

BOARD- LEVEL OVERVIEW

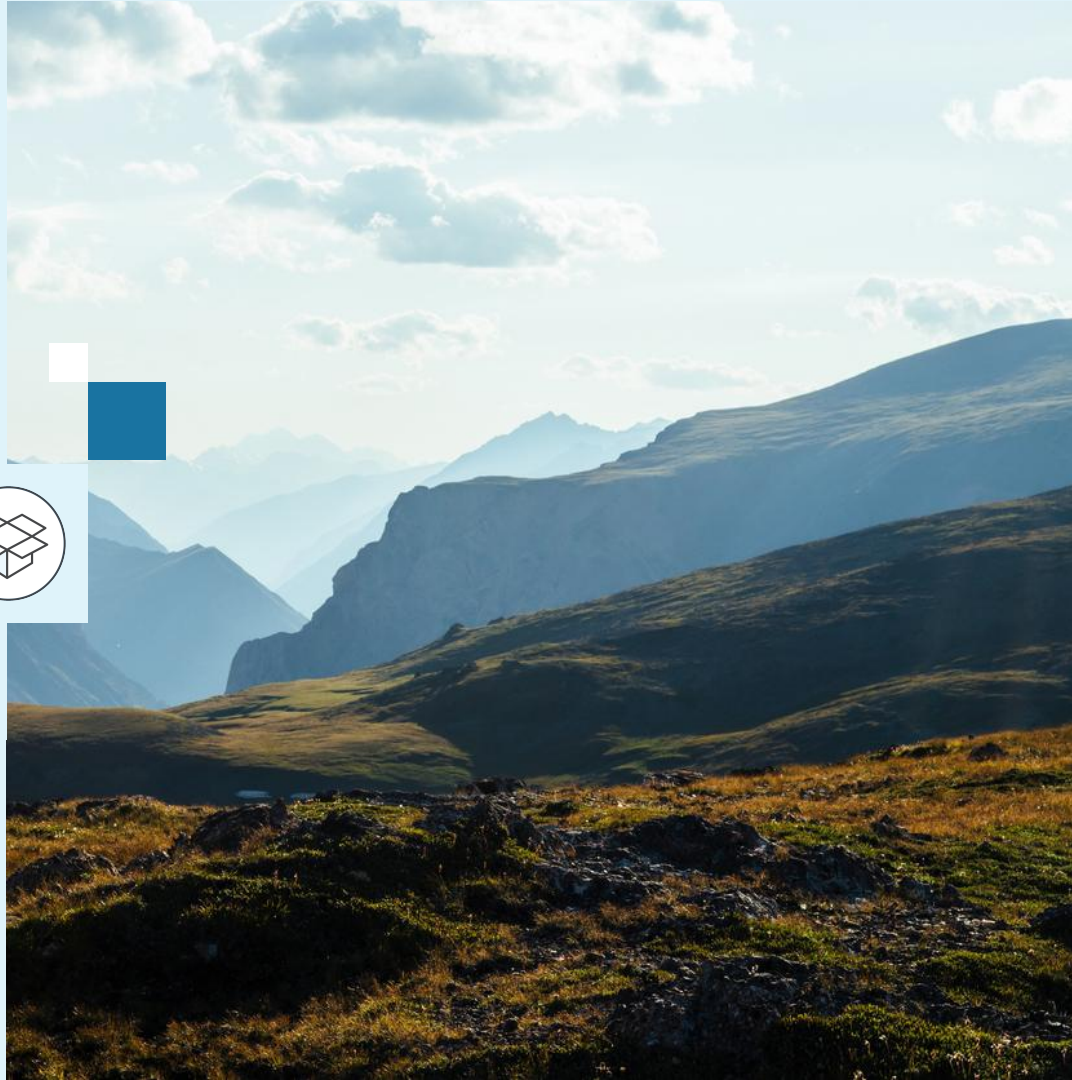
TNFD in a Box

Version 1.1

March 2024



Taskforce on Nature-related
Financial Disclosures



www.tnfd.global



How to use TNFD in a Box

→ TNFD in a Box provides an overview for market participants about why corporates and financial institutions need to consider nature as a strategic risk management issue and how they can identify, assess, manage and disclose their nature-related dependencies, impacts, risks and opportunities by adopting the TNFD recommendations.

- External parties may use these materials (with appropriate attribution) as they see fit to support adoption and implementation.
- Those wanting additional detail should continue to the following five modules.

- This content is intended for workshop-style presentations.
- Signposts are provided to material published by the TNFD, including its recommendations and additional guidance.
- TNFD materials can be found on the TNFD website at www.tnfd.global

- While illustrative examples are provided throughout these materials, they do not necessarily represent best practice and have not been endorsed by the TNFD. They are simply designed to highlight how organisations have approached assessment and implementation challenges, with the TNFD draft guidance available at the time.



