sector screening	Location screening	Dependencies & impacts assess- ment	Dependencies & impacts assess- ment	Dependencies & impacts assess- ment
Sector applica	bility	All	All	FIs	FIs	FIs
	Land use change	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Sea use change	\checkmark	\checkmark	Х	Х	Partial
	Climate change	\checkmark	\checkmark	\checkmark	\checkmark	~
Pressure	Pollution	\checkmark	\checkmark	\checkmark	\checkmark	~
	Direct Exploitation	\checkmark	\checkmark	Partial	Partial	~
	Invasive species	\checkmark	\checkmark	Х	Х	х
	Negative impacts	~	\checkmark	\checkmark	✓	~
Coverage	Positive impacts	Х	\checkmark	\checkmark	Х	\checkmark
-	Dependencies	\checkmark	Х	\checkmark	\checkmark	~
Scope (bounda-	Scope 1	\checkmark	\checkmark	\checkmark	\checkmark	✓
	Scope 2	\checkmark	\checkmark	\checkmark	\checkmark	~
ries)	Scope 3	Х	\checkmark	Partial	Partial	\checkmark
Metric		Mean Species Abundance (MSA), STAR, Aggregate Index	STAR (Risk of extinction)	PDF (Potentially Disappeared Fraction)	MSA, Aggregate Index	MSA, Aggregate Index
Accessibility		Open source	Commercial	Open source	Commercial	Commercial

Figure 5. Tools to assess nature-related risks and opportunities for financial institutions

Source: European Commission (December 2022), Finance for Biodiversity Foundation, DWS Research Institute

3.1 ENCORE - a key tool for exposure assessment

One of the most popular screening approaches has been developed by Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE). This adopts a top-down approach focusing on sectors and industry types to create a materiality matrix. The aim is to identify priority sectors in terms of their dependency and impact on nature. In terms of impact, it examines the main threats to biodiversity loss such as land use change and resource exploitation and links these threats to economic activities by scoring production processes²⁵ on a scale from Very Low to Very High.

An overall score for each production process is then calculated based on the sum of Very Low to Very High ratings assigned for each criterion. For the biodiversity dependencies, a similar rating system is applied but instead of the five threats, dependencies are classified into categories according to the function they provide for production processes, such as soil quality. Similarly, an overall score is then calculated for the relevant GICS sector.

¹⁹ https://www.financeforbiodiversity.org/wp-content/uploads/Finance-for-Biodiversity_Guide-on-biodiversity-measurement-approaches_3rd-edition-1.pdf

²⁰ ENCORE – Exploring Natural Capital Opportunities, Risks and Exposure (UNEP-WCMC, UNEP FI & NCFA) – launched in 2018

²¹ IBAT – Integrated Biodiversity Assessment Tool (BirdLife International, Conservation International, IUCN, UNEPWCMC) - launched in 2008 ²² BFFI – Biodiversity Footprint Financial Institutions (CREM and PRé Sustainability, together with ASN Bank) - launched in 2019

²³ BIA-GBS – Biodiversity Impact Analytics powered by the Global Biodiversity Score (Carbon4Finance and CDC Biodiversité) - - launched in 2021 ²⁴ GBSFI – Global Biodiversity Score for Financial Institutions (CDC Biodiversité) -- launched in 2020

²⁵ The production processes are the level at which links with the environment are assessed. One sub-industry can link to more than one production process just as on production process can be linked to more than one sub-industry.

Figure 4 presents an illustrative example of an investor's portfolio exposure to a range of nature-related dependencies and impacts across several sectors using the materiality approach. This illustrative example reveals that utilities and electricity generators rank high across all selected dependencies and impacts although portfolio exposure may be relatively low. Meanwhile, financials has a high share from a portfolio exposure perspective but the sector ranks low across all dependency and impact variables.

	Dependencies Impacts								
			Land use	Water use		Pollution			Low High
						Solid			
	Soil				Air	waste	Soil	Water	
SASB Sectors	Quality	Water	Land use	Water use	pollution	pollution	pollution	pollution	AUM (% of total)
1 Agricultural Products & Tobacco	High	High	High	High	Low	Low	High	High	2%
2 Consumer Goods	Low	Low	Low	High	Moderate	Low	Moderate	Moderate	5%
3 Extractives & Minerals Processing	Low	Moderate	High	High	High	High	Moderate	High	14%
4 Financials	Low	Low	Low	Low	Low	Low	Low	Low	16%
5 Food & Beverage (ex. Agriculture & Tobacco)	Low	Moderate	Low	High	Low	Moderate	Low	Low	11%
6 Health Care	Low	High	Low	High	Low	Moderate	High	High	6%
7 Infrastructure (ex. Utilities & Generators)	Low	High	High	Low	Low	High	Low	Low	2%
8 Renewable Resources & Alternative Energy	Low	High	Low	High	Low	Low	High	High	3%
9 Resource Transformation	Low	Low	Low	High	Moderate	High	High	High	6%
10 Services	Low	Low	Low	Moderate	Low	Low	Moderate	High	12%
11 Technology & Communications	Low	Low	Low	Low	Low	Low	High	High	15%
12 Transportation	Low	Low	Moderate	High	Moderate	Moderate	High	High	5%
13 Utilities & Electricity Generators	High	High	High	High	High	High	High	High	3%

