



Why biodiversity and natural capital matter to business

and what you need to know about the Taskforce on Nature-related Financial Disclosures (TNFD) beta framework

Twin challenges, twin task forces

Net zero and nature are intrinsically linked. Climate change and declining biodiversity and natural capital are twin existential threats to life on this planet, and both are at tipping points. Meaningful action towards a net-zero and nature-positive future has never been more urgent.

Addressing both the climate emergency and the escalating crisis in nature needs to be at the heart of the strategy to build a better and more sustainable future.

While climate action is increasingly discussed and reported as part of business ESG strategy and performance, less systematic attention has yet been placed on articulating and disclosing biodiversity and natural capital dependencies, risks, opportunities, aspirations and performance.

Many organisations will already be aware of the Taskforce for Climate-related Financial Disclosures (TCFD), which released a set of recommendations in 2017 that have been widely encouraged and adopted and have even become mandatory in some jurisdictions. Over the past five years, many industries and businesses have greatly lifted their net-zero commitments and communication of climate actions and risks, to the point that this is now widely expected practice.

However, there is much progress yet to be made in terms of business's relationship with nature. In 2021, The Taskforce on Nature-related Financial Disclosures (TNFD) was established to develop a framework for greater disclosure and transparency of risks, opportunities and actions related to the perilous state of the world's biodiversity and natural capital. The goal is to achieve a greater flow of global finance away from harmful impacts on nature, and towards nature-positive actions.

What is biodiversity and natural capital?

Biodiversity is the diversity of all living organisms at genetic, species and ecosystem levels. Biodiversity is the living component of natural capital.

Natural capital can be defined as the world's stocks of natural assets, including geology, soil, air, water and all living things. It refers to the elements of the natural environment that are considered essential to the long-term sustainability of development for their provision of 'functions' to the economy.

Framing nature and biodiversity as 'natural capital' is a way of looking at the environment from an economic perspective.





Key TNFD definitions:

- 1 Natural capital**
Renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils, minerals) that yield a flow of benefits to people.
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- 2 Environmental assets**
Renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils, minerals) that yield a flow of benefits to people.
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- 3 Ecosystem services**
The contributions of ecosystems to economic or other human activity. TNFD sees ecosystem services as provisioning services, regulating and maintenance services, and/or cultural services.
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- 4 Natural capital dependencies**
Aspects of ecosystem services that a community, company or country relies on to function.
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- 5 Nature-related risks**
Potential threats posed to an organisation linked to its and other organisations' dependencies on nature and nature impacts. These can derive from physical (acute and chronic), transition (policy, legal, market, technology and reputation) and systemic risks (such as ecosystem collapse, aggregated risks, contagion and spill-over in the financial system).
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- 6 Nature-related opportunities**
Activities that create positive outcomes for organisations and nature by avoiding or reducing impact on nature, or contributing to its restoration.
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- 7 Nature-positive**
A high-level goal and concept describing a future state of nature (e.g. biodiversity, ecosystem services and natural capital) which is greater than the current state. Often adopted as an overarching company target.

Natural capital and biodiversity are fundamental to lives and livelihoods

We know intuitively that natural capital and biodiversity matter greatly to the health of the planet and the lives of people. Clean air, drinkable water, healthy food, and the joys of natural places are fundamental to our lives. But when natural capital and biodiversity decline further, what will happen to livelihoods in industries that rely heavily on ecosystem services – such as farming, fishing, forestry and tourism?

Industries that rely on nature employ around 1.2 billion people, while more than half of the world's GDP – an estimated USD \$44 trillion of economic value generation – is moderately or highly dependent on nature and its services according to the World Economic Forum. Recent research of the world's largest listed companies has shown that around USD \$7.2 trillion of total enterprise value remains exposed to unmanaged biodiversity risk¹. In the Asia-Pacific, 63% of GDP is at risk from biodiversity and nature loss.

