

# Nature-related risks and opportunities

Guidance for accountants and  
business leaders.

# Introduction

This guidance document has been prepared by CPA Australia as part of a series of materials to support members as they deepen their own understanding of sustainability-related risks and opportunities.

In this guidance document we will be discussing an organisation's dependence and impact on nature. Like climate-related risks and opportunities, accountants are best placed to provide holistic thinking, judgement and rigour to this sustainability topic.

- Boards and executive leadership teams would need to consider nature as part of its materiality setting process and risk identification and mitigation strategies.
- Many organisations have a material exposure to nature-related risks and opportunities, and would therefore be best advised to factor this topic into their strategic decision-making and business transformation plans.
- The accounting profession has the necessary skills and capabilities to aid the identification, measurement and response to nature-related risks and opportunities.

**“The truth is, every one of us, no matter who we are or where we live, can and must play a part in restoring nature. I am hopeful for the future, because although nature is in crisis, now is the time for action, and together we can save it.” - David Attenborough**

## **The importance of nature-related risks and opportunities for accountants.**

- Nature-related disclosures may be formalised into reporting requirements in the future.
- Accountants can provide holistic problem solving and systems thinking to understand the dependence and impact on nature.
- Nature is directly linked to climate-related and societal risks and opportunities. Accountants are best placed to connect these considerations and articulate a more cohesive narrative of the impact of an organisation.

## **The importance of nature-related risks and opportunities for business.**

- Organisations are dependent on natural resources as part of their product and service delivery.
- Organisations also impact on the general state of the environment through their operations (waste disposal, water quality etc.).
- Sustainable use of natural resources not only builds resilience in supply chains, but also safeguards these valuable resources for future use.

## Background and policy landscape

There is growing consensus that nature should be viewed as a core and strategic risk management issue alongside climate-change. The interconnected nature of climate change and nature is also becoming increasingly clear.

In 2012 the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was established with a mandate to bridge the gap between the science and policy on nature. In their 2019 Global Assessment Report on Biodiversity and Ecosystem Services<sup>1</sup>, the IPBES sets out the dire state of nature.

## Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide.

The World Economic Forum's most recent Global Risk Perception Survey which sets out the top 10 risks in the short and long term echoes the concerns put forward by the IPBES report. Nature-related risks being ranked very high by respondents in the long term.

- 2<sup>nd</sup>: Critical change to Earth systems
- 3<sup>rd</sup>: Biodiversity loss and ecosystem collapse
- 4<sup>th</sup>: Natural resource shortages

Figure 1: WEF Global Risks Report



Source: World Economic Forum Global Risks Perception Survey 2023-2024.

In 2022 at COP15 on the Convention of Biological Diversity, 196 Countries agreed to the Kunming-Montreal Global

<sup>1</sup> IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio (et al).

Biodiversity Framework. The Framework sets out an ambitious range of practical commitments to live in harmony with nature and where: "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

#### **2050 Goals**

- Goal 1: Protect and Restore
- Goal 2: Prosper with Nature
- Goal 3: Share Benefits Fairly
- Goal 4: Invest and Collaborate

In September 2023 the Taskforce for Nature-related Financial Disclosures (TNFD) released their final recommendations. The 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.

Globally governments are also acting with purpose through policy and fiscal action. This could lead to businesses that have not managed their nature impact adequately to face sanction and a reduction in market valuation, ratings, and stakeholder confidence.

#### **Quantifying the cost of repair**

The dependence on nature and its services should not be underestimated. It is estimated that roughly 50% of Australia's GDP is moderately or highly dependent on nature and its services<sup>1</sup>. The cost of repair also carries a steep price tag, at a forecast \$2 bn annual investment over the next 30 years<sup>2</sup>.

There are natural connection points between climate change and nature. As we have seen in the climate space, effective change is largely driven by collective action.

Leading governments are driving change through science backed policy. The business sector has a role to drive effective change through the adaptation of its own operations and value chain. Society more broadly should also be considering the impact from consumption of goods and services and advocate for change.

<sup>1</sup> Australian Conservation Foundation (2022). The nature-based economy: How Australia's prosperity depends on nature. Nature Dependency Report.

<sup>2</sup> Mappin, B., Ward, A., Hughes, L., Watson, J. E., Cosier, P., and Possingham, H. P. (2022). The costs and benefits of restoring a continent's terrestrial ecosystems. *Journal of Applied Ecology*, 59(2), 408–419.

# Demystifying nature

Nature is a broad term to describe the physical environment that we live in.

The Taskforce for nature-related financial disclosures (TNFD) provides the following definition as a starting point to their own framework.

**The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment<sup>1</sup>**

In its simplest form the definition of nature spans across five 'realms' being land, ocean, freshwater, society, and atmosphere.

