

THE NATURE – BUSINESS NEXUS

TNFD in a Box

Version 1.1

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Taskforce on Nature-related
Financial Disclosures



www.tnfd.global



How to use TNFD in a Box

→ This document, The Nature-Business Nexus, is the second in a series of six modules introducing the TNFD, called TNFD in a Box.

→ TNFD recommends beginning with the first module, Board-Level Overview, and then proceeding to the following five modules that provide greater detail.

- 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simply designed to highlight how organisations have approached assessment and implementation challenges, with the TNFD draft guidance available at the time.



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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The business case for nature

And its links to climate change



We all depend on nature

The natural world is our most important asset, on which all economic activity depends

"We are totally dependent upon the natural world. It supplies us with every oxygen-laden breath we take and every mouthful of food we eat."

Professor Sir Partha Dasgupta,
economist

"Our planet is our only home. It doesn't matter if you have a brick house in the city, a wooden house in the countryside or a straw house in the forest. Any house you have will be on the only ground capable of sheltering us all: Mother Earth's lap."

Sônia Guajajara, Brazilian Indigenous activist, environmentalist, and politician

"Humanity needs nature to survive, and so do the economy and banks. The more species become extinct, the less diverse are the ecosystems on which we rely. This presents a growing financial risk that cannot be ignored"

Frank Elderson, Executive Board
Member of the ECB

"It seems to me that the natural world is the greatest source of excitement; the greatest source of visual beauty; the greatest source of intellectual interest. It is the greatest source of so much in life that makes life worth living."

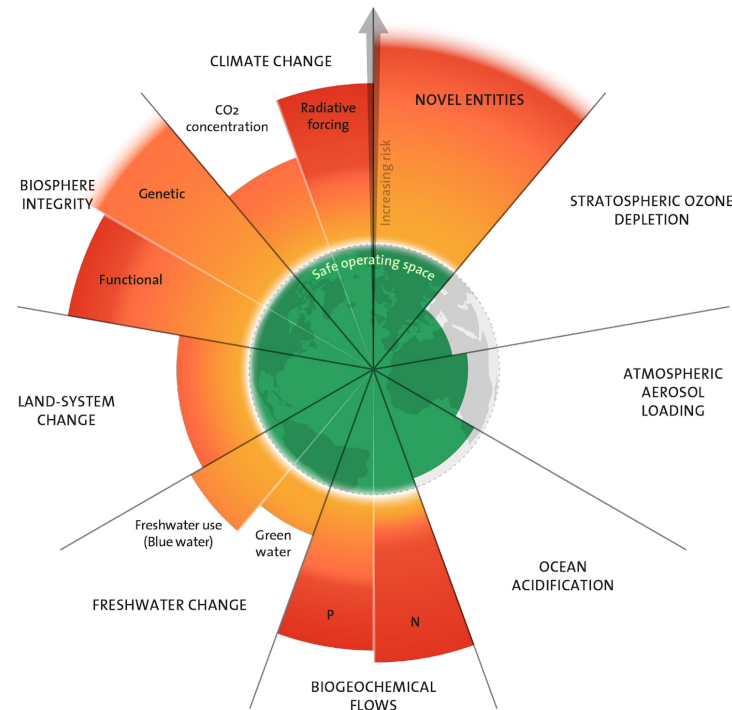
Sir David Attenborough

But we are living beyond our means

We are operating beyond the "safe operating space" for six of the nine planetary boundaries

The planetary boundaries

- Introduced in 2009 as a framework for tracking the planet's ability to support human development.
- Identifies nine biophysical processes that are critical for Earth System functioning. Crossing the boundaries increases the risk of large-scale, potentially irreversible environmental changes.
- Based on the latest available science, we have already crossed at least six of the nine planetary boundaries
-



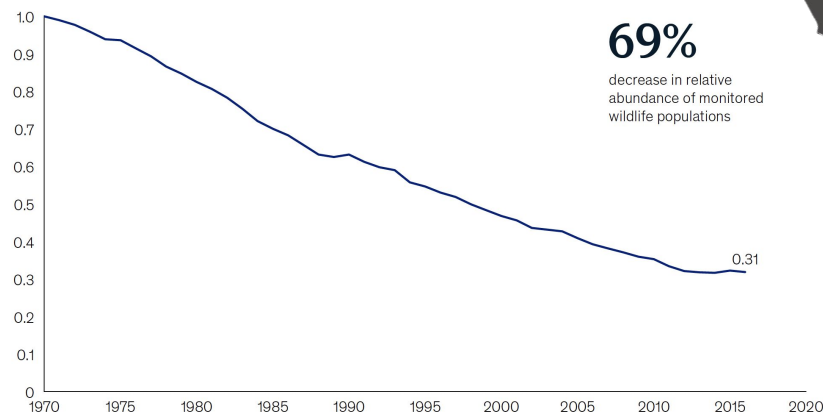
Novel entities are materials created and introduced to the environment entirely by human activities, including plastics, pesticides, industrial chemicals, chemicals in consumer products, antibiotics and other pharmaceuticals. Significant volumes enter the environment every year, with potentially disruptive and irreversible impacts.

This is leading to multiple nature crises

Drivers of nature loss and their impact on nature

Extinction rates are estimated to be 100 to 1,000 times higher than their background rate over the past tens of millions of years and are continuing to rise.

Living Planet Index,¹ 1970–2018



Sources: WWF | Living Planet Report 2022, UNEP | Beat Plastic Pollution accessed 2023, IPCC | AR6 Climate Change Report 2023

Evidence

Biodiversity loss

69% decline in wildlife populations between 1970 and 2018

Forest cover loss

Over 1/3 of forests have been cut down, half within the last century

Freshwater consumption

Agriculture uses 70% of the world's accessible freshwater, wasting 60% through inefficiencies.

Chemical and plastic pollution

79% of plastic waste is sent to landfills or the ocean.

Nutrient pollution

Nearly 2/3 of the ~120 m tonnes of reactive nitrogen produced each year pollutes air, water, soil, marine and coastal areas.

Climate change

Global average temperature has increased by ~1°C since 1900. Over half of this increase is since the mid-1970s.

Nature loss and climate change are inextricably linked

Climate change is one of the five main drivers of nature change.

It is increasing the frequency of events such as droughts and storms, which have impacts on natural ecosystems. Other drivers of nature loss (e.g. deforestation) are significant sources of greenhouse gas emissions.



Climate change



Land/ freshwater/
ocean use change



Resource use/
replenishment



Pollution/
pollution removal



Invasive alien
species introduction/
removal

Global economies rely on nature

If left to continue at current rates, biodiversity loss could cost the global economy \$2.7 trillion annually by 2030⁹.



The continued degradation of ecosystem services represents an annual loss of at least \$479 billion per year.

The worldwide loss of pollinators—including bees, butterflies, moths and other insects—well underway due to our excessive use of pesticides, would lead to an estimated drop in annual agricultural output of around \$217 billion.



