

Sector guidance

Additional guidance for financial institutions

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**Taskforce on Nature-related
Financial Disclosures**



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1. Introduction

This document provides additional guidance for financial institutions on the TNFD's recommended disclosures. It includes:

- Section 2: Guidance for financial institutions on the TNFD recommended disclosures. This should be read in conjunction with the [TNFD Recommendations](#);
- Section 3: Guidance on the TNFD disclosure metrics for financial institutions. This should be read in conjunction with the metrics annexes (Annexes 1 and 2) in the [TNFD Recommendations](#);
- Annex 1: A list of reference sectors to support the application of the core disclosure metric for financial institutions on exposure to sectors (FI. C0.0);
- Annex 2: A mapping of the European Union's Sustainable Finance Disclosure Regulation (SFDR) Principle Adverse Impact (PAI) indicators to the drivers of nature change and TNFD core global disclosure metrics; and
- Annex 3: A list of references to other relevant guidance.

This guidance uses general formulations that can be applied by banks, re/insurance companies, asset managers and owners, and development finance institutions, but where relevant also indicates how the guidance may apply to specific sub-sectors. The guidance is intended to be applied at the level of an entity and not a financial product. This approach has been adopted to streamline the guidance and avoid overlaps with financial product disclosure regulatory regimes.

Financial institutions should also refer to the TNFD additional guidance for all sectors and for real economy sectors of interest to their financial activities. These documents provide suggested guidance only and are not required for organisations reporting against the TNFD recommended disclosures.

The TNFD additional guidance covers:

- [Identification and assessment of nature-related issues \(the LEAP approach\)](#);
- [Sector-specific guidance to support the LEAP approach, including sector metrics](#);
- [Biome-specific guidance](#); and
- Additional guidance on three cross-cutting components of the LEAP approach:
 - [Scenario analysis](#), and a [discussion paper that includes guidance on conducting advanced scenario analysis](#) relevant for financial institutions;
 - [Engagement with Indigenous Peoples, Local Communities and affected stakeholders](#);
 - [Setting science-based targets for nature](#) (for corporates, based on SBTN guidance).

While the Taskforce does not intend to change its recommended disclosures, it may publish periodic updates to its additional guidance to incorporate feedback from market participants and other stakeholders.



2. Additional guidance financial institutions on the recommended disclosures

This additional guidance for financial institutions should be read in conjunction with the [TNFD Recommendations](#), which set out the recommended disclosures and guidance for all sectors.

For ease of reference, the TNFD's 14 recommended disclosures are shown in Figure 1.

Figure 1: TNFD's recommended disclosures

Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.
Recommended disclosures	Recommended disclosures	Recommended disclosures	Recommended disclosures
<p>A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.</p> <p>B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.</p> <p>C. Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.</p>	<p>A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.</p> <p>B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.</p> <p>C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.</p> <p>D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.</p>	<p>A(i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.</p> <p>A(ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).</p> <p>B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.</p> <p>C. Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.</p>	<p>A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.</p> <p>B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.</p> <p>C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.</p>



2.1. Governance

Disclose the organisation’s governance of nature-related dependencies, impacts, risks and opportunities.

Investors, lenders, re/insurance underwriters and other users of nature-related financial disclosures are interested in understanding the governance processes, controls and procedures the organisation uses to monitor and manage nature-related issues. They are specifically interested in understanding the role an organisation’s board plays in overseeing nature-related issues, as well as management’s role in assessing and managing those issues.

Such information supports evaluations of whether nature-related issues receive appropriate board and management attention and whether the organisation’s governance body/bodies have an appropriate level of skill and competence available to do so. The governance disclosures therefore cover the organisation’s governance of nature-related dependencies, impacts, risks and opportunities.

A. Describe the board’s oversight of nature-related dependencies, impacts, risks and opportunities	No additional guidance for financial institutions.
B. Describe management’s role in assessing and managing nature-related dependencies, impacts, risks and opportunities	No additional guidance for financial institutions.
C. Describe the organisation’s human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation’s assessment of, and response to, nature-related dependencies, impacts, risks and opportunities	Financial institutions should also describe how they have worked with investee companies, counterparties or clients with whom they have financial relationships through advisory, investing, lending or re/insurance to help ensure they undertake outreach and engage relevant Indigenous Peoples, Local Communities and affected stakeholders in their assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.



2.2. Strategy

Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation’s business model, strategy and financial planning where such information is material.

Investors and other stakeholders are interested in understanding the approach the organisation uses to manage nature-related issues and how nature-related issues may affect an organisation’s

business model, strategy and financial planning over the short, medium and long term. Such information is used to inform expectations about the future performance of an organisation.

A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term	No additional guidance for financial institutions.
B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation’s business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place	<p>Financial institutions should also describe sector, realm, impact driver or biome-specific standards and policies (covering, for example, forestry, fisheries, palm oil, mining or illegal wildlife trade), particularly if these standards and policies impose limits or other due diligence standards on advisory, investment, lending or re/insurance activities.</p> <p>Financial institutions should also provide information on how nature-related risks and opportunities are considered in product and service offerings. For example:</p> <ul style="list-style-type: none">• A re/insurer should describe how nature-related dependencies, impacts, risks and opportunities in its value chain affect the re/insurance offerings or investments on a sector or at a geographic level;• A bank should describe how its due diligence has been affected by the consideration of the counterparty’s nature-related dependencies, impacts, risks and opportunities; and• An asset manager or asset owner should describe how nature-related dependencies, impacts, risks and opportunities are factored into product development and investment or ownership strategy. <p>Without disclosing proprietary details or information, this may include a description of how adjustments are determined to:</p> <ul style="list-style-type: none">• Terms and conditions, pricing or portfolio composition for lending, advisory, underwriting and investments; and/or• Integration of nature into risk management, investment management and re/insurance hazard models.



B. continued	<p>This may also include a financial institution's risk standards, due diligence requirements and other policies on a sector or topic basis.</p> <p>For clients, counterparties and investee companies that have been identified as having the most significant nature-related dependencies, impacts, risks and opportunities, financial institutions should describe any additional engagement or due diligence processes applied to encourage them to manage their own nature-related dependencies, impacts, risks and opportunities management and disclosure. Such activities may be done individually or collectively through stewardship and engagement platforms.</p> <p>The overall process should be described and some specific examples and measurable outcomes from due diligence and engagement could be provided where this does not violate client confidentiality.</p> <p>In all cases, confidential business, client and investment information is not expected to be disclosed and the Taskforce recognises there may be limits on what can be disclosed in different jurisdictions.</p>
C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios	<p>Financial institutions that perform scenario analysis to assess nature-related risks and opportunities should describe how the outputs from the scenario analysis are used in risk management processes, given the financial institution's activities and the relevant timeframes (e.g. the maturity of loans for banks differs from the holding periods of asset owners, which differs from the liability duration for insurers and re-insurers, and these may affect how such information is considered).</p> <p>The Taskforce recognises there may be limitations to the granularity of information that can be disclosed for confidentiality or competitive reasons. At a minimum, information provided should give an indication of the kinds of analysis done, the main conclusions and learnings, the limitations of the analysis and any decisions or changes as a result of the scenario analysis.</p>
D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations	<p>Financial institutions should disclose the locations in their direct operations that meet the criteria for priority locations in the TNFD Recommendations.</p>



2.3. Risk and impact management

Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

Investors and other stakeholders are interested in understanding how an organisation's nature-related dependencies, impacts, risks and opportunities are identified, assessed, prioritised and monitored, and whether those processes are integrated into existing risk management processes. Such information helps users of nature-related financial disclosures to evaluate the

organisation's overall risk processes and risk and impact management activities.

