



Centre for Governance and Sustainability
NUS Business School

NATURE-RELATED PRACTICES AND STRATEGIES IN ASIA PACIFIC



JANUARY 2025

Preface

For Kering and for the National University of Singapore, commitment to sustainability is both a fundamental principle and a strategic imperative. Together, we recognise that addressing the complex environmental challenges of today requires collaborative action across sectors and geographies. The unique partnership between Kering and the Centre for Governance and Sustainability (CGS) at the National University of Singapore Business School, launched in 2023, is rooted in this understanding. Supporting rigorous academic research studies is in line with Kering's commitment to education, collaboration, and innovation to contribute to climate action and achieve long-term sustainability. Together, we seek to advance the discourse on sustainability, particularly as it pertains to nature-related risks and opportunities within the Asia-Pacific region.

This report on Nature-related Practices and Strategies in Asia Pacific represents a critical milestone in our collaborative research efforts. It offers a comprehensive analysis of how businesses are integrating nature-related considerations into their strategies and governance frameworks. By focusing on the current state of nature-related reporting and alignment with global frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD), this study provides essential insights for businesses seeking to enhance their environmental disclosures and contribute to a nature-positive economy.

Our common ambition through this partnership is to not only elevate the standards of nature-related reporting but to foster actionable insights that guide companies toward long-term, sustainable growth. This report underscores the importance of integrating nature into the core of business strategy, governance, and risk management, laying the foundation for more resilient and responsible practices across the region.

Kering and the National University of Singapore are proud to support this pivotal research and remain committed to driving forward impactful sustainability initiatives, as we collectively work towards shaping the future of responsible business practices.





Table of Contents

Preface	2
Executive Summary	4
Introduction	6
Research Methodology	7
Scope of study	7
Research framework	7
1. Identification and Materiality	9
1.1 Identification of nature-related issues	9
1.2 Materiality and level of materiality of nature-related issues	10
2. Frameworks and Commitments	13
2.1 Framework adoption	13
2.2 Nature-related commitments	16
3. Framework Alignment (TNFD)	18
3.1 Governance	18
3.2 Strategy	22
3.3 Risk and impact management	30
3.4 Metrics and targets	33
Highlights of Best Practices in Nature-related Reporting	36
CTBC Financial Holding Co.	36
City Developments Limited	37
Qantas Airways Limited	37
Mitsubishi Corporation	38
Fast Retailing Co. Ltd	38
Conclusion and Recommendations	39
Appendix	40
List of abbreviations	40
List of figures, tables and boxes	41
Partners in this study	42

Executive Summary

Examining interactions with nature may be new to businesses but doing so would illuminate potential risks and opportunities. Nature-related reporting is an avenue for companies to examine these interactions and communicate their position to stakeholders.

The report “Nature-related Practices and Strategies in Asia Pacific” seeks to understand how top listed companies in Asia Pacific fare in nature reporting. The study is a collaborative effort between Kering and the Centre for Governance and Sustainability (CGS) at the National University of Singapore (NUS) Business School.

This report assessed the current state of nature-reporting of 700 listed companies from 11 industries across 14 selected jurisdictions in Asia Pacific. Specifically, researchers studied whether companies viewed nature as material to their businesses, adopted frameworks in guiding their actions towards nature, and the extent to which their practices aligned with the Taskforce on Nature-related Financial Disclosures (TNFD) framework, a comprehensive nature-reporting standard. The report discusses industry trends, areas of improvement as well as best practices in nature-related reporting.

The key findings include:

72%

of 700 companies identified topics such as water, biodiversity and ecosystem protection

35%

within this group further considered these issues material

Currently, nature-related issues are not deemed material to most assessed companies. While 72% identified topics such as water, biodiversity and ecosystem protection in their sustainability or annual reports, only 35% within this group further considered these issues material to their businesses. In comparison, 68% of Australia-listed and 48% of New Zealand-listed companies that mentioned nature-related issues viewed them as material, ahead of other jurisdictions. These companies also led in adopting the TNFD framework.

82%

of 375 companies that disclosed a materiality matrix regarded climate-related issues as mid-to-high material concerns.

31%

within this group (375 companies) regarded nature-related issues as mid-to-high material concerns.

Nature is a nascent issue compared to climate. Even when identified as a material issue, nature was less often regarded as a mid-to-high priority concern for most companies when compared to climate. Climate-related disclosure frameworks also had a higher adoption rate than those for nature-related issues, likely due to stricter climate reporting requirements from local authorities. Companies are expected to enhance disclosure of nature-related issues by tapping into relevant frameworks.

Nature-related disclosures show mixed progress on alignment with the TNFD framework.

50%

of assessed companies disclosed the role of their board and management in overseeing nature-related issues

In TNFD's **governance** pillar, around 50% of assessed companies disclosed the role of their board and management in overseeing nature-related issues, signalling growing leadership attention.

75%

recognised the impact of nature-related issues on their strategy

In the **strategy** pillar, 75% recognised the impact of these issues on their strategy, and 49% disclosed the effect of nature-related issues on their financial planning, while only 25% addressed strategy resilience under different scenarios.

25%

addressed strategy resilience

Even fewer (9%) mentioned capital flow and financing opportunities, suggesting that more capital should be directed towards addressing nature-related concerns.

39%

integrated nature-related issues into their overall risk management

In the **risk and impact management** pillar, most companies identified nature-related issues, but few provided detailed information on how they assessed and managed these issues.

<40%

disclosed metrics for managing nature-related issues

In the **metrics and targets** pillar, fewer than 40% disclosed metrics for managing nature-related issues, and only 30% of companies that have identified nature-related issues set specific targets.

30%

of 505 companies that have identified nature-related issues set specific targets

Introduction

Nature and biodiversity are the foundation of all life on earth, enabling the flourishing of human life and economic activity. Human wellbeing is heavily dependent on ecosystem services that provide material resources like food, medicines and energy; and processes like pollination and air, water and soil regulation¹. Nature also provides critical climate change mitigation services through the absorption and storage of carbon in oceans, forests and peatlands².

However, human activity is driving biodiversity decline at unprecedented rates. According to the Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services (IPBES)³, 14 out of 18 categories of nature’s contributions to people have been in decline in the past 50 years, affecting crop production and coastal protection, amongst other issues. This threatens food security and access to clean water and reduces our capacity to cope with climate change. Economic risks include disruptions to production and value chains and reduced profit and cashflows, resulting in liquidity, reputational and legal risks⁴. The World Economic Forum’s (2024)⁵ Global Risks Report finds biodiversity loss and ecosystem collapse to be perceived as one of the most significant risks in the next decade, in addition to related risks including pollution, critical change to Earth systems and natural resource shortages.

Businesses’ significant impact and reliance on biodiversity provide a strong premise for business action, yet they have not been adequately accounting for their dependence on ecosystem

services and the risks they face. However, there is increased public interest in driving business action on biodiversity decline⁶. Target 19 of the Kunming–Montreal Global Biodiversity Framework focuses on mobilising finance for biodiversity, including private finance from investments and schemes like green bonds and biodiversity offsets⁷. Target 15 of the framework requires parties to ensure that businesses monitor, assess, disclose and reduce their biodiversity-related risks and negative impacts. The Taskforce on Nature-related Financial Disclosures (TNFD) has developed a framework for companies to understand the relationships between nature, business and financial capital. It aims to orient global financial flows to benefit nature, in alignment with the Global Biodiversity Framework⁸. The TNFD recommendations offer a shared language for understanding nature-related concepts. It also provides guidance on relevant information to disclose, including common metrics to assess nature-related issues.

With the launch of the TNFD in September 2023, some early adopters have started reporting in accordance with the framework, while others are exploring the incorporation of biodiversity into their sustainability reporting. This study seeks to assess the state of nature-related reporting in Asia Pacific, highlight existing trends in nature- and biodiversity-related reporting and identify room for improvement. It provides a baseline to track developments in nature-related reporting in the following years.

¹Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services*. IPBES secretariat, Bonn, Germany. https://files.ipbes.net/ipbes-web-prod-public-files/inline/files/ipbes_global_assessment_report_summary_for_policymakers.pdf

²Shin, Y.-J., Midgley, G. F., Archer, E. R. M., Arneith, A., Barnes, D. K. A., Chan, L., Hashimoto, S., Hoegh-Guldberg, O., Inzarov, G., Leadley, P., Levin, L., Ngo, H. T., Pandit, R., Pires, A. P. F., Pörtner, H.-O., Rogers, A. D., Scholes, R. J., Settele, J., & Smith, P. (2022). Actions to halt biodiversity loss generally benefit the climate. *Global Change Biology*, 28(9), 2846–2874. <https://doi.org/10.1111/gcb.16109>

³Supra note 1.

⁴Kedward, K., Ryan–Collins, J., & Chenet, H. (2022). Biodiversity loss and climate change interactions: financial stability implications for central banks and financial supervisors. *Climate Policy*, 23(6), 763–781. <https://doi.org/10.1080/14693062.2022.2107475>

⁵World Economic Forum. (2024). *The Global Risks Report 2024*. https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2024.pdf

⁶Smith, T., Beagley, L., Bull, J., Milner–Gulland, E. J., Smith, M., Vorhies, F., & Addison, P. F. E. (2020). Biodiversity means business: Reframing global biodiversity goals for the private sector. *Conservation Letters*, 13(1). <https://doi.org/10.1111/conl.12690>

⁷Convention on Biological Diversity. (2022, December). *Kunming–Montreal Global Biodiversity Framework*. <https://www.cbd.int/doc/c/e6d3/cdid/daf663719a03902a9b116c34/cop-15-l-25-en.pdf>

⁸Taskforce on Nature-related Financial Disclosures. (2023, September). *Recommendations of the Taskforce on Nature-related Financial Disclosures*. https://tnfd.global/wp-content/uploads/2023/08/Recommendations_of_the_Taskforce_on_Nature-related_Financial_Disclosures_September_2023.pdf?v=1695118661

Research Methodology

Scope of study

This study assessed the nature-related practices and disclosures of the top 50 listed companies by market capitalisation across 14 jurisdictions in the Asia Pacific region, namely: Australia, China (Mainland), Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam. A total of 700 listed companies were studied, spanning 11 industries: communication services, consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, real estate, and utilities⁹.

The companies identified in this study are listed in the following stock exchanges: Australian

Securities Exchange, Bombay Stock Exchange, Bursa Malaysia, Ho Chi Minh Stock Exchange, Hong Kong Stock Exchange, Indonesia Stock Exchange, Korea Stock Exchange, New Zealand Stock Exchange, The Philippine Stock Exchange, Shanghai Stock Exchange, Shenzhen Stock Exchange, Singapore Exchange, Stock Exchange of Thailand, Taiwan Stock Exchange and Tokyo Stock Exchange.

The information reviewed was based on the latest sustainability reports and annual reports available in February 2024. Only companies whose reports were communicated in English were included in this study.

Research framework

This study provides insights into the current state of nature-related practices and disclosures. It seeks to establish a baseline for strategic approaches and reporting, identify industry trends, and highlight areas for improvement. Three key topics were analysed, namely 1) companies' identification of nature-related issues and their materiality; 2) nature-related frameworks that companies adopt; and 3) the extent to which company practices align with the TNFD framework, which is more nature-specific.



⁹The industry classification is based on the Global Industry Classification Standard (GICS). Three companies are mutual funds and are not assigned to any GICS classification based on the GICS methodology.

Table 1: Research Framework

Area	Sub-area	Description
Identification and materiality	Identification of nature-related issues	Nature-related issues include companies' nature dependencies, impacts, risks and opportunities disclosed in their latest sustainability report.
	Materiality and level of materiality of nature-related issues	Whether nature and biodiversity are material to the company and their level of priority in the materiality matrix.
Framework adoption	Framework adoption	Nature-related frameworks adopted by companies in the various jurisdictions.
	Nature-related commitments	Nature-related commitments include net positive impact, net gain, no deforestation, no exploitation, no net loss, and the use of certified raw materials.
Framework alignment (TNFD)	Governance	<ul style="list-style-type: none"> • Description of the board's oversight and management's role in assessing and managing nature-related issues. • Description of the organisation's human rights policies and stakeholder engagement activities.
	Strategy	<ul style="list-style-type: none"> • Description of nature-related issues over the short, medium and long term. • Description of the effect of nature-related issues. • Locations of direct business operations and value chains in priority locations.
	Risk and impact management	<ul style="list-style-type: none"> • Description of processes for identifying, assessing, prioritising and monitoring nature-related issues. • Integration of nature-related issues into overall risk management.
	Metrics and targets	Description of metrics and targets used to assess and manage nature-related issues.