"As a Latin American investment manager, we are aware of the relevance and the threats posed by human activity to the natural capital of the region, one of the most biodiverse regions in the world. We recognise the potential significance of the risks that derive from the depletion of this capital"

Lina Maria Uribe Palacio, Grupo Sura

"We know that our long-term success depends on the health and stability of our natural environment. That means adopting sustainable agriculture practices that protect water resources, biodiversity, climate and soil health, and playing our part in addressing the environmental impact of food production and consumption on a global level"

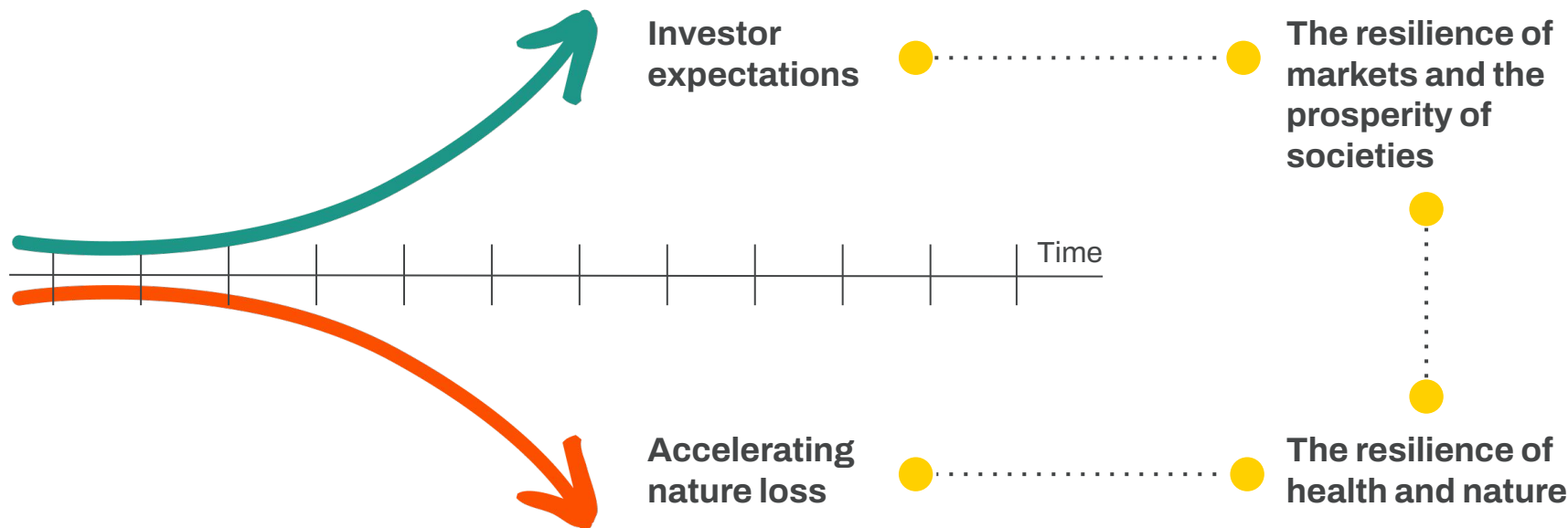
Ken Murphy, Group Chief Executive, Tesco

For business, nature is no longer just a CSR issue, but a strategic risk management one

The future cash flows of business depend on the flow of benefits (known as ecosystem services) from nature into business models across the economy

\$44 trillion of economic value generation – over half the world's total GDP – is moderately or highly dependent on nature and its services

World Economic Forum



What happens when nature risks materialise

PG&E Corp, a northern California power utility, was forced to file for Chapter 11 bankruptcy after it was found liable for a series of forest fires by a federal court. Between 2015 and 2018, sparking lines and poorly maintained infrastructure started several wildfires in the local area. These fires caused over 100 fatalities and destroyed an area almost the size of Los Angeles.

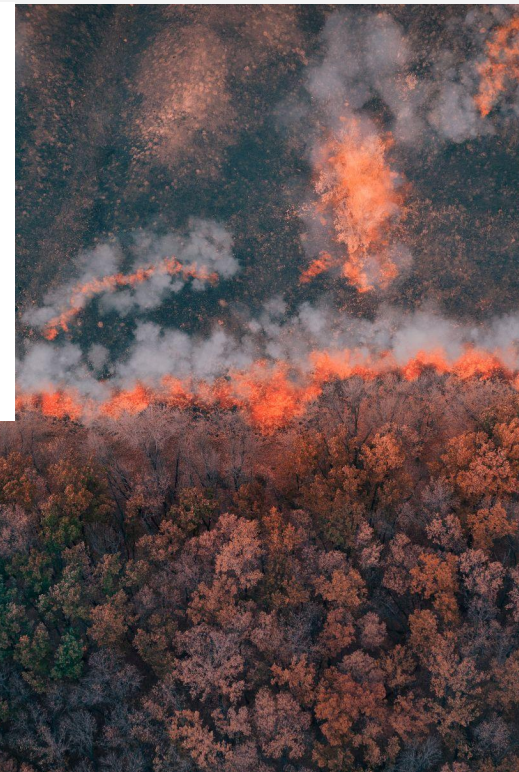
Nature-related risk: severe and prolonged drought – exacerbated by climate change – has made forests in northern California more vulnerable to wildfire. PG&E remains highly exposed to wildfire risk.



PG&E Corp share prices fell significantly after the Napa Valley fires (2017) and Camp Fire (2018)

Impacts on the company:

- Liabilities of ~\$30 billion, far in excess of insurance limits.
- Reputational damage led to a huge decrease in share prices.
- CEO stepped down.
- Company pleaded guilty to 84 counts of manslaughter.



Source: Bloomberg

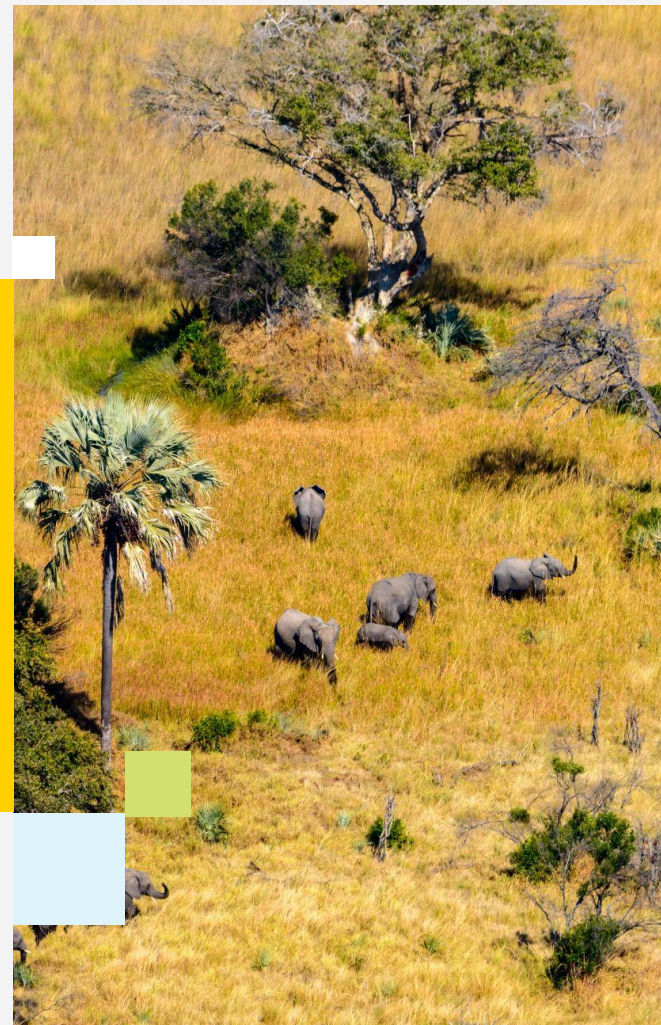
Business must tackle nature alongside climate

Policy makers, regulators and investors are increasingly aligned on the need for businesses across sectors to identify, assess and report on their nature-related issues

- The need for integrated action to achieve a nature-positive, net-zero and equitable global economy is clear.
- Alongside the Paris Agreement goals for climate action, business and finance now need to be assessing the significance and consequences for their business of the Global Biodiversity Framework (GBF).
- Investors are seeking more information on nature-related issues through their stewardship activities.
- Leading companies and financial institutions are already beginning to take combined action on climate and nature.