In addition to economic value, it's estimated that nature-based solutions could provide more than 30% of the cost-effective tools to address climate change by 2030. We won't achieve Paris climate goals without nature-based solutions in our land, water, food and energy systems.

Unfortunately, we're simply not doing enough to preserve remaining natural capital, or repair what we've already damaged. A 2016 report from Credit Suisse and McKinsey estimated that some USD\$300 billion to \$400 billion is required each year to preserve healthy terrestrial and marine ecosystems – but only \$52 billion/year is flowing towards conservation projects².

Australia has one of the worst conservation records of any wealthy and politically stable nation, with the most mammalian extinctions of any continent, and an expected increase in listed entities due to the 2019–20 bushfires³. There are arguably no clearer examples of how declining natural values can affect economies than the impact on tourism of coral bleaching in the Great Barrier Reef, or the impacts on agriculture of water scarcity in the Murray-Darling Basin.

Learning from Country

Globally, challenges relating to biodiversity and natural capital won't be solved without meaningful engagement with First Nations peoples.

In Australia, Aboriginal and Torres Strait Islander peoples are traditional custodians of the whole country, and rights holders of up to 60% of the land (and an increasing proportion of sea country too). Practices that are millennia-old can be reconsidered or revisited to help restore greater biodiversity, including principles of restraint around only taking and using what is actually needed. Working together with Aboriginal and Torres Strait Islander peoples to tackle environmental challenges allows for positive social, economic and environmental outcomes.



¹ onlinelibrary.wiley.com/doi/10.1002/bse.3142

² www.unepfi.org/news/conservation-finance-from-niche-to-mainstream-the-building-of-an-institutional-asset-class

³ soe.dceew.gov.au



Nature-related opportunities and risks for business

There's a real business opportunity in tackling biodiversity. Businesses that take effective action to prevent detrimental impacts on nature, and that leave net benefits for biodiversity and natural capital, will also increasingly protect and enhance their social licence and reputation, availability of financing, regulatory arrangements, supply chains, and business performance. By understanding nature-related dependencies, and taking action towards a more sustainable and resilient business model, companies can maximise their success on a deteriorating and ever-changing planet.

Not taking action to limit negative impacts on nature has serious ramifications. With intensifying public scrutiny and concerns about 'greenwashing', the heightened focus on the credibility of net zero strategies and environmental claims is likely to extend to business impacts on biodiversity and natural capital.

Across the market, investment in nature-positive actions is still in its early stages. Climate change and reducing greenhouse gas emissions have taken primary focus until now. However, as organisations mature in their progress on decarbonisation and begin to understand the inextricable link between protecting nature and addressing climate change, we will see a growing level of investment in nature.

Focus is increasing on establishing a global goal for nature, similar to the climate goal of net zero. This will be discussed during the COP15 Convention on Biological Diversity in December 2022.

With the fragile state of our planet's natural capital, it is everybody's responsibility to act. Governments and individuals will play their roles, but for business, this is the time to take the lead, accelerate the pace of ecological transformation, incorporate biodiversity and nature targets into strategy planning and decision-making, and promote a comprehensive green transformation.

It is also the time to explore opportunities to capture natural capital value and organisational impact as part of wider ESG disclosures.

Accounting for our actions with the TNFD

Maintaining and enhancing natural capital and biodiversity will become increasingly important for businesses in the low-carbon future economy. Understanding the economic value of nature can make its contribution to livelihoods and economies visible, enabling businesses to account for nature in their decision-making. Similar to other assets recognised today, natural capital assets will impact overall enterprise value and become a key driver in future decision-making.

The TNFD provides a clear, structured framework that can help businesses understand the implications of biodiversity and natural capital for their organisation and activities. It helps companies navigate towards maximising their impact and enterprise value. The TNFD framework brings consideration of nature-related dependencies, risks and opportunities into core corporate strategy, decision-making and reporting, helping prioritise and accelerate the flow of capital into nature-positive outcomes.