01 Identification and Materiality

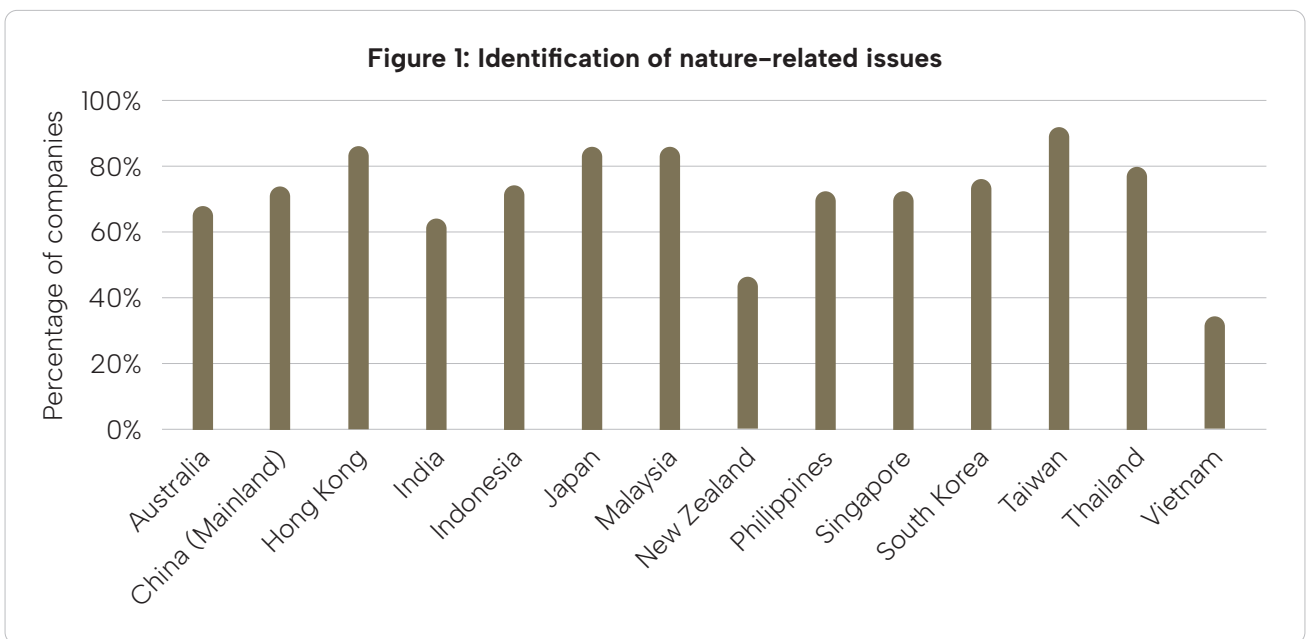
1.1 Identification of nature-related issues

Many companies are recognising the importance of reporting on nature and biodiversity issues. In this study, nature and biodiversity issues encompass a range of critical factors for businesses to consider, including dependencies, impacts, risks, and opportunities. Dependencies refer to the environmental assets that companies rely on for their operations. Impacts involve the effects that business activities have on nature, both positive and negative. Risks arise from these dependencies and impacts on nature, potentially threatening business sustainability. On the other hand, opportunities represent activities that can yield positive outcomes for both business and nature.

As nature and biodiversity reporting is still in its early stages in the Asia Pacific region, the identification of nature-related issues in this part of the study provides a general overview of the percentage of companies that have included mentions of nature or biodiversity issues in their sustainability or annual reports.



Current landscape



- Out of **700** assessed companies, **72%** have identified nature-related issues in their sustainability or annual reports.
- The top 5 jurisdictions with listed companies identifying nature-related issues are Taiwan (**92%**), Hong Kong (**86%**), Japan (**86%**), Malaysia (**86%**) and Thailand (**80%**).
- It is notable that out of **700** assessed companies, **57%** have integrated nature-related issues with other sustainability issues. Examples of the integration include forest conservation resulting in water conservation and absorbing greenhouse gas emissions, and responsible stewardship of natural resources helping to mitigate the impact of natural disasters.

1.2 Materiality and level of materiality of nature-related issues

Materiality assessments help organisations and stakeholders identify and prioritise nature and biodiversity factors that have the most significant impact on their operations, value creation and long-term sustainability, as well as the organisation’s impact on nature and biodiversity.

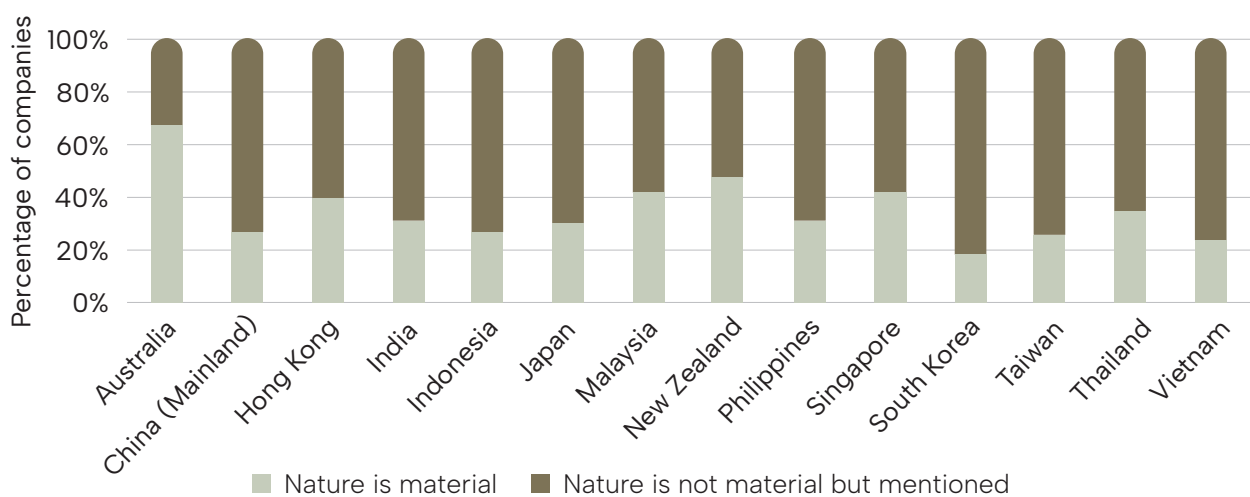
In their materiality assessments, organisations may adopt a single financial materiality approach, single impact materiality approach or double materiality approach which refers to a combination of the former two. The International Sustainability Standards Board (ISSB) adopts a financial materiality approach, while the Global

Reporting Initiative (GRI) focuses more on impact materiality. Companies intending to align with Target 15¹⁰ of the Kunming–Montreal Global Biodiversity Framework will have to consider both financial and impact materiality.

To enhance interoperability with existing reporting frameworks, the TNFD takes a flexible approach, recommending financial materiality as a baseline and impact materiality as an optional addition. However, regardless of the materiality approach, the TNFD recommends identifying and assessing all four types of nature-related issues: dependencies, impacts, risks and opportunities.

Current landscape

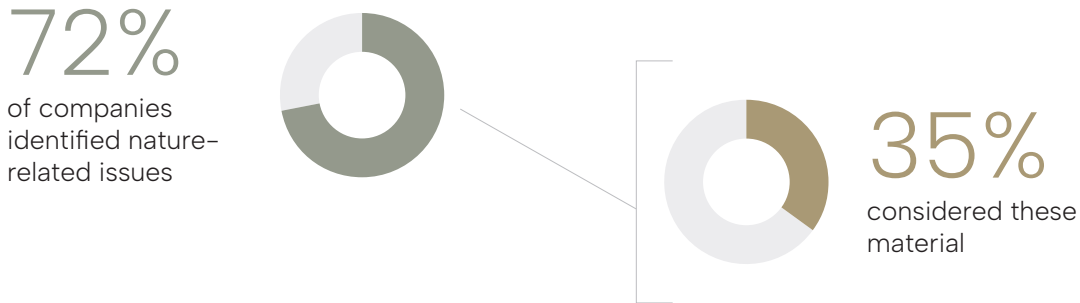
Figure 2: Companies that view nature as material, among companies that identified nature-related issues



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

¹⁰Target 15 refers to: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts. See <https://www.cbd.int/gbf/targets>

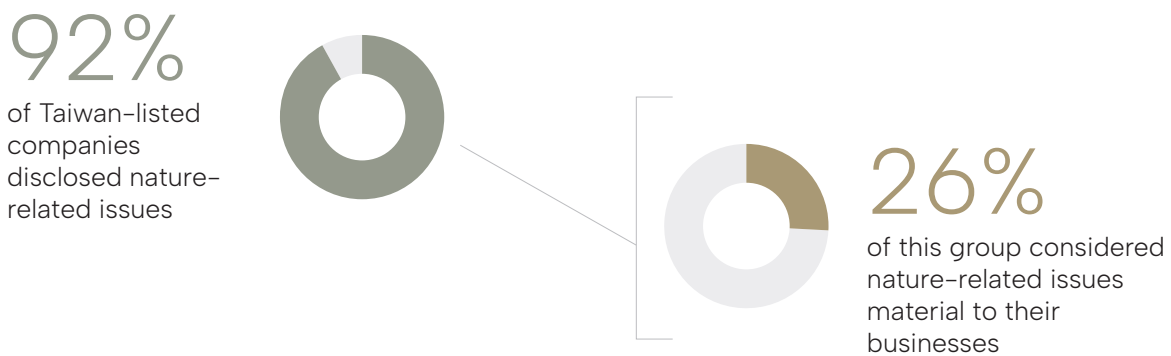
- Overall, 72% of companies have identified nature-related issues. Out of these, only 35% considered nature-related issues material to their business.

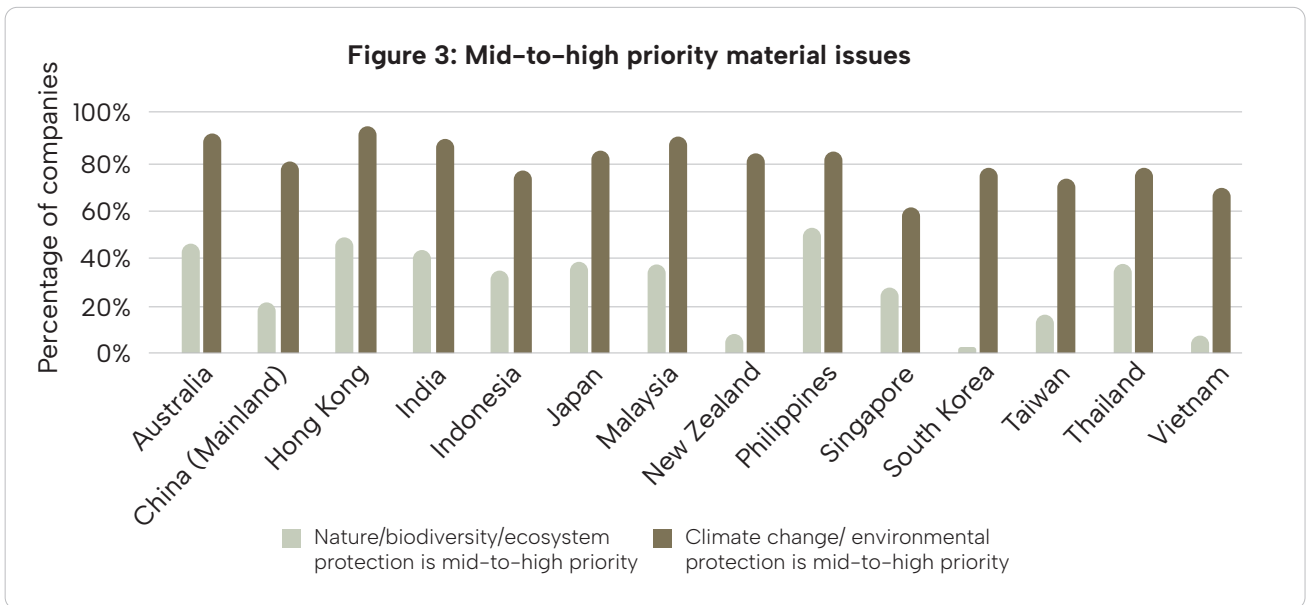


- In Australia, 68% of companies that disclosed nature-related issues viewed them as material. In New Zealand, this figure is 48%. These percentages are comparably higher than in other jurisdictions.



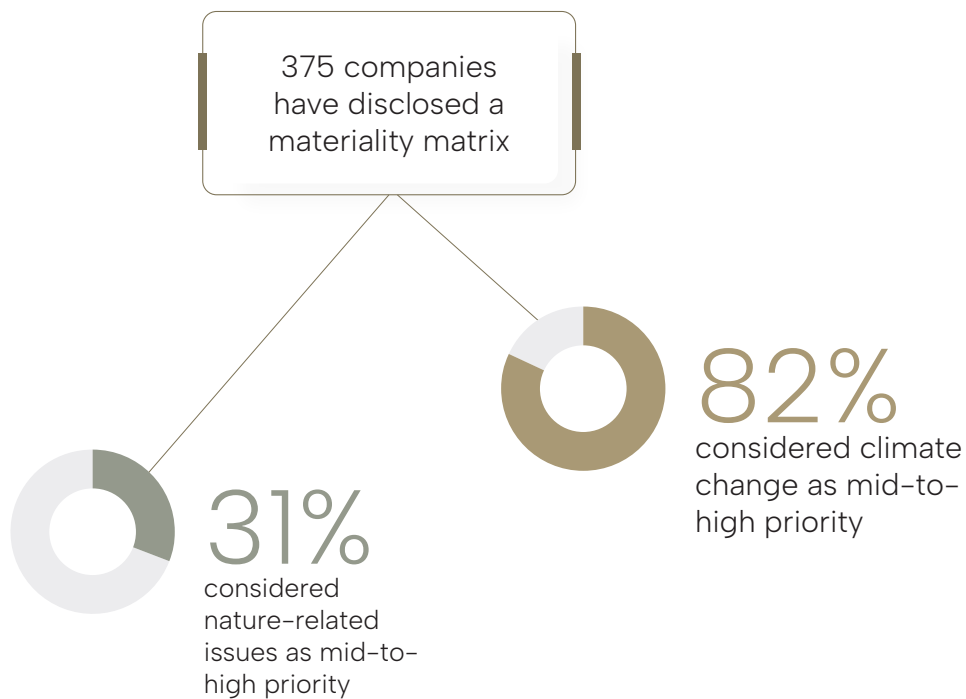
- Although 92% of Taiwan-listed companies have disclosed nature-related issues, only 26% of this group viewed nature-related issues as material to their businesses.