“The risks are real and they are urgent. The rapid degradation of nature is threatening ecosystems and the services they provide. Services such as clean water, healthy air, food and materials that are all essential to our economies and our very existence as humans. As central banks and supervisors, we have every reason to be concerned, because it’s an illusion to think we can preserve financial stability if this degradation continues.”

Klaas Knot,
President of De Nederlandsche Bank





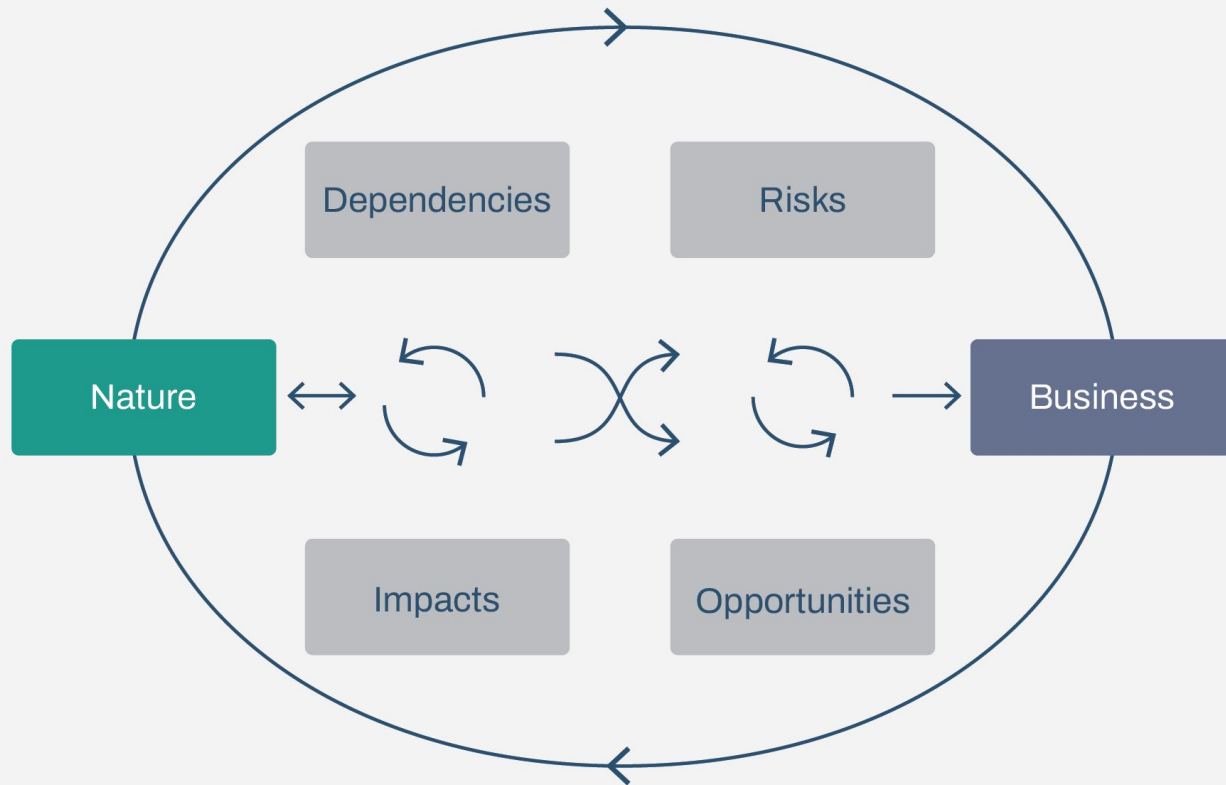
A framework for nature-business links

Nature-business basics







The four building blocks for understanding the business/nature interface

Nature-related issues: dependencies, impacts, risks, opportunities

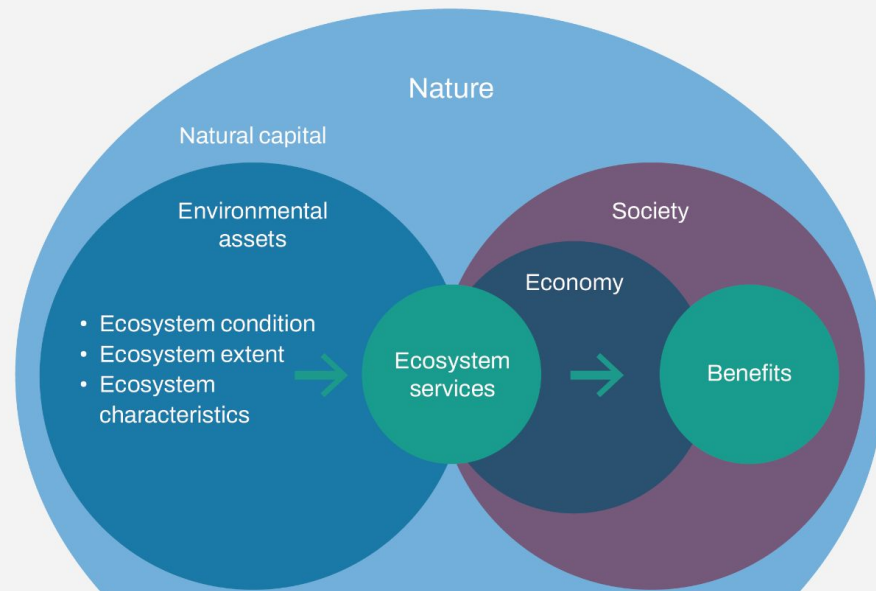


Key Concepts

Ecosystem assets produce ecosystem services that economies and societies rely on.

-  **Natural capital** is the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that support economic activity just as physical and human capital do.
-  Natural capital consists of stocks of **environmental assets** – naturally occurring living and non-living components of the earth, such as forests, wetlands, coral reefs and agricultural areas.
-  **Ecosystem services** are the benefits that people derive from nature, such as air and water purification or pollination.
-  **Biodiversity** is the variety of life that underpins the flow of benefits.

Ecosystems are spread across **four realms** (land, ocean, freshwater, atmosphere) and **25 biomes** (types of ecosystem e.g. tropical forests, intensive land use systems, rivers and streams, marine shelf).