A non-exhaustive list of response indicators and metrics that may help organisations to demonstrate the process used to identify, assess, prioritise and manage nature-related dependencies, impacts, risks and opportunities is provided in Annex 2 of the [TNFD Recommendations](#).

A. (i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations	No additional guidance for financial institutions.
A. (ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s)	For financial institutions, the primary focus should be on downstream value chains, which are effectively the financial institutions' financial portfolios (e.g. lending, investment, re/insurance).
B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities	No additional guidance for financial institutions.
C. Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes	<p>Financial institutions should describe, as relevant, how the organisation's risk functions (in the case of all institutions), underwriting units (in the case of re/insurers), lending teams (in the case of banks) and investment teams (in the case of asset managers and owners) monitor nature-related dependencies, impacts, risks and opportunities in its direct operations and financial portfolios.</p> <p>Financial institutions should also describe the integration of nature-related risk considerations into other risk management categories, such as credit risk, market risk, operational risk, underwriting risk and investment risk.</p> <p>In all cases, confidential business, client and investment information is not expected to be disclosed and the Taskforce recognises there may be limits on what can be disclosed in different jurisdictions.</p>



2.4. Metrics and targets

Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.

Investors and other stakeholders are interested in understanding an organisation's performance in relation to nature-related issues, including progress towards any targets the organisation has set and how an organisation measures and monitors its nature-related dependencies, impacts, risks and opportunities.

Disclosure of the metrics and targets used by an organisation to identify, evaluate, assess and manage material nature-related dependencies, impacts, risks and opportunities helps investors

and other stakeholders to assess an organisation's risk-adjusted returns, its ability to meet current and future financial obligations, its general exposure to nature-related issues, and its progress in managing or adapting to those issues. Disclosure of metrics and targets on a consistent basis helps investors and other stakeholders to compare organisations within a sector or industry.

The TNFD intends to increase the specificity on methodologies in its guidance over time, as practices and standards further develop.

A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process

Financial institutions should include:

- All **core global risk and opportunity disclosure metrics** listed in Annex 1 of the [TNFD Recommendations](#); and
- **Any other relevant metrics**, drawing on the TNFD additional disclosure indicators and metrics in Annex 2 of the [TNFD Recommendations](#), the additional sector disclosure metrics for financial institutions in this document and the financial institution's own assessment metrics, as appropriate.

Metrics should be reported at the appropriate level (e.g. geography, asset class, portfolio, portion of portfolio) to reflect most accurately the magnitude of risks and opportunities described in Strategy A.

The Taskforce recognises that financial institutions are likely only to disclose on selected risks and opportunities and not disclose on a comprehensive basis across all financing, investing and re/insurance portfolios. For C7.0 and C7.1 financial institutions should focus disclosures on those categories that are most meaningful in the context of their business model. C7.2 is not expected to be disclosed for the companies in the financial portfolios of a financial institution but only for fines/penalties of the financial institution itself.

The description of the metrics' scopes and methodologies applied should include whether these are identified and categorised based on regulatory or voluntary taxonomies, market-based standards or internal definitions.

Financial institutions may find it helpful to refer to the guidance on metrics in Section 3 of this document.



B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature	<p>Financial institutions should include:</p> <ul style="list-style-type: none">• All core global dependency and impact disclosure metrics, provided in Annex 1 of the TNFD Recommendations, for each material dependency and impact in the financial institution's direct operations described in Strategy A, if any (recognising that it is unlikely that a financial institution's direct operations will have material dependencies and impacts on nature and thus this disclosure is likely to be the exception);• The core dependency and impact disclosure metrics for financial institutions' portfolios. These metrics are described in Section 3.3 of this document and should be reported at the group consolidated entity level to the extent possible (following the asset class coverage recommendations in Section 3.5 of this document), rather than by material issue; and• Any other relevant metrics, drawing on the TNFD additional disclosure indicators and metrics listed in Section 3.4 of this document and the financial institution's own assessment metrics as appropriate. <p>The underlying assumptions and methodologies behind any estimates should be clearly stated and based on the best available information about the locations and activities of companies.</p> <p>Such disclosures are expected to be at an aggregate level and not at the level of individual portfolio holdings, transactions or exposures, to avoid confidentiality concerns. As and when possible, this disclosure should include a breakdown by sector or geography (e.g. country, biome and/or ecosystem).</p> <p>Financial institutions may find it helpful to refer to the guidance on metrics in Section 3 of this document.</p>
C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these	No additional guidance for financial institutions.



3. Additional guidance for financial institutions on metrics

This additional guidance on metrics for financial institutions should be read in conjunction with the [TNFD Recommendations](#), which set out the TNFD measurement architecture and global disclosure metrics.

For financial institutions, most dependencies and impacts on nature are likely to arise through their financial portfolios (e.g. lending, investment, re/insurance) rather than their direct operations, as has been the case with Scope 3 emissions reporting aligned with the TCFD recommendations.

While the Greenhouse Gas Protocol has provided a universal measurement basis for emissions reporting for over two decades, no equivalent universal measurement standard exists for the other dimensions of nature. The Taskforce recognises that this and the lack of data currently provided by non-financial companies makes it more complex for financial institutions to assess and disclose the dependencies and impacts on nature of their financial activities.

As outlined in the [TNFD Recommendations](#), the TNFD measurement architecture is comprised of three categories of disclosure metrics:

1. **Core global disclosure metrics** – recommended for disclosure by all organisations across all sectors, on a comply or explain basis;
2. **Core sector disclosure metrics** – recommended for disclosure by all organisations within the specific sector, on a comply or explain basis; and
3. **Additional disclosure metrics** – recommended for disclosure, where relevant, to best represent an organisation's material nature-related issues, based on their specific circumstances.

The TNFD's metrics for disclosure draw from a range of existing standards and frameworks such as the ISSB's IFRS standards, SASB standards, GRI Standards, the CDP disclosure platform, the Kunming-Montreal Global Biodiversity Framework and other relevant UN frameworks, the European Sustainability Reporting Standards (ESRS) and Sustainable Finance Disclosure Regulation (SFDR) among others. A number of organisations, including standard-setting organisations, continue to work on identifying relevant sector-level assessment and reporting metrics for financial institutions. The Taskforce recommends that report preparers stay engaged with progress on these developments and implement the latest definitions within their risk management processes and disclosures. The TNFD will periodically update its recommended metrics for disclosure in line with these ongoing initiatives.