Note: companies included in this figure are companies which have disclosed a materiality matrix (total 375).

- Among 375 companies that have disclosed a materiality matrix, fewer prioritised nature-related issues as mid-to-high material concerns (31%) compared to the 82% of companies that have given similar priority to climate-related issues.



02 --- Frameworks and Commitments

2.1 Framework adoption

While there is no single, unified framework specifically for nature reporting, several sustainability reporting frameworks include references to nature-related issues for organisations. In this study, researchers examined companies’ adoption of widely used sustainability frameworks and guidelines, such as the Global Reporting Initiative (GRI), the United Nations’ Sustainable Development Goals (SDGs), the Task Force on Climate-related Financial Disclosures (TCFD), to provide an overview and comparison with emerging nature-specific reporting frameworks such as the TNFD.

Common frameworks at a glance

The following details commonly adopted nature- and climate-related frameworks selected for comparison in this study:

1) **Global Reporting Initiative (GRI) 304: Biodiversity¹¹**

GRI 304 helps organisations to better understand which decisions and business practices lead to biodiversity loss, where impacts occur in their value chains, and how they can be managed.

2) **International Union for Conservation of Nature (IUCN)**

IUCN frameworks and standards include the IUCN Global Standard for Nature-based Solutions and the IUCN Red List of Threatened Species.

3) **Network for Greening the Financial System (NGFS)**

NGFS lists climate scenarios that help explore the possible impacts of climate change on the economy and the financial system. It also lists nature-related financial risks.

4) **Sustainable Development Goal (SDG) 13: Climate Action**

Take urgent action to combat climate change and its impacts.

5) **Sustainable Development Goal (SDG) 14: Life Below Water**

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

6) **Sustainable Development Goal (SDG) 15: Life on Land**

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

7) **Task Force on Climate-related Financial Disclosures (TCFD)**

Climate-related financial disclosure recommendations structured around governance, strategy, risk management, and metrics and targets.

¹¹The GRI topic standard on Biodiversity has been revised to GRI 101: Biodiversity 2024 in the first quarter of 2024. At the time of data collection for this report, GRI 304: Biodiversity was the dominant GRI topic standard on Biodiversity in use.

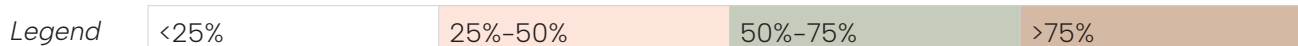
8) Taskforce on Nature-related Financial Disclosures (TNFD)

Nature-related financial disclosure recommendations consistent with the global baseline of corporate sustainability reporting and are to be aligned with global policy goals in the Kunming-Montreal Global Biodiversity Framework. The TNFD is structured around governance, strategy, risk and impact management, and metrics and targets.

Current landscape

Table 2: Framework adoption

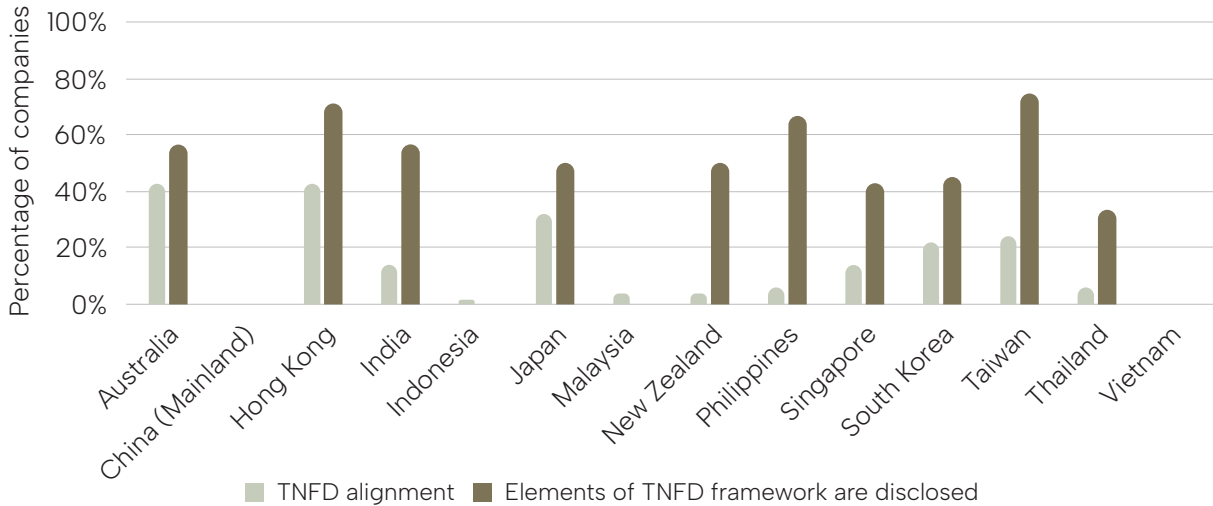
Jurisdiction	GRI 304	IUCN	NGFS	SDG 13: Climate Action	SDG 14: Life Below Water	SDG 15: Life on Land	TCFD	TNFD
Australia	24%	16%	16%	80%	18%	40%	88%	42%
China (Mainland)	38%	12%	4%	74%	34%	42%	66%	0%
Hong Kong	28%	20%	18%	66%	28%	42%	88%	14%
India	30%	20%	6%	80%	24%	64%	54%	14%
Indonesia	38%	36%	4%	66%	38%	44%	30%	2%
Japan	28%	12%	12%	78%	32%	46%	98%	32%
Malaysia	40%	34%	6%	90%	40%	50%	80%	4%
New Zealand	4%	2%	10%	40%	4%	16%	58%	4%
Philippines	36%	42%	2%	76%	50%	62%	48%	6%
Singapore	16%	16%	36%	76%	16%	20%	98%	14%
South Korea	40%	42%	24%	70%	30%	46%	100%	22%
Taiwan	18%	20%	24%	96%	32%	44%	100%	24%
Thailand	26%	40%	2%	94%	46%	64%	44%	6%
Vietnam	8%	4%	0%	26%	14%	20%	2%	0%



- Climate change continues to be a key focus, with 72% of the 700 companies assessed disclosing their alignment with SDG 13 – Climate Action, and 68% aligning with the TCFD framework.
- However, only 13% of the assessed companies have disclosed their alignment with the TNFD framework, highlighting that TNFD adoption is still in its early stages. But it is

encouraging that 27% of companies have adopted GRI 304: Biodiversity, signalling that nature-related reporting is not entirely new. These companies may also have a head start in adopting the TNFD framework, as the TNFD and GRI have been working together to enhance interoperability between the two, with strong alignment on definitions and metrics for disclosure.

Figure 4: TNFD alignment and elements of TNFD framework disclosed



- Australia-listed companies have the highest TNFD framework alignment rate (42%), followed by Japan (32%). In contrast, none of the China (Mainland) and Vietnam-listed companies in this study have adopted the TNFD framework.



42% of Australia-listed companies aligned with TNFD framework

- Among the companies that have disclosed their adoption of the TNFD framework, just over half (54%) provided further details on the specific elements of the framework they have implemented.



54% of companies that disclosed their adoption of the TNFD framework, provided further details on the specific elements

- This suggests intention to align with the TNFD framework, despite companies requiring time to assess their nature-related issues, develop strategies or gather required information.

2.2 Nature-related commitments

Organisations are increasingly disclosing their commitments to restoring and investing in nature across various dimensions, including water, biodiversity, natural resources, forests, chemicals and plastics. Examples of these nature-related commitments include pledges for zero deforestation, the elimination of exploitation, achieving a net positive impact, and the use of certified raw materials. Such commitments are vital for businesses to effectively manage risks, meet stakeholder expectations, drive innovation, and ensure long-term sustainability¹².

Nature-related commitments assessed in this study

The common nature-related commitments assessed in this study are:

- 1) **Net Gain:** Achieving biodiversity net gain through land and marine management, where biodiversity is in a measurably better state than before the development took place.
- 2) **Net Positive Impact:** Biodiversity impacts caused by business operations are outweighed by the actions taken to avoid and reduce such impacts, rehabilitate affected species or landscapes, and offset any residual impacts. The commitment is similar to No Net Loss but with a wider margin of offset added in, particularly important for areas where conservation gains are uncertain or areas with more serious biodiversity impacts.
- 3) **No Deforestation:** Reduce or eliminate deforestation in business operations and value chains.
- 4) **No Exploitation:** Not exploiting workers, local communities or small-scale growers in the production of an agricultural commodity.
- 5) **No Net Loss:** Biodiversity impacts caused by businesses are balanced or outweighed by measures taken to avoid and minimise the impacts, to restore affected areas, and to offset residual impacts, so that no loss remains. While there is currently no universal definition, the IUCN suggests no net loss and net positive impact on biodiversity to mean no net reduction in inter- and intra-species diversity, long-term survival of species, and the composition of species assemblages that allow the ecosystem to thrive¹³. The impact on biodiversity should be evaluated against the baseline of the state or trajectory of biodiversity in the area affected by a project, prior to project development.
- 6) **Use of Certified Raw Materials:** Raw materials used are certified by a third party to be produced and sourced in a sustainable way.

¹²Nature in the balance: What companies can do to restore natural capital. McKinsey. (2022). Retrieved August 26, 2024, from <https://www.mckinsey.com/capabilities/sustainability/our-insights/nature-in-the-balance-what-companies-can-do-to-restore-natural-capital>

¹³Aiama, D., Edwards, S., Bos, G., Ekstrom, J., Krueger, L., Quétier, F., Savy, C., Semroc, B., Sneary, M. and Bennun L. (2015). *No Net Loss and Net Positive Impact Approaches for Biodiversity: exploring the potential application of these approaches in the commercial agriculture and forestry sectors*. Gland, Switzerland: IUCN. <https://portals.iucn.org/library/sites/library/files/documents/2015-003.pdf>

Current landscape

Table 3: Nature-related commitments

Industry sector (number of companies)	Top commitment	Percentage of companies in the respective sector
Consumer Staples (70 companies)	No deforestation	33%
Industrials (108 companies)		20%
Energy (29 companies)	No net loss	10%
Materials (54 companies)		22%
Utilities (40 companies)	Net positive impact	15%
Communication Services (44 companies)	Use of certified raw materials	14%
Consumer Discretionary (58 companies)		22%
Financials (130 companies)		12%
Health Care (37 companies)		11%
Information Technology (64 companies)		25%
Real Estate (63 companies)		17%



Note: Three companies are excluded as they are mutual funds companies and not assigned by any category by GICS; bases for top commitment are the number of companies under respective industry sectors.

- Overall, the adoption of nature-related commitments by companies across various industry sectors remains low, with only 34% of companies making such commitments.



34%

of companies make nature-related commitments

- The most adopted commitment is the use of certified raw materials, seen in 17% of companies, followed by no deforestation (14%) and no exploitation (12%).
- To enhance sustainability efforts, companies should prioritise integrating broader nature-related initiatives and adopting relevant nature-related commitments across their operations.

03

Framework Alignment (TNFD)

3.1 Governance

Board governance over nature-related issues is crucial for managing risks, aligning corporate strategy with environmental considerations, ensuring regulatory compliance, and sustaining long-term value. As nature-related risks stemming from a company's dependencies and impacts on nature are increasingly recognised as material, it becomes essential for directors to address these issues effectively¹⁴.

Five-step approach for directors to navigate nature-related risks

An English law legal opinion commissioned by the Commonwealth Climate and Law Initiative and advisory firm Pollination outlines a five-step approach for directors to navigate nature-related risks and guide their companies through a nature-positive transition¹⁵.