KEY TAKEAWAYS FOR BOARD MEMBERS

Business is embedded within nature

Our society, economies and financial systems are embedded in nature, not external to it. The cash flows of business depend on the resilience of nature

Understanding dependencies and impacts

The key to understanding nature-related issues is understanding the organisation's dependencies and impacts on nature and where they are located

Climate and nature risks are inextricably connected

Nature's systems are interconnected. Climate change is one of five drivers of nature loss.

Businesses are unprepared and investors are asking questions

Most businesses today have a blind spot on their nature-related issues, while investors increasingly consider nature a key risk issue

The TNFD is a tool to support action

The TNFD provides a set of disclosure recommendations and assessment guidance for organisations to identify, assess and report on their evolving nature-related issues

Consistent with global standards and goals

The TNFD Recommendations are consistent with the TCFD Recommendations and ISSB & GRI global sustainability standards, and aligned with global policy goals and targets.

Science based and market tested

The recommendations and guidance were developed with 19 knowledge partners and extensive market feedback and pilot testing by 240 organisations.



Overall structure of TNFD in a Box

BOARD-LEVEL OVERVIEW

Introduction to nature-related disclosures and the TNFD



OVERVIEW OF THE TNFD

Approach and recommendations in a nutshell



THE TNFD ASSESSMENT APPROACH (LEAP)

Guidance on the identification and assessment of nature-related dependencies, impacts, risks and opportunities.



THE NATURE – BUSINESS NEXUS

Why nature matters to business and finance



THE TNFD RECOMMENDATIONS

The TNFD's Recommended Disclosures



METRICS, DATA, SCENARIOS & ENGAGEMENT

The TNFD's approach to metrics, scenarios, data, and stakeholder engagement





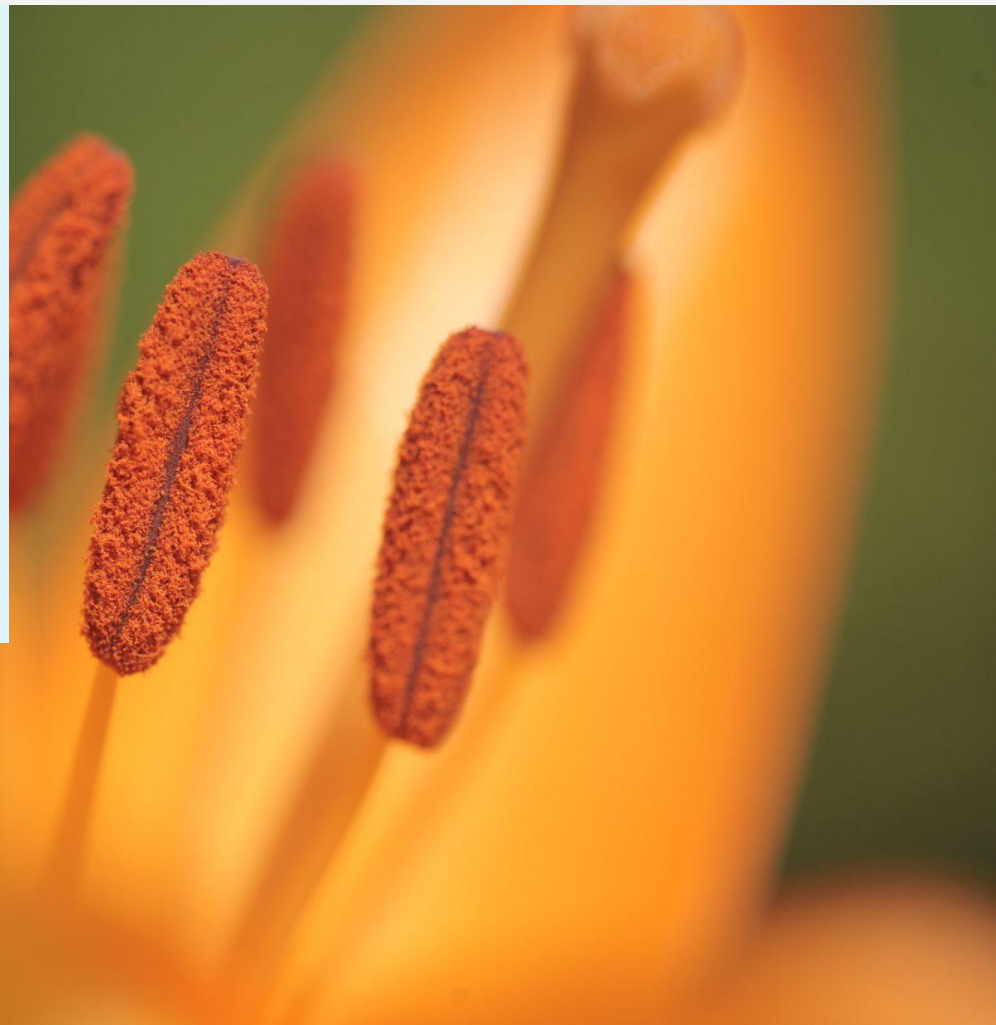
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Our societies, economies & financial systems are embedded in nature, not external to it

100% of the global economy and financial system depends on and impacts nature.

