

Nature-Related Practices and Strategies in Asia Pacific

Presented by



Centre for Governance and Sustainability
NUS Business School

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Biodiversity forms the foundation of the economy and all life on earth



Contextualising the biodiversity crisis in Asia Pacific

Economic risks

- Nature loss places **63% of regional GDP** at risk
- **53% of Gross Value Add (GVA)** in Asia Pacific is reliant on fertile soils, clean water, pollination and climate stability
- **64% of fisheries** are at risk of overfishing due to damaging practices like bottom trawling

Opportunities for nature-positive

- 59 nature-positive business opportunities could produce **USD 4.3 trillion** in annual business volume and create **232 million jobs** by 2030.
- These include technologies to reduce food waste, land restoration and sustainable fisheries

Impacts on nature

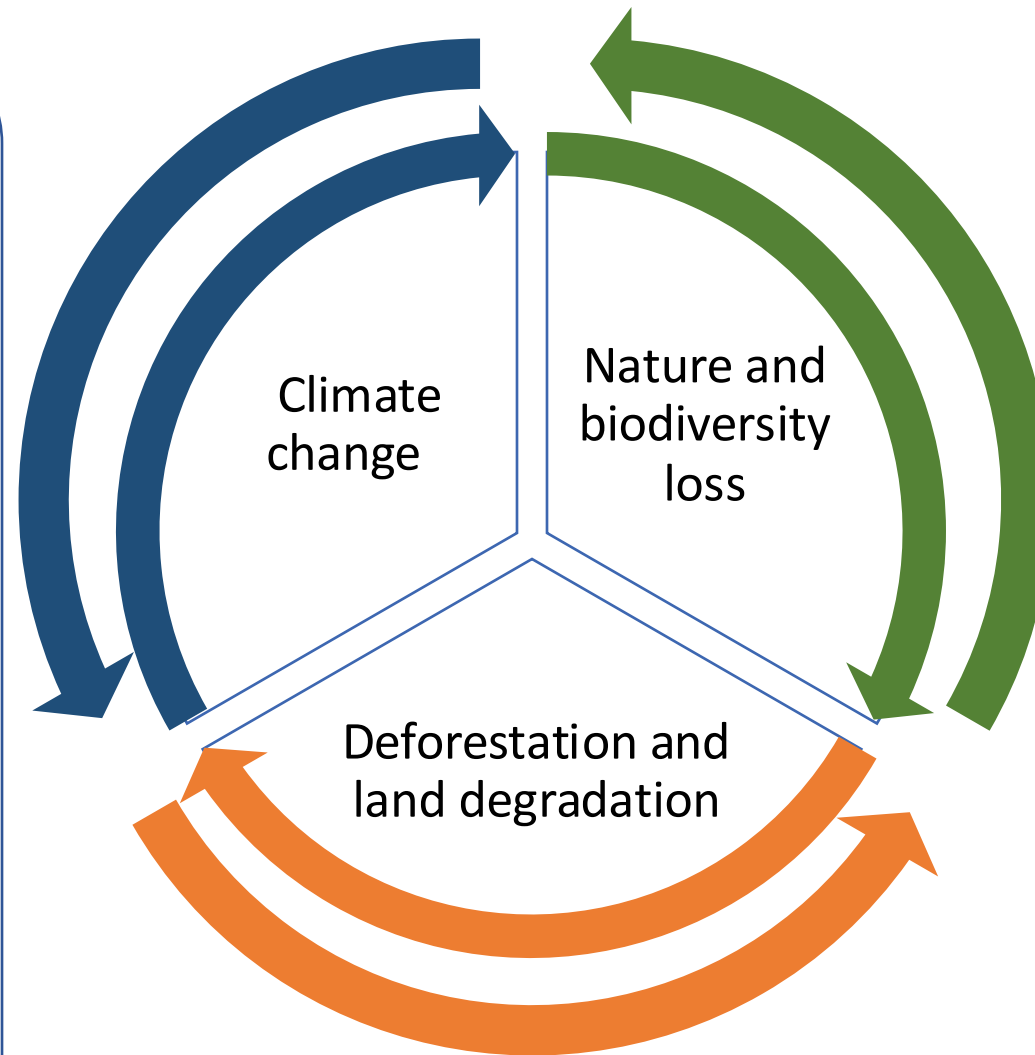
- Degradation of **60% of grasslands** due to agriculture and invasive species
- Up to **42% of species** in Southeast Asia could be lost by 2100
- **95% of coral reefs** in Southeast Asia and 50% in the Pacific are under threat

Impact drivers

- **Land/sea use change:** agriculture, fishing and forestry drive over 90% of deforestation
- **Pollution:** over 80% of wastewater is discharged without treatment into freshwater ecosystems
- **Resource exploitation:** Asia is the most water stressed region due to overuse of resources

Nature, biodiversity and climate change are inextricably linked








- Rising temperatures, changing precipitation patterns and ocean acidification can **alter habitats, increase the risk of extinction** for many species.
- Warmer temperature and changing ecosystems **facilitate the spread of diseases**.
- Extreme weather events (droughts, heatwave and storms) lead to more **frequent wildfires and pest outbreaks**.
- Deforestation from extreme weather events causes **soil degradation and desertification**.



- Nature and biodiversity loss causes **reduced carbon sequestration** from healthy ecosystem.
- Destruction of natural habitats **releases stored carbon** and **increases GHG emissions**.
- **Disruption of natural regeneration** of forests.