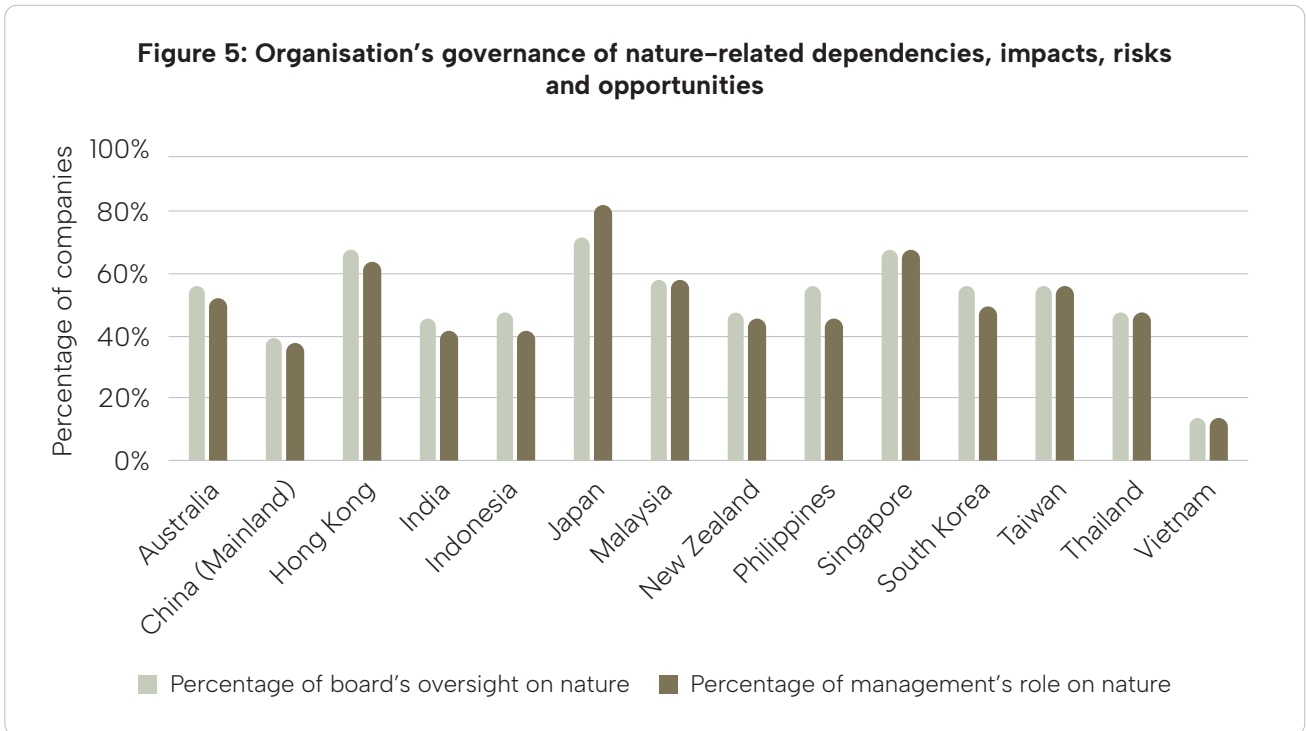
- 1) **Identification:** Directors who actively evaluate the extent of their company's exposure to nature-related risks can make more informed commercial decisions and better justify their actions or inaction.
- 2) **Assessment/Evaluation:** Directors should assess which nature-related risks are relevant and significant, and evaluate their potential impact on the company, utilising TNFD guidance and materiality assessments.
- 3) **Risk Management/Mitigation:** Directors need to determine the best strategies for managing or mitigating significant risks, possibly through the implementation of a risk management framework.
- 4) **Disclosure:** Directors should decide what must be disclosed according to applicable laws and whether to voluntarily disclose material nature-related risks or impacts in response to market or investor expectations.
- 5) **Documentation:** By thoroughly documenting their consideration of these steps in board minutes, agendas, memoranda, and reports, directors can safeguard themselves against litigation and legal risks.

¹⁴Herweijer, C., Evison, W., Mariam, S., Khatri, A., Albani, M., Semov, A., & Long, E. (2020). *Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy*. World Economic Forum. <https://www.weforum.org/publications/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy/>

¹⁵*Nature-related risks and Duties of Company Directors*. (2024, March 11). Commonwealth Climate and Law Initiative. <https://tnfd.global/wp-content/uploads/2024/07/CCLI-Briefing-Directors-duties-and-Nature.pdf>

Current landscape

3.1.1 Description of the board’s oversight and management’s role in assessing and managing nature-related issues



- Slightly more companies have described the board’s oversight on nature-related issues (52%) as compared to those that have described management’s role in assessing and managing nature-related issues (50%).
- Japan has the highest percentage of companies (82%) that described management’s role in assessing and managing nature-related issues. Japan also has the highest percentage of companies (72%) that described the board’s oversight on nature-related issues.
- While most companies have recognised the importance of nature-related issues at both the board and management levels, there is still room for improvement. Japan’s leadership in this area could serve as a model, demonstrating the value of a coordinated approach between the management and board in driving effective nature-related strategies. Companies in other Asia Pacific jurisdictions might benefit from adopting similar practices to enhance their governance and accountability in their nature-related efforts.



Integrating nature into decision making across the organisation

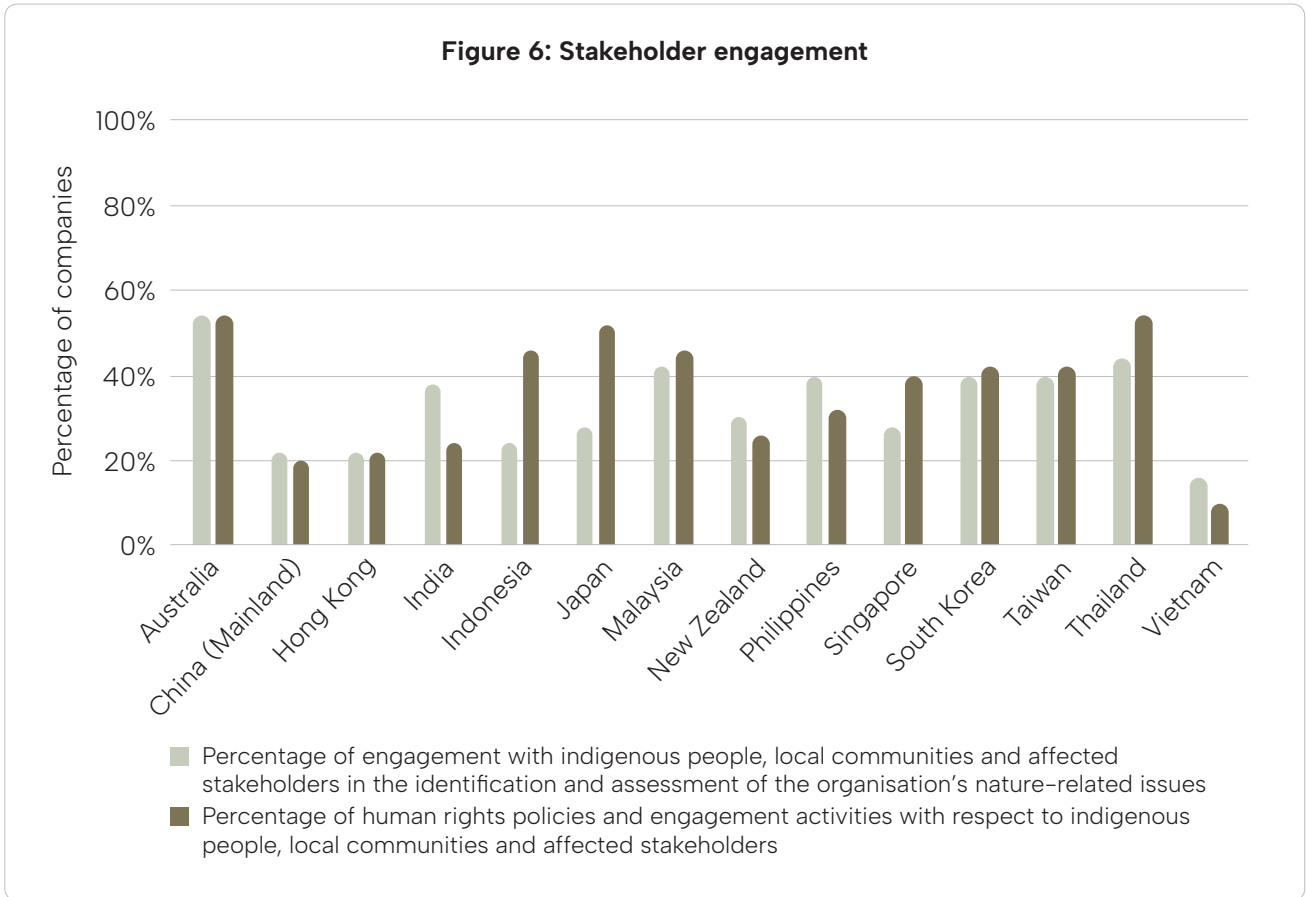
A French think tank dedicated to sustainability in the public and private sectors, the Cercle de Giverny's 2023 working group on "How to represent nature in governing bodies?" offers several propositions to enhance the integration of nature into decision making across the whole organisation¹⁶. These include:

- 1) Integrating nature into the core of business strategies to promote the co-resilience of nature and businesses. For example, mapping nature-related risks and opportunities and setting nature-related targets.
- 2) Promote training in nature-related issues at all levels of the company, from managers and board members to team members.
- 3) Review the variable remuneration of company directors to factor in the achievement of quantified objectives that promote the prevention of degradation of nature, as well as the preservation, restoration and regeneration of nature.
- 4) Nominate to the board of directors one or more directors to represent the interests of nature, in collaboration with all board committees. The British company Faith in Nature is a leading example of giving Nature an actual seat on the board, through an appointed Nature Guardian to act on its behalf as part of the board of directors¹⁷.

¹⁶Cercle de Giverny. (2023). *Accélérer la transformation écologique et sociale de la France: 30 propositions pour une RSE systémique* [Accelerating the ecological and social transformation of France: 30 propositions for systemic CSR]. Paris, France. https://cercle-giverny.fr/wp-content/uploads/2023/09/30_propositions_Cercle_2023.pdf

¹⁷Faith in Nature. (n.d.). *Nature on the Board: An Open Source Guide*. https://cdn.shopify.com/s/files/1/0513/8923/5351/files/FIN_NOTB_GUIDE.pdf?v=1666787253

3.1.2 Description of organisation’s human rights policies and engagement activities



- Overall, about one-third of the assessed companies (33%) engage with indigenous people, local communities and affected stakeholders in identifying and assessing nature-related issues. Some such engagements include consulting with local communities or implementing feedback mechanisms where projects may have significant impact. The proportion is highest in Australia (54%), followed by Thailand (44%) and Malaysia (42%).
- Overall, a slightly higher percentage (36%) of assessed companies disclosed their human rights policies and engagement activities concerning indigenous peoples, local communities and affected stakeholders. The proportion is highest for Australia and Thailand (both at 54%), followed by Japan (52%), Indonesia (46%) and Malaysia (46%).
- The data reveals a significant gap in how companies are involving key stakeholders in nature-related issues and disclosing related human rights policies. While Australia has set a strong example in this regard, other jurisdictions lag behind, indicating an opportunity for improvement.

Indigenous Peoples are critical stewards of biodiversity¹⁸. However, they are underrepresented in the development and implementation of biodiversity policies¹⁹. The Convention on Biological Diversity recognises the unique contributions of Indigenous Peoples and local communities towards conserving biodiversity, outlining in Article 8(j) that Parties shall:



Respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices²⁰.

3.2 Strategy

Under the TNFD recommendations, organisations are encouraged to disclose how nature-related issues could impact their business model, strategy, and financial planning across short-, medium- and long-term horizons. In developing their strategy, organisations should consider both the risks and opportunities arising from the physical and transition aspects of nature-related issues. Furthermore, they are advised to disclose the locations of their assets and activities, especially those in priority areas. Priority areas refer to locations where material nature-related issues have been identified, or where an organisation’s activities interface with ecologically sensitive areas such as areas of ecosystem degradation, areas of biodiversity importance and areas of known water stress. As nature-related issues are location-specific, locating a business’s physical interfaces with nature is key to nature-related analyses. Identifying material or sensitive locations is crucial for understanding where the organisation has the greatest impact on nature or is most vulnerable to nature-related risks, resulting in a more accurate assessment of these issues²¹. Additionally, organisations are advised to disclose their resilience by incorporating nature-related scenario analyses into their planning.

Key benefits of conducting nature-related scenario analysis

Key benefits of conducting nature-related scenario analysis include:

- 1) **Risk Assessment and Strategic Planning:** Scenario analysis enables organisations to explore various future pathways, helping them prepare for different possibilities. This proactive approach ensures organisations are better equipped to handle potential changes in regulations, market conditions and public expectations regarding nature-related issues²².
- 2) **Stakeholder Trust and Communication:** By utilising scenario analysis, organisations can present potential impacts and opportunities in a more structured and transparent manner, thereby building greater trust with stakeholders and demonstrating their ability to respond effectively to nature-related challenges²³.

¹⁸Reyes-García, V., Fernández-Llamazares, Á., Aumeeruddy-Thomas, Y., Benyei, P., Bussmann, R. W., Diamond, S. K., García-del-Amo, D., Guadilla-Sáez, S., Hanazaki, N., Kosoy, N., Lavides, M., Luz, A. C., McElwee, P., Meretsky, V. J., Newberry, T., Molnár, Z., Ruiz-Mallén, I., Salpeteur, M., Wyndham, F. S., Zorondo-Rodríguez, F., & Brondizio, E. S. (2022). Recognizing Indigenous peoples’ and local communities’ rights and agency in the post-2020 Biodiversity Agenda. *Ambio* 51, 84–92. <https://doi.org/10.1007/s13280-021-01561-7>

¹⁹Supra note 15.