The prosperity and resilience of our societies and economies

depends on...

A sustained flow of ecosystem services

which in turn depends on...

Healthy and resilient ecosystems: nature and its biodiversity

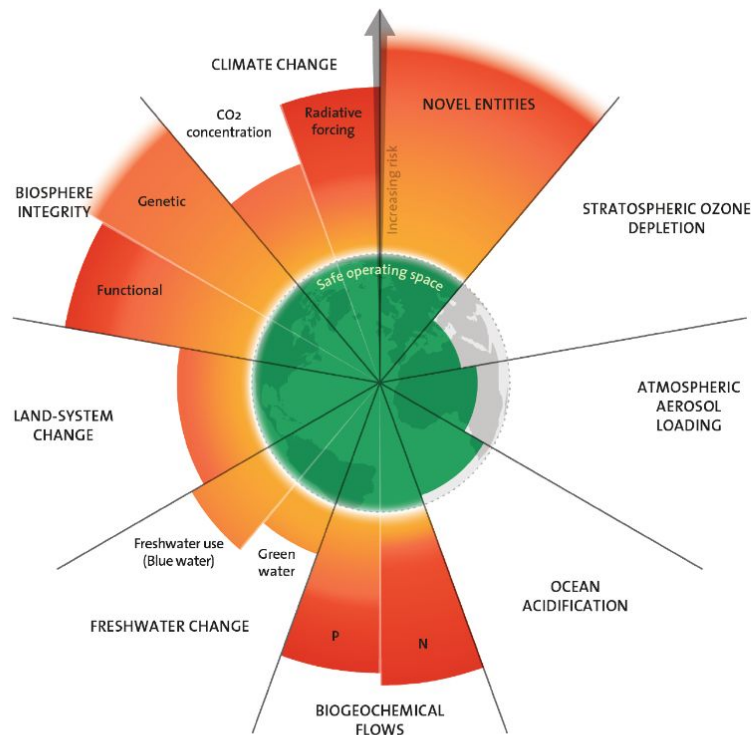
“Nature’s ability to provide the goods and services on which we depend is being undermined, presenting enormous risks to prosperity.”

Henry M. Paulson,
fmr US Treasury Secretary



With six planetary boundaries now breached, risks to business increase

The global economy is already operating outside the safe zone for six of the nine planetary boundaries – processes that are critical for maintaining the Earth's stability.



Climate and environmental issues now top the highest-priority risks identified by global leaders. But most businesses remain unprepared to address them.

