

# Nature Incorporated

CDP's Southeast Asia 2022 report

March 2023

Special Thanks to

 **south pole**



# Contents

<b>3</b>	<b>Better for Nature, Better for Climate</b>
<b>4</b>	<b>Disclosure Snapshot</b>
<b>6</b>	<b>Disclosure Insights</b>
<b>9</b>	<b>Disclosure Themes – the Nature Nexus</b>
9	Climate change
15	Forests
20	Water security
25	Summary of disclosures across nature themes
<b>26</b>	<b>The Way Forward</b>
<b>27</b>	<b>Appendix</b>
<b>28</b>	<b>Contact Us</b>

## **Important Notice**

The content of this report may be used by anyone providing acknowledgment is given to CDP Worldwide (CDP). This does not represent a license to repackage or resell any of the data reported to CDP or the contributing authors and presented in this publication. If you intend to repackage or resell any of the contents of this report, you need to obtain express permission from CDP before doing so.

CDP does not provide any representations or warranties (written or verbal) on the accuracy or completeness of the information and opinions contained in this report. You must not act upon the information and opinions contained in this publication without obtaining specific professional advice. To the extent permitted by laws and regulations, CDP does not accept or assume any liability, responsibility, or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information in this publication, or for any decisions based on it. All information and views expressed herein by CDP are based on the judgments at the time of this publication and are subject to change without notice due to economic, political, industry, and firm-specific factors. Content for guest profiles in this report was provided by the respective companies, and they reflect the views of their respective authors and not necessarily the views of CDP.

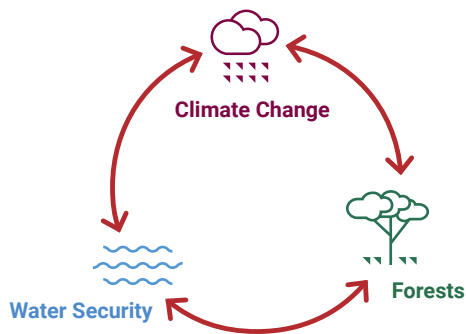
CDP's affiliated member companies, or its shareholders, members, partners, principals, directors, officers and/or employees may have a position in the securities of the companies discussed herein. The securities of the companies mentioned in this publication may not be eligible for sale in some states or countries nor suitable for all types of investors; their value and the income they produce may fluctuate and/or be adversely affected by exchange rates.

'CDP' refers to CDP North America, Inc, a not-for-profit organization with 501(c)3 charitable status in the United States, and CDP Worldwide, a registered charity (number 1122330) and a company limited by guarantee registered in England (number 05013650).

© 2023 CDP Worldwide. All rights reserved.

# Better for Nature, Better for Climate

What happens in Southeast Asia will impact the world. Southeast Asia is not just culturally diverse, it is extremely biodiverse. The region houses spectacular biodiversity hotspots and natural ecosystems. This includes: precious marine ecosystems comprising 30% of the world's coral reefs, with a value of over US\$100 billion, one-third of the world's mangroves<sup>1</sup> and nearly 15% of the world's tropical forests<sup>2</sup>. At the same time, it is one of the most vulnerable regions to the impacts of climate change. Southeast Asia was estimated by the United Nations to suffer economic losses amounting to about US\$86.5 billion a year due to natural disasters<sup>3</sup>. Global temperatures have already risen about 1°C above pre-industrial levels because of escalating carbon emissions and this is expected to exacerbate. Southeast Asia is at the confluence of where nature and climate intersect, and it is paramount we act quickly and with purpose as a region, for the region.