²⁰Convention on Biological Diversity. (n.d.). *Article 8(j) – Traditional Knowledge, Innovations and Practices*. <https://www.cbd.int/traditional/default.shtm>

²¹SBTN Validation Pilot Summary Report (pp. 22–25). (2024). Science Based Targets Network. <https://sciencebasedtargetsnetwork.org/case-studies/leading-the-way-initial-learnings-from-sbtns-target-validation-pilot/>

²²Guidance on Scenario Analysis (p. 3). (2023). Taskforce on Nature-related Financial Disclosure. https://tnfd.global/wp-content/uploads/2023/09/Guidance_on_scenario_analysis_V1.pdf

²³Integrating Nature in Climate Scenario Analysis for Enhanced Resilience (p. 14). (2024). Canadian Institute of Actuaries. <https://www.cia-ica.ca/publications/224052e/>

Current landscape

3.2.1 Description of nature-related issues over the short, medium and long term

Figure 7: Disclosure of dependencies and impacts over different time horizons

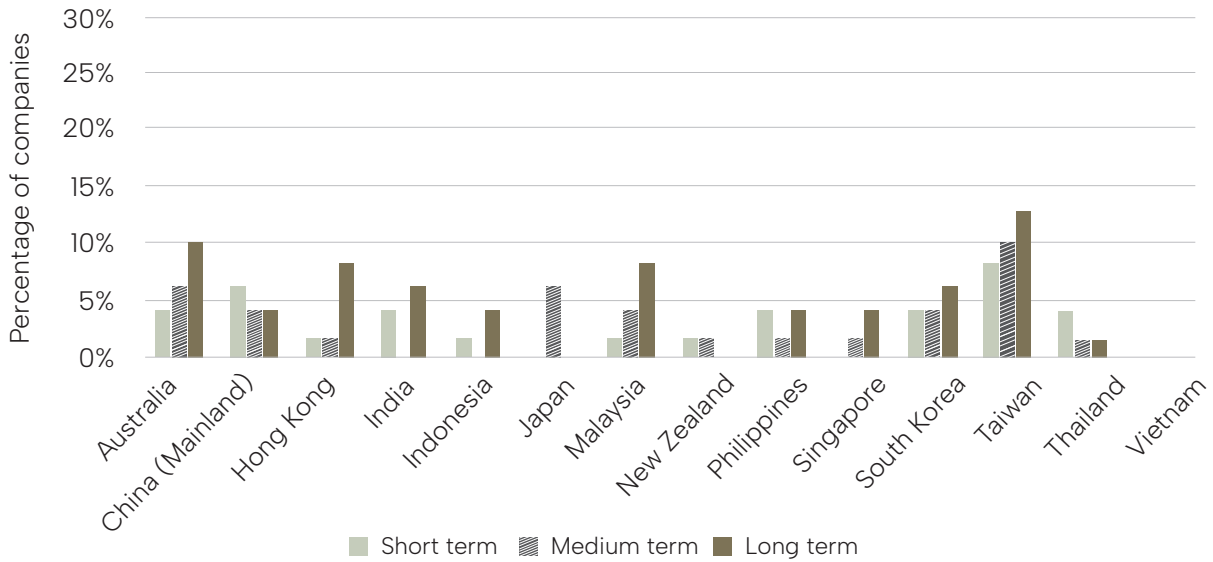
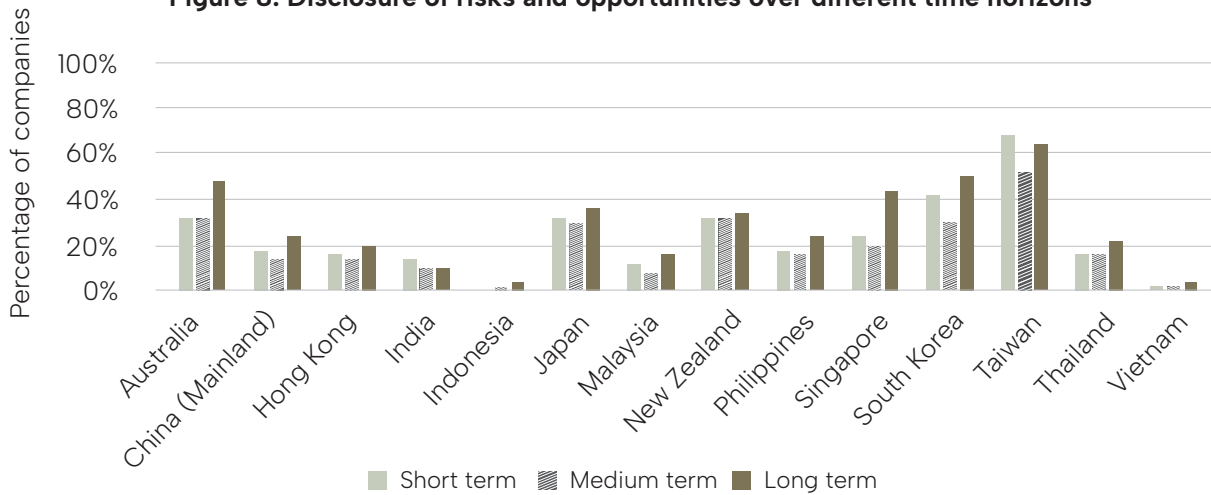


Figure 8: Disclosure of risks and opportunities over different time horizons



- More than half of the assessed companies did not specify the time horizons in which they will be affected by nature-related issues. While 66% of companies disclosed their dependencies and impacts on nature, only 8% specified the time horizon of the dependencies and impact. Similarly, the majority of companies (86%) disclosed their nature-related risks and opportunities but only 34% specified the applicable time horizons.
- Only 3% of assessed companies have disclosed their short-term dependencies and impacts on nature, with the same percentage doing so for the medium term. A slightly higher percentage (5%) disclosed their long-term dependencies and impacts on nature.
- A larger proportion of companies provided time-bound disclosures for risks and opportunities related to nature. Specifically, 23% disclosed short-term risks and opportunities, 20% addressed the medium term, and 29% focused on the long term.
- Disclosures of dependencies and impacts are just as important as those of risks and opportunities. They enable organisations and stakeholders to understand the critical natural resources required for business growth and the impacts of business activities on nature. This, in turn, leads to a clearer identification of associated risks and opportunities.

Figure 9: Types of nature-related risks disclosed

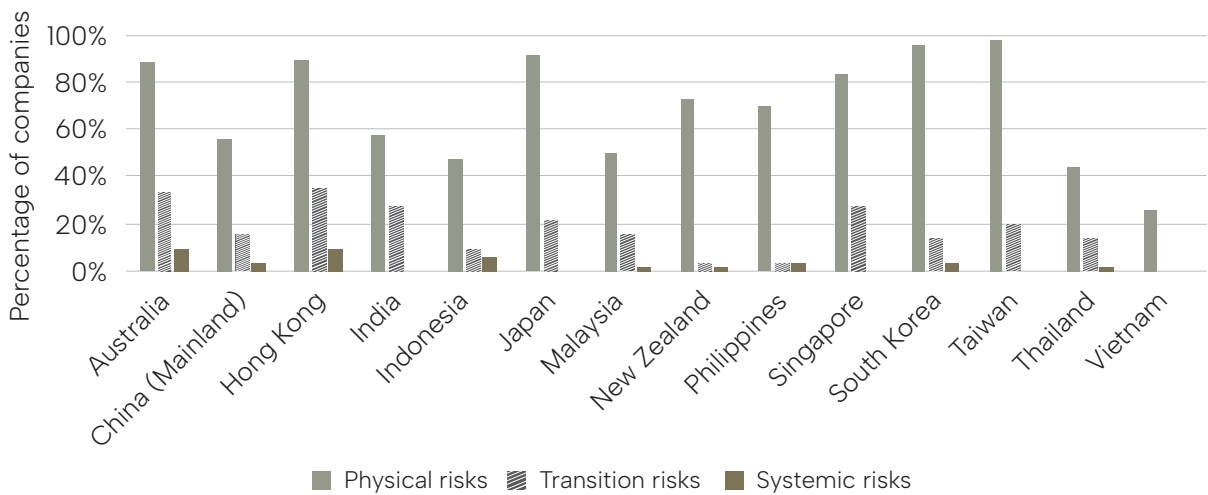
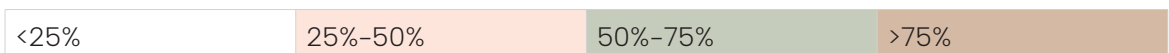


Table 4: Types of nature-related opportunities disclosed

Jurisdiction	Markets	Resource efficiency	Products and services	Capital flow and financing	Reputational capital	Sustainable use of natural resources	Ecosystem protection, restoration and regeneration
Australia	14%	42%	36%	8%	20%	42%	66%
China (Mainland)	14%	42%	40%	14%	0%	28%	52%
Hong Kong	14%	50%	38%	18%	16%	46%	64%
India	6%	44%	18%	0%	4%	54%	56%
Indonesia	0%	46%	26%	6%	4%	52%	78%
Japan	10%	46%	36%	8%	8%	52%	74%
Malaysia	4%	58%	38%	10%	16%	52%	68%
New Zealand	4%	12%	12%	2%	8%	12%	42%
Philippines	2%	50%	24%	8%	12%	60%	70%
Singapore	10%	54%	24%	24%	10%	58%	46%
South Korea	2%	48%	38%	2%	8%	52%	86%
Taiwan	4%	54%	36%	16%	14%	58%	76%
Thailand	8%	40%	22%	6%	4%	38%	56%
Vietnam	2%	0%	8%	4%	0%	6%	8%

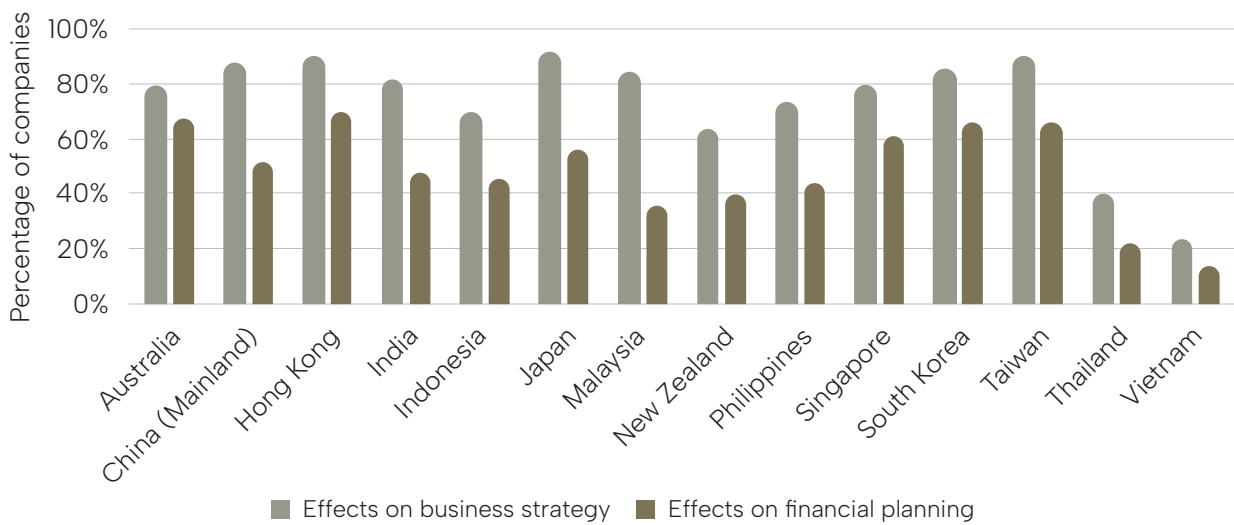
Legend



- Overall, while a significant majority of companies (70%) have disclosed nature-related physical risks, only a small fraction has addressed transition risks (18%) and systemic risks (3%).
- Commonly disclosed physical risks include climate change-related physical risks such as extreme weather that can affect business operations, supply chains, facilities and agricultural output.
- On the other hand, 74% of the assessed companies have disclosed at least one relevant nature-related opportunity. The most common nature-related opportunities disclosed were related to ecosystem protection, restoration and regeneration (60%), followed by sustainable use of natural resources (44%) and resource efficiency (42%).

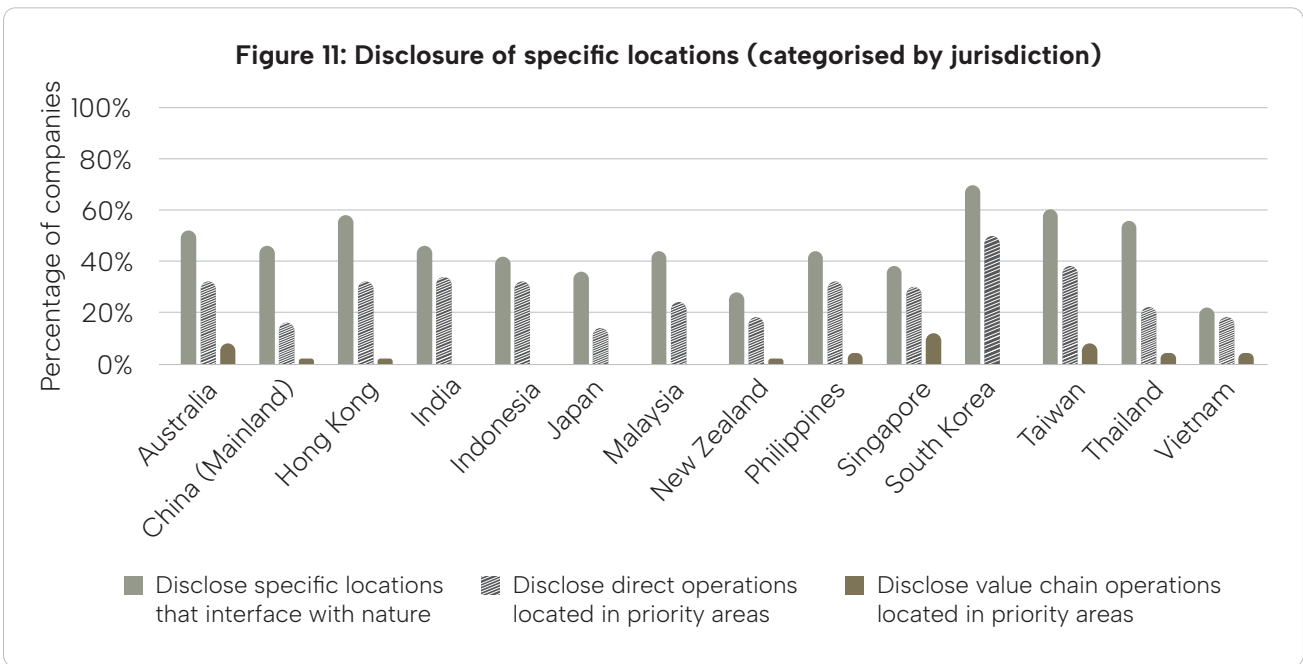
3.2.2 Description of the effect of nature-related issues

Figure 10: Effects of nature-related issues on business strategy and financial planning



- Overall, 75% of the assessed companies have disclosed the impact of nature-related issues on their business strategy. This impact often relates to the long-term direction and positioning of the company, influencing its core business model, competitive advantage, market positioning, and strategic objectives.
- Nearly half of the assessed companies (49%) have disclosed the effect of nature-related issues on their financial planning. This disclosure involves how nature-related issues affect decisions related to budgeting, capital allocation, revenue forecasting and cost management.
- Nature-related scenario analysis is still nascent, with only 25% of companies disclosing the resilience of their strategies to nature-related risks and opportunities in different scenarios. In contrast, a 2023 study²⁴ by PwC and CGS covering a similar research scope found that 89% of companies in Asia Pacific have carried out climate-related scenario analysis. Some companies have also integrated nature-related issues with climate-related scenario analysis, which can be an accessible way to explore nature-related scenario analysis and consider the connections between climate and nature-related issues.