Global representatives from 34 financial institutions, corporates and service providers have been appointed to the Taskforce and are continuing to develop and evolve new beta versions of the TNFD framework. The TNFD framework builds on the widely adopted structure of the Taskforce for Climate-related Financial Disclosures (TCFD), but tackles **natural capital dependencies** and risks in a unique way. Like the TCFD, the core elements and areas of disclosure are governance, strategy, risk management and metrics, and targets (see textbox).

The Taskforce is encouraging corporates and financial institutions, as well as scientific experts, development finance institutions and standard-setting bodies, to trial the proposed framework and provide feedback to inform future iterations.

Engaging with the TNFD will help organisations in all sectors understand the issues, make scientifically informed decisions, build resilience, and make the most of the opportunities created by the drive for a nature-positive future. Early movers will benefit from timely recognition of risks and opportunities and building internal capacities that recognise and manage nature-related issues. In doing so, they will be well positioned to stay ahead of the market and be prepared for when TNFD (like TCFD) is mandated.

Rapid uptake of the TNFD is expected as it follows in the footsteps of TCFD and is likely to be integrated in the upcoming ISSB standard.



Australia's role in the TNFD

The TNFD is supported by some of the world's largest organisations as well as the United Nations, national governments and standard-setting bodies. As a country that is heavily impacted by nature-related risks, Australia has been very active in the development of the TNFD.

The Responsible Investment Association Australasia (RIAA) is convening the official Consultation Group for Australia and New Zealand on the TNFD. You can express your interest to participate here: tnfd.global/australia-nz-cg. RIAA is also convening investors and other actors in the Nature Working Group, which aims to help upskill and support investors to consider natural capital in their portfolios. responsibleinvestment.org/nature-working-group.

PwC is a member of the TNFD. PwC Australia experts on natural capital and biodiversity dependencies and risks can assist with your natural capital dependency, risk and opportunity assessments, peer analysis, policy and strategy development, nature and biodiversity target setting and monitoring, and TNFD beta testing.

What you can do to prepare for the TNFD

- Become familiar with the key concepts of natural capital and nature-related dependencies, risks and opportunities.
- Consider what impact your organisation is having on nature.
- Consider what actions your organisation could take to avoid or reduce any negative natural capital impacts and risks.
- Consider how your business strategy and value chains may be exposed to nature-related dependencies and risks directly or indirectly.
- Consider the broader risks and opportunities presented to your organisation by the shift to a nature-positive economy.
- Initiate conversations about natural capital in your company.
- Consider piloting the TNFD beta framework and benefitting from early-mover insights and a leading position in the market.
- Decide which of the piloting options would be relevant to your organisation at this stage:
 - ‘desktop testing’ the framework to see how it may apply to your business
 - full piloting of the framework implementing all steps, from identifying and assessing the impacts and dependencies through to preparing the disclosures
 - taking the ‘middle road’ approach by identifying ‘no regret’ actions within the 17 steps of the LEAP process, piloting these and considering future extensions into the full framework.
- Engage with knowledge partners to assist you on your journey.
- Join the TNFD forum of pilot testers for further support and peer-to-peer communication.
- Provide feedback on your piloting of the beta framework to help improve future iterations.

Examples of the TNFD at work

There are three groups of entities for which piloting of the TNFD beta framework is of particular importance:

High direct dependency on natural capital	High direct impacts on natural capital	High indirect dependencies and or impacts in value chains
E.g. Agriculture, forestry, fisheries, tourism	E.g. Primary resources industry, real estate and infrastructure	E.g. Retail, food production, textiles
<ul style="list-style-type: none"> • Increasingly vulnerable and facing diminishing outputs due to decline of the quality and quantity of natural capital and ecosystem services • Increasing risk and volatility and decreasing ability to attract investment (investors see the industries as increasingly risky) 	<ul style="list-style-type: none"> • Environmental impacts are highly regulated and businesses are increasingly required to demonstrate measurable nature-positive outcomes • Increasing societal and stakeholder pressure for accountability on nature-related impacts • Require approaches that <ol style="list-style-type: none"> a) help reduce the natural capital impact in operations b) help maximise the positive outcomes of restoration efforts 	<ul style="list-style-type: none"> • Potential high dependencies and impacts in value chains, but may have low levels of awareness and oversight • Require approaches to examine supply and value chains for timely identification of dependencies and risks and for planning risk management actions • Require approaches for engagement with suppliers to improve their natural capital outcomes
<ul style="list-style-type: none"> • Implementing nature-positive practices can improve long-term productivity and investment security 	<ul style="list-style-type: none"> • Can reduce own environmental footprint and achieve better mandated and voluntary nature restoration outcomes and improved perception among stakeholders of environmental credentials 	<ul style="list-style-type: none"> • Opportunity to recognise nature-related value-chain dependencies, impacts and opportunities • Enables engagement with suppliers to decrease and manage risks and to benefit from opportunities, such as significantly improved public and stakeholder perception and robust credentials on nature-related performance

TNFD provides a systematic framework to identify, qualify and value dependencies, risks and opportunities and integrate them in overall company risk management, strategic decision-making and sustainability disclosures.

Using the TNFD beta framework

Key TNFD elements

As an important component of the beta framework, TNFD has developed an integrated assessment process for nature-related risk and opportunity management called LEAP (Locate; Evaluate; Assess; Prepare). This aims to break down the highly complex issues related to natural capital into easier to grasp elements and practical action steps. The outcomes of a LEAP assessment feed into the recommended TNFD disclosures.

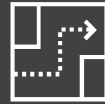
The LEAP approach builds on the Natural Capital Protocol developed by the Capitals Coalition and is already well-known among companies and organisations that have started their natural capital journey. It also integrates closely with the Science Based Targets Network (SBTN) guidance on target setting, monitoring and evaluation⁴.

Disclosure architecture: core elements



Governance

An organisation's governance structures and practice around natural capital impacts, risks and opportunities



Strategy

The actual and potential effect of natural capital impacts and dependencies, risks and opportunities on business strategy and finances



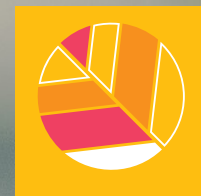
Risk management

The processes in place to identify, assess and manage the impacts and dependencies, risks and opportunities



Metrics and targets

Targets set and indicators used to assess and manage the impacts and dependencies, risks and opportunities