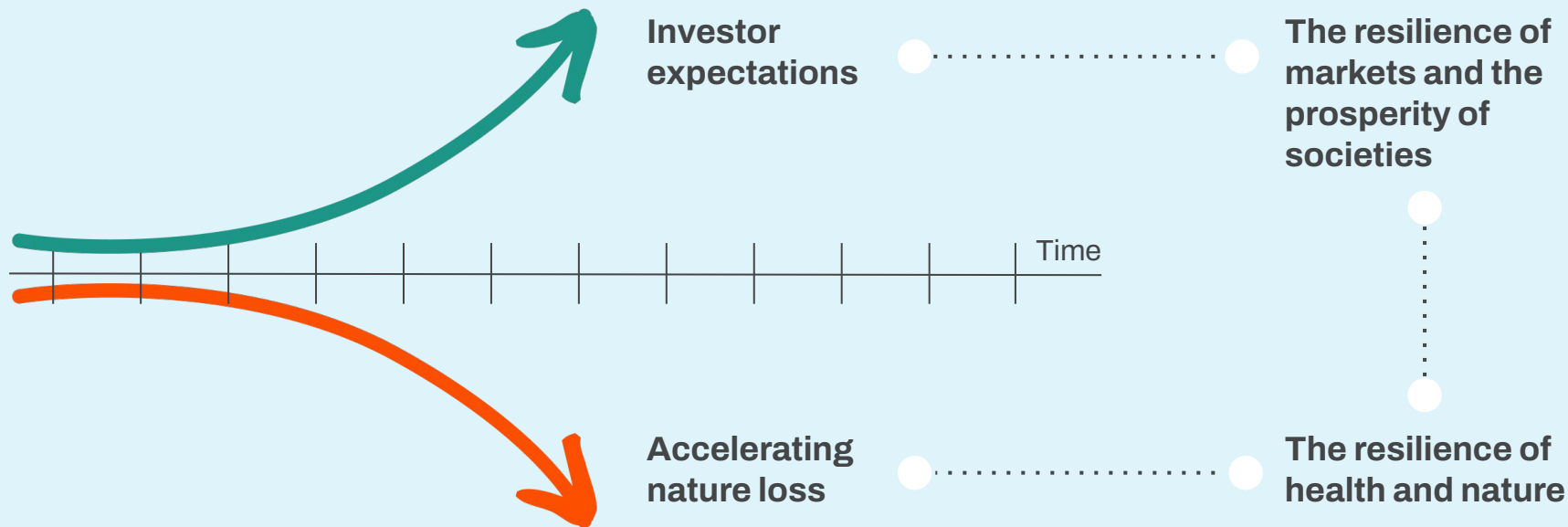
10 Years

- 1 Failure to mitigate climate change
- 2 Failure of climate-change adaptation
- 3 Natural disasters and extreme weather events
- 4 Biodiversity loss and ecosystem collapse
- 5 Large-scale involuntary migration
- 6 Natural resources crises
- 7 Erosion of social cohesion and societal polarisation
- 8 Widespread cybercrime and cyber insecurity
- 9 Goeconomic confrontation
- 10 Large-scale environmental damage incidents

Source: Azote for Stockholm Resilience Centre, based on analysis in Richardson et al. (2023); WEF | Global Risks Report 2023. The Global Risks Report is underpinned by the Global Risks Perception Survey (GRPS), which includes insights from 1,200 experts from academia, business, government, the international community and civil society.

Nature flows and cash flows

At an institutional level, the future cash flows of a business depend on the future flow of ecosystem services from nature into business models, including value chains.

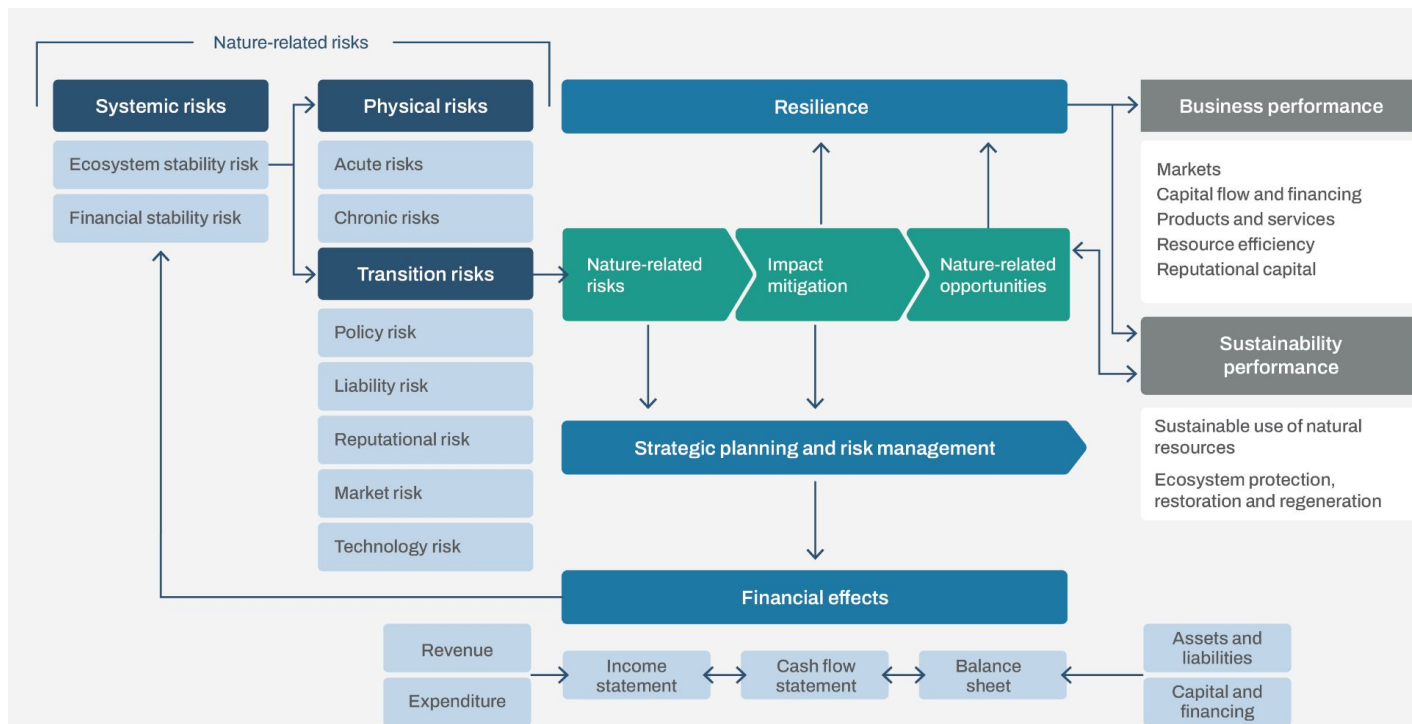


Nature-related risks and opportunities have financial effects

Nature-related risks and opportunities have financial effects for an organisation through changes to:

- Revenue, expenses and capital expenditure;
- Access to - and cost of - capital (through, for example, re-ratings of its credit risk or insurance premiums); and
- Carrying amount of assets and liabilities on the balance sheet.