Table 1 provides an overview of which metrics are recommended by the TNFD for financial institutions on a comply or explain basis (core), which are recommended where relevant (additional), and which apply to financial portfolios and/or direct operations.



Table 1: TNFD metrics recommendations for financial institutions

	Metric	Financial institution direct operations	Financial portfolios
Core global disclosure metrics	C1-C5 Impacts and dependencies	Disclosure expected to be the exception: only if material.	Recommended, where relevant and possible, recognising current limits on data availability
	C7.0-7.4 Risks and opportunities	Disclosure expected to be the exception: only if material.	<p>Disclose, recognising current limits of methodologies and definitions.</p> <p>For C7.0 and C7.1, financial institutions should focus disclosures on those categories that are most meaningful in the context of their business model.</p> <p>C7.2 is not expected to be disclosed for the companies in the financial portfolios of a financial institution but only for fines/penalties of the financial institution itself.</p>
Core FI sector metrics	Exposure to sectors	Not applicable	Disclose
	Exposure to sensitive locations	Not applicable	Disclose, recognising current limits on data availability
Additional metrics		Recommended, where relevant, to best represent a financial institution's material nature-related issues. Disclosure expected to be the exception; only if material.	Recommended, where relevant, to best represent a financial institution's material nature-related issues



3.1. TNFD's core global disclosure metrics – application by financial institutions

3.1.1. Risks and opportunities

The Taskforce recommends that financial institutions disclose all core global risk and opportunity disclosure metrics provided in Annex 1 of the [TNFD Recommendations](#) and summarised in Box 1.

Box 1: What are TNFD risk and opportunity metrics for financial institutions?

Risk metrics for financial institutions measure the financial implications that nature-related risks may have on their financial position, financial performance and cash flows. These could include the value of assets or liabilities exposed to the potential for loss, as noted in the TNFD core global metrics definitions. This also could include the potential loss amount itself on lending for banks, underwriting for re/insurers, or investments for asset managers and owners under a given scenario. Given current limits of methodologies, data, scenarios and other considerations, the Taskforce recognises that financial institutions are unlikely to disclose quantitative potential loss amounts in the near term.

Opportunity metrics for financial institutions measure the financial implications that nature-related opportunities may have on their financial position, financial performance and cash flows. These could include lending and advisory opportunities for banks, underwriting opportunities for re/insurers or investment opportunities for asset managers and owners. For financial institutions, these will often be in the form of individual products or transactions, so can be disclosed as absolute amounts and relative to a portfolio total. Financial institutions should state how they have identified these opportunities, including any definitions or standards used.

The TNFD core global risk and opportunity disclosure metrics are listed in Table 2.

Table 2: TNFD core global disclosure indicators and metrics for nature-related risks and opportunities

Metric no.	Category	Metric
C7.0	Risk ¹	Value of assets, liabilities, revenues and expenses that are assessed as vulnerable to nature-related transition risks (total and proportion of total).
C7.1		Value of assets, liabilities, revenues and expenses that are assessed as vulnerable to nature-related physical risks (total and proportion of total).
C7.2		Description and value of significant fines/penalties received/litigation action in the year due to negative nature-related impacts.
C7.3	Opportunity	Amount of capital expenditure, financing or investment deployed towards nature-related opportunities, by type of opportunity, with reference to a government or regulator green investment taxonomy or third-party industry or NGO taxonomy, where relevant.
C7.4		Increase and proportion of revenue from products and services producing demonstrable positive impacts on nature with a description of impacts. ²

The Taskforce recognises that key concepts, methodologies and definitions used for climate-related risk analysis (e.g. scenario pathways and Value at Risk³ methodologies) still need further development to support disclosures on potential quantitative loss amounts. The Taskforce provides additional guidance on the methods for assessing and quantifying nature-related risks in its guidance on the LEAP approach and will be working with a range of partner organisations in the coming years on these issues. There are also a number of references in Annex 3 that provide indications of how financial institutions may approach risk analysis.

- 1 Refer to the [TNFD Glossary](#) for the definition of vulnerable. Core global metrics C7.0 and C7.1 are connected to additional metrics A8.6 and A9.0 which ask for disclosure of exposure to nature-related risks. For organisations following the LEAP approach, exposure is determined in the Evaluate phase and connected to exposure to nature-related dependencies and impacts, whilst vulnerability is determined in the Assess phase, considering the likelihood of the risk arising and the organisation's ability to mitigate the risk.
- 2 Positive impacts on nature refer to positive changes to the state of nature. They can be generated by both positive impact drivers and those that reduce negative impact drivers.
- 3 Value at Risk is a measure of a potential loss in a portfolio, which estimates how much a set of investments might lose at a maximum, with a given probability (e.g. 99.5%, 99.9%), in a set time period. It requires estimation of the probability distribution for the changes in the value of the portfolio. TCFD (2021) [Forward-Looking Financial Sector Metrics Consultation](#).



Box 2: TNFD definitions of vulnerability and nature positive

Vulnerability: The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements, including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

*Source: IPCC (2022) [Annex II: Glossary](#). In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*.*

Nature positive: Nature positive is a global and societal goal. Individual entities, geographies and countries can and must demonstrate their sufficient contribution to a global nature-positive outcome. In operationalising nature positive, tackling drivers and the negative and positive impacts is central. Companies and financial institutions can contribute to the nature positive goal by taking these high-level actions: Assess their material impacts, dependencies, risks and opportunities; shift their business strategy and models; commit to science-based targets for nature; report their nature-related issues to investors and other stakeholders; transform by avoiding and reducing negative impacts, restoring, and regenerating nature; collaborate across land, seascapes and river basins; and advocate to governments for policy ambition.

Source: Nature Positive Initiative (2023) [The Definition of Nature Positive](#)

There is currently no consensus or established methodology for measuring ‘contributions to nature positive outcomes’ by a business or financial institution. Similarly there is no consensus on transition finance including pathways to judge the transition alignment of companies.

When disclosing on opportunities, financial institutions should state how they have come to a conclusion that what they disclose is a nature related opportunity or has positive outcomes for nature. Metric C7.3 specifies this should be with reference to a government or regulator green investment taxonomy or third-party industry or NGO taxonomy, where relevant.

There is emerging work in this area including through the [Nature Positive Initiative](#). Financial institutions are encouraged to consult this work as well as the [TNFD sector guidance](#) which provide an indication of the material nature-related issues for a given sector.

3.1.2. Dependencies and impacts

The Taskforce recommends that financial institutions disclose all **core global dependency and impact disclosure metrics**, listed in Annex 1 of the [TNFD Recommendations](#), for each material dependency and impact in the financial institution's direct operations described in Strategy A, if any.

As noted in Table 1, these disclosures are expected to be the exception for a financial institution because, unlike their financial portfolios, they are not likely to have material impacts or dependencies in their own direct operations.