The natural capital that Southeast Asia stewards over provides a great opportunity for climate action. Maintaining forest cover and reforestation can sequester carbon and restore ecosystem services that are projected to wane. Water security will augment the resilience and reliability of the forests and enhance the services that they provide. Mitigating emissions and climate change will help enhance water security and reduce natural disasters that cause widespread damage not just to livelihoods but also to the natural habitats of biodiversity. Simply put, if it is better for nature, it is better for climate. Collective action is also necessary. Governments, investors, corporations and the people all have a part to play. The world is severely lagging in the necessary action to achieve net-zero and adequately protect our natural

environment and resources. In 2022, 482 companies across Southeast Asia reported climate data to CDP, but only 123 disclosed on water and 35 for forests. Beyond the Taskforce on Climate-related Financial Disclosures (TCFD), in 2022 at the United Nations Framework Convention on Climate Change (UNFCCC) 27<sup>th</sup> Conference of the Parties (COP27), the Taskforce on Nature-related Financial Disclosures (TNFD) was initiated to accelerate a more holistic response. It is imperative that collective action around nature's themes must also be considered together. Disclosures are at least increasing in the region. Some are doing more, but action has been imbalanced and more urgency is needed. There are many reasons for the insufficient response, even as different stakeholders await the new International Sustainability Standards Board (ISSB) to align different disclosure standards, but it is not enough. In this report, we highlight the current state of nature and climate in Southeast Asia, and the action we hope will come about as you read this report. We believe it will encourage you to do more; and your action in Southeast Asia will encourage the rest of the world to do more.

**CDP and South Pole**  
Southeast Asia and Oceania

<sup>1</sup> Loke, M. C. (2014). Sustainable Development of Southeast Asia's Marine Ecosystems – Climate Change Challenges and Management Approaches. [Chou2014Int\\_Conf\\_Mar\\_Sci\\_Aquac.pdf \(nus.edu.sg\)](#)

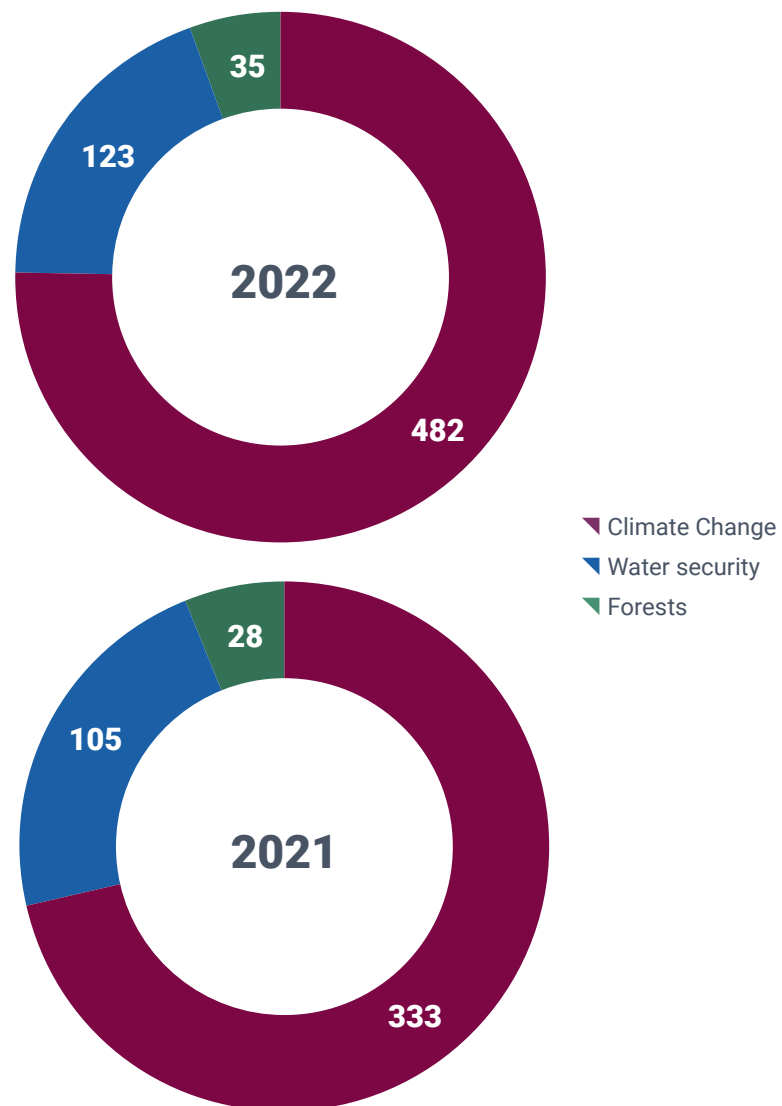
<sup>2</sup> Estoque, R., et al. (2019). The future of Southeast Asia's forests. [The future of Southeast Asia's forests | Nature Communications](#)

<sup>3</sup> United Nations, Economic and Social Commission for Asia and the Pacific (ESCAP). (2020). The Disaster Riskscape across South-East Asia: Key Takeaways for Stakeholders. ST/ESCAP/2885.