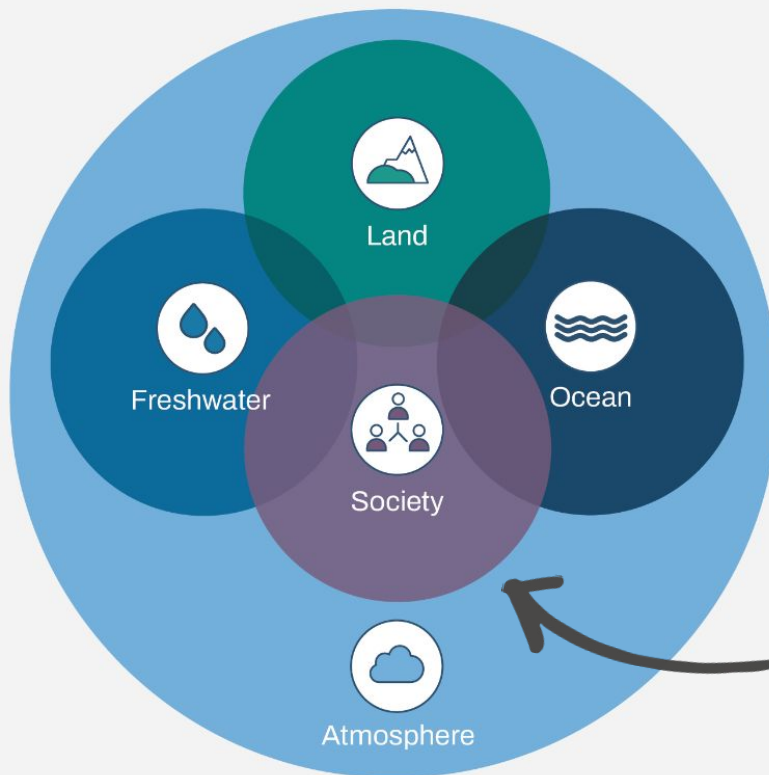
EXAMPLE: CLEAN WATER PROVISION

A water utility or beverage company depends on the ecosystem service of clean water provision, which derives from the environmental asset of water resources and healthy terrestrial and aquatic ecosystems (ecosystem assets). The degradation of peatlands leads to water sedimentation and deterioration of water quality.

Restoration of habitats and preservation of biodiversity could increase water quality, reducing the operational costs of water treatment.

Key Concepts: the four realms of nature

The four realms provide an entry for understanding how organisations and people depend, and have impacts, on nature.



Biodiversity refers to the variability among living organisms across these realms. It is an essential and integral characteristic of nature that enables ecosystems to be productive, resilient and able to adapt.

Atmosphere is included to reflect the importance of air quality and the close association between climate- and nature-related risks and opportunities, while acknowledging that links with climate mitigation and adaptation occur across all realms.

Society lies at the centre of the framework, interacting with and across all four realms. This includes people, corporates and financial institutions, all of whom depend and have impacts on nature. People are part of nature, not separate from it.

Nature: ecosystems and their services

Examples of ecosystem assets and the benefits they provide to people

Ecosystem services

The flow of **benefits that ecosystem assets provide** to people include:

1) Provisioning services:

Benefits that are extracted or harvested, such as food, timber

2) Regulating and maintenance such as water purification and pollination

3) Cultural services:

Non-material benefits, such as spiritual, educational, recreational

Examples of ecosystem services that the natural world provides. Often, ecosystems work together in the provision of these services.

ENVIRONMENTAL ASSETS

Ocean ecosystems



ECOSYSTEM SERVICES

Biomass provisioning

Nursery population and habitat maintenance

Global climate regulation

Freshwater ecosystems



Water supply

Recreation-related services

Spiritual, artistic and symbolic services

Land ecosystems



Genetic material

Water flow regulation

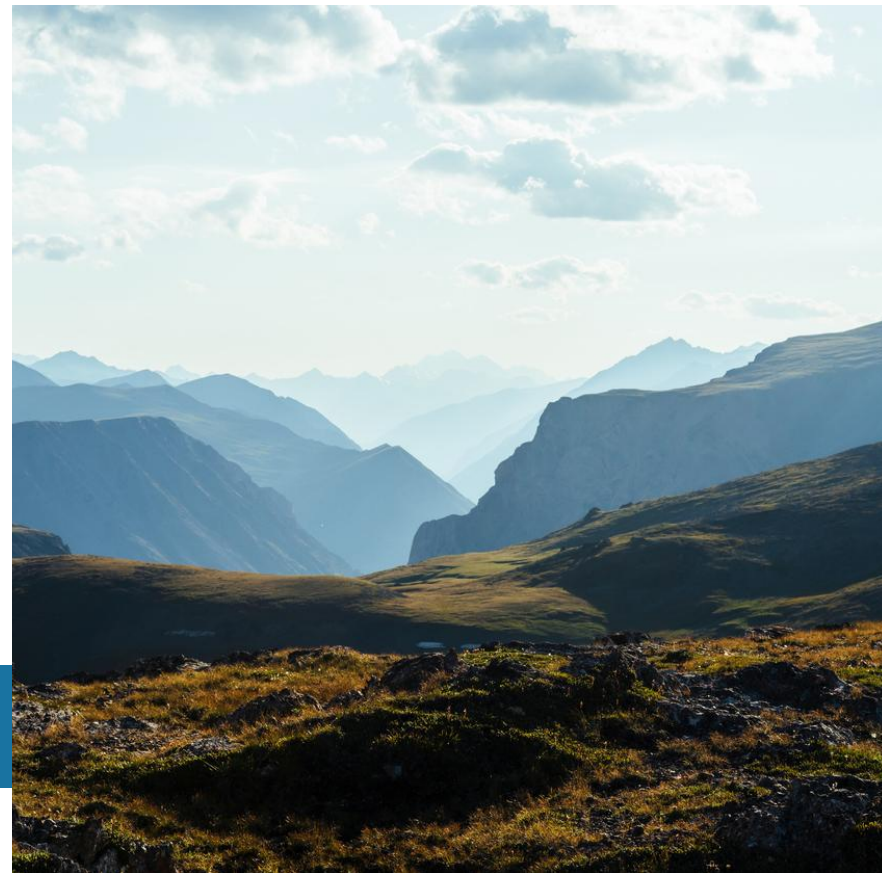
Storm mitigation

Air filtration



Nature-related dependencies and impacts

How business and finance depend and have impacts on nature



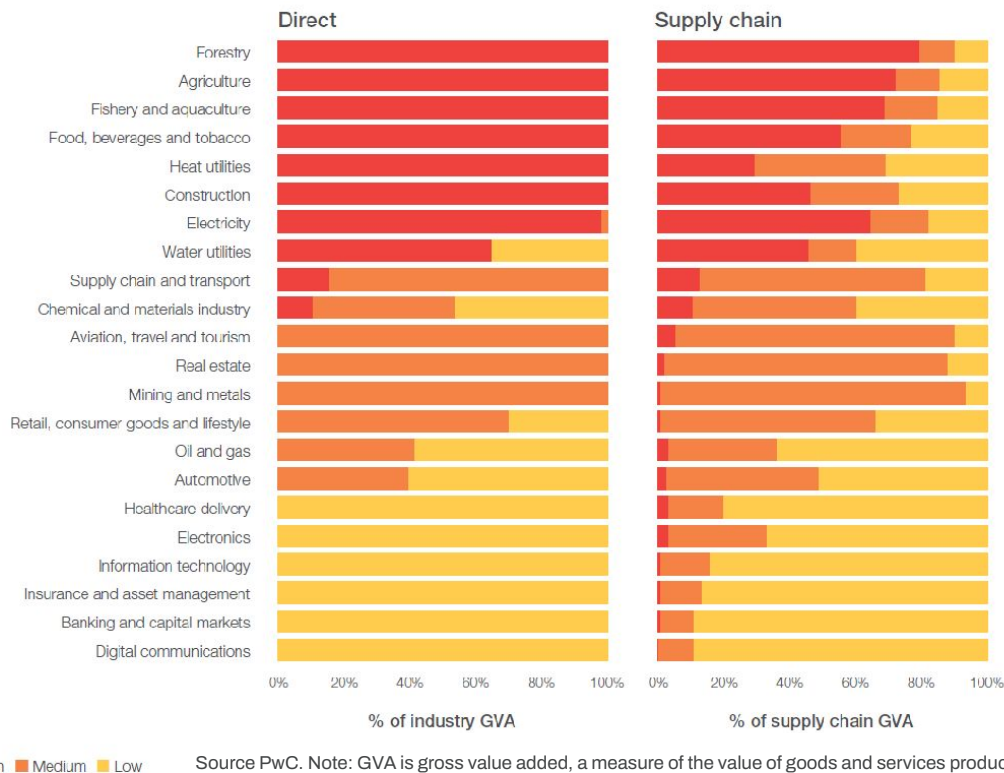
Across sectors, businesses depend on nature and its services