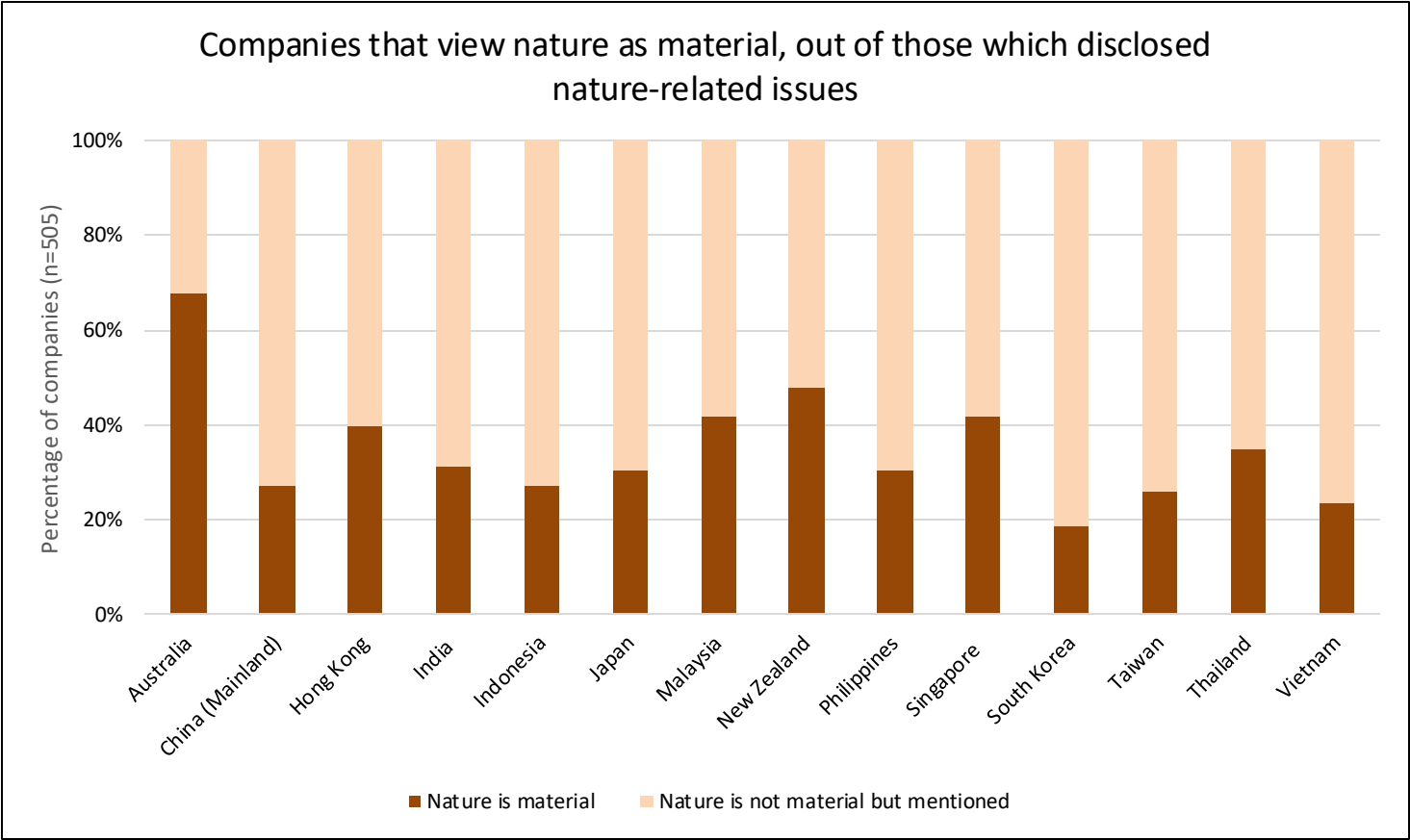
- When forests are cleared or degraded, the **carbon stored is released** into the atmosphere, contributing to the **increase in GHG emissions**.
- Forests regulate water cycles by **maintaining humidity and influencing rainfall patterns**.
- Many species may **lose their habitats** from deforestation.

However, more companies are adopting climate change frameworks, possibly due to regulations on mandatory climate reporting, with fewer companies aligned with nature and biodiversity related frameworks

Framework or commitment		Overall adoption
	SDG 13 Climate Action	72%
	Task Force on Climate-related Financial Disclosures (TCFD)	68%
	SDG 15 Life on Land	43%
	SDG 14 Life Below Water	29%
	GRI 304: Biodiversity	27%
	International Union for Conservation of Nature (IUCN)	23%
	Task Force on Nature-related Financial Disclosures (TNFD)	13%

- 72% of the companies have disclosed their alignment with SDG 13 “Climate Action”, followed by **68% disclosing their alignment with TCFD** framework, indicating that climate change remains one of the focus issues.
- Merely **13% disclosed their alignment with TNFD** framework, indicating that adoption of TNFD is still at early phase. Adoption of all nature-related frameworks and commitments remains low, below 50%
- Adoption rates for TNFD are highest in Australia (42%) and Japan (32%) listed companies

Many companies mention nature-related issues in their report, but few consider nature and biodiversity to be material to their business



Note: companies included in this figure are those which have identified nature-related issues (total 505)

- Although 83% of companies that mentioned nature or biodiversity in their report, only **40% consider nature and/or biodiversity to be a material issue**. From another study carried out by CGS, **72% of companies have considered climate change to be a material issue**.
- While many companies understand the significance of climate change for their business, **few companies are addressing the synergies between mitigating nature loss and climate change**

Biodiversity and nature-related risks are critical issues for the Asia-Pacific region, given its immense ecological diversity and economic dependence on natural resources

Global risks landscape ranked by severity



- Globally, **environmental related risks** including natural disasters and extreme weather events, failure to mitigate and adapt to climate change, large scale environmental damage incidents, biodiversity loss, natural resource crises are found to be the **top 10 severe risks in the short-term (2 years) and long-term (10 years)**.
- **Companies operating and investing in Asia Pacific will face greater risks** as 99 out of 100 cities most vulnerable to a range of environmental and climate-related threats are in Asia.

While the link between business and nature may not be immediately apparent, nature-related risks are becoming increasingly significant for companies in Asia Pacific

Physical risks

70%

of companies disclosed physical risks

Acute risks: Short-term, specific events that change the state of nature.
Chronic risks: Gradual changes to the state of nature

Transition risks

18%

of companies disclosed transition risks

Policy risks: Changes in policy due to new policies to create positive impact or mitigate negative impacts on nature.
Market risks: Dynamic changes in overall markets, including changes in consumer preferences.
Technology risks: Substitution of products or services with a reduced impact on nature and/ or reduced dependency on nature.
Reputational risks: Changes in perception concerning an organisation's actual or perceived nature impacts.
Liability risks: Risks that arise directly or indirectly from legal claims.