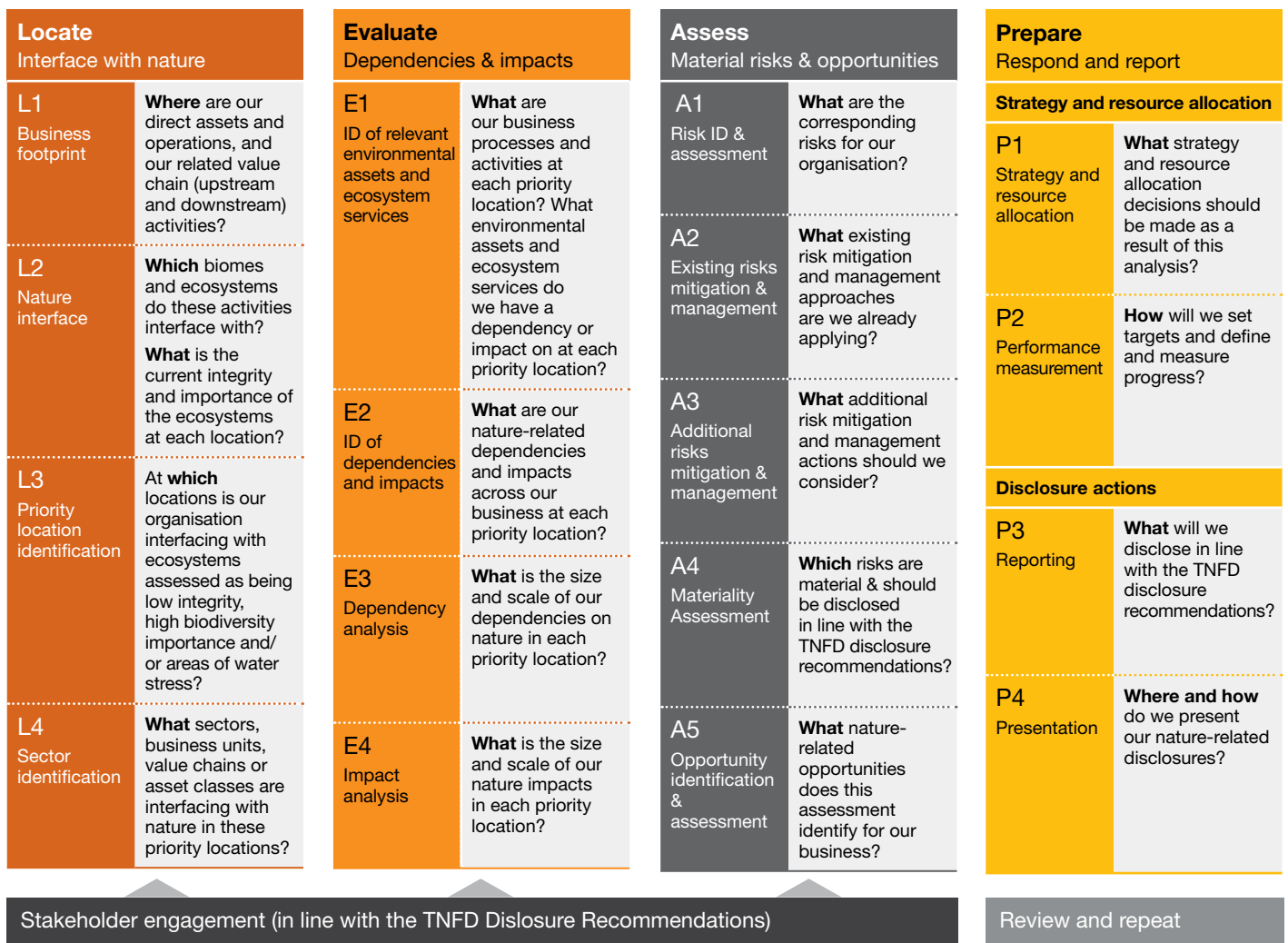


<https://sciencebasedtargetsnetwork.org/take-action-now/take-action-as-a-company/join-the-sbtn-corporate-engagement-program/corporate-engagement-members-only/target-setting-tools-and-guidance/>



The LEAP approach

Scoping the assessment



TNFD global framework⁵

The beta framework provides general guidance on each step of LEAP and mentions a range of tools that may assist the work; however, it does not recommend a single harmonised methodological framework. This leaves flexibility about the method and extent to which the nature-related dependencies and impacts are identified and assessed. Unlike the greenhouse gas emissions indicators in the TCFD, there is no single universal metric to measure natural capital impacts.

Therefore, each organisation will need to determine the appropriate metrics, tools and methods for their assessments. The TNFD process will require a range of expertise with in-depth knowledge of the entity and its value chain on the one hand, and deep subject matter expertise on natural capital on the other. The TNFD stresses the importance of stakeholder engagement to achieve a comprehensive and robust assessment requiring multi-faceted judgments.

⁵ <https://framework.tnfd.global/wp-content/uploads/2022/03/LEAP-approach-Corporates-1-scaled.jpg>

Disclosure recommendations

The recommended TNFD disclosure requirements tackle each of the core elements in alignment with TCFD reporting, bringing in nature-specific elements, where required.



Governance disclosures

Details of board's oversight and management's role in managing nature-related risks and opportunities.