These transmission channels can have a positive or negative effect on credit, operational, market, liquidity, liability, reputational and strategic risk.



CASE STUDY 1:

The Californian almond Industry



- Produces 80% of world's supply, representing \$11 billion to the local economy
- Almond production relies on bee pollination - and imports approx 1.6 million colonies a year
- Areas reliant on bee pollination for high-value crops like almonds tend to have poor habitats for bees (use of insecticides, lack of diverse flowering plants)
- Decline in bee population (30% of managed colonies are lost each year) has led to 13% increase in production costs

Sources: Almond Board of California | Annual Report 2016; Inside Climate News| California's Almond Trees Rely on Honey Bees and Wild Pollinators, but a Lack of Good Habitat is Making Their Job Harder 2021; The Bee Informed Partnership 2022| Loss and Management Survey

The Fortune logo, featuring a hamburger menu icon to the left of the word "FORTUNE" in a bold, sans-serif font.

Home News Tech Finance Leadership Well Recommends

AGRICULTURE

California Almond Growers Are Feeling the Sting After Bee Thieves Abscond With Hives

**TIME****SUBSCRIBE****U.S.**

California Man Accused of Stealing Nearly \$1M Worth of Bees

The Forbes logo, consisting of three horizontal lines followed by the word "Forbes" in a serif font.

FORBES > INNOVATION > SUSTAINABILITY

EDITORS' PICK

No Water No Microchips: What Is Happening In Taiwan?

CASE STUDY 2:

Exposure to the global semiconductor sector



- Taiwan produces 68% of global semiconductors, supplying microchips for computers, mobile phones and car sensors
- Microchip production is heavily reliant on water use - a typical manufacturing plant uses between 2 - 4 million gallons of ultra pure water to cool systems and rinse away chemicals
- Taiwan relies on monsoons for its water supply - lack of heavy rain since 2020 in combination with heavy water usage has led to drought
- Water shortages increased costs for manufacturers relying on water trucks, costing up to \$500 million for one major manufacturer in 2021
- Ongoing water shortages in Taiwan have implications for most global supply chains

Sources: Forbes | No Water No Microchips: What Is Happening in Taiwan? 2021; Fortune | Taiwan's drought is exposing just how much water chipmakers like TSMC use (and reuse) 2021

CASE STUDY 3:

Policy aimed at creating sustainable food systems drives transition risk for the agricultural sector



- Policies driving a transition to sustainable food systems need to be included within business models of companies operating in the agricultural sector, creating transition risk for financiers of the agricultural sector
- The EU farm to fork strategy contains a policy proposal aiming to reduce soil nutrient loss by 50% in Europe by 2030
- This will require a 20% decrease in fertiliser use
- A case study by CISL suggests that policies reducing fertiliser usage could lead to valuation declines of up to 46% for two major fertiliser producers.
- If extrapolated globally, equity value across the sector could decline by up to \$67 billion

Source: CISL | Nature-related financial risk use case: The EU Farm to Fork Strategy and Fertiliser Companies 2022



The TNFD recommendations help organisations address nature risks

Most companies, investors and lenders today do not understand their nature-related issues

(dependencies, impacts, risks and opportunities) and are inadequately accounting for nature in their strategies and capital allocation decisions.

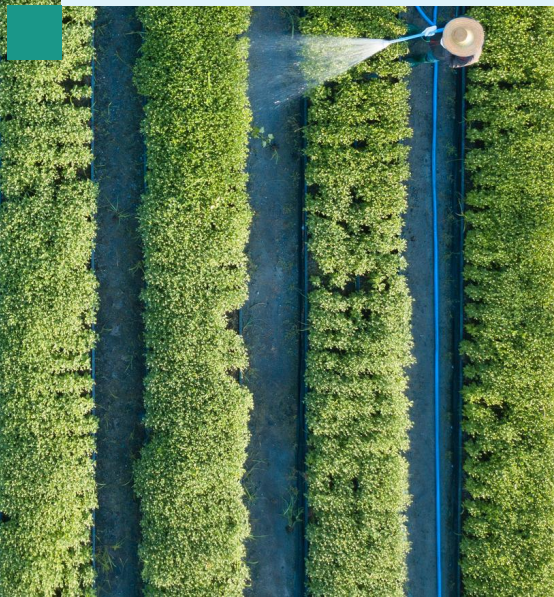
Data released by CDP suggests that nearly 70% of companies disclosing data through CDP did not assess the impact of their value chain on biodiversity in 2022.