**Figure 2: The five nature realms.**



From a business perspective it is important to understand that organisations would have both dependencies and impacts on nature. Nature can therefore be viewed as an asset that delivers benefits and services to society more broadly.

## **Example 1: The forest for the trees**

A logging company is dependent on its plantations delivering a consistent yield of timber to fulfil market demand.

If the water used for irrigation is contaminated or the soil is not managed in a sustainable way depleting it of important nutrients or results in erosion, this would impact on both yield, revenue and ultimately profit.

The supply of timber is therefore dependent on the services that can be derived from nature, whether soil, natural irrigation and others to produce benefits for society.

It is important to note that the timber industry also has a responsibility to not adversely impact on downstream economic participants, as nature is inherently connected.

If effluent from production processes for example are not treated properly and leaks into rivers or groundwater, this could have adverse effects for amongst others crop farmers, craziers and communities.

## **Example 2: Fashion blunder**

Fashion is highly dependent on biodiversity and nature from the supply of nature-dependent commodities like cotton, animal hides, and new or innovative materials like, mycelium leather, hemp and bamboo, clean water and healthy soils<sup>2</sup>.

The drive for higher consumption linked to fast changing seasonal fashion trends is placing an ever increasing burden on these natural resources.

Ultimately, the depletion of any of these resources would not only result in ecological damage, but also in increased input costs for an organisation.

Fast fashion also places pressure on land usage, as garments that cannot be re-purposed would ultimately end up in landfills. Apart from this there are also impacts from i.e., chemical effluent created through production and dying processes that could cause environmental damage.

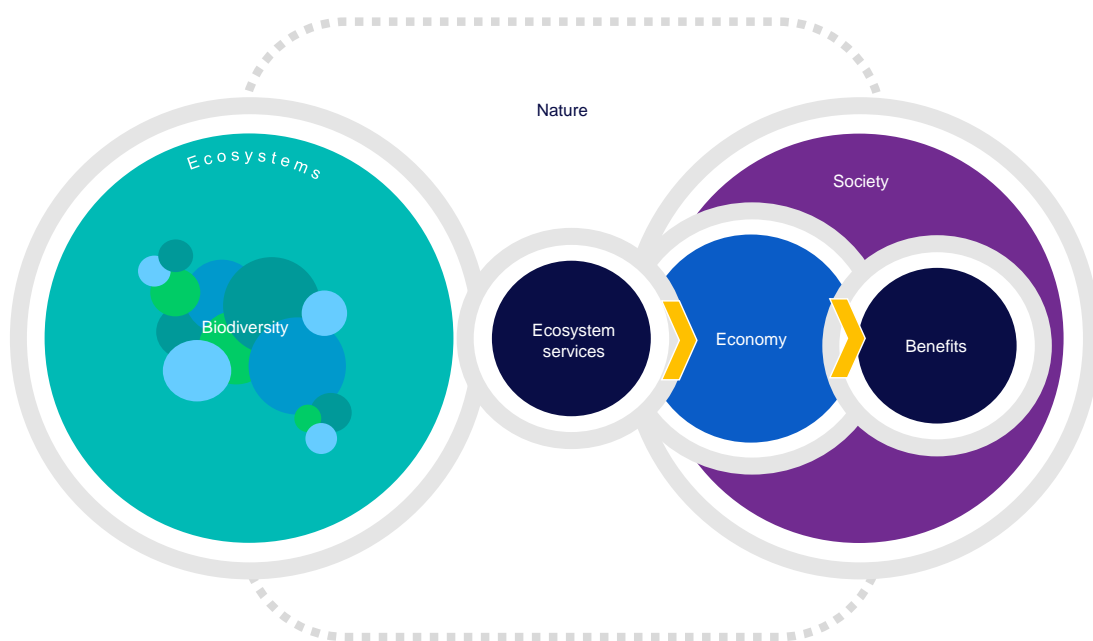
<sup>1</sup> Díaz, S et al (2015) The IPBES Conceptual Framework – connecting nature and people

<sup>2</sup> Adapted from the Fashion Pact webpage.

The International Sustainability Standards Board (ISSB) builds on the core definition of nature and as part of its own agenda setting work has indicated biodiversity, ecosystems and ecosystem services (BEES) as a new research topic that would support its future standard-setting work.

Viewing nature through the lens of the BEES, provides insight into how a rich biodiversity and stable and thriving ecosystems contribute towards the benefits that society can derive from these resources.