3.2. TNFD's core sector disclosure metrics for financial institutions

The TNFD recommends two core sector disclosure metrics to support financial institutions' disclosure of their exposure to sectors with material nature-related dependencies and impacts and exposure to sensitive locations.

Financial institution core disclosure metric (FI.C0.0) – Exposure to sectors

The Taskforce recommends that financial institutions disclose a metric that represents the **exposure to a defined set of sectors considered to have material nature-related dependencies and impacts**. This metric demonstrates that a financial institution has undertaken an initial nature-related exposure assessment with a sector lens, based on a heatmapping approach (guidance on heat maps is provided in Annex 4 of the [LEAP approach](#)).

- For banks: absolute amount or percentage of lending volume.
- For asset owners and managers: absolute amount or percentage of invested or owned assets.
- For re/insurers: absolute amount or percentage of gross written premiums (excluding external

acquisition costs if appropriate) or total sums insured.

The Taskforce recommends that this metric be calculated for the whole portfolio and sectors are not removed due to small exposure amounts. All the sectors that the TNFD has identified should be considered for this metric (see Annex 1).⁴ These sectors were identified by the TNFD based on input from knowledge partners and evidence of typical elevated dependencies and impacts in direct operations and upstream and downstream value chains. The sectors are identified in Annex 1 by standard industry sector codes in existing classification systems.

The calculation of this metric should not exclude the sectors where a financial institution has limited financial exposure. The materiality of potential nature-related dependencies and impacts is identified through the proportion of exposure in the sectors in Annex 1 compared to the entire portfolio of the financial institution.

It is important to note that this metric measures potential, not actual, dependencies and impacts on nature. Identifying actual dependencies and/or impacts entails further analysis that can be guided by calculation of this metric. It is not a measure of nature-related risk or opportunity for a financial institution. These are covered in the core global disclosure metrics (see Section 3.1.1).

Financial institution core disclosure metric (FI.C0.1) – Exposure to sensitive locations

The Taskforce recommends that financial institutions disclose a metric that represents the **exposure to companies with assets and/or activities in sensitive locations**. This metric demonstrates that a financial institution has undertaken an initial nature-related exposure assessment with a sensitive location lens.

- For banks: absolute amount or percentage of lending volume.

⁴ The specification of a set of sectors for this metric aligns with the initial approach of the TCFD, which defined carbon-related assets as exposures to sectors for which the TCFD provided additional guidance.



- For asset owners and managers: absolute amount or percentage of invested or owned assets.
- For re/insurers: absolute amount or percentage of gross written premiums (excluding external acquisition costs if appropriate) or total sums insured.

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.

Further guidance on the definition of sensitive locations, and tools and data to identify and assess those locations, is provided in the TNFD [Guidance on the identification and assessment of nature-related issues: The LEAP approach](#), component L4.

The Taskforce recommends financial institutions start with an initial focus on the location of the assets and activities in the portfolio companies' direct operations. It is important to note that this does not capture exposure to potential dependencies and impacts in upstream and downstream value chains of portfolio companies. The TNFD expects that disclosure of this metric and the coverage of the full value chain will improve over time as data on the location of company assets, activities and sensitive locations improves, in line with the [TNFD's guidance on value chains](#).

It is important to note that this metric measures potential, not actual, dependencies or impacts on nature. Identifying actual dependencies and/or impacts

entails further analysis of the portfolio company's activities in the location and the way they are managed. Calculation of this metric can help guide further analysis. It is not a measure of nature-related risk or opportunity for a financial institution. These are covered in the core global disclosure metrics (see Section 3.1.1).

Financial institutions should specify the scope of their coverage of these two metrics following the asset class coverage recommendations in Section 3.5. Given data limitations, it is generally expected that the scope of coverage for metric FI.C0.0 will be larger than for FI.C0.1

3.3. TNFD's additional disclosure metrics for financial institutions

Financial institutions may choose to disclose any other relevant metrics, drawing on the TNFD additional indicators and metrics in Annex 2 of the [TNFD Recommendations](#) and the financial institution's own assessment metrics, as appropriate. A financial institution may choose to disclose these in order to best represent the institution's material nature-related issues, based on its specific circumstances.

The following TNFD additional metrics for financial institutions have been compiled based on feedback received on the TNFD's consultation on this guidance:

- Metrics based on footprinting approaches, including ecological (area-based) footprints, biodiversity footprints and ecosystem service footprints. If disclosing footprint metrics, financial institutions should describe the inputs and assumptions in the analysis, and refer to the [TNFD discussion paper on biodiversity footprinting approaches for financial institutions](#) for further examples and guidance on the appropriate interpretation and use of these metrics;
- The European Union's Sustainable Finance Disclosure Regulation (SFDR) Principle Adverse Impact (PAI) indicators (see Annex 2 for a mapping



of these indicators to the drivers of nature change and the TNFD core global metrics);⁵

- Amount of exposure to companies that have harmful activities or sourcing in biodiversity sensitive areas (total and/or proportion of total);
- Amount of exposure to companies without corporate biodiversity/nature-related policies (total and/or proportion of total);
- Amount of exposure to companies with science-based biodiversity/nature-related targets (total and/or proportion of total);
- Amount of exposure to companies with known biodiversity/nature-related controversies and incidents (total and proportion of total);
- Amount of exposure (and annual flows) to sectors in a government or regulator green investment taxonomy or third-party industry or NGO taxonomy, where relevant; and
- The [NEC metric](#).

At present, financed impact metrics based on the core global C1-C5 indicators are additional disclosure metrics for financial institutions. This is subject to ongoing work by the Taskforce to explore this further through a discussion paper on disclosure of financed impacts for financial portfolios in late 2024.

3.4. Asset class coverage

The TNFD recognises that financial institutions offer a range of products and services and some may have a more immediate link to potential dependencies and impacts on nature than others. With respect to asset classes, metrics FI.C0.0 and FI.C0.1 are most readily calculated for corporate equity and debt (both publicly listed and privately held), corporate lending and re/insurance, infrastructure and project finance, commodity finance, capital markets underwriting for companies, and commercial and residential real estate. Asset classes such as derivatives, cash, money market instruments, commodity futures, other personal and retail finance, as well as off balance sheet, non-discretionary wealth management, and other advisory activities are not expected to be disclosed. Sovereign exposures should not currently be considered for inclusion but may be included in future. Financial institutions may want to include certain sub asset classes, for example credit default swaps, in scope where they believe meaningful.

Table 3 provides an overview of the asset class coverage expected for financial institutions disclosing TNFD metrics FI.C0.0 and FI.C0.1. This is based on identification of exposures that can be readily classified by sector and currently may have data available for location-based analysis.

⁵ With the exception of total spatial footprint, plastic pollution and invasive alien species, for which corresponding metrics were not identified at this stage. This will be kept under review.