Strategy disclosures

Identification of risks and opportunities, with assessment of the related impacts on the company's business strategy and financial planning and how resilient the company is to those impacts. In addition, disclosures on the company's interactions with especially sensitive and natural areas of high importance are included.



Risk management disclosures

Details of how the organisation identifies and manages nature-related risks, and how these processes are integrated in the overall strategic risk management approach.



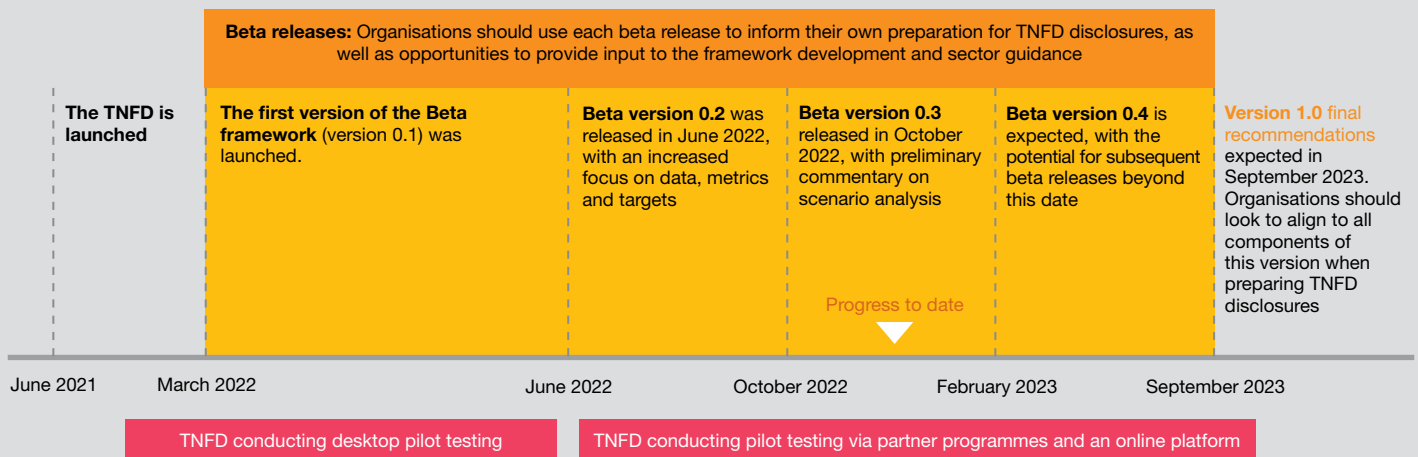
Disclosures on metrics and targets

Quantitative and qualitative performance indicators and targets used in assessments, with data on upstream and downstream value-chain impacts, similar to TCFD Scope 1,2,3 considerations (the value chain disclosure requirement is still under development).

TNFD timeline

TNFD is work in progress ...

... but companies can already test/apply the beta framework



For a more in-depth discussion on TNFD please reach out to one of our ESG specialists.



Linda Romanovska
Senior Manager, Assurance
linda.romanovska@pwc.com



John Tomac
Partner, Assurance
john.tomac@pwc.com



Katelyn Bonato
Partner, Energy Transition
katelyn.bonato@pwc.com

About the author

Linda Romanovska is an appointed member of the EU Platform on Sustainable Finance, the high-level technical advisory body to the European Commission, which is providing expert inputs for the development of EU's Sustainable Finance Framework including the EU taxonomy of sustainable economic activities and sustainability disclosure regime for financial entities and funds. Linda is likewise appointed to the EFRAG expert group tasked with the development of Corporate Sustainability Reporting Standards implementing the upcoming EU Corporate Sustainability Reporting Directive. Linda also co-chairs a working group on incentivising investment in natural capital in the Responsible Investment Association Australasia (RIAA) working group on Nature, engages with the current TNFD development process and is appointed to the Technical Advisory Group for the Australian Sustainable Finance Institute (ASFI) sustainable finance taxonomy project.



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