# Disclosure Snapshot

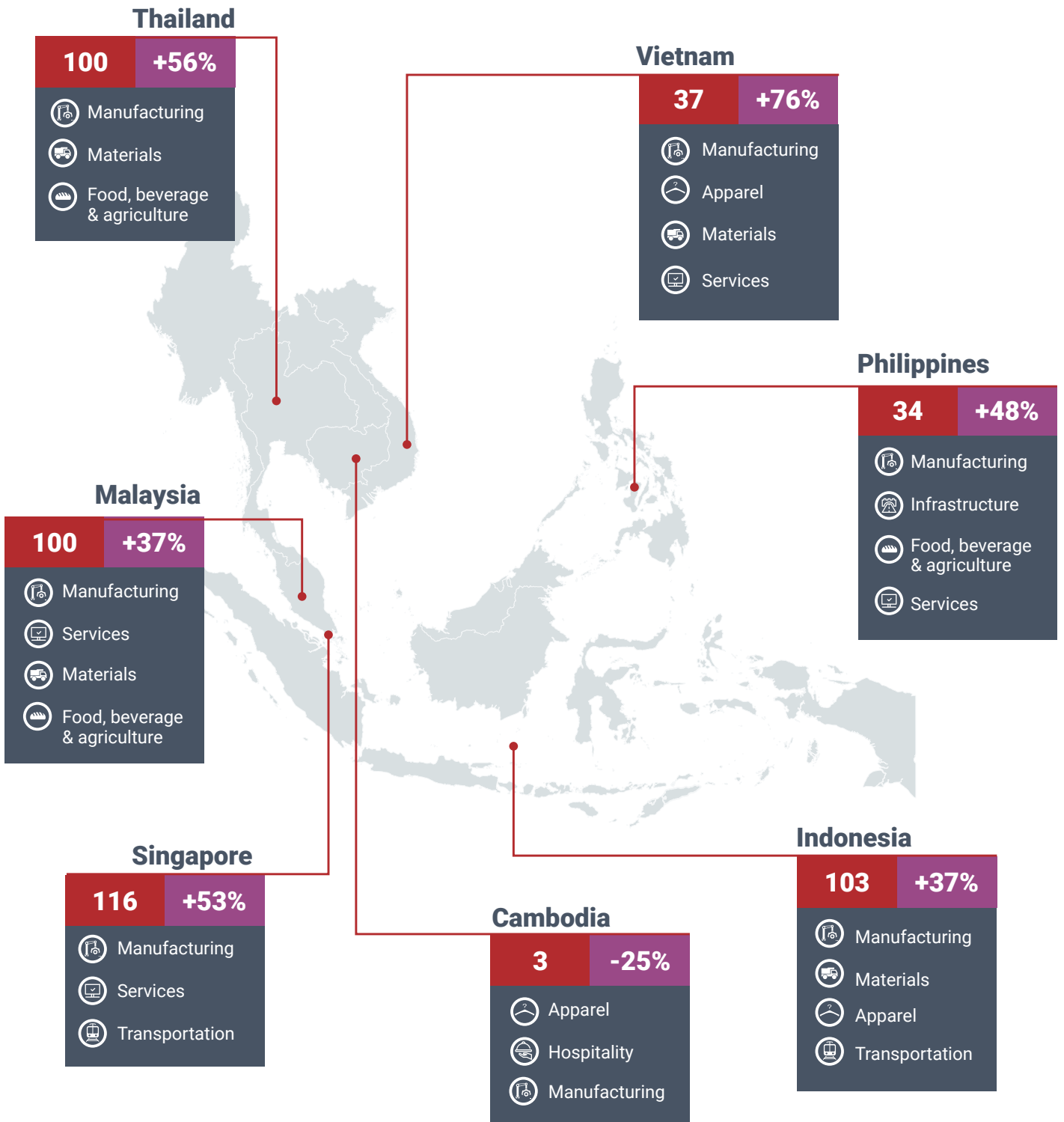
Disclosure plays a major role in helping different stakeholders of nature and our environment see the full picture of what is happening and take the necessary actions for an effective response. They also highlight leaders and laggards in different sectors and markets, allowing for more targeted policy and engagement efforts. In this section, we summarize the key statistics observed from disclosures of over 400 companies in Southeast Asia and the gaps that society urgently needs to fill. We hope this will catalyze action in the different levels of environmental governance and action in the region.