Table 3: Asset class coverage expected for metrics FI.C0.0 and FI.C0.1

Asset class coverage	Metric FI.C0.0 – Exposure to sectors	Metric FI.C0.1 – Exposure to sensitive locations
Corporate equity and debt (publicly listed and privately held)	✓	✓
Infrastructure and project finance assets	✓	✓
Commodities finance	✓	✓
Corporate lending	✓	✓
Sovereign exposures	Not currently considered for inclusion but may be included in future.	
Cash and money market		
Derivatives and commodity future		
Advisory and other off balance sheet activity		
Retail and other consumer exposures		
Mortgage portfolios	Banks and Insurers may choose to disclose	

Financial institutions should specify the scope of coverage of their metrics FI.C0.0 and FI.C0.1 (e.g. corporate lending for banks). Given current data limitations, the Taskforce recognises that the scope of coverage for FI.C0.0 may be larger than FI.C0.1.

Financial institutions may want to apply these asset class coverage considerations to their risk and opportunity metrics and should specify the scope covered when disclosing.



3.5. Other considerations for metrics and disclosures by financial institutions

Data limitations and future developments

The Taskforce recognises that:

- Financial institutions have significant data dependencies on the companies in their financial portfolios;
- Data may be limited currently, both for company activity by location and upstream and downstream; and
- When obtaining data on companies, financial institutions will often rely on external data providers that have a mix of company reported and estimated data and that such data will often be determined using proxies or models. As companies start to assess and disclose aligned with the [TNFD Recommendations](#), it can be expected that a greater amount of better quality data and analytics will become available over time.

There is also considerable innovation underway in nature-related data and metrics and financial institutions may wish to trial these new tools and datasets as part of their assessment and disclosure activities. The Taskforce will continue to consult with market participants and wider stakeholders on data and metrics innovation and practice, including through:

- A discussion paper on disclosure of financed impacts and dependencies for financial portfolios; and
- A blueprint for a global Nature Data Public Facility (NDPF).

Use of estimates and client confidentiality

Financial institutions may need to make estimates based on the best available information about the locations and activities of companies. The underlying assumptions and methodologies behind such estimates should be clearly stated. As and when possible, this disclosure should include a breakdown by sector or geography (e.g. country, biome and/or ecosystem).

In all cases, such disclosures are expected to be at an aggregate level and not at the level of individual companies, transactions or exposures, to avoid confidentiality concerns.

Disclosures on target setting

The TNFD recommended disclosure 'Metrics and Targets C' recommends that organisations disclose the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these. Organisations should refer to the [TNFD recommendations](#) which set out this recommended disclosure and guidance for all sectors.

The Taskforce recommends that financial institutions also consult the work on targets of the Finance for Biodiversity Foundation, United Nations Environment Programme Finance Initiative (UNEP FI), and Science Based Targets Network.⁶ The Taskforce will continue to work with these and other partners to develop guidance for financial institutions on nature-related target setting and cross-sector guidance on nature transition planning.

⁶ Finance for Biodiversity Foundation (2023) [Nature Target Setting Framework for Asset Managers and Asset Owners](#); UNEP-FI (2023) [PRB Nature Target Setting Guidance](#); SBTN (2024) [Guidance for Financial Institutions](#).



Annex 1: Sector list and mapping for core financial institution metric on exposure to sectors

The following list of priority sectors is based on a continuous review of sources from the TNFD's knowledge partners⁷ and experience drawn from the TNFD pilots. The sectors have been defined in the first instance according to GICS 6-digit industry codes as the ISSB's IFRS-S2 Standard recommends the use of these codes for disclosures of financed emission impact metrics in the case of climate (see paragraph B58-B63). Additional mappings to the standard industry codes have been provided using the NACE, ISIC and ICB sector classifications. This list will continue to be reviewed following new developments from knowledge partners and scientific literature. Companies can use other standard industry codes for disclosure like NAICS and compare with respective correspondence tables.

Table 4: Sector list and mapping for core financial institution metric on exposure to sectors

Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Energy [1010]	Oil, Gas & Consumable Fuels [101020]	601010 (but exclude 60101015, 60101030)	5.10, 5.20, 6.10, 6.20, 7.21, 8.92, 19.10, 19.20, 24.46, 35.21, 46.71, 49.50	510, 520, 610, 620, 721, 892, 1910, 1920, 2420, 3520, 4661, 4930

⁷ See UN Environment Programme, UNEP Finance Initiative, and Global Canopy (2020) [Beyond 'Business as Usual': Biodiversity Targets and Finance Managing biodiversity risks across business sectors](#); World Economic Forum (2020) [Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy](#); SBTN Sectoral Materiality Tool for Step 1a (version 2 – July 2021); World Benchmarking Alliance (2022) [Nature Benchmark Methodology](#); Finance for Biodiversity Foundation (2023) [Briefing paper Top 10 biodiversity-impact ranking of company industries](#).



Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/ or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Materials [1510]	Chemicals [151010]	552010 (and include 50203015, which are plastics)	8.91, 20.11-20.17, 20.20, 20.30, 20.51-20.60, 22.19, 22.21, 23.14	891, 2011, 2012, 2013, 2021, 2022, 2029, 2030, 2219, 2220, 2310
	Construction Materials [151020]	50101030 (cement), 50101035 (other building materials)	8.11, 8.12, 23.11, 23.12, 23.20, 23.31, 23.32, 23.51, 23.52, 23.61-23.65, 23.69, 23.70, 23.91, 23.99	810, 2310, 2391, 2392, 2394, 21395, 2396, 2399
	Containers & Packaging [151030]	50203030	16.24, 17.21, 22.22, 23.13, 23.19, 25.91	1623, 1702, 2220, 2310, 2599
	Metals & Mining [151040]	551020, 551030	7.10, 7.29, 8.93, 8.99, 9.90, 24.10, 24.20, 24.31-24.34, 24.41-24.45, 24.51-24.54, 25.50, 25.61, 25.99, 32.11	710, 729, 893, 899, 990, 2410, 2420, 2431, 2432, 2591, 2592, 2599, 3211
	Paper & Forest Products [151050]	55101010, 55101015	2.10, 2.20, 2.40, 16.10, 16.21, 16.22, 17.11, 17.12, 17.23, 17.24, 17.29	210, 220, 240, 1610, 1621, 1622, 1701, 1709



Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/ or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Transportation [2030]	Air Freight & Logistics [203010]	502060 (but include 40501010, airlines)	49.10-51.21, 52.21-53.20, 77.11, 77.12, 77.34	4911-5120, 5221-5320, 7710, 7730
	Passenger Airlines [203020]			
	Marine Transportation [203030]			
	Ground Transportation [203040]			
	Transportation Infrastructure [203050]			
Automobiles & Components [2510]	Automobile Components [251010]	401010	22.11, 29.10, 29.31, 29.32, 30.91	2211, 2910, 2930, 3091
	Automobile [251020]			
Consumer Durables & Apparel [2520]	Household Durables [252010], but exclude the Homebuilding [25201030] sub-industry	402020 (but exclude 40202010, home construction), 402040 (but exclude 40204035, cosmetics), 55101020 (textiles)	13.10-13.99, 14.11-14.39, 15.11-15.20, 16.29, 22.29, 23.41, 23.49, 25.71, 26.40, 26.52, 27.51, 27.52, 28.24, 31.02, 31.03, 31.09, 32.12, 32.13, 32.99	1311, 1312, 1313, 1391, 1392, 1393, 1394, 1399, 1410, 1420, 1430, 1511, 1512, 1520, 1629, 2220, 2393, 2593, 2640, 2652, 2750, 2818, 3100, 3211, 3212, 3290
	Textiles, Apparel & Luxury Goods [252030]			



Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/ or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Consumer Services [2530] Consumer Staples Distribution & Retail [3010]	Hotels, Restaurants & Leisure [253010], only the Restaurants [25301040] sub-industry Consumer Staples Distribution & Retail [301010]	452010 (but exclude 45201020, personal products and 45201020, non-durable household products), 40501040 (restaurants)	46.17, 46.21, 46.31-46.34, 46.36-46.39, 47.11, 47.21-47.29, 47.73, 47.81, 56.10, 56.21, 56.29, 56.30	4610, 4620, 4630, 4711, 4721, 4722, 4723, 4772, 4781, 5610, 5621, 5629, 5630
Food & Beverage [3020]	Beverages [302010]	451010, 451020, 451030	01.11-01.70, 02.30, 03.11, 03.12, 03.21, 03.22, 10.11-10.92, 11.01-11.07, 12.00, 46.11, 46.23	111-170, 230, 311, 312, 321, 322, 1010-1080, 1101-1104, 1200, 4610, 4620,
	Food Products [302020]			
	Tobacco [302030]			
Household & Personal Products [3030]	Household Products [303010]	40204035 (cosmetics),	20.41, 20.42	2023
	Personal Care Products [303020]	45201020 (personal products) 45201020 (non-durable household products)		
Pharmaceuticals & Biotechnology [3520]	Biotechnology [352010]	201030	21.10, 72.11	2100, 7210
	Pharmaceuticals [352020]			
Semiconductors & Semiconductor Equipment [4530]	Semiconductors & Semiconductor Equipment [453010]	10102010	26.11, 28.99	2610, 2829



Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/ or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Utilities [5510] Commercial & Professional Services [2020]	Commercial Services & Supplies [202010], only the Environmental & Facilities Services [20201050] sub-industry	651010, 651030, 651020	35.11-35-14, 35.22, 35.23, 35.30, 37.00, 38.11, 38.12, 38.21, 38.22, 38.31, 38.32, 39.00	3510, 3520, 3530, 3700, 3811, 3812, 3821, 3822, 3830, 3900
	Electric Utilities [551010]			
	Gas Utilities [551020]			
	Multi Utilities [551030]			
	Water Utilities [551040]			
	Independent Power & Renewable Electricity Producers [551050]			



Name and code of GICS Industry Group	Industries, sub-industries exceptions described	ICB – 6-digit sector and/ or 8-digit sub-industry	NACE Rev 2 – 4-digit (From SBTN Materiality Tool Jan 2023 version)	ISIC 4-digit (From SBTN Materiality Tool Jan 2023 version)
Real Estate Management & Development [6020]	Homebuilding [25201030] sub-industry	351010, 351020, 501010 (but exclude 50101030, 50101035), 40202010	25.11, 41.10 – 43.99, 71.12	2511, 4100 – 4390, 7110
Equity Real Estate Investment Trusts (REITs) [6010]	Construction & Engineering [201030]			
Consumer Durables & Apparel [2520]	Real Estate Management & Development [602010], only the Real Estate Development [60201030] sub-industry			
Capital Goods [2010]	Diversified REITs [601010]			
Consumer Services [2530]	Industrial REITs [601025]			
	Hotel & Resort REITs [601030]			
	Office REITs [601040]			
	Health Care REITs [601050]			
	Residential REITs [601060]			
	Retail REITs [601070]			
	Specialised REITs [601080]			

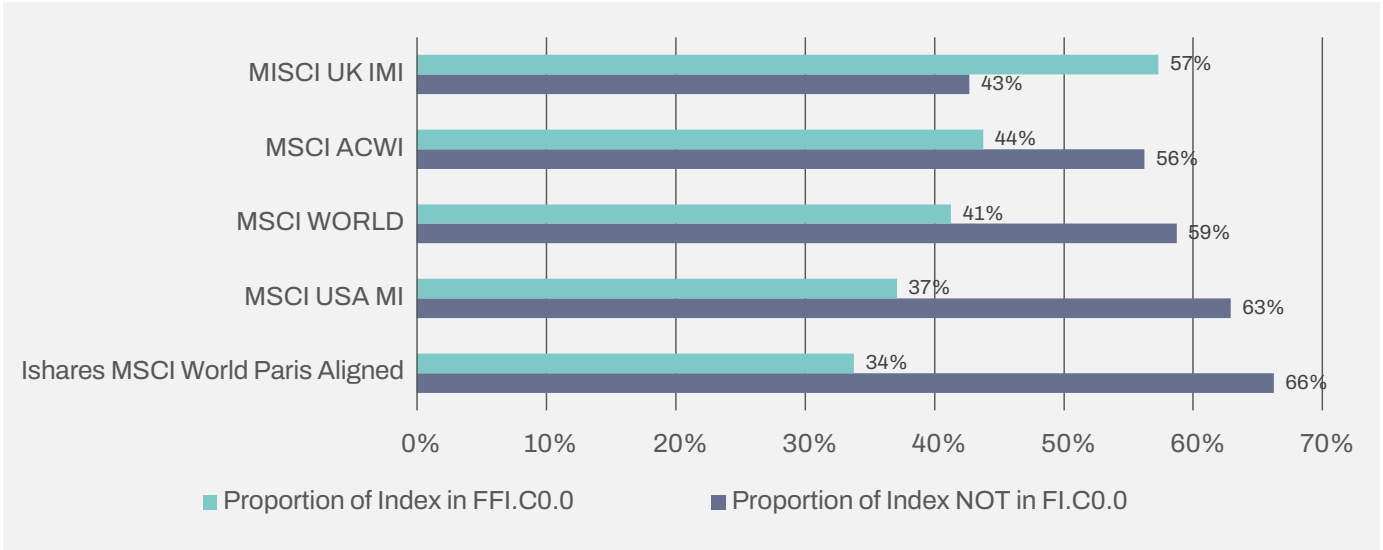


Example of TNFD Financial Institution metric FI.C0.0

Using the GICS 6 codes listed above, Figure 2 summarises what proportion of market capital in several common market indices is in sectors that have material nature-related dependencies or impacts, as of April 2024. For example, it shows that if a financial institution’s

investment, lending or re/insurance exposure is weighted in accordance with the market cap of the MSCI ACWI index, approximately 44% its portfolio exposure would be in the scope of TNFD financial institution metric FI.C0.0.

Figure 2: Proportion of exposure against sectors with material nature-related dependencies and impacts as per TNFD defined sector list



Note: iShares MSCI World Paris-Aligned Climate UCITS ETF excludes cash positions and index futures



Annex 2: European Union Sustainable Finance Disclosure Regulation (SFDR) principal adverse impact equivalents

Table 5 provides a mapping to the TNFD core global metrics of the SFDR principal adverse impact metrics, which are additional financial sector specific metrics in the TNFD recommendations. The purpose is to demonstrate the potential relationship. This should not be read as a statement that the SFDR metrics are core metrics for financial institutions.