“Destroy nature and you destroy the economy. This is not some kind of a flower power, tree-hugging exercise . . . this is core economics. Even if I couldn’t care less about the planet, even if I couldn’t care less about biodiversity, I would say the exact same things.”

Frank Elderson, Board Member, European Central Bank






Percentage of direct and supply chain GVA with high, medium and low nature dependency, by industry



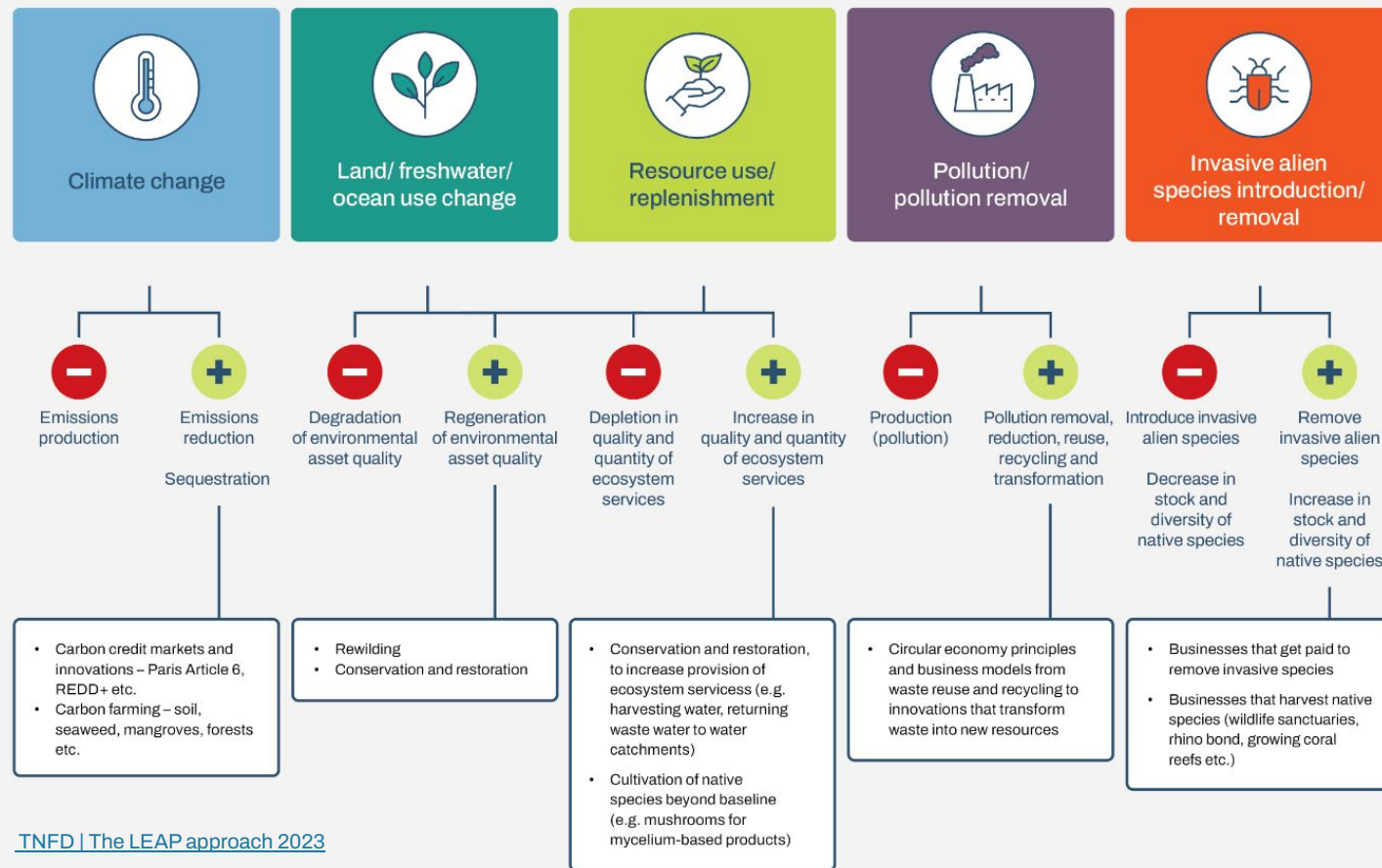
Source PwC. Note: GVA is gross value added, a measure of the value of goods and services produced.

Dependencies: Examples

Dependency	Context	Environmental asset/ Ecosystem service (non-exhaustive)	Threat	Economic impact
California almond industry 	Responsible for 80% of the world's almond production. \$15 billion contribution to the national economy.	Land ecosystems/ Pollination	Loss of pollinators threatens this industry. It is estimated that 30% of managed colonies in the US are lost each year.	13% increase in production costs
Global pharmaceutical industry 	50% of prescription drugs are based on a molecule that occurs naturally in a plant. 70% of cancer drugs are natural or synthetic products inspired by nature.	Land ecosystems/ Genetic material/ Biomass provisioning/ Scientific services	Loss of trees and biodiversity, particularly in forests, threaten this industry. One example is the South American cinchona tree that is the source of the malaria drug quinine.	One potential major drug lost every two years, according to some estimates
Taiwan microchip manufacturing 	Taiwan dominates microchip manufacturing, accounting for over 60% of the total foundry industry revenue globally. Microchip manufacturing is heavily reliant on high-quality water to cool its systems and rinse away industrial chemicals. A single major Taiwanese microchip manufacturer alone uses on average more than 150,000 tonnes of water per day to maintain operations.	Freshwater ecosystems/ Water supply/ Water purification	Water shortages present risks for the microchip industry. Droughts and erratic rainfall due to climate change have exacerbated water shortages.	Increased production costs for manufacturers due to water shortages

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; WEF | Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy 2020; 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

Impacts: Businesses can have both negative and positive impacts on nature



Negative impacts: business practices contribute to the five drivers of nature change

Drivers of nature change

Climate change



Land/freshwater /ocean use change



Resource use/ replenishment



Pollution/ pollution removal



Invasive alien species introduction/ removal



Illustrations of the scale of nature change

Carbon removed annually by marine and terrestrial ecosystems is equivalent to 60% of the world's annual carbon emissions from fossil fuels

Since 2000, global cropland increased by 230 million hectares and 100 million hectares of forest was lost. Under a business-as-usual scenario, the world is set to lose 46 million hectares of natural land by 2030

Since 1980, global water use has increased by ~ 1% per year and is expected to increase at similar rates until 2050, 20% to 30% above 2019 water use.