## Trends in Disclosure Numbers by Questionnaire Theme<sup>4</sup>



<sup>4</sup> 35 companies responded to the forests disclosure request, and 28 companies disclosed actions on at least one forest risk commodity.

## 2022 Southeast Asia Disclosures by Country<sup>5</sup>



▼ Disclosure in 2022  
 ▼ Change from previous year  
 ▼ Top disclosing sectors

<sup>5</sup> This report covers Singapore, Indonesia, Malaysia, Thailand, Vietnam, Philippines and Cambodia. Brunei, Myanmar, Timor-Leste and Laos are not included in this report.

# Disclosure Insights

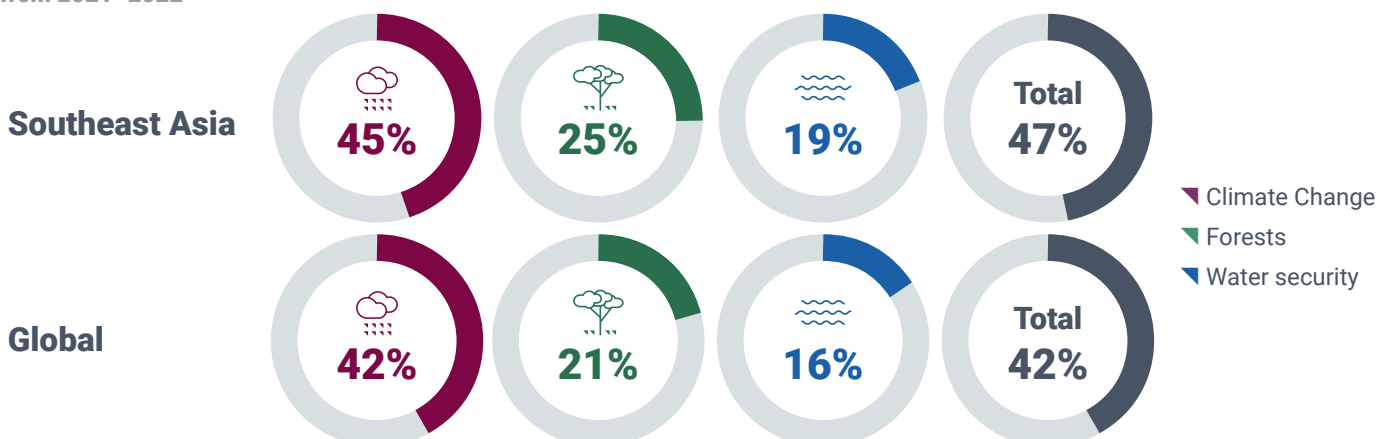
Beyond the world benefitting from the power of disclosure, businesses also benefit. Southeast Asia is at the center of these opportunities. Environmental action can offer businesses a competitive advantage in transactions and opportunities for growth, in turn generating jobs and economic value for their countries and better livelihoods for the people. There is a new wave of responsible investors that are also careful about greenwashing, and a transparent, comprehensive and consistent disclosure framework helps to mitigate those risks. Disclosures not only help to assuage the concerns of investors and other stakeholders, but also provide comparative best practices that businesses can apply to their own strategies to achieve greater sustainability and an enhanced reputation.

In this section, we highlight key insights and metrics from companies' 2022 disclosures that investors, buyers, regulators and other stakeholders can use to understand the current environmental maturity of businesses in Southeast Asia, where opportunities and successes lie, and where we are not doing enough.