Systemic risks

3%

of companies disclosed systemic risks

Ecosystem stability risks: Risk of the destabilisation of a critical natural system.
Financial stability risks: Risk that a materialisation and compounding of physical and/ or transition risks leads to the destabilisation of an entire financial system.

Does it make business sense to integrate nature issues into long-term business strategy? – Of course, YES!

Risk management

Addressing nature-related risks such as biodiversity loss and resource scarcity can help business mitigate potential disruptions to their operations and supply chain.

- [BHP Limited](#) manages the nature-related risks specifically within the land and water the company steward, such as reduced water supply to communities, changes to water quality and damage to infrastructure.
 - [Setting water-related commitments/ targets based on water data and accounting.](#)
 - Introducing Global Land Use Permitting (GLUP) system to support the internal end-to end compliance requirements to manage land use disturbance risks.
 - These measures helped to mitigate the nature-related risks such as water risks and environmental compliance risks.

Regulatory compliance/ government policies

Mandatory regulatory requirements are being introduced to address nature-related issues.

- [Kunming-Montreal Global Biodiversity Framework](#): Target 15 of this framework requires governments to ensure that large companies and financial institutions monitor, assess, and disclose biodiversity-related risks, dependencies, and impacts by 2030.
- [National Biodiversity Strategy and Action Plans \(NBSAP\)](#): Several jurisdictions have developed NBSAP as part of their commitment to the Convention on Biological Diversity. These plans outline strategies for conserving biodiversity, including habitat protection, species conservation and sustainable use of natural resources.

Does it make business sense to integrate nature issues into long-term business strategy? – Of course, YES!

Market opportunities

Businesses that prioritise nature-related strategies can tap into new markets and enhance brand reputation.

Long-term resilience

By fostering a healthy relationship with nature, businesses can ensure the long-term availability of natural resources they depend on, thereby enhancing their resilience and sustainability.

- **Financing opportunities for businesses:** As a result of City Developments Limited's (CDL) commitment to nature conservation and sustainable development, [CDL has recently secured a S\\$400 million landmark sustainability-linked loan provided by DBS Bank.](#)
- **Reputation improvement:** Swire Properties Limited was among the first to pilot nature reporting in their recently published [sustainability report 2023.](#) Swire Properties have also adopted nature-based solutions by reducing the heat island effect, increasing rainwater retention and improving district level air quality. As a result, Swire Properties was featured in the World Business Council for Sustainable Development as a TNFD pilot use case.
- [Capitaland Integrated Commercial Trust \(CICT\)](#) has committed to preserving the biodiversity of its sites and the wider area by ensuring no sites are situated within protected areas, incorporating greenergy within its properties for its end-users and communities. CICT has also used sustainable and certified wood materials and products as part of its Sustainable Building Guidelines. As part of the company's Environmental Management System, CICT ensures wastewater is responsibly disposed to prevent water pollution and impact the biodiversity.

TNFD: disclosure framework and guidance on nature-related issues

What is the TNFD?

The Taskforce for Nature-related Financial Disclosures offers a **framework for companies to disclose nature-related information** relevant to their stakeholders.

Beyond this, it also **guides companies in understanding how their business interacts with nature**, to assess their nature-related issues and **develop risk management processes** to manage these issues.

Recommended disclosures: 4 pillars

Governance

Disclose the organisation's governance of 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.

Risk & impact management

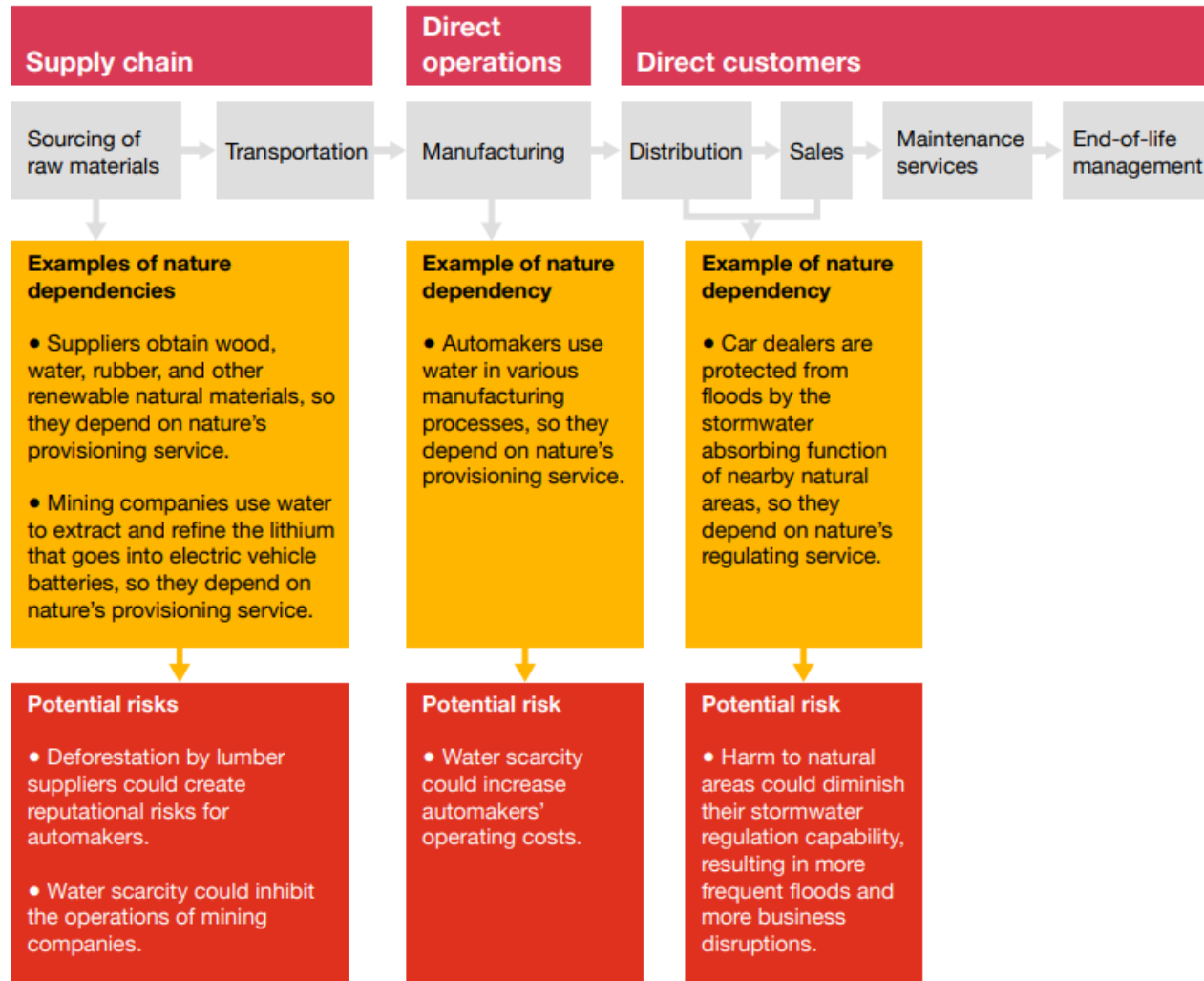
Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.