3.2.3 Locations of direct business operation and value chain in priority locations



²⁴PwC & Centre for Governance and Sustainability, NUS Business School. (2023). *Sustainability Counts II: State of sustainability reporting in Asia Pacific*. PwC. <https://www.pwc.com/gx/en/issues/esg/asia-pac-esg/sustainability-counts-2023.pdf>

Figure 12: Disclosure of specific locations (categorised by industry sector)



Note: Three companies are excluded as they are mutual funds companies and not assigned by any category by GICS; bases for “disclosure of specific locations (categorised by industry sector)” are the number of companies under respective industry sectors.

- Overall, 46% of assessed companies disclosed specific locations of their operations that interface with nature, which refers to the way its operations interact with natural environments and ecosystems. This includes factors including proximity to sensitive habitats, reliance on natural resources, and the impact of its operations on biodiversity and ecosystem health. Disclosing the specific locations of these interfaces is critical for understanding the nature-related issues that a company may face.
- Among the assessed companies, 28% disclosed the locations of direct operations in priority areas²⁵, while only 3% disclosed the locations of value chain operations in priority areas. As nature-related issues are location-specific, companies should work on mapping out the physical footprint of their value chains to perform a more complete analysis of their nature-related issues.

²⁵According to the TNFD definition, priority areas are locations that are 1) material, where the organisation has identified material nature-related issues, and/or 2) sensitive, where there is greater potential fallout associated with the management of natural capital. Further, TNFD defined sensitive areas as having these five characteristics: of importance for biodiversity, of high ecosystem integrity, of rapid decline in ecosystem integrity, of high physical water risks, and of importance for ecosystem service provision.

- South Korea-listed companies and Taiwan-listed companies most frequently disclosed locations that interface with nature and direct operations located in priority areas.
- Singapore has the highest percentage of companies that disclosed locations of value chain operations located in priority areas. In contrast, none of the assessed companies in India, Indonesia, Japan, Malaysia and South Korea provided such disclosure.
- When analysing by industry sector, the data show that companies in the energy, materials and utilities sectors led in disclosing specific locations of their operations that interface with nature and direct operations located in priority areas.
- The significant difference between disclosures for direct operations (28%) and value chain operations (3%) indicates that companies are more focused on their immediate impacts but may be overlooking the broader environmental and nature-related footprint of their supply chains. Companies should evaluate how nature-related issues affect all levels of their operations, including upstream and downstream activities.

Understanding the LEAP approach

The TNFD has developed the Locate, Evaluate, Assess and Prepare (LEAP) Approach as an additional resource to provide practical guidance on identifying, assessing, managing and disclosing nature-related dependencies, impacts, risks and opportunities. It integrates methods, tools and resources from existing nature-related initiatives such as the Natural Capital Protocol, Science Based Targets Network (SBTN), IUCN and IPBES. The LEAP approach refers to the following four assessment phases:

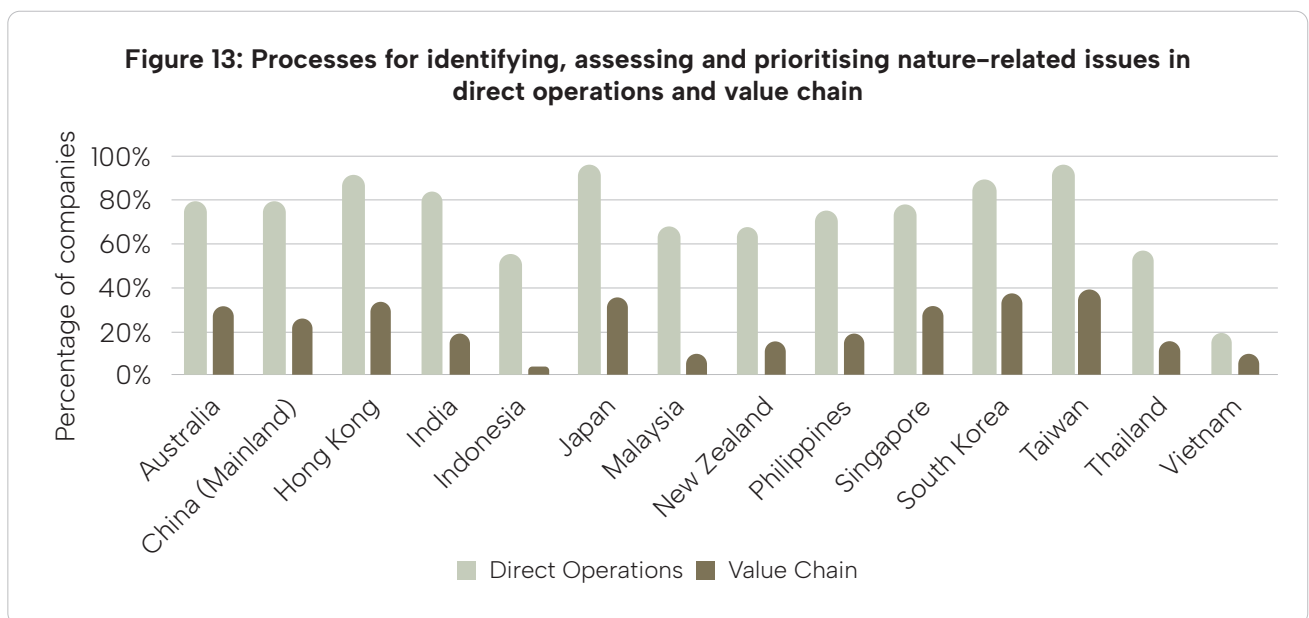
- 1) **Locate** the organisation's interfaces with nature, particularly activities with high or moderate dependency and impacts on nature that are situated in ecologically sensitive locations.
- 2) **Evaluate** the organisation's dependencies and impacts on nature, considering the environmental assets, ecosystems and impact drivers associated with various business activities. Once identified, organisations may measure the scale and severity of their dependencies and impacts on nature.
- 3) **Assess** nature-related risks and opportunities to the organisation, identifying risks and opportunities to be prioritised and disclosed. Organisations can consider ways to adapt existing risk and opportunity management processes in response to the assessment.
- 4) **Prepare** to respond to nature-related risks and opportunities by developing appropriate strategies, managing resource allocation, setting targets and disclosing relevant information in line with TNFD recommendations.

3.3 Risk and impact management

Organisations are encouraged to describe the processes they use to identify, assess, prioritise, and monitor nature-related issues to ensure transparency and accountability. This allows stakeholders to understand how these issues are managed. By explaining how nature-related issues are integrated into the overall risk management framework, organisations demonstrate their commitment to embedding environmental considerations into their broader decision-making processes, rather than treating them as isolated concerns.

Current landscape

3.3.1 Description of processes for identifying, assessing, prioritising and monitoring nature-related issues



- The overall trend indicates that the companies disclosed a higher percentage of processes to identify, assess and prioritise nature-related issues in direct operations than in their value chains across all jurisdictions.
- Japan-listed and Taiwan-listed companies have the highest percentage of companies that identify, assess and prioritise nature-related issues, which include dependencies, impacts, risks and opportunities in both direct operations (96% for Japan and Taiwan) and value chain (Taiwan: 40%; Japan: 36%).

Figure 14: Disclosure, assessment process and management of dependencies and impacts

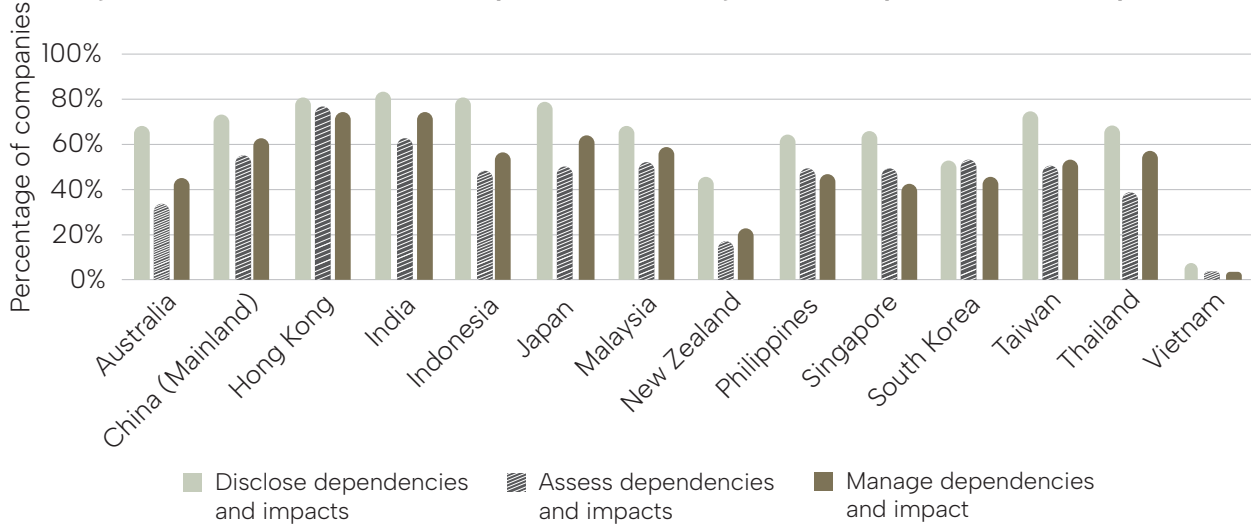
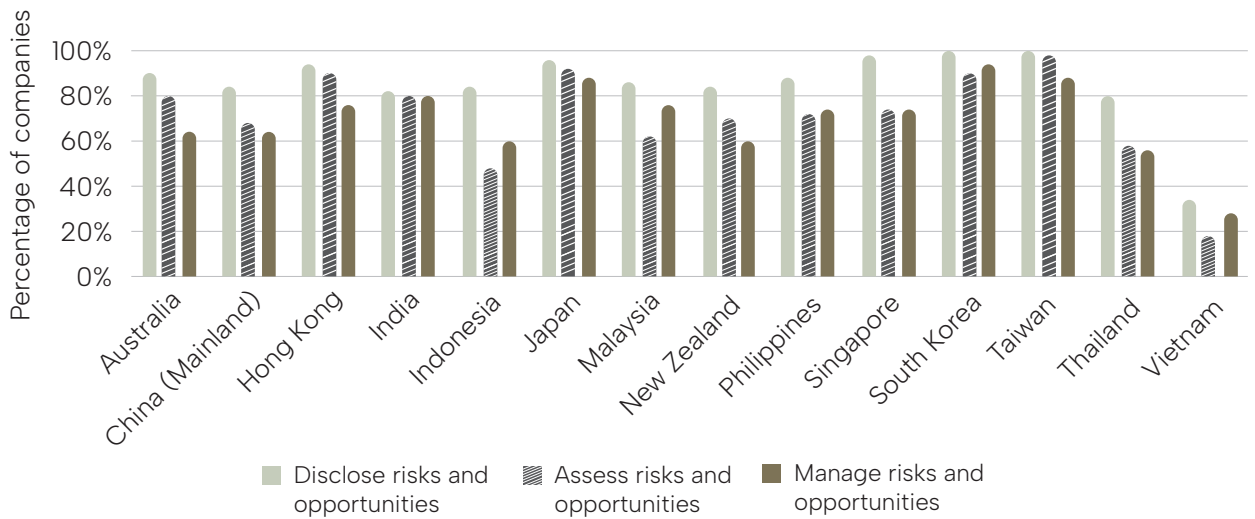
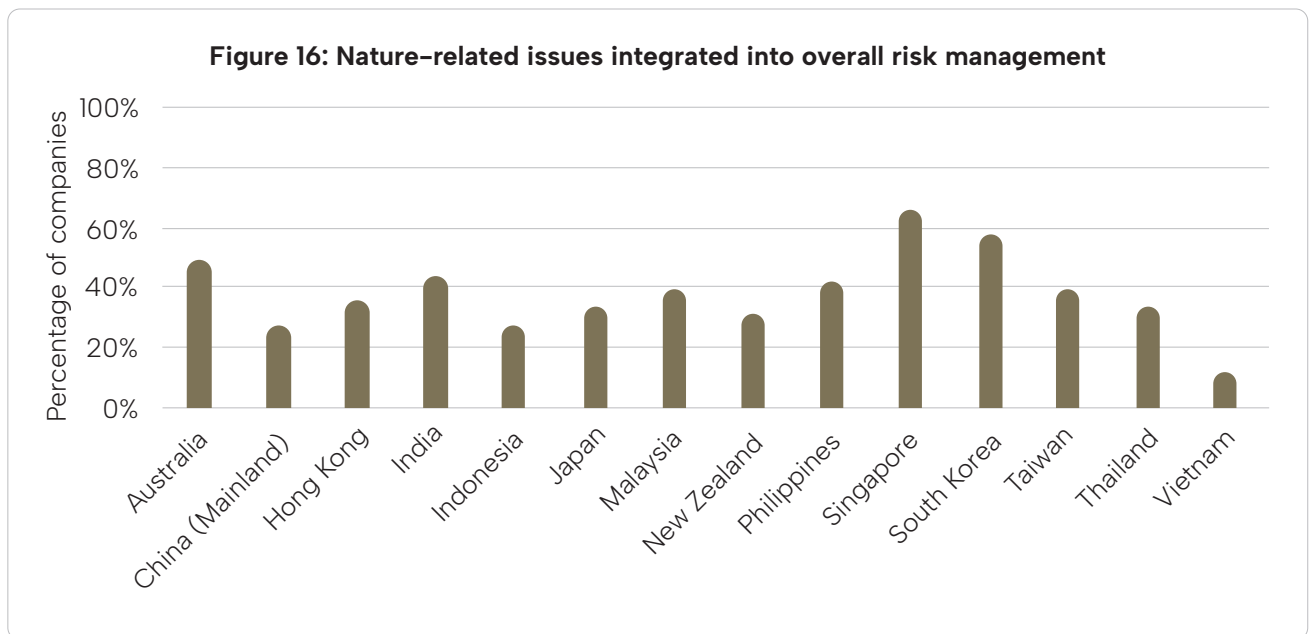