4. 4. 11. trativa h 4.4 4 .. duit J A.M

Source: TNFD (March 2023). Nature-related risk and opportunity management and disclosure framework

Another example of a risk assessment tool is the WWF Biodiversity Risk Filter (BRF), launched in January 2023²⁶, which enables company and portfolio level analysis. Rather than adopting a top-down approach used by the materiality matrix approach, the BRF employs a bottom-up approach whereby the methodology first gathers location-specific company data, followed by location-specific biodiversity related risks. These are weighted by the business importance of the location, providing the ability to create a company specific risk rating. This is then aggregated across the entire portfolio of companies. However, FIs may find that the availability of either company specific data (ENCORE) or asset location data (BRF) for their entire investment universe may be incomplete.

3.2 Engagement a powerful tool

Engaging with investors has become a strong tool for motivating companies to address nature-related issues and promote transparency in reporting. This can include responding to CDP questionnaires on water and forests as well as those biodiversity disclosures aligned to TNFD and CSRD requirements. Other engagement issues can include board oversight regulatory compliance and indigenous rights, and which will be explored in greater detail in our next whitepaper. By effectively engaging with companies, investors can enhance the impact of their portfolios on nature-related issues. Engagement can also lead companies to improve the transparency and action around their nature strategies and risk management. This includes setting specific targets validated by SBTN for both their direct operations but also their supply chains, similar to the approach adopted for climate.

SBTN helps companies establish science-based targets (SBTs) to reduce their impact on nature, restore habitats, and tackle the factors contributing to nature loss within their own operations and supply chains. Encouraging companies to set targets through SBTN ensures that they are independently verified using the industry standard for science-based corporate climate target setting. This allows investors and companies to raise biodiversity ambition that can be measured in a uniform, comparable way. For example, while almost 70% of companies with water-related supply chain targets are meeting them, only 40% of companies reporting to CDP on water are assessing risks in their supply chain, and just 4% are setting water-related targets for their supply chain²⁷. Engagement is a powerful strategy that fosters a "win-win" arrangement, effectively fulfilling the obligations and mandates of various stakeholders.

²⁶ https://www.wwf.org.uk/press-release/biodiversity-risk-filter-launch-wef-davos-meeting ²⁷ CDP (March 2024). Stewardship at the source: Driving water action across supply chains https://cdn.cdp.net/cdp-production/cms/reports/documents/000/007/620/original/CDP_Water_Global_Report_2023_.pdf?1711030114

October 2024 - For Qualified Investors (Art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA). For Professional Clients (MiFID Directive 2014/65/EU Annex II) only. For Institutional investors only. Further distribution of this material is strictly prohibited. Australia and New Zealand: For Wholesale Investors only

4 / Conclusion

It is often cited that the lack of nature-related data limits the ability of investors to address nature-related risks and opportunities at an investment portfolio level. However, materiality matrices with the ENCORE tool and foot-printing analysis with the use of the WWF Biodiversity Risk Filter and Water Risk Filter are currently available to enable such assessments. These approaches provide investors with more clarity on their nature-related exposures and, in so doing, can better inform asset managers, for example in developing biodiversity-related engagement strategies.

However, and as outlined in our second biodiversity whitepaper²⁸, most nature-related impacts and dependencies reside on a company's supply chain. This is why initiatives such as the Science-based Targets for Nature (SBTN) and the Corporate Sustainability Due Diligence Directive (CSDDD), are important since they aim to enhance corporate sustainability practices throughout an operation's value chain.

Contributors



Abhishek-r Mittal CROCI Investment Strategy & Valuation Group



Janamejay Kumar CROCI Investment Strategy & Valuation Group

²⁸ DWS Research Institute (April 2024). Why companies are waking up to nature's value https://www.dws.com/en-gb/insights/global-research-institute/why-companies-are-waking-up-to-natures-value/

5 / Appendix

Table 1a: Overview of how the main biodiversity reporting standards & framework compare

Frameworks	ESRS	TNFD	GRI	ISSB (SASB)	CDP questionnaire
About	Sustainability re- porting standards	Risk manage- ment and disclosure framework	Sustainability reporting standards	Standards for sustainability- related financial disclosures	Climate and nature reporting platform
Voluntary or nandatory	Mandatory	Voluntary	Voluntary	Voluntary	Voluntary
Farget report preparers	Businesses and financial institu- tions as specified in the EU CSRD	Businesses and financial institu- tions	Businesses, financial institutions and other organizations	Businesses and financial institutions	Businesses and financial institutions
Coverage of nature	Cover nature and other sustainability issues, include dedicated environmental standards	Overarching nature coverage	Cover nature and other sustaina- bility issues, include topic standards on specific environmental issues	Cover nature and other sustainability issues, include dedicated climate standards	Climate, forests and water security questionnaires cover specific nature-related issues
Value chain coverage	Direct operations, upstream and downstream	Direct opera- tions, upstream and downstream	Direct opera- tions and upstream and down- stream (downstream is optional in the GRI Biodiversity Standard)	Direct operations, upstream and downstream	Direct operations, upstream and some downstream
Scope of sector specific guidance	Sector-specific disclosure requirements for selected sectors	Sector-specific guidance and disclosure requirements for selected sectors	Sector-specific disclosure requirements and guidance for selected sectors	Sector-specific guidance for all sectors	Sector-specific disclosure requirements for selected sectors
Use of location information in the assessment	Yes	Yes	Yes	Yes	Yes