Fertilisers entering coastal ecosystems have produced more than 400 ocean 'dead zones', totalling more than 245,000 km².

42% of threatened or endangered species are at risk due to invasive species. The number of established invasive species is set to increase by 36% by 2050, compared to 2005 levels.

EXAMPLE: RAINFALL AND BRAZILIAN SOY AND BEEF FARMING



- Deforestation linked to the agricultural sector in Brazil can undermine the capacity of the remaining forest to generate its own rain, diminishing the long-term capacity to undertake rain-fed agriculture in the region
- This also affects rainfall and climatic conditions in other regions far removed from the Amazon

Source: NOAA | Global Climate Report; Popatov et al. in Frontiers in Remote Sensing | The Global 2000-2020 Land Cover and Land Use Change Dataset Derived From the Landsat Archive 2022; UN World Water | Development Report 2019; IPBES | Global Assessment Report on Biodiversity and Ecosystem Services 2019; Duenas et al. in Global Ecology and Conservation | The threat of invasive species to IUCN-listed critically endangered species 2022



Nature-related risks

Potential threats to an organisation from nature loss



Nature is a core strategic and risk management issue, alongside climate change

Climate and environmental issues now top the highest priority risks identified by global leaders.

But they remain the risks for which businesses are least prepared.



10 Years

- 1 Failure to mitigate climate change
- 2 Failure of climate-change adaption
- 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 Geoeconomic confrontation
- 10 Large-scale environmental damage incidents

Risk categories

Economic

Environmental

Geopolitical

Societal

Technological

Source: 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 together with the Executive Opinion Survey (EOS) of 12,000 business leaders in 121 economies.

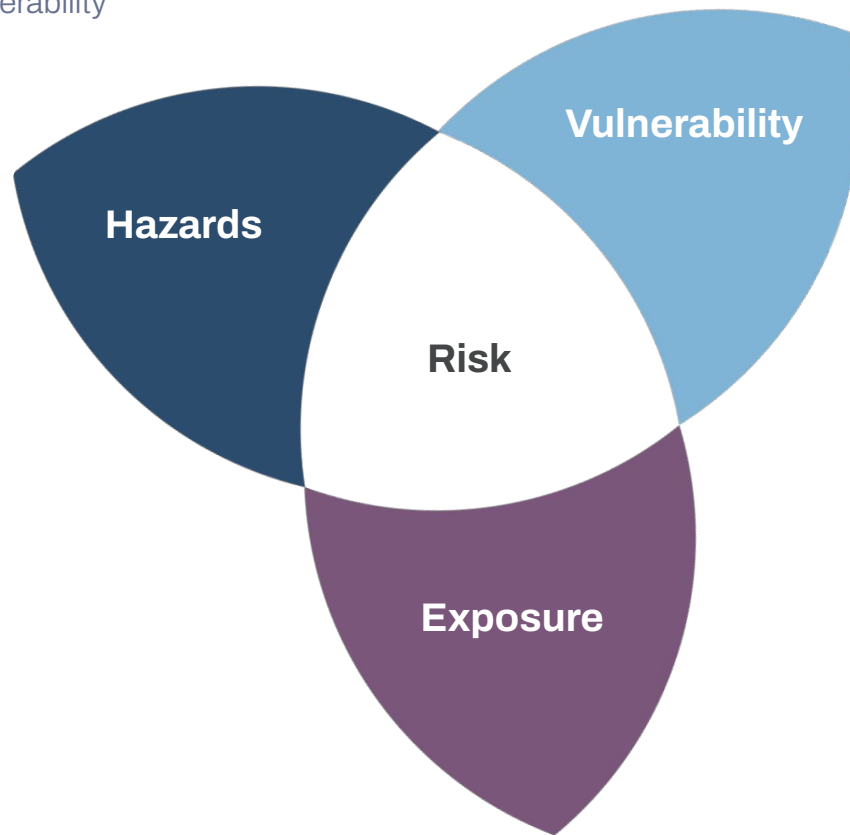
Risk: the potential for nature-related financial harm

Nature-related risk is a function of hazard, exposure and vulnerability

Hazard: The potential occurrence of a natural or human-induced physical event that may cause loss of life, injury or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision and environmental resources.

Exposure: The presence of people, livelihoods, species or ecosystems, environmental functions, services and resources, infrastructure, or economic, social or cultural assets in places and settings that could be adversely affected.

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.



Nature risks can be physical, transition or systemic risks

The TNFD defines nature-related risks as potential threats posed to an organisation that arise from its and wider society's dependencies and impacts on nature.

Nature-related physical risks



Result from the degradation of nature and consequential loss of ecosystem services. These risks can be acute or chronic.

Nature-related physical risks arise as a result of changes in the biotic (living) and abiotic (non-living) conditions that support healthy, functioning ecosystems. These risks are usually location specific.

Examples:

- Transport route or infrastructure damaged or destroyed due to a landslide
- Pollution stemming from pesticide use

Nature-related transition risks



Result from a misalignment of economic actors with actions aimed at protecting, restoring and/or reducing negative impacts on nature.

Categories of nature-related transition risks include policy risk, market risk, technology risk, reputational risk and liability risk.

Examples:

- New EU deforestation regulation affecting specific commodities
- NGO files a legal complaint alleging environmental violations

Nature-related systemic risks



Arise from the breakdown of the entire system, rather than the failure of individual parts.

Categories of systemic risk:

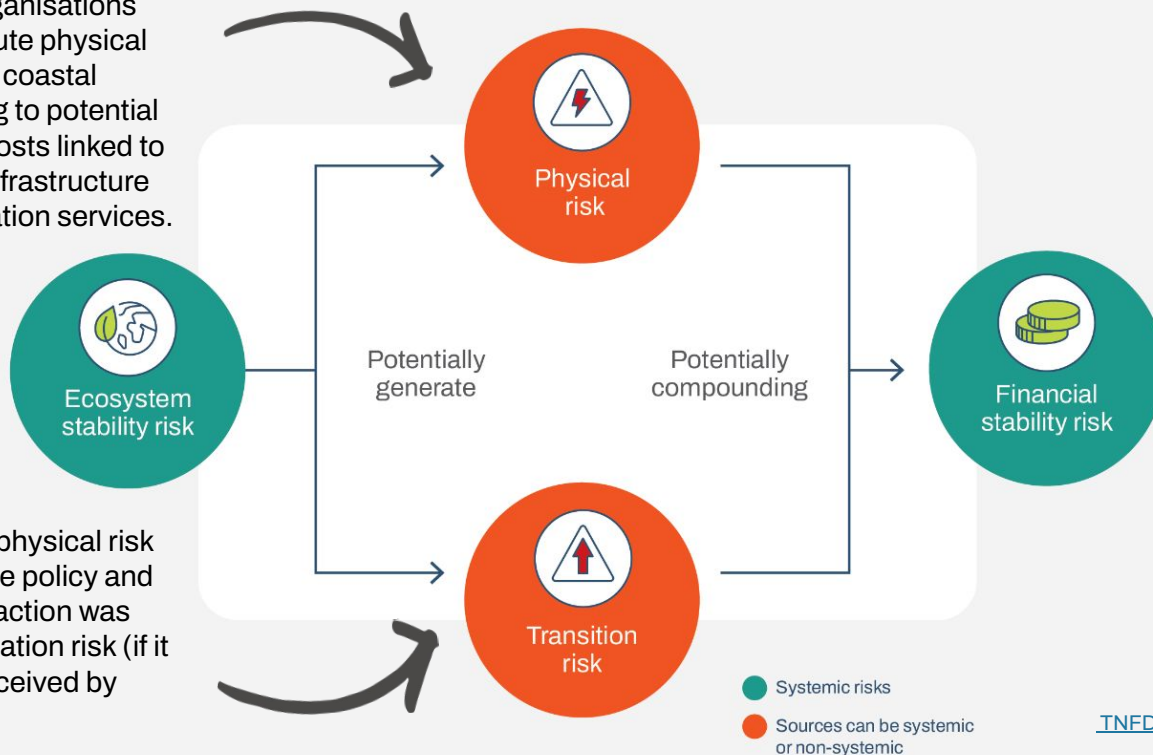
- **Ecosystem stability:** Risk of the destabilisation of a critical natural system
- **Financial stability:** Potential destabilisation of an entire financial system from materialisation and compounding of physical and/or transition risks