Table 5: TNFD additional disclosure metrics for financial institutions – SFDR Principle Adverse Impact equivalents

Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
Climate change	GHG emissions	GHG Emissions (Scope 1, 2, 3) (Core PAI 1)	Refer to IFRS-S2 Climate-related Disclosure Standard.
Land/ freshwater/ ocean use change	Extent of land/ freshwater/ ocean use change		Total spatial footprint (km ²) (sum of): <ul style="list-style-type: none">• Total surface area controlled/managed by the organisation, where the organisation has control (km²);• Total disturbed area (km²); and• Total rehabilitated/restored area (km²).

8 Based on the EU SFDR Principal Adverse Impact (PAI) indicator near equivalents.



Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
Land/ freshwater/ ocean use change	Extent of land/ freshwater/ ocean use change	<p>Share of investments in investee companies that engage in activities that cause land degradation, desertification or soil sealing (Additional PAI 10)</p> <p>Share of investments in companies without a policy to address deforestation (Additional PAI 15)</p>	<p>Extent of land/freshwater/ocean ecosystem use change (km²) by:</p> <ul style="list-style-type: none"> • Type of ecosystem;⁹ and • Type of business activity. <p>Extent of land/freshwater/ocean ecosystem conserved or restored (km²), split into:</p> <ul style="list-style-type: none"> • Voluntary; and • Required by statutes or regulations. <p>Extent of land/freshwater/ocean ecosystem that is sustainably managed (km²) by:</p> <ul style="list-style-type: none"> • Type of ecosystem; and • Type of business activity.
Pollution/ pollution removal	Pollutants released to soil split by type	Tonnes of inorganic pollutants equivalent per million EUR invested, expressed as a weighted average (Additional PAI 1)	Pollutants released to soil (tonnes) by type, referring to sector-specific guidance on types of pollutants.
Pollution/ pollution removal	Wastewater discharged	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average (Core PAI 8)	<p>Volume of water discharged (m³), split into:</p> <ul style="list-style-type: none"> • Total; • Freshwater; and • Other.¹⁰ <p>Including:</p> <ul style="list-style-type: none"> • Concentrations of key pollutants in the wastewater discharged, by type of pollutant, referring to sector-specific guidance for types of pollutants; and • Temperature of water discharged, where relevant.

⁹ When disclosing ecosystem types, refer to the International Union for Conservation of Nature Global Ecosystem Typology.

¹⁰ Freshwater: (≤1,000 mg/L Total Dissolved Solids). Other: (>1,000 mg/L Total Dissolved Solids). Reference: GRI (2018) GRI 303-4 Water discharge.



Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
Pollution/ pollution removal	Waste generation and disposal	<p>Tonnes of hazardous waste and radioactive waste generated by investee companies per million EUR invested, expressed as a weighted average (Core PAI 9)</p> <p>Tonnes of non-recycled waste generated by investee companies per million EUR invested, expressed as a weighted average (Additional PAI 13)</p> <p>Share of real estate assets not equipped with facilities for waste sorting and not covered by a waste recovery or recycling contract (Additional PAI 20)</p>	<p>Weight of hazardous and non-hazardous waste generated by type (tonnes), referring to sector-specific guidance for types of waste.</p> <p>Weight of hazardous and non-hazardous waste (tonnes) disposed of, split into:</p> <ul style="list-style-type: none">• Waste incinerated (with and without energy recovery);• Waste sent to landfill; and• Other disposal methods. <p>Weight of hazardous and non-hazardous waste (tonnes) diverted from landfill, split into waste:</p> <ul style="list-style-type: none">• Reused;• Recycled; and• Other recovery operations.
Pollution/ pollution removal	Plastic pollution		<p>Plastic footprint as measured by total weight (tonnes) of plastics (polymers, durable goods and packaging) used or sold broken down into the raw material content.¹¹</p> <p>For plastic packaging, percentage of plastics that is:</p> <ul style="list-style-type: none">• Reusable;• Compostable;• Technically recyclable; and• Recyclable in practice and at scale.

11 Raw material content: % of virgin fossil-fuel feedstock; % of post-consumer recycled feedstock; % of post-industrial recycled feedstock; % of virgin renewable feedstock.

Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
	Non-GHG air pollutants	<p>Tonnes of air pollutants equivalent per million EUR invested, expressed as a weighted average (Additional PAI 2)</p> <p>Tonnes of ozone-depleting substances equivalent per million EUR invested, expressed as a weighted average (Additional PAI 3)</p>	<p>Non-GHG air pollutants (tonnes) by type :</p> <ul style="list-style-type: none"> • Particulate matter (PM_{2.5} and/or PM₁₀); • Nitrogen oxides (NO₂, NO and NO₃); • Volatile organic compounds (VOC or NMVOC); • Sulphur oxides (SO₂, SO, SO₃, SO_x); and • Ammonia (NH₃).
Resource use/ replenishment	Water withdrawal and consumption from areas of water scarcity	<p>Average amount of water consumed by the investee companies (m³) per million EUR of revenue of investee companies (Additional PAI 6)</p> <p>Share of investments in investee companies without water management policies (Additional PAI 7)</p> <p>Share of investments in investee companies with sites located in areas of high water stress without a water management policy (Additional PAI 8)</p>	Water withdrawal and consumption ¹² (m ³) from areas of water scarcity, including identification of water source.

¹² Water consumption is equal to water withdrawal less water discharge. Reference: GRI (2018) GRI 303-5.

Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
Resource use/replenishment	Quantity of high-risk natural commodities sourced from land/ocean/freshwater	<p>Shares of investments in investee companies without sustainable land/agriculture practices or policies (Additional PAI 11)</p> <p>Share of investments in investee companies without sustainable oceans/ seas practices or policies (Additional PAI 12)</p>	<p>Quantity of high-risk natural commodities¹³ (tonnes) sourced from land/ocean/freshwater, split into types, including proportion of total natural commodities.</p> <p>Quantity of high-risk natural commodities⁹ (tonnes) sourced under a sustainable management plan or certification programme, including proportion of total high-risk natural commodities.</p>
Invasive species and other	Placeholder indicator: Measures against unintentional introduction of invasive alien species (IAS) ¹⁰		Quantity/percentage of high-risk procurement with appropriate measures against unintentional introduction of IAS, or low-risk designed procurement and/or quantity/percentage of high-risk activities operated under appropriate measures to prevent unintentional introduction of IAS, or low-risk designed activities. ¹⁴

¹³ Users should refer to the Science Based Targets Network (SBTN) High Impact Commodity List (HICL) and indicate what proportion of these commodities represent threatened and CITES listed species.