## 1 There is a growing momentum for regulatory environmental disclosure with a focus on climate change in Southeast Asia. Forest and water-themed disclosures are lagging.

- ▼ 47% increase in companies disclosing to CDP in Southeast Asia, compared with an increase of 42% globally.
- ▼ 4% of companies (20) in Southeast Asia made disclosures across climate change, forests, and water security.
- ▼ The number of companies disclosing, and taking action, on forests is still far from the critical mass required to achieve global environmental targets.

Figure 1: Percentage increase in disclosures in Southeast Asia compared with disclosures across all three environmental themes from 2021–2022

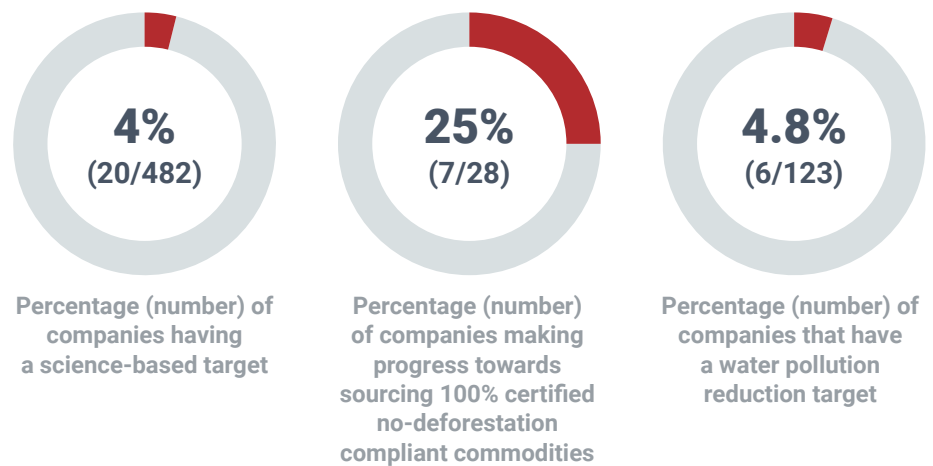


## 2 Only five Southeast Asian companies made it to CDP's A list in 2022

- Four of the five companies are headquartered in Thailand, one in Singapore.
- Four of the five companies were on the Climate Change A list. Three companies were on the Water Security A List.

## 3 Companies in Southeast Asia are still short of ambition in making environmental commitments.

Figure 2: Percentage of companies setting science-based targets, no-deforestation-linked targets and water pollution reduction targets



## 4 Great costs to be borne by Southeast Asia from environmental inaction

- Southeast Asian companies estimate the financial impacts of risks across climate change, forests, and water security to far exceed the cost of responding to these risks.

Figure 3: Ratios of estimates of financial impacts of environmental risks to the costs of responding across environmental themes




	Combined financial impacts/Costs of responding
Climate risks	22 times less
Forests risks	10 times less
Water risks	8 times less



## 5 Supply chain engagement is still regarded only as a 'good-to-have' instead of a 'need-to-have' in Southeast Asia

- Environmental impacts of the supply chain remain significantly underestimated by Southeast Asian companies

Figure 4: Percentage of disclosing companies engaging their suppliers and providing financial incentives

	Percentage of responders engaging their suppliers	Number of responders that provide financial incentives to suppliers
 Climate Change	31%	1
 Forests	19%	2
 Water Security	18%	3





# Disclosure Themes – the Nature Nexus

**In the following sub-sections, we discuss the specific trends around each of the three environmental themes that currently comprise nature - climate change, forests and water security. It is already a commonly understood position that these elements are just different representations of the same environmental stewardship issue, and are, therefore, part of the same issue. Even as we seek further action on climate disclosures and science-based target (SBT) commitments, we implore greater action on forests and water, particularly in Southeast Asia. If what we are doing to tackle climate change is not enough, we are doing even less to protect the precious forest and water resources surrounding us. So too the other environmental themes not yet included in our disclosure frameworks. This must change.**



## Climate change

Despite being one of the most vulnerable regions to the impact of global warming, Southeast Asia remains heavily dependent on fossil fuels. While some countries in the region have set national targets to reach net zero by 2050 in response to the 1.5°C target of the Paris Agreement, there are outliers. Indonesia has committed to net zero by 2060 and Thailand by 2065. The Philippines has not yet committed to any net zero target. The region's energy demand is also expected to increase by around 3% a year between 2030 and 2050<sup>6</sup>. Decarbonizing is a big challenge for Southeast Asia, which has to balance economic growth with sustainable aims. Collective actions at national and organizational levels in Southeast Asia are vitally important to drive the necessary change.