Figure 15: Disclosure, assessment process and management of risks and opportunities



- Companies generally disclosed their dependencies and impacts on nature (66%) more than they disclosed their processes for assessing (47%) and managing (52%) these dependencies and impacts.
- Similarly, for risks and opportunities, while a higher percentage of companies disclosed this information (86%) and addressed the assessment process (71%) and management (70%), the trend is consistent: companies are more inclined to disclose nature-related issues than to provide detailed information on their assessment and management processes.

3.3.2 Description of nature-related issues integrated into overall risk management



- 39% of the assessed companies have integrated nature-related issues into their overall risk management. It is expected that more companies will integrate nature-related issues into their overall risk management to enhance it.
- Notably, Singapore (66%) and South Korea (58%) have the highest percentage of companies which have integrated nature-related issues into their overall risk management.

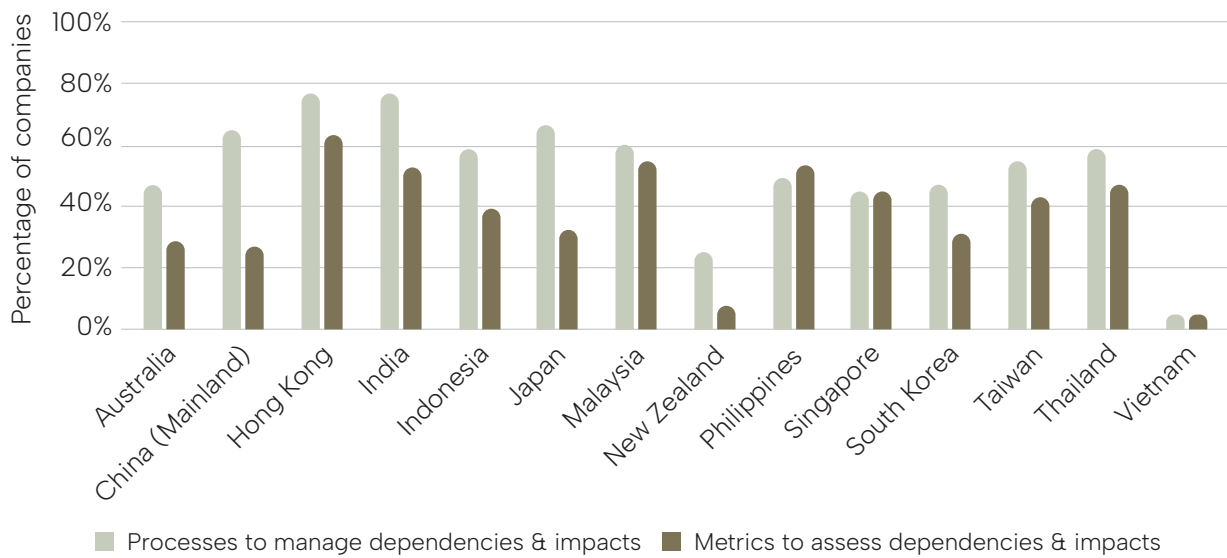


3.4 Metrics and targets

Metrics and targets are crucial for measuring, monitoring and communicating an organisation’s progress and performance against its established goals. Standardised metrics are particularly important as they enable comparison with other organisations within the sector. To facilitate this, the TNFD provides a set of core and additional global disclosure metrics as a reference for organisations²⁶. Furthermore, setting achievable and measurable targets is essential for motivating organisations to continually innovate and enhance their nature-related performance.

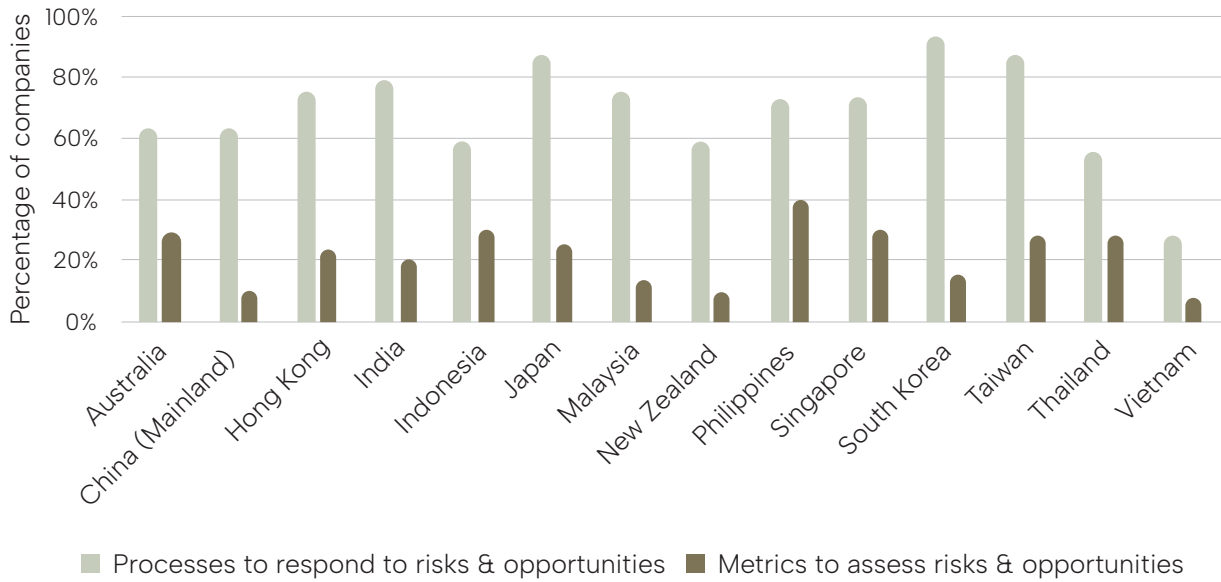
Current landscape

Figure 17: Processes and metrics to manage dependencies and impacts



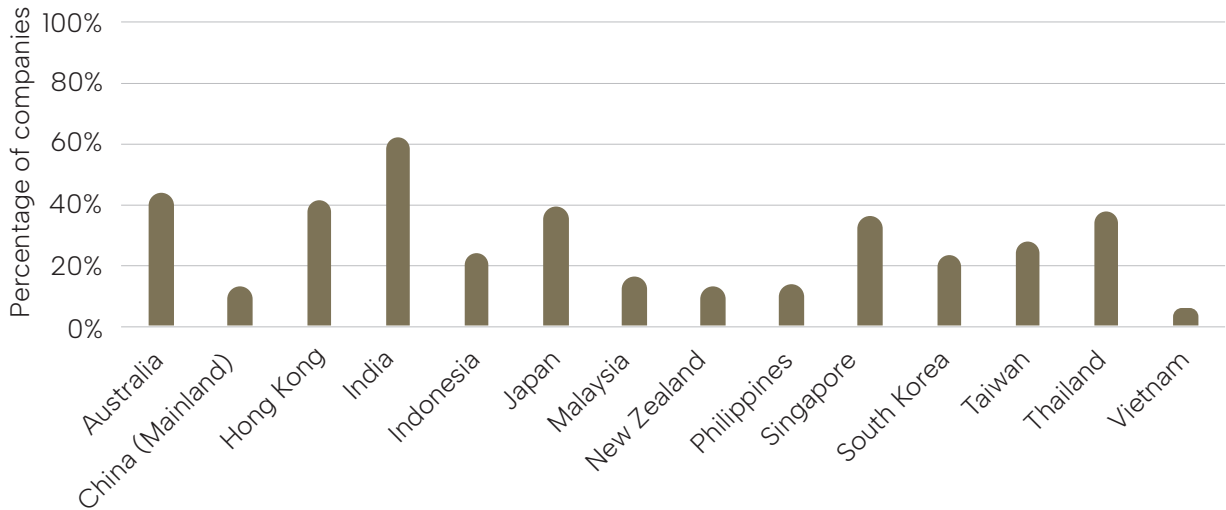
²⁶Recommendations of the TNFD. (n.d.). Taskforce on Nature-related Financial Disclosures. <https://tnfd.global/recommendations-of-the-tnfd/>

Figure 18: Processes and metrics to respond to risks and opportunities



- Although the majority of companies have established processes to address nature-related dependencies and impacts (52%) and risks and opportunities (70%), there is a notable lack of metrics to evaluate progress.
- Just over one-third of companies (37%) have metrics for assessing dependencies and impacts, while an even smaller proportion (22%) have metrics for evaluating risks and opportunities.
- Notably, Hong Kong (62%), Malaysia (54%), India (52%) and the Philippines (52%) have higher percentages of companies that have disclosed metrics for managing dependencies and impacts. The Philippines also leads with the highest percentage of companies (40%) providing metrics for managing risks and opportunities.

Figure 19: Targets and goals



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

- Among those that have disclosed nature-related issues, only 30% further disclosed targets and goals to manage these issues.
- The top five jurisdictions which have disclosed nature-related targets and goals are India (63%), Australia (44%), Hong Kong (42%), Japan (40%) and Thailand (38%).
- An understanding of nature-related issues and monitoring of relevant metrics can help companies set impactful and realistic targets.



Highlights of Best Practices in Nature-related Reporting

CTBC Financial Holding Co.

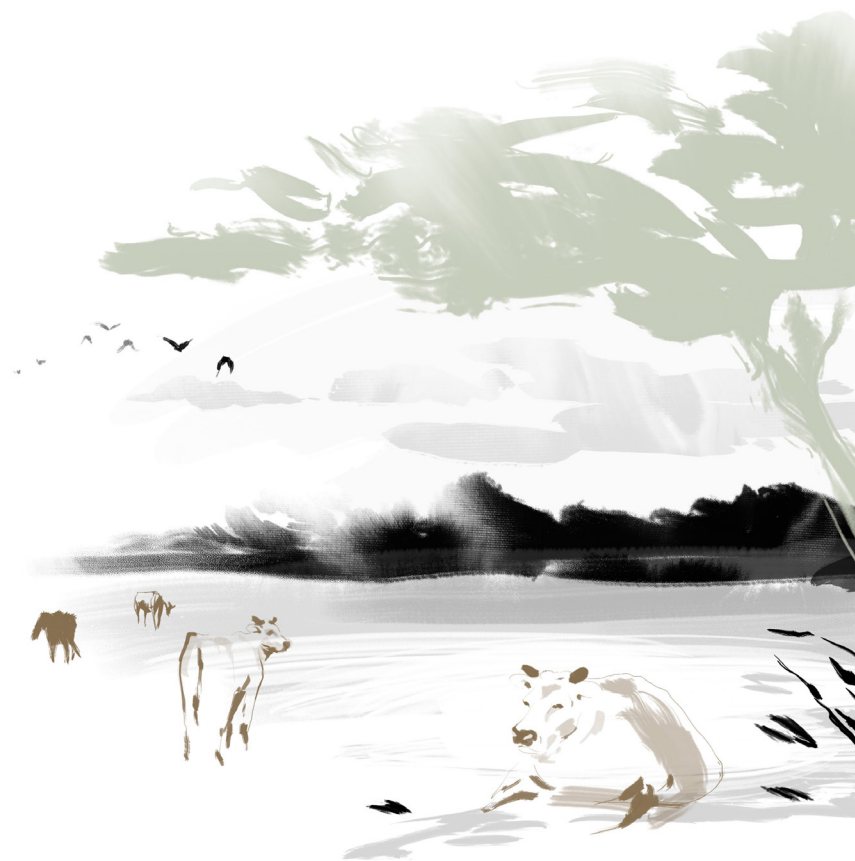
Headquartered in Taiwan, CTBC Financial Holding Co. (hereinafter, “CTBC Holding”) is an early adopter of the TNFD, publishing their first Nature-related Financial Disclosure Report in December 2023. The Board of Directors provides oversight over nature-related risks, while the board-level Corporate Sustainability Committee reviews the group’s sustainability plans, strategy and implementation plans. At the management level, the TCFD/TNFD team comprises the Chief Risk Officer and CTBC Holding’s Risk Management Department which is responsible for developing the nature-related risk management framework that is cascaded to all subsidiaries.