Metrics & targets

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

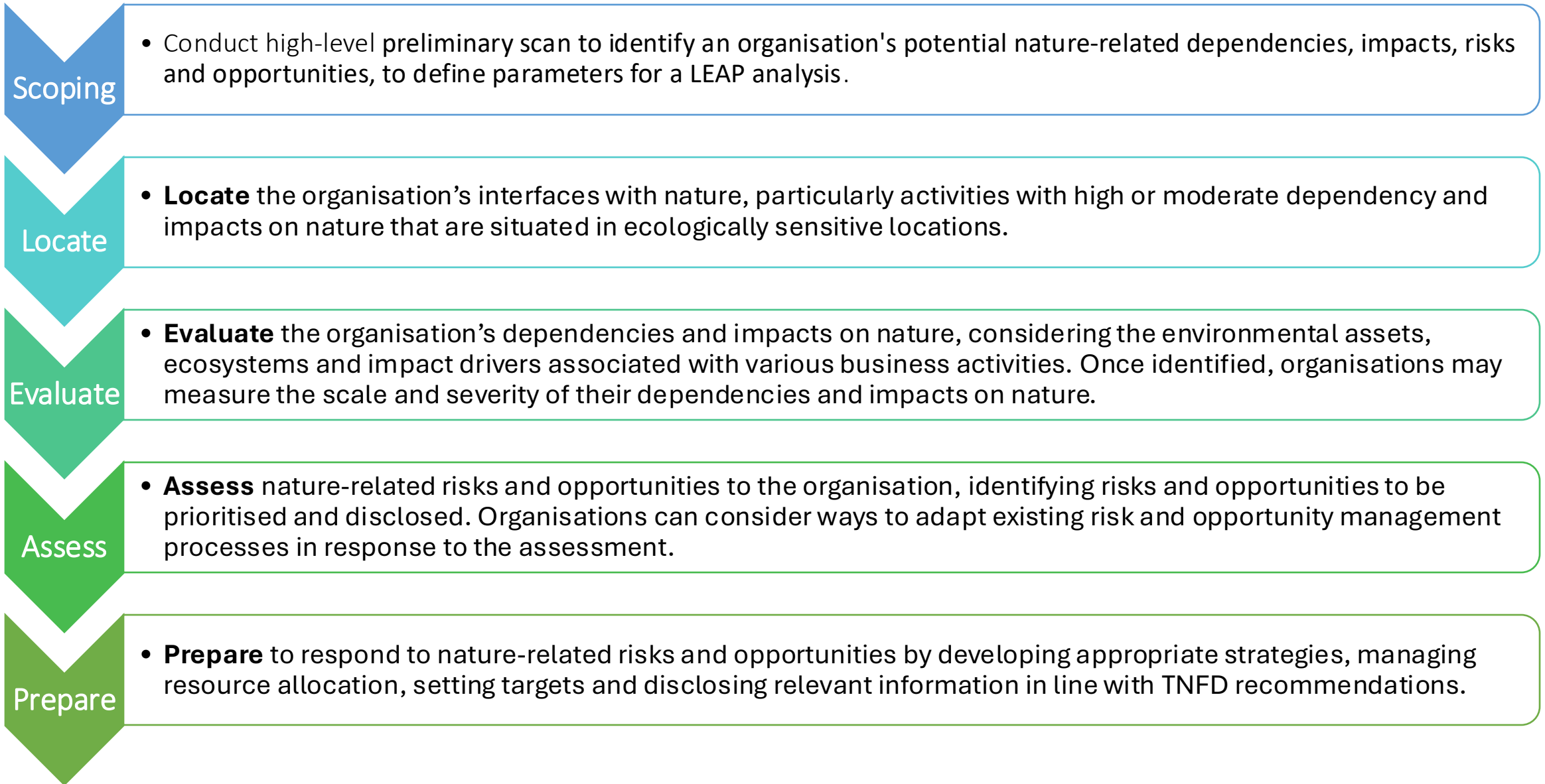
Nature-related issues: dependencies, impacts, risks and opportunities