## Governance

Governance is key to managing climate-related issues and driving values from key decision makers. In the face of a growing trend of climate-related disclosure rules and climate litigation cases in Southeast Asia, climate issues have not only become compliance issues that require board-level oversight but are also regarded as risk issues that result in financial losses. It is encouraging to see that 70% of Southeast Asian disclosing companies having board-level oversight of climate-related issues. However, there remains limited board competence and few incentives for climate-related management.

<sup>6</sup> International Energy Agency. (2022). Southeast Asia Energy Outlook 2022. <https://www.iea.org/reports/southeast-asia-energy-outlook-2022>.

- ▼ 70% have board-level oversight of climate-related issues within the organization.
- ▼ 27% have at least one board member with competence on climate-related issues.
- ▼ 33% provided incentives for the management of climate-related issues.

### Strategy

Integrating climate-related issues into business strategy sets the tone for organizations in addressing climate challenges. It can be tangibly demonstrated by developing a credible, 1.5°C-aligned climate transition plan, which should be integrated into the overall business strategy. In 2022, only 18% of responders have a 1.5°C-aligned climate transition plan while only 18% use climate scenario analyses<sup>7</sup>.

Shifting away from fossil fuels is expected to be one of the key strategies in achieving net-zero in Southeast Asia. Indonesia, Philippines and Vietnam are the most coal-reliant countries in the region, with a high growth rate in greenhouse gas (GHG) emissions, while Thailand and Malaysia have modest growth of emissions. Although decarbonization strategies adopted by companies are sector-specific, utilization of renewable energy is still considered as one of the key strategies to be adopted by Southeast Asian companies.

- ▼ 18% of companies have a transition plan which aligns with a 1.5°C world.
- ▼ 18% of companies use climate scenario analysis to inform their business strategies.
- ▼ 31% have sourced renewable energy.
- ▼ 5% identify spending/revenue that is aligned with their organization's climate transition.

<sup>7</sup> CDP also released a global report on climate transition plan "Are Companies Developing Credible Climate Transition Plans?" in February 2023.

## Risk management

As one of the most vulnerable regions to climate change, Southeast Asia, with long coastlines and heavily populated low-lying areas, faces large and varying extents of impacts posed by climate change. Floods, loss of biodiversity and sea level rise are perceived as the top three climate change impacts in the region<sup>8</sup>. According to the Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report (AR6), flooding has resulted in a significant increase in the average annual economic losses in coastal cities, especially in South and Southeast Asia between 2005 and 2050<sup>9</sup>. Together with transition risks, it is estimated that the region will suffer from an economic loss of around US\$28 trillion over the next 50 years due to inaction on climate change<sup>10</sup>.

In addition, while Southeast Asian disclosing companies perceived that the financial impacts of climate inaction significantly outweigh the cost of responding to climate risks, less than half have identified climate risks and opportunities with substantive financial or strategic impacts on their business. This number suggests an inadequate understanding of the impacts posed by climate risks and opportunities among Southeast Asian companies.

- ▼ 65% of companies have a process for identifying, assessing and responding to climate-related risks and opportunities.
- ▼ Among those with climate risk mechanisms in place, 82% have integrated climate risk management processes into multi-disciplinary company-wide risks management processes, while 18% have a standalone climate-related risk management process.
- ▼ 42% of companies identified climate risks and opportunities with substantive financial or strategic impacts on their business.

<sup>8</sup> Seah, S. et al. (2021). [Southeast Asia Climate Outlook: 2021 Survey Report](#)