Different forms of nature-related risk are closely interrelated

Physical and transition risks can stem from non-systemic or systemic forms of nature-related risks.

For example, organisations can generate acute physical risk by removing coastal marshes, leading to potential storm damage costs linked to loss of coastal infrastructure and storm mitigation services.

The heightened physical risk can also generate policy and legal risk (if that action was illegal) and reputation risk (if it is negatively perceived by consumers).



If sufficient organisations in that region remove coastal marshes, then whole regions of industry may suffer from a lack of protection from coastal storms.

These events would then create traditional sources of financial risk (e.g. credit or market risk), and potentially, through compounding, cascading and contagion effects, leading to financial stability risk.

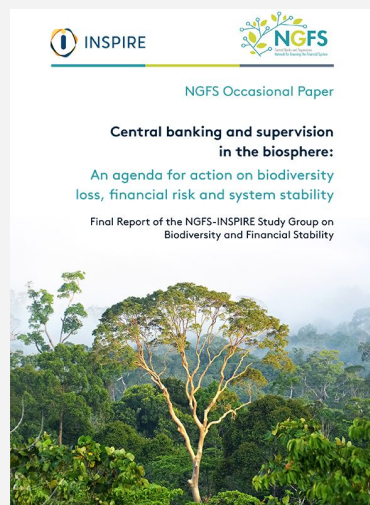
Nature-related risks: Financial institutions

Financial institutions face nature-related risks and opportunities

Financial institutions provide finance to companies through investment, insurance and banking services. Therefore, they are also exposed to nature-related risks, including physical, transition and systemic risks.

Central banks and financial supervisors are increasingly recognising nature loss as a source of systemic risk to financial systems and economies.

In March 2022, the NGFS concluded that nature-related risks could have significant macroeconomic implications and that failure to account for, mitigate and adapt to these implications is a source of risks for individual financial institutions as well as for financial stability.



Source: [NGSF | Central banking and supervision in the biosphere 2022](#).

EXAMPLE: HOW SOIL DEGRADATION AMPLIFIES FINANCIAL VULNERABILITY



In collaboration with the Cambridge Institute for Sustainability Leadership (CISL), Robeco quantified the financial risk of land degradation to the agricultural value chain and its valuation implications.

Following an extreme weather event, those along the value chain connected to degrading land saw a material negative impact on valuation:

- Farmers operating predominantly on degrading land saw their market value decline by 13%
- Those on healthy soils saw it increase by 6%
- Smaller packaged food companies that source from areas of degrading land saw a negative impact on valuation as high as 45%
- The smaller and less diversified a company, and the more connected to degrading land, the worse the valuation impact



Opportunities and looking ahead

What are the opportunities
for business and finance?



Nature-related opportunities

The TNFD defines nature-related opportunities as activities that create positive outcomes for organisations and nature through positive impacts or mitigation of negative impacts on nature.

As with risks, nature-related opportunities are generated through dependencies and impacts on nature.



Nature-related opportunities can occur:

- When organisations **avoid, reduce, mitigate or manage nature-related risks**, for example, connected to the loss of nature and ecosystem services that the organisation and society depend on; and
- Through the **strategic transformation of business models, products, services, markets and investments** that actively work to reverse the loss of nature, including by restoration and regeneration of nature and implementation of nature-based solutions.

Nature-related opportunity categories

- **Business performance:**
Opportunities directly relating to the organisation's financial and strategic performance
- **Sustainability performance:**
Opportunities relating to the sustainable use of natural resources and ecosystem protection, restoration and regeneration.

Business performance categories



Markets

Changing dynamics in overall markets, such as access to new markets or locations, that arise from other opportunity categories as a result of changing conditions, including consumer demands, consumer and investor sentiment and stakeholder dynamics



Resource efficiency

Actions an organisation can take within its own operations or value chain in order to avoid or reduce impacts and dependencies on nature (for example, by using less natural resources), while achieving co-benefits such as improved operational efficiency or reduced costs (for example, micro-irrigation, which maximises plant health, reduces water use and reduces costs)



Products and services

Value proposition related to the creation or delivery of products and services that protect, manage or restore nature, including technological innovations



Capital flow and financing

Access to capital markets, improved financing terms or financial products connected to positive nature impacts or the mitigation of negative impacts



Reputational capital

Changes in perception concerning a company's actual or perceived nature impacts, including the consequent impacts on society and engagement of stakeholders

Sustainability performance



Sustainable use of natural resources

Substitution of natural resources by recycled, regenerative, renewable and /or ethically responsibly sourced organic inputs



Ecosystem protection, restoration and regeneration

Activities that support the protection, regeneration or restoration of habitats and ecosystems, including areas both within and outside the organisation's direct control

Nature-related opportunities: Examples

Companies can act to reduce costs, protect revenues and increase profits by delivering on society's climate and nature goals.

The biofertiliser and organic fertiliser market represents a new market opportunity expected to be worth \$45 billion in 2030

If an agricultural input company could establish a 10% market share, this would lead to an additional \$4.5 billion in revenue

The sustainable food products market is expected to grow at over 5% per year, reaching \$171 billion by 2030