CTBC Holding is commendable for analysing nature-related issues in both their direct operations and their investment and loan portfolios. They referenced the TNFD’s additional guidance for financial institutions and considered 16 sensitive sectors in their nature-related assessments.

In addition to identifying nature-related risks, CTBC Holding also mapped nature-related risks to business activities and traditional financial risk categories, illuminating the potential financial impacts of nature-related risks. Through TNFD’s seven opportunity categories, the company identified nature-related opportunities and mapped them to specific actions taken by relevant business units.

In applying the TNFD LEAP approach, CTBC Holding collaborated with various institutions to perform more targeted and in-depth analyses. In an academic collaboration with the National Taiwan Normal University, they tapped on the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) framework to develop a Taiwan-specific environmental information database which was used to identify dependencies, impacts and hotspots in over 70 assets and operating sites in their direct operations and loan portfolios.

CTBC Holding also collaborated with S&P Global, utilising S&P’s nature database as well as the Nature Risk Profile methodology developed by the United Nations Environment Programme (UNEP) and S&P Global Sustainable, a sustainability intelligence hub. This methodology was used to identify whether assets were located in the Integrated Biodiversity Assessment Tool’s (IBAT) Protected Areas or Key Biodiversity Areas and evaluate the degree of nature-related dependencies and impacts.



City Developments Limited

City Developments Limited (CDL) is one of five early adopters of the TNFD framework in Singapore. Before the TNFD was launched, CDL established a Biodiversity Policy in 2020 and had already been disclosing nature-related issues in accordance with GRI 304: Biodiversity and the Carbon Disclosure Project (CDP). Under its Biodiversity Policy, CDL commits to performing risk assessments for new developments, mitigating impact on habitats and wildlife of conservation importance, incorporating biophilic design in buildings, promoting responsible sourcing and partnering with stakeholders to reduce biodiversity impact.

Nature-related issues are not managed in silos, but rather, integrated into various aspects of the business – targets, policies and procurement processes. At the highest level of the organisation, CDL’s Board Sustainability Committee considers nature-related issues in the company’s strategies and business plans. The management-level Sustainability Committee comprises five sub-committees supported by cross-functional

management and operational staff, ensuring alignment with the company’s sustainability objectives.

CDL utilised their climate change scenario analysis to understand both climate- and nature-related risks and opportunities, allowing the company to draw connections between the two. For example, the risk of increased raw material costs is driven by both regulatory requirements on raw material extraction from ecologically sensitive areas and decarbonisation policies resulting in higher costs on carbon-intensive materials.

Prior to construction on greenfield sites located within or adjacent to natural habitats, CDL conducts biodiversity impact assessments and undertakes mitigation measures to reduce disruptions to local biodiversity. The company also utilises a biodiversity management platform for evaluation and ongoing monitoring of nature-related dependencies, impacts and risks. This applies to new as well as existing projects.

Qantas Airways Limited

Qantas Airways from Australia is commendable for its engagement with indigenous peoples and local communities in its climate- and nature-related strategies. While the company is due to release TNFD-aligned strategy and reporting in FY24, nature and biodiversity are key considerations in their procurement of carbon offsets as part of their climate strategy.

Qantas Airways has established a carbon offset strategy supported by an Integrity Framework which considers co-benefits for nature and regional communities in their procurement of carbon credits. Their procurement strategy prioritises carbon credits from indigenous communities, such as offsets from Arnhem Land Fire Abatement, an Aboriginal-owned business, which supports Traditional Owners and generates carbon reductions through fire management techniques drawing on customary fire knowledge.

Mitsubishi Corporation

Japan's Mitsubishi Corporation (MC) demonstrates the utilisation of various tools to conduct a comprehensive analysis of nature-related issues across a diverse range of business activities. For example, MC utilised the ENCORE tool in an initial screening to identify priority business segments with greater dependencies and impacts on nature. This tool provides broad information on nature-related dependencies and impacts based on sectors, sub-industries and production processes. It also maps specific nature-related dependencies and impacts and natural capital hotspots to geographical locations.

MC then conducted further analysis on the priority business segments identified, in accordance with the TNFD LEAP approach. They focused on their aquaculture business, Cermaq, which is exposed to a higher degree of dependency on nature, thus presenting greater nature-related risks to the company. As part of the assessment phase, MC identified nature-related risks and opportunities and conducted scenario analysis aligned with the TNFD guidance to identify risks and opportunities of high importance, which were then addressed through countermeasures adopted. They also identified relevant metrics for continued monitoring and management of nature-related issues.

Fast Retailing Co. Ltd

In its commitment to sustainability, Japan's Fast Retailing Co. Ltd. (Fast Retailing) has introduced a comprehensive group policy on biodiversity. This policy aims to mitigate the impact of its business on biodiversity and contribute to ecosystem conservation. It serves as a guideline for action across Fast Retailing's operations and outlines several initiatives designed to achieve the company's long-term goal of having a net positive impact on nature.

As a fashion company reliant on raw materials such as cotton, wool, down, and leather, Fast Retailing recognises that biodiversity and environmental risks are critical factors that could affect its operations. In 2021, following the International Union for Conservation of Nature (IUCN) guidelines, the company conducted a biodiversity impact and dependency assessment. This assessment helped identify the impacts and dependencies within its upstream and downstream value chains, offering valuable insights to the management team on areas of high impact and high dependency. Key biodiversity impacts identified are: land use change and pollution in cotton production, land use change in rayon production, and pollution from product

use and disposal. The ecosystem services from nature they are most dependent on are water supply, climate stability and disaster prevention. Armed with this knowledge, the company was better prepared to develop targeted strategies to address potential risks.

The resulting biodiversity policy not only outlines the necessary steps to mitigate these risks but also establishes a clear framework for initiatives and action plans to address the identified impacts and dependencies. Some initiatives include enhancing traceability of products to the farm level to understand their value chain impacts, avoiding procurement from areas that pose high risk to biodiversity, and switching to materials with lower impact on biodiversity such as those sourced from regenerative farms. Across the organisation, various departments that interact with the value chain collaborate to promote biodiversity initiatives. By starting with a comprehensive assessment and developing a tailored policy in response, Fast Retailing is making significant strides in integrating nature and biodiversity considerations into its core business practices.

Conclusion and Recommendations

While nature-related issues are gaining visibility, they are not yet considered material by most companies. While 72% of assessed companies mentioned topics such as biodiversity, water, and ecosystem protection in their sustainability or annual reports, only 35% of them viewed the nature-related issues as material. Companies in Australia and New Zealand are leading the way, with 68% and 48%, respectively, recognising nature-related issues as material and being at the forefront of adopting the TNFD framework—a positive trend for other jurisdictions to follow.

Nature-related issues, however, remain less prioritised than climate concerns, with climate frameworks seeing higher adoption due to stricter regulatory requirements. Despite this, businesses should avoid viewing nature-related issues as separate from climate concerns. The two are inextricably linked: biodiversity loss reduces carbon sequestration, releasing stored carbon and increasing greenhouse gas emissions, while climate change exacerbates habitat destruction, leading to species extinction, the spread of diseases, and more frequent wildfires and pest outbreaks.

To address these gaps and improve disclosures, several recommendations are proposed:

- 01 **Reassess the materiality of nature-related issues** through deeper analysis to uncover potential financial impacts and risks.
- 02 **Accelerate the adoption of the TNFD framework** to ensure standardised, comprehensive nature-related disclosures.
- 03 **Strengthen governance oversight**, with boards and management playing a more active role in nature-related decision-making.
- 04 **Improve scenario analysis and strategy resilience**, incorporating nature risks such as biodiversity loss and water security into business strategies.
- 05 **Increase capital flow toward nature-related opportunities**, particularly through green financing and investments in nature-positive initiatives.
- 06 **Develop clear metrics and targets** for managing nature-related risks and regularly track performance against these goals.
- 07 **Enhance risk assessment and impact management** by providing detailed disclosures on how nature-related risks are identified and managed.
- 08 **Align nature and climate disclosures**, recognising the interconnection between nature and climate impacts, to present a comprehensive view of environmental risks and opportunities.

As climate reporting becomes more mature in the region, integrating nature into these frameworks is essential for a holistic understanding of environmental risks. By implementing these recommendations, companies can strengthen their nature-related financial disclosures, align with best practices, and ensure long-term resilience in the face of evolving environmental risks and regulatory pressures.

Appendix

List of abbreviations

GRI	Global Reporting Initiative
IPBES	Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services
ISSB	International Sustainability Standards Board
IUCN	International Union for Conservation of Nature
LEAP	Locate, Evaluate, Assess and Prepare
NGFS	Network for Greening the Financial System
SBTN	Science Based Targets Network
SDG	Sustainable Development Goals
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures



List of figures, tables and boxes

Figure 1: Identification of nature-related issues
Figure 2: Companies that view nature as material, among companies that identified nature-related issues
Figure 3: Mid-to-high priority material issues
Figure 4: TNFD alignment and elements of TNFD framework disclosed
Figure 5: Organisation’s governance of nature-related dependencies, impacts, risks and opportunities
Figure 6: Stakeholder engagement
Figure 7: Disclosure of dependencies and impacts over different time horizons
Figure 8: Disclosure of risks and opportunities over different time horizons
Figure 9: Types of nature-related risks disclosed
Figure 10: Effects of nature-related issues on business strategy and financial planning
Figure 11: Disclosure of specific locations (categorised by jurisdiction)
Figure 12: Disclosure of specific locations (categorised by industry sector)
Figure 13: Processes for identifying, assessing and prioritising nature-related issues in direct operations and value chain
Figure 14: Disclosure, assessment process and management of dependencies and impacts
Figure 15: Disclosure, assessment process and management of risks and opportunities
Figure 16: Nature-related issues integrated into overall risk management
Figure 17: Processes and metrics to manage dependencies and impacts
Figure 18: Processes and metrics to respond to risks and opportunities
Figure 19: Targets and goals
Table 1: Research framework
Table 2: Framework adoption
Table 3: Nature-related commitments
Table 4: Types of nature-related opportunities disclosed
Box 1: Common frameworks at a glance
Box 2: Nature-related commitments assessed in this study
Box 3: Five-step approach for directors to navigate nature-related risks
Box 4: Integrating nature into decision making across the organisation
Box 5: Key benefits of conducting nature-related scenario analysis
Box 6: Understanding the LEAP approach

Partners in this study

About Kering



A global Luxury group, Kering manages the development of a series of renowned Houses in Fashion, Leather Goods and Jewelry: Gucci, Saint Laurent, Bottega Veneta, Balenciaga, Alexander McQueen, Brioni, Boucheron, Pomellato, DoDo, Qeelin and Ginori 1735, as well as Kering Eyewear and Kering Beauté. By placing creativity at the heart of its strategy, Kering enables its Houses to set new limits in terms of their creative expression while crafting tomorrow's Luxury in a sustainable and responsible way. We capture these beliefs in our signature: "Empowering Imagination". In 2023, Kering had 49,000 employees and revenue of €19.6 billion.

About the Centre for Governance and Sustainability, NUS Business School



The Centre for Governance and Sustainability (CGS) was established by the National University of Singapore (NUS) Business School in 2010. It aims to spearhead relevant and high-impact research on corporate governance and corporate sustainability issues that are pertinent to institutions, government bodies and businesses in Singapore and the Asia-Pacific. Spearheading thought leadership, CGS conducts public lectures, industry roundtables, and academic conferences on topics related to governance and sustainability. CGS is the national assessor for the corporate sustainability and corporate governance performance of listed issuers in Singapore. In tandem with growing demands from consumers and investors that financial returns are achieved with integrity, backed with environmental and social considerations, CGS has a slew of research focusing on sustainability reporting in Asia Pacific, sustainable banking, nature reporting, and climate reporting in ASEAN. More information about CGS can be accessed at <https://bschool.nus.edu.sg/cgs/>.

Founded in 1965, the same year that Singapore gained independence, NUS Business School stands among the world's leading business schools today. We are distinctive for offering the best of global business knowledge with deep Asian insights, preparing students to lead Asian businesses to international success and to help global businesses succeed in Asia.

The School attracts a diverse and talented students to our broad portfolio of academic programmes, including [The NUS BBA](#), [The NUS MBA](#), [The NUS Executive MBA](#), [The NUS MSc Programmes](#) and [PhD](#) programmes in addition to our customised and open enrolment [Executive Education](#) courses. Admission to NUS Business School is highly competitive, and we are proud of the exceptional quality of our students.

For more information, please visit <https://bschool.nus.edu.sg/>.

Project Team

Project Lead

Marie-Claire DAVEU, Lawrence LOH, Thierry MARTY

Project Team

Kering: Pauline PIGOTT, Errial CHIU, Yunjeng LEE

Centre for Governance and Sustainability: Joycelyn LEE, Sabrina SOON, Minjun HUANG, Verity THOI

Edited by

ANG Hui Min

Supported by

Ad'N Azhari B ABDUL RAHMAN, ANG Wei Heng Roy, CHAI Yu Qing Amanda, CHIA Shin Yin, CHOO Wan Xuan Abigail, CHU Jia Xuan, CHUA Wei Jun, Haziqah Bte Mohamed ESA, KHOO Hui-Chi Faith, LIN Kaizeng, LOH Jia Ning Amanda, Muhammad Zahid Afiq Bin MOHAMAD AZIZ, ONG Fei, Qinling YAW Niki, SEE Han Meng, TOH Jun Rong, WANG Ershan