Illustrative case from the automotive industry

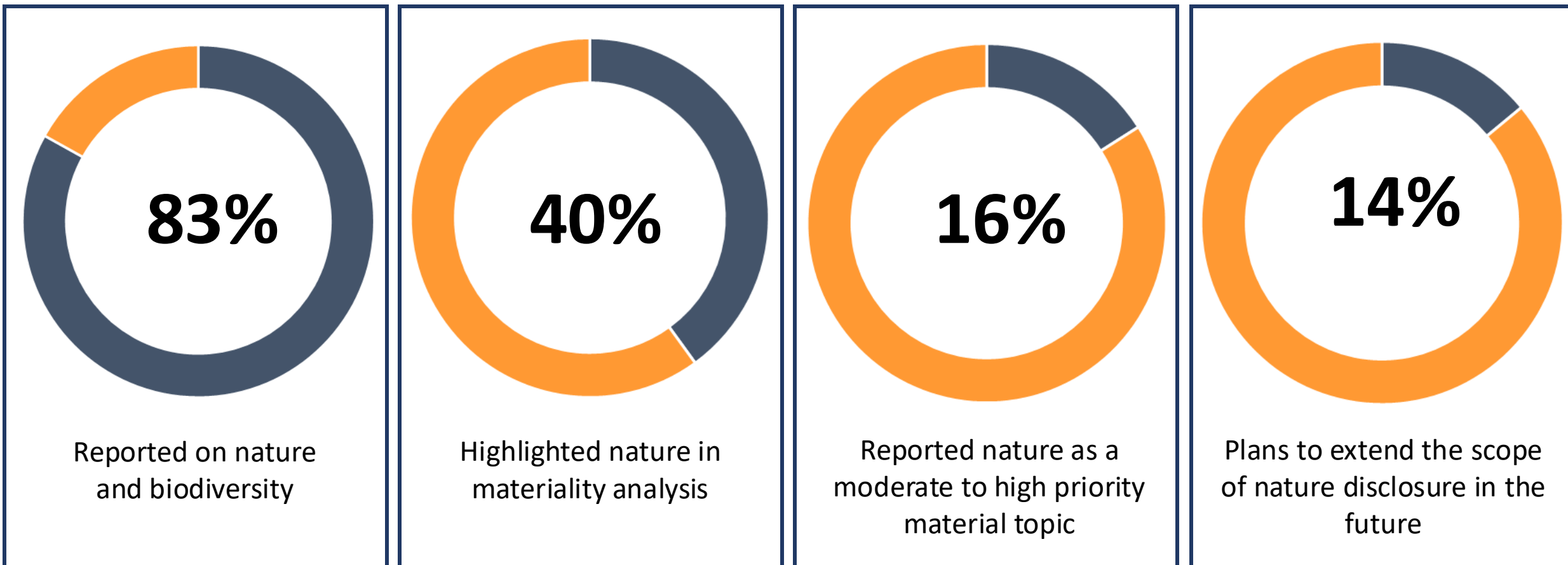


- **Dependencies:** environmental assets that the company depends on, such as water, wood, rubber, land for the automotive company.
- **Impacts:** Since the company uses water to extract and refine the lithium, it might create a negative impact on local water ecosystem, causing water pollution and affecting the lives under water.
- **Risks:** Associated with nature-related dependencies, nature-related risks for this automotive company are mainly physical risks linked with water scarcity, storm and floods.
- **Opportunities:** However, opportunities such as improving water usage efficiency, preserving water at its source, afforestation initiatives also exist.

Understanding nature-related issues: TNFD LEAP Approach

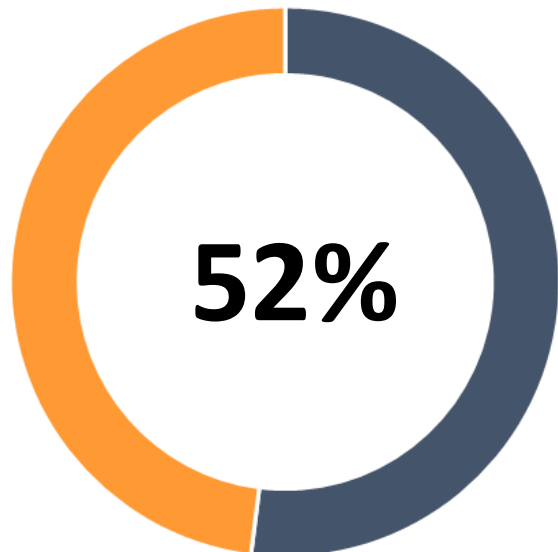


State of nature-reporting in Asia Pacific

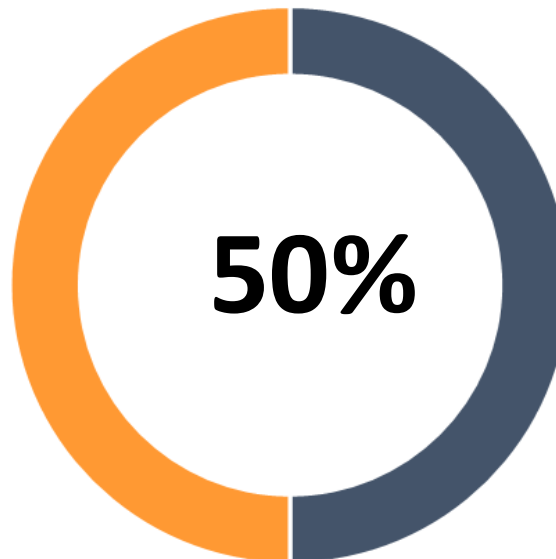


- Nature is so closely interlinked with climate, sustainability and business operations that many companies already have some form of nature-related reporting despite nature being low priority.
- This suggests that nature-related topics are not completely new to business, and they are ready to adopt the TNFD to investigate nature-related issues further.

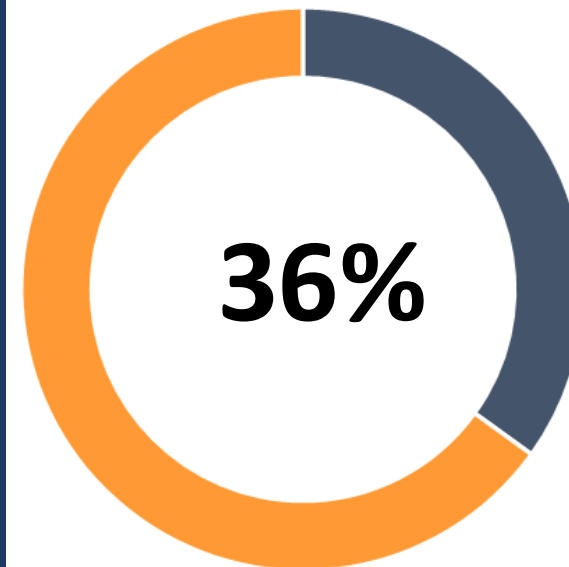
State of nature-reporting in Asia Pacific: Governance