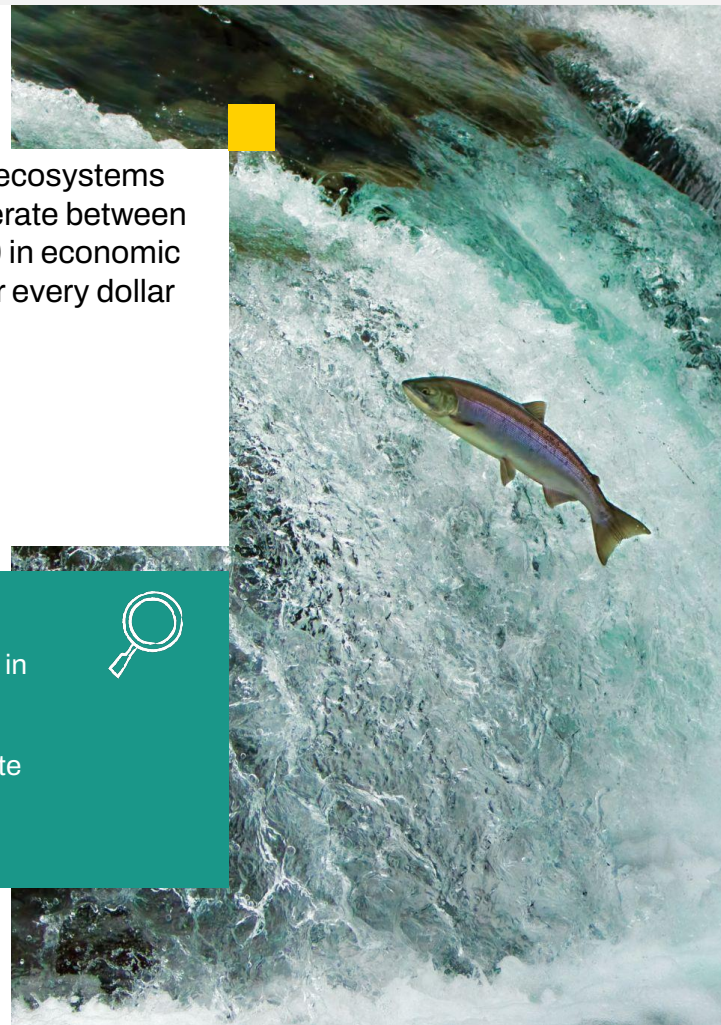
A downstream company could increase revenue by \$3.5 billion by capturing 2% of the sustainable food products market in 2030

The value of new business opportunities in the food & agriculture sector alone is expected to reach \$4.5 trillion by 2030

Restoring ecosystems could generate between \$7 and \$30 in economic benefits for every dollar invested

EXAMPLE: REDUCE AND MITIGATE

Credit Suisse launched the Ocean Engagement Fund in 2020. This fund engages with portfolio companies to steer them away from activities that harm the ocean, encouraging projects that mitigate the effects of climate change and reduce biodiversity loss



KEY TAKEAWAYS

Nature loss is accelerating

We are operating beyond our planetary boundaries

Risks to business and finance are rising

Accelerating nature loss poses a growing risk to businesses and capital portfolios

Needs an integrated approach

Nature loss and climate change are closely interlinked strategic risk management issues

Dependencies

Businesses depend on nature and the ecosystem services it provides

Impacts

Businesses have impacts - both negative (degradation) and positive (enhancement) - on nature and the ecosystem services on which they and others depend

Risks

Risks for business and financial institutions arise due to dependencies and impacts on nature

Opportunities

Businesses and financial institutions can create positive outcomes for their organisations and nature.





Appendix

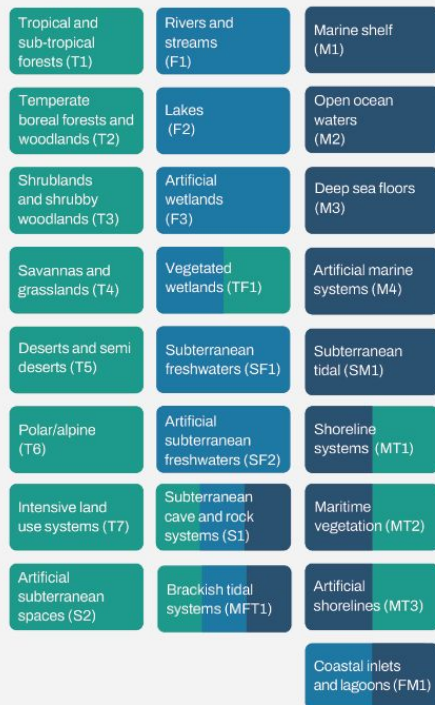


Nature: Fundamental concepts for understanding nature

Realms



Biomes



Environmental assets

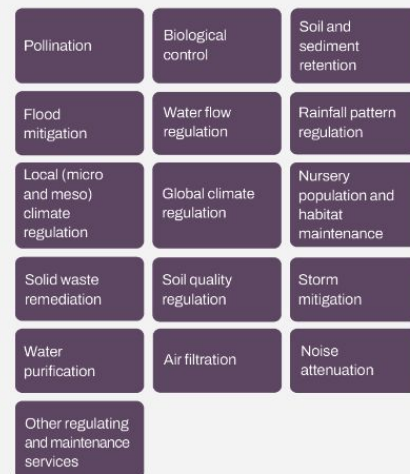


Ecosystem services

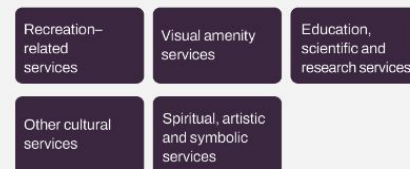
Provisioning services



Regulating & maintenance services



Cultural services



Source: IUCN Global Ecosystem Typology and UN System of Environmental-Economic Accounting (SEEA) – Ecosystem Accounting

The Nature-Business Nexus: Glossary

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.

Biome: Global-scale zones, generally defined by the type of plant life that they support in response to average rainfall and temperature patterns e.g. tundra, coral reefs or savannas.

Conservation: An action taken to promote the persistence of ecosystems and biodiversity.

Dependencies: Dependencies are aspects of environmental assets and ecosystem services that a person or an organisation relies on to function.

Drivers of nature change: All external factors that affect nature, anthropogenic assets, nature's contributions to people and good quality of life.

Ecosystem: A dynamic complex of plant, animal and microorganism communities and the non-living environment, interacting as a functional unit.

Ecosystem services: The contributions of ecosystems to the benefits that are used in economic and other human activity.

Environmental assets: The naturally occurring living and non-living components of the Earth, together constituting the biophysical environment, which may provide benefits to humanity.

Impacts: Changes in the state of nature (quality or quantity), which may result in changes to the capacity of nature to provide social and economic functions.

Impact drivers: A measurable quantity of a natural resource that is used as a natural input to production or a measurable non-product output of a business activity.

Natural capital: The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.

Nature: The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment.

Nature-positive: A high-level goal and concept describing a future state of nature (e.g., biodiversity, ecosystem services and natural capital) that is greater than the current state.

Nature-related risks: Potential threats (effects of uncertainty) posed to an organisation that arise from its and wider society's dependencies and impacts on nature.

Nature-related opportunities: Activities that create positive outcomes for organisations and nature by creating positive impacts on nature or mitigating negative impacts on nature.

Physical risks: Risks resulting from the degradation of nature and consequential loss of ecosystem services that economic activity depends upon.

Realm: Major components of the living, natural world that differ fundamentally in ecosystem organisation and function.

Restoration: The process of assisting the recovery of an area or ecosystem that has been degraded, damaged or destroyed.

Species: A fundamental category for the classification and description of organisms, defined in various ways but typically on the basis of reproductive capacity.

State of nature: The condition and extent of ecosystems, and species population size and extinction risk, including positive or negative changes.

Systemic risks: Risks arising from the breakdown of the entire system, rather than the failure of individual parts.

Transition risks: Risks to an organisation that stem from a misalignment of economic actors with actions aimed at protecting, restoring and/or reducing negative impacts on nature.

For full definitions and further information, please refer to the [TNFD Glossary](#).

TNFD IN A BOX

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