The TNFD is a global, market-led, science-based and government-supported initiative to help companies and financial institutions factor nature into their decision making.

The TNFD recommendations provide companies and financial institutions of all sizes with a risk management and disclosure framework to identify, assess, manage and, where appropriate, disclose nature-related issues.

"Nature provides irreplaceable services to societies and businesses. I applaud the TNFD's efforts..."

President Emmanuel Macron, France



The TNFD recommendations and implementation guidance were published in September 2023



“Building on the groundwork established by the Kunming-Montreal Global Biodiversity Framework, the TNFD has produced a set of recommendations which will be integral in improving investor access to meaningful and consistent data. The financial and economic implications of biodiversity loss are vital topics for investors to take on and are fundamentally inseparable from their wider considerations on climate. As such, the PRI calls on investors and other economic actors to initiate their TNFD disclosure journeys, building on the learnings from voluntary adoption of the TCFD recommendations.”

David Atkin, CEO, Principles for Responsible Investment (PRI)



The recommendations build on, and integrate, existing science, frameworks and standards



“The TNFD recommendations are to a high extent consistent with the GRI Standards, just as the GRI Biodiversity Standard is informed by the work of TNFD.”

Eelco van der Enden, CEO of the Global Reporting Initiative (GRI)

“We are pleased to note the high-level of consistency within the finalised TNFD recommendations and the ISSB Standards, which both incorporate the architecture of the TCFD recommendations.”

Sue Lloyd, Vice Chair of the ISSB

“CDP is delighted to announce our intention to align our global disclosure platform with the TNFD framework, which is an exciting opportunity for a unified response to the crisis of nature loss.”

Nicolette Barlett, Chief Impact Officer at CDP

The recommendations are designed to enable the materiality preferences of the report preparer

Meeting the material information needs of capital providers, consistent with the ISSB's IRS Standards and the TCFD recommendations, with a focus on risk management and how dependencies and impacts on nature create risks and opportunities for an organisation's financial position and prospects.

Global policy goals and targets

Nature-related assessment and reporting

Nature-related disclosures

Financial materiality approach



Double materiality approach



Meeting the material information needs of stakeholders focused on impacts, aligned with a broader materiality approach, reporting against both the ISSB and the GRI standards.

The recommended disclosures

The recommended disclosures encourage integrated climate-nature reporting, building on the TCFD approach

- 14 recommended disclosures
- Same structure, language and approach as TCFD
- Organised around four pillars:

Governance

Strategy

Risk & Impact Management

Metrics & Targets

TNFD recommended disclosures

Governance

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

Recommended disclosures

- A.** Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.
- B.** Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.
- 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.

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.

Recommended disclosures

- A.** Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.
- 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.
- C.** Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.
- 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.

Risk & impact management

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

Recommended disclosures

- A(i)** Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.
- 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).
- B.** Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.
- 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.

Metrics & targets

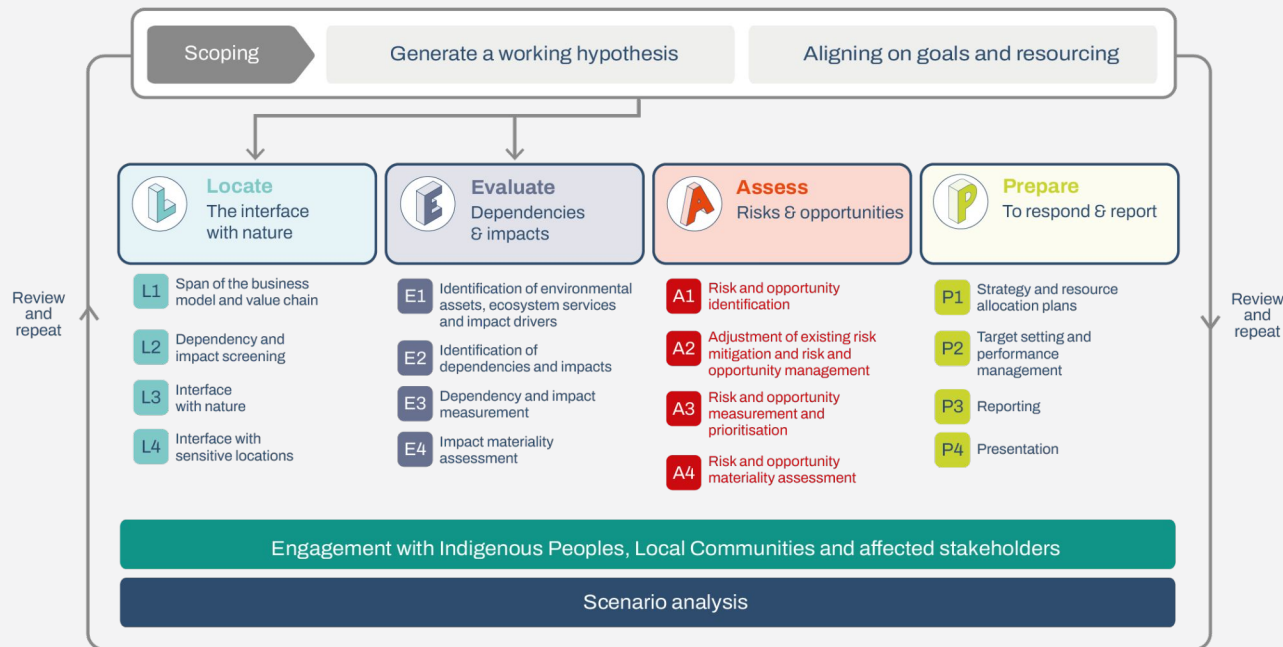
Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.