Described the board's oversight of nature-related issues

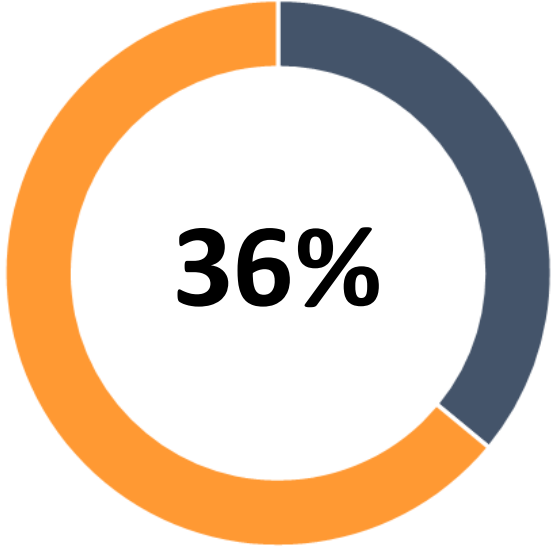


Described the management's role in assessing and managing nature-related issues



Described the organization's human rights policies and engagement activities with affected stakeholders

State of nature-reporting in Asia Pacific: Strategy



36%

Category	Percentage
Described the nature-related issues identified over short, medium and long term	36%
Described the effects of nature-related issues on business model, value chain, strategy and financial planning	78%
Described the resilience of the organisation's strategy to nature-related issues, taking into consideration different scenarios	25%
Described the locations of assets and/or activities in the organisations, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations	29%

Described the nature-related issues identified over short, medium and long term



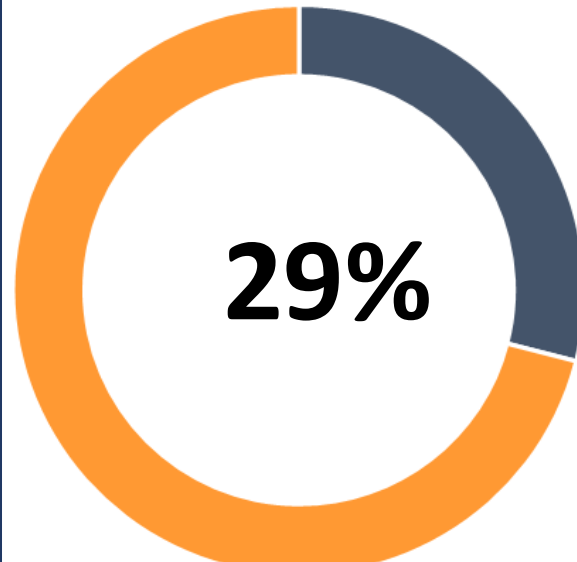
78%

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25%

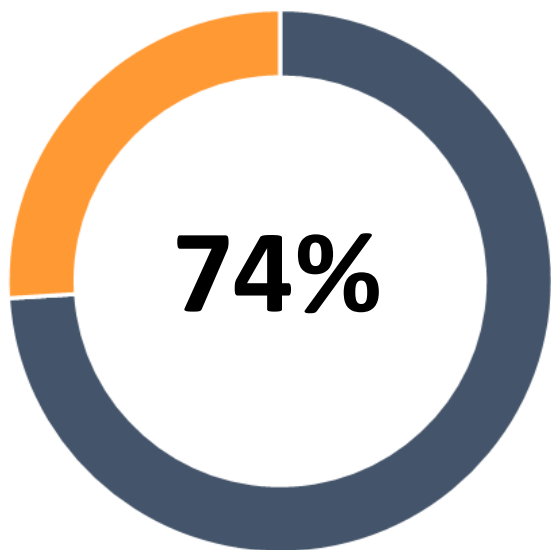
Described the resilience of the organisation's strategy to nature-related issues, taking into consideration different scenarios



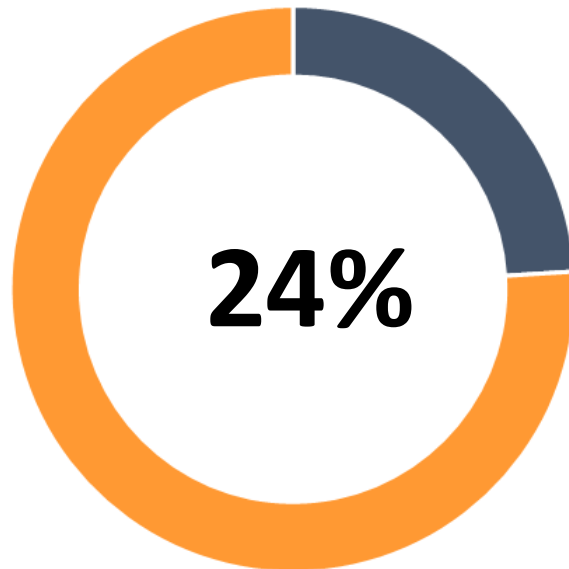
29%

Described the locations of assets and/or activities in the organisations, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations

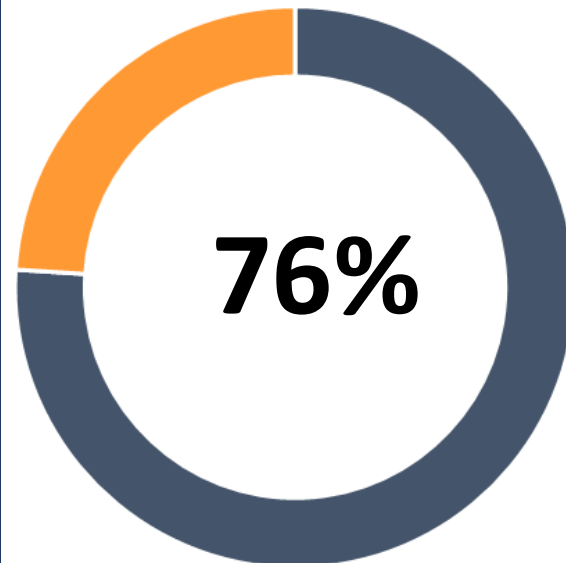
State of nature-reporting in Asia Pacific: Risk and impact management