¹⁴ Due to the measurement of levels of invasive species for organisations being a developing area, the chosen core global indicator focuses on whether an appropriate management response is in place for the organisation. The additional sets of metrics contain measurement of the level of invasive species within an area. The TNFD intends to do further work with experts to define 'high-risk procurement', 'low-risk designed procurement', 'high-risk activities' and 'low-risk designed activities'.



Driver of nature change	Indicator	Additional disclosure metric for financial institutions ⁸	Core global metric
State of nature	Placeholder indicator: Ecosystem condition	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas (Core PAI 7)	<p>For those organisations that choose to report on state of nature metrics, the TNFD encourages them to report the following indicators, and to refer to the TNFD additional guidance on measurement of the state of nature in Annex 2 of the LEAP approach:</p> <ul style="list-style-type: none">• Level of ecosystem condition by type of ecosystem and business activity;• Species extinction risk.
State of nature	Placeholder indicator: Species extinction risk	<p>Share of investments in investee companies that have operations affecting threatened species (Additional PAI 14.1)</p> <p>Share of investments in investee companies without a biodiversity protection policy covering operational sites owned, leased, managed in, or adjacent to, a protected area or an area of high biodiversity value outside protected areas (Additional PAI 14.2)</p>	<p>There are a number of different measurement options for these indicators. The TNFD does not currently specify one metric as there is no single metric that will capture all relevant dimensions of changes to the state of nature and a consensus is still developing.</p> <p>The TNFD will continue to work with knowledge partners to increase alignment.</p>



Annex 3: References

The literature on nature-related issues for financial institutions is continually expanding. In particular, there are several initiatives and platforms to support financial institutions that produce useful references on an ongoing basis. Thus, financial institutions are encouraged to check these for the latest publications:

- Cambridge Institute for Sustainability Leadership – <https://www.cisl.cam.ac.uk/centres/centre-for-sustainable-finance/nature-related-financial-risks>
- CDP – <https://www.cdp.net/en>
- Ceres – <https://www.ceres.org/nature>
- Finance for Biodiversity Foundation – <https://www.financeforbiodiversity.org/>
- Forest 500 – <https://forest500.org/>
- Green Finance Institute – <https://www.greenfinanceinstitute.com/gfihive/>
- Inevitable Policy Response – <https://ipr.transitionmonitor.com/>
- Nature Finance – <https://www.naturefinance.net/>
- Planet Tracker – <https://planet-tracker.org/>
- Principles for Responsible Investment – <https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/environmental-issues/nature>
- UNEP FI Nature Program – <https://www.unepfi.org/nature/nature/>
- WEF – <https://www.weforum.org/projects/nature-action-agenda/>
- World Benchmarking Alliance – <https://www.worldbenchmarkingalliance.org/nature-benchmark/>
- WWF – https://wwf.panda.org/discover/our_focus/finance/

The following is a sample of additional publications that may be of interest to financial institutions.

- Banque de France (2021) [A “Silent Spring” for the Financial System? Exploring Biodiversity-Related Financial Risks in France](#)
- Bloomberg (2023) [Ten Case Studies Highlight the Financial Costs of Nature-related Risk](#)
- Business for Nature / WEF / WBCSD (2023) [Sector actions toward a nature positive future](#)
- CDP and Planet Tracker (2022) [High and dry: How water issues are stranding assets](#)
- DeNederlandscheBank (2020) [Indebted to nature](#)
- DeNederlandscheBank (2024) [Nature-related financial risks in our own account investments: An exploratory case study and deep dive in electric utilities](#)
- DeNederlandscheBank (2023) [The economic and financial stability repercussions of nature degradation for the Netherlands: Exploring scenarios with transition shocks](#)
- Dutch financial institutions Biodiversity Working Group – [Overview of resources and case studies](#)
- European Central Bank (2023) [Impact of euro area economy and banks on biodiversity](#)
- European Insurance and Occupational Pensions Authority (2023) [EIOPA staff paper on nature-related risks and impacts for insurance](#)
- European Central Bank, Nature Finance, Potsdam Institute for Climate Impact Research (2024) [Climate-nature scenario development for financial risk assessment: Invitation for Feedback on Scenario Development Framework](#)



- European Investment Bank (2023) [MDB Common Principles for tracking nature-positive finance \(eib.org\)](#)
- European Union (2024) [Study for a methodological framework and assessment of potential financial risks associated with biodiversity loss and ecosystem degradation](#)
- Finance for Biodiversity Foundation (2023) [Nature target setting framework for asset managers and asset owners](#)
- Finance for Biodiversity Foundation (2023) [Guide on biodiversity measurement approaches \(3rd edition\)](#)
- Finance for Biodiversity Foundation (2023) [Guide on engagement with companies](#)
- Finance for Biodiversity Foundation (2023) [Briefing paper: Top 10 biodiversity-impact ranking of company industries](#)
- Global Canopy (2023) [Forest 500 – 2023: A watershed year for action on deforestation. Annual Report 2023](#)
- IFC (2023) [Biodiversity finance reference guide](#)
- Green Finance Institute (2024) [UK nature-related risk analysis update](#)
- Network for Greening the Financial Systems (NGFS) (2023) [Nature-related financial risks: A conceptual framework to guidance action by central banks and supervisors](#)
- NGFS (2023) [NGFS Recommendations toward the development of scenarios for assessing nature-related economic and financial risks](#)
- NGFS–INSPIRE (2022) [Central banking and supervision in the biosphere: An agenda for action on biodiversity loss, financial risk and system stability](#)
- NGFS-INSPIRE (2022) [Beyond climate: Addressing financial risks from nature and biodiversity loss](#)
- OECD Environment Policy Paper (2023) [Assessing biodiversity-related financial risks: Navigating the landscape of existing approaches](#)
- Power, S, Dunz, D. and O. Gavryliuk (2022) [An overview of nature-related risks and potential policy actions for Ministries of Finance: Bending the curve of nature loss Coalition of Finance Ministers for Climate Action](#)
- Race to Zero (2022) [Assessing the Financial Impact of the Land Use Transition on the Food and Agriculture Sector](#)
- SBTi (2024) [Guidance for financial institutions.](#)
- Taskforce on Nature Markets (2023) [Making nature markets work: Shaping a global nature economy in the 21st century. NatureFinance](#)
- Trase Earth – Overview on trade and financing of commodities driving deforestation worldwide
- UNEP FI (2023) [Global biodiversity framework and the financial sector](#)
- UNEP FI (2024) [New green shoots 2024](#)
- UNEP FI (2023) [PRB nature target setting guidance](#)
- UNEP FI (2023) [State of finance for nature 2023](#)
- UNEP (2022) [State of finance for nature. Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows](#)
- University of Cambridge Institute for Sustainability Leadership (CISL) (2022) [Integrating climate and nature: the rationale for financial institutions](#)
- University of Cambridge Institute for Sustainability Leadership (CISL) (2023) [Roadmap: Identification and integration of nature-related risks and impacts in underwriting and insurance brokerage](#)
- World Bank (2023) [Biodiversity and finance: A preliminary assessment of physical risks for the banking sector in emerging markets](#)
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