Table 1b: How the main biodiversity reporting standards and frameworks compare based on governance, strategy, risk and targets.

Frameworks	ESRS	TNFD	GRI	ISSB (SASB)	CDP questionnaire
Governance arour	nd nature-related d	lependencies, impa	acts, risks and oppo	ortunities (DIRO)	
Board's over- sight	Yes	Yes	Yes	Yes	Yes
Sustainability linked compen- sation	Yes	Yes	Yes	Yes	Yes
Strategy around r	nature-related DIR	0			
Risk Assessment	Both dependencies and impacts	Both dependencies and impacts	Impacts, lim- ited assessment of dependencies	Both dependencies and impacts	Both dependencies and impacts
Materiality con- cept	Environmental, social (impact) and financial materiality	Flexible	Environmental and social (impact) materiality	Financial materiality	Environmental, social (impact) and fi- nancial materiality
Scenario Analy- sis	Yes	Yes	No	Yes	Yes
Engagement with rights-hold- ers and relevant stakeholders re- quired/ recom- mended	Yes	Yes	Yes	Yes	Yes
Risk & impact mai	nagement of natur	e-related DIRO			
Assessment of nature-related risks and oppor- tunities	Both risks and opportunities	Both risks and opportunities	Not covered	Both risks and opportunities	Both risks and opportunities
Actions and re- sources related to biodiversity and ecosystems	Yes	Yes	Yes	Yes	Yes
Target and metric	cs used to assess ar	nd manage nature-	related DIRO		
Disclosure of na- ture related tar- gets	Yes	Yes	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes

Important information – EMEA, APAC & LATAM

DWS is the brand name of DWS Group GmbH & Co. KGaA and its subsidiaries under which they do business. The DWS legal entities offering products or services are specified in the relevant documentation. DWS, through DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively "DWS") are communicating this document in good faith and on the following basis.

This document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as investment advice.

This document is intended to be a marketing communication, not a financial analysis. Accordingly, it may not comply with legal obligations requiring the impartiality of financial analysis or prohibiting trading prior to the publication of a financial analysis.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements. Past performance is no guarantee of future results.

The information contained in this document is obtained from sources believed to be reliable. DWS does not guarantee the accuracy, completeness or fairness of such information. All third party data is copyrighted by and proprietary to the provider. DWS has no obligation to update, modify or amend this document or to otherwise notify the recipient in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

Investments are subject to various risks. Detailed information on risks is contained in the relevant offering documents.

No liability for any error or omission is accepted by DWS. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid.

DWS does not give taxation or legal advice.

This document may not be reproduced or circulated without DWS's written authority.

This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject DWS to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

© 2024 DWS Investment GmbH

Issued in the UK by DWS Investments UK Limited which is authorised and regulated in the UK by the Financial Conduct Authority. © 2023 DWS Investments UK Limited

In Hong Kong, this document is issued by DWS Investments Hong Kong Limited. The content of this document has not been reviewed by the Securities and Futures Commission. © 2024 DWS Investments Hong Kong Limited

In Singapore, this document is issued by DWS Investments Singapore Limited. The content of this document has not been reviewed by the Monetary Authority of Singapore. © 2024 DWS Investments Singapore Limited

In Australia, this document is issued by DWS Investments Australia Limited (ABN: 52 074 599 401) (AFSL 499640). The content of this document has not been reviewed by the Australian Securities and Investments Commission. © 2024 DWS Investments Australia Limited

For institutional / professional investors in Taiwan:

This document is distributed to professional investors only and not others. Investing involves risk. The value of an investment and the income from it will fluctuate and investors may not get back the principal invested. Past performance is not indicative of future performance. This is a marketing communication. It is for informational purposes only. This document does not constitute investment advice or a recommendation to buy, sell or hold any security and shall not be deemed an offer to sell or a solicitation of an offer to buy any security. The views and opinions expressed herein, which are subject to change without notice, are those of the issuer or its affiliated companies at the time of publication. Certain data used are derived from various sources believed to be reliable, but the accuracy or completeness of the data is not guaranteed and no liability is assumed for any direct or consequential losses arising from their use. The duplication, publication, extraction or transmission of the contents, irrespective of the form, is not permitted.

as of 10/16/24; 103171_1 (10/2024)