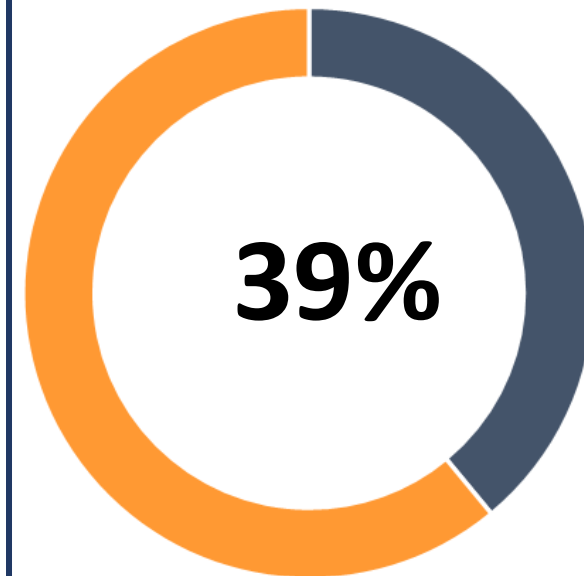
Described the organisation's processes for identifying, assessing and prioritising nature-related issues in its direct operations



Described the organisation's processes for identifying, assessing and prioritising nature-related issues in its upstream and downstream value chain(s)

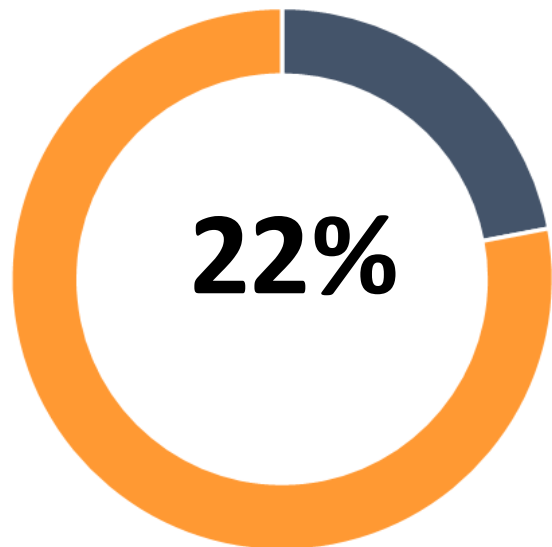


Described the organisation's processes for managing nature-related issues

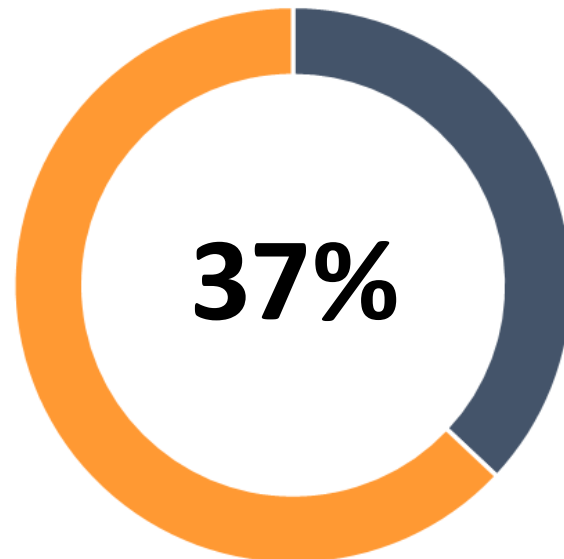


Described how the processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into overall risk management processes

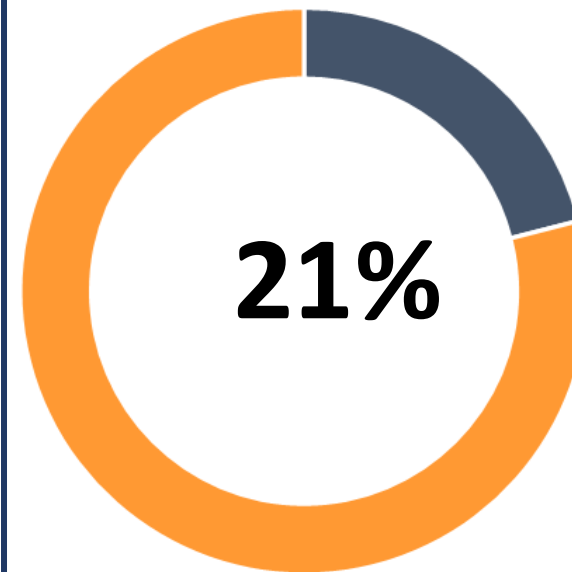
State of nature-reporting in Asia Pacific: Metrics and targets



Disclosed the metrics used to assess and manage material nature-related risks and opportunities in line with its strategy and risk management



Disclosed the metrics used by the organisation to assess and manage dependencies and impacts on nature.



Described the targets and goals used by the organisation to manage nature-related issues and its performance against the targets and goals

In short, the current status of nature-related reporting reflects a few challenges that needs to be tackled

Even among the listed companies with large market capitalization, nature-related issues remains nascent.

- Only a small percentage of the assessed companies considered nature-related issues as material to their businesses.

There is a critical information gap for investors and stakeholders seeking insights into how nature-related issues impact businesses.

- Since nature-related reporting is not mandatory in most of the assessed jurisdictions, and there are various frameworks for sustainability reporting, the majority of the assessed companies have not adopted the more comprehensive TNFD framework.

Nature-related concerns are not yet fully integrated into decision-making processes.

- Even though some companies acknowledge nature-related risks, few disclose their processes for assessing and managing these risks.

Nature action by businesses

Assess

Measure, value and prioritise impacts and dependencies on nature, both within direct operations and priority parts of the value chain, both up and downstream.

Commit

Set transparent, time-bound, specific, science-based targets.