Recommended disclosures

- 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.
- B.** Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.
- C.** Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.

Additional implementation guidance - the LEAP approach

Responding to market feedback for 'how to' guidance, the TNFD has developed, pilot tested and released a comprehensive assessment process for nature-related issues to help inform decisions regarding materiality and disclosure

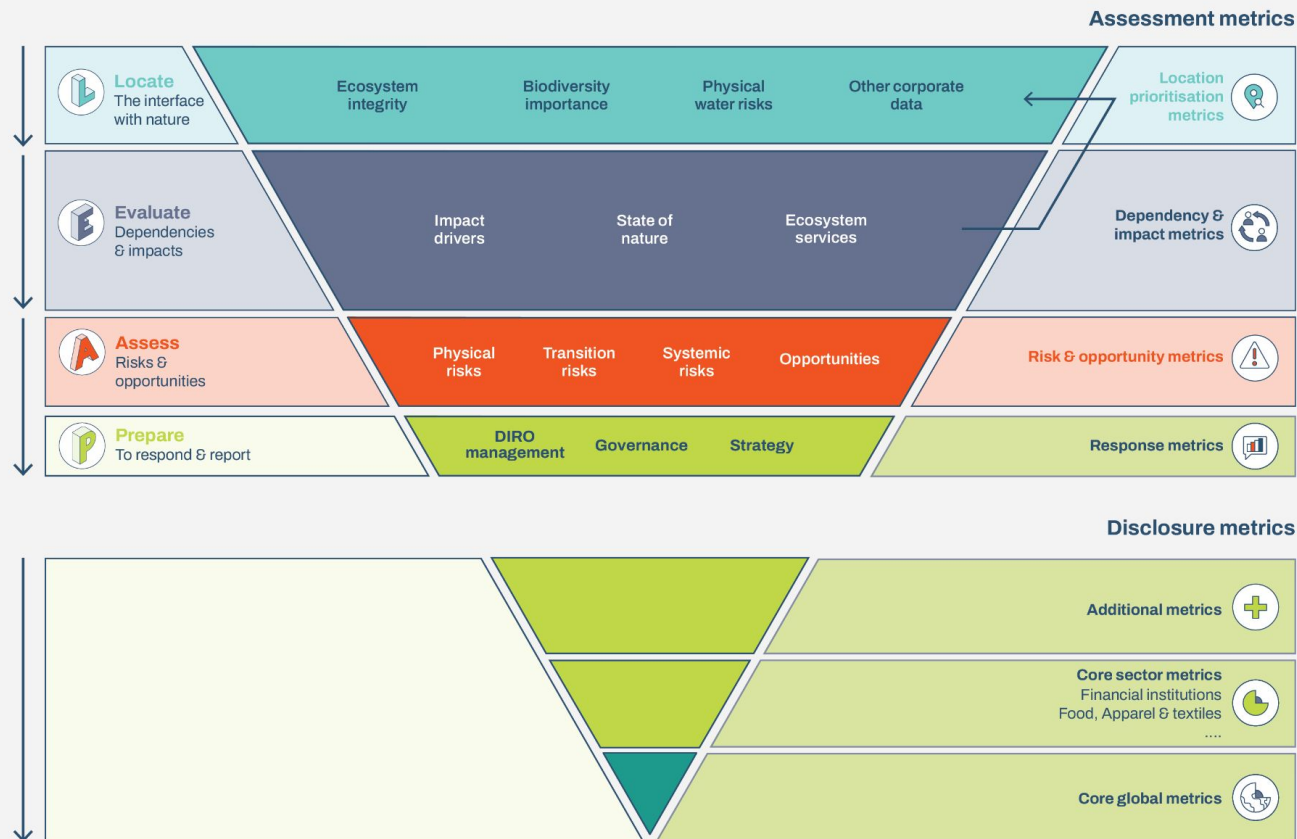


- Leveraging existing frameworks and tools including the Natural Capital Protocol and SBTN target setting methods
- Enables both impact and financial materiality assessment aligned with European (CSRD) and ISSB requirements
- Based on extensive market feedback and pilot testing by over 240 institutions globally