**Figure 3: Biodiversity, ecosystems and ecosystem services.**



Concept	Definition
Ecosystems	A dynamic complex of plant, animal and microorganism communities and the non-living environment, interacting as a functional unit <sup>1</sup> .
Ecosystem services	The contributions of ecosystems to the benefits that are used in economic and other human activity <sup>2</sup> .
Biodiversity	The variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. <sup>3</sup>

1 Convention on Biological Diversity (1992) Article 2; IPBES (2019) Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

2 UN (2021) System of Environmental-Economic Accounting - Ecosystem Accounting

3 Convention on Biological Diversity (1992) Article 2





# The role of business

## Nature-related dependencies and risks.

The dependence and impacts on nature would logically not be uniform across sectors. It is also important to note that although some organisations have already begun to identify,

map, understand and address their nature-related risks and opportunities, this is not the case more broadly.

The TNFD defines four nature-related issues that businesses would need to consider.

Issue	Example
	Dependencies of the organisation on nature
	Impacts on nature caused, or contributed to, by the organisation
	Risks to the organisation stemming from their dependencies and impacts
	Opportunities for the organisation that benefit nature through positive impact or mitigation of negative impacts on nature
	Businesses depend on nature as part of the inputs to their production processes and delivery of services. Examples include timber, ground water or fresh water for drinking, and natural fibres for fertilizer.
	Waste production that can not be otherwise be recycled will require landfill sites. This could in turn lead to a loss of biodiversity due to land clearance.
	As organisations define and measure their reliance on nature, the risk of changes to nature will provide a mechanism to review business strategies and operations.
	Business.gov.au highlights benefits and opportunities for business along cost savings, business reputation, work health and safety and legal compliance.



## Key considerations for business leaders.

What should business leaders be thinking about in the short to medium-term?

Alongside climate change, nature and biodiversity is a growing area of concern, and businesses will be expected to

evidence their consideration and response to nature-related risks and opportunities over time. As we have seen with climate-related considerations, part of the impetus for change will be driven by the requirements of sustainability standards and regulators.

Consider	Recommended guidance and resources
1. <b>Understand:</b> Identify and map the organisation's nature-related dependencies and risks.	<ul style="list-style-type: none"> <li>• ENCORE provides an understanding of sectoral dependencies and impacts on nature.</li> <li>• Utilise the TNFD's LEAP approach.</li> </ul>
2. <b>Integrate:</b> Explicitly include nature as a component to risk-management.	<ul style="list-style-type: none"> <li>• Apply the TNFD's guidance on nature-related scenario analysis.</li> </ul>
3. <b>Respond:</b> Develop strategies to review business operations and incorporate nature as a fundamental consideration.	
4. <b>Measure:</b> Set targets that align with global nature ambition.	<ul style="list-style-type: none"> <li>• Kunming-Montreal Global Biodiversity Framework goals.</li> <li>• TNFD Recommendations</li> <li>• Australia's Plan for Nature</li> </ul>
5. <b>Disclose:</b> Consider disclosure of the organisation's nature-related response	<ul style="list-style-type: none"> <li>• As sustainability-related disclosure standards evolve businesses should stay abreast of the latest developments.</li> <li>• IFRS S1 provides an overarching framework for sustainability-related reporting.</li> <li>• The ISSB has indicated biodiversity, ecosystems and ecosystem services (BEES) as part of its future agenda of work.</li> <li>• The Global Reporting Initiative (GRI) GRI 101: Biodiversity 2024</li> <li>• The European Financial Reporting Advisory Group's reporting standard for biodiversity and ecosystems.</li> </ul>



# Endnotes

## References

- IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio (et al).
- Australian Conservation Foundation (2022). The nature-based economy: How Australia's prosperity depends on nature. Nature Dependency Report.
- Mappin, B., Ward, A., Hughes, L., Watson, J. E., Cosier, P., and Possingham, H. P. (2022). The costs and benefits of restoring a continent's terrestrial ecosystems. *Journal of Applied Ecology*, 59(2), 408–419.
- Convention on Biological Diversity (1992) Article 2; IPBES (2019) Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.
- UN (2021) System of Environmental-Economic Accounting - Ecosystem Accounting.
- Convention on Biological Diversity (1992) Article 2.

## Website resources

- Kunming-Montreal Global Biodiversity Framework
- Taskforce for Nature-related Financial Disclosures (TNFD)
- TNFD's LEAP approach
- TNFD's guidance on nature-related scenario analysis.
- Australia State of the Environment Report
- 'Nature Positive Plan: better for the environment, better for business'
- Business.gov.au
- ENCORE mapping tool.
- 'Nature risk is the next challenge that demands a global solution'.
- The European Financial Reporting Advisory Group's reporting standard for biodiversity and ecosystems.

## Author

- Patrick Viljoen CPA, Sustainability Leader, CPA Australia.

## Further enquiries

For any further enquiries please contact Patrick Viljoen at [patrick.viljoen@cpaaustralia.com.au](mailto:patrick.viljoen@cpaaustralia.com.au)