Transform

Avoid and reduce negative impacts, restore and regenerate, collaborate across landscapes and seascapes, shift business strategy and models, and advocate for policy ambition.

Disclose

Track performance and prepare to publicly report material nature-related information throughout the journey (aiming to track performance across all actions and publicly report on all disclosure requirements).

Industry cases: City Developments Limited



Zero in on Nature: As one of the five early adopters of TNFD in Singapore, City Developments Limited (CDL) has released its latest Integrated Sustainability Report this year, themed "Zero in on Nature".



Biodiversity Policy: commitment to perform risk assessment and mitigate impact to habitats and wildlife of conservation importance, incorporate biophilic design in new and existing buildings, promote responsible sourcing and partnering stakeholders.



Biodiversity Impact Assessment: for new development projects to assess risks to biodiversity and wildlife in or near to sensitive areas.



Innovation: Xylo Systems, cloud-based AI platform to measure and manage biodiversity impact, conduct in-depth assessments, predict potential consequences of our activities, and make informed decisions based on data.

Industry cases: Mitsubishi Corporation

 Mitsubishi Corporation

Integrated Report 2023
For the fiscal year ended March 31, 2023

**Combining
Excellence**



Redefining Materiality:

“Conserving and Effectively Utilising Natural Capital” was added as its material issues. This is essential to ensure the business strategies, initiatives and organisational management are aligned to promote nature and biodiversity.



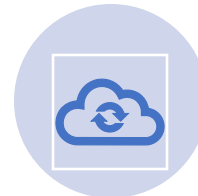
Biodiversity Policy:

Mitsubishi Corporation is committed to maintaining, protecting, and restoring nature and biodiversity through various action plans.



Identifying Dependencies and Impacts using TNFD and ENCORE:

Utilised ENCORE to map the overall levels of dependence and impact on nature for each businesses. TNFD LEAP process was carried out to better understand the levels of dependence and impact on nature.



Conservation:

Environmental conservation projects including Global Reef Conservation, Forest Conservation and Rangeland Restoration projects were carried out in its effort to conserve biodiversity.

Note:

- 1) ENCORE stands for Exploring Natural Capital Opportunities, Risks and Exposure, is a free online tool for organisations to explore their exposure to nature-related risk and map its dependencies and impacts on nature.
- 2) The LEAP approach involves four phases: Locate your interface with nature; Evaluate your dependencies and impacts on nature; Assess your nature-related risks and opportunities; and Prepare to respond to, and report on, material nature-related issues aligned with TNFD’s recommended disclosures.

Industry cases: Qantas Group



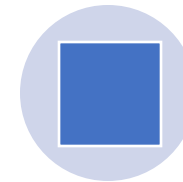
Intersection between nature, climate and people: integrated into nature action plan. Actions include sourcing sustainable aviation fuels (SAFs) certified to minimise biodiversity impact, collaborating with key suppliers on circular solutions.



Nature risk and opportunity assessment across value chain: identified issues by value chain segments to develop targeted nature strategy. For example, resource extraction for aircraft manufacturing impacts nature through land use change and pollution.



Involve and benefit First Nations and local communities in the group's approach to nature. The group will engage and learn from First Nations communities with expertise in protecting nature.



Investment in conservation: in partnership with the Great Barrier Reef Foundation to expand reef restoration efforts and research on coral regeneration and resilience to warming oceans.

Nature action by governments

Incentives for nature-based solutions

- Financial incentives such as tax relieves, grants, and subsidies could be provided to businesses to encourage the nature-based solutions.
- Green bonds could be promoted to fund environmental projects and encourage investment into nature-based solutions.

Public-Private Partnerships (PPPs)

- Governments can foster partnerships with corporations, NGOs and local communities to implement nature-related solutions.
- Providing regular trainings, workshops for leadership to integrate biodiversity into business strategies.

Regulation for nature-related reporting

- Encourage listed companies to include TNFD-aligned nature-related reporting in their sustainability report.
- Introduce phased approach for TNFD-aligned nature-related reporting for some sectors such as mining, financials, electricity.

Convention on Biological Diversity and Kunming-Montreal Global Biodiversity Framework

Convention on Biological Diversity (CBD)

- The CBD is a multilateral UN treaty with 3 main objectives:
 - The conservation of biological diversity
 - The sustainable use of the components of biological diversity
 - The fair and equitable sharing of the benefits arising out of the utilization of genetic resources



Convention on
Biological Diversity

Kunming-Montreal Global Biodiversity Framework (KMGBF)

- In response to scientific evidence that global biodiversity is declining at unprecedented rates, the GBF was adopted at COP 15 in 2022, laying out a pathway towards a vision of living in harmony with nature by 2050.
- The Framework aims to galvanise action by governments and society to halt and reverse biodiversity loss, setting out 23 targets to be achieved by 2030, to build towards 2050 goals.
- COP 16 was held in 2024 to discuss the implementation of the GBF.

Convention on Biological Diversity: Following up from COP 16 Biodiversity Summit

What has been achieved

- **Cali Fund:** Mechanism for industries benefitting from digital genetic information to share benefits with developing countries and Indigenous Peoples
- **Indigenous representation:** New body for Indigenous Peoples and local communities to participate in decision making on biodiversity

What is still in progress

- **Implementing the KMGBF:** Only 44 countries have submitted National Biodiversity Strategy and Action Plans (NBSAPs). No conclusion on how to monitor targets.
- **Mobilising finance:** Discussions on strategy to secure \$200 billion annually to support biodiversity to be continued.

How businesses can support the KMGBF

- **Implement Target 15:** Businesses can start to monitor, assess, disclose and reduce their impact on nature ahead of national government regulations.
- **Finance biodiversity:** The International Advisory Panel on Biodiversity Credits (IAPB) launched their Framework for high integrity biodiversity credit markets, a market mechanism to mobilise finance for nature conservation. Businesses purchasing or developing credits should ensure that credits and projects are aligned with the High-Level Principles set out in the Framework, broadly:
 - Verified outcomes for nature
 - Equity and fairness for people
 - Good governance for markets