Metrics for assessment and disclosure

Guidance is provided on

- A larger set of optional **additional disclosure and assessment metrics** to support organisations in making representative and accurate disclosures
- A small set of **core metrics** to be disclosed on a comply or explain basis; some are global and some are specific to a sector



Report preparers are now getting started and the TNFD is enabling and supporting voluntary market adoption and capacity building



Source: [Forico](#)

“Protecting nature makes our business more resilient and helps us deliver for patients by ensuring the supply of raw materials needed to manufacture vital medicines and vaccines. That’s why we’re proud to be a member of the Taskforce on Nature-related Financial Disclosures. We have started to implement the TNFD methodology to better understand our nature-related risks and opportunities and are committed to publish our first TNFD disclosures from 2026, based on 2025 data”

Julie Brown, Chief Financial Officer at GSK

“We believe that the TNFD is an effective and indispensable approach for assessing and disclosing nature-related risks and opportunities in our business activities. The MS&AD plans to start adopting the recommendations of the Taskforce in its sustainability reporting from FY2024.”

Naomi Motojima, Chief Sustainability Officer at MS&AD

Additional guidance under development by the TNFD including:



- Sector guidance
- Guidance on alignment to CSRD, GRI, ISSB and other requirements

Capacity building initiatives including:

- Education and training
- Nature-related data
- Preparer Forums

Recommendations and guidance available to get started

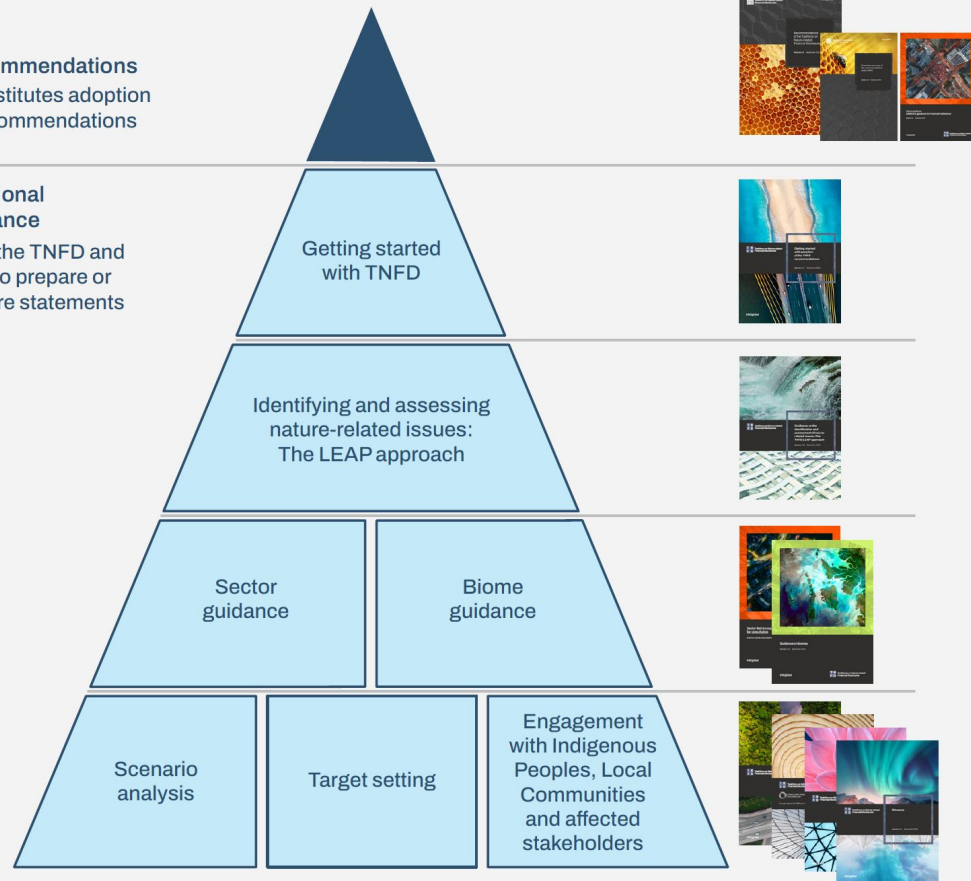
These materials
and more
available on the
[TNFD website](https://www.tnfd.global/)



The TNFD recommendations
Use of which constitutes adoption
of the TNFD recommendations

Additional
guidance

Suggested by the TNFD and
not required to prepare or
make disclosure statements



The time for action is now.

The TNFD recommendations are ready for adoption.

To address the declining productivity and resilience of nature and, by extension, the declining prosperity and resilience of our societies, economies, financial systems and business models, nature-related issues must now be incorporated into enterprise and portfolio risk management processes.

Failure to do so leaves business, finance, financial systems and the whole of society with a major risk management blind spot in the face of accelerating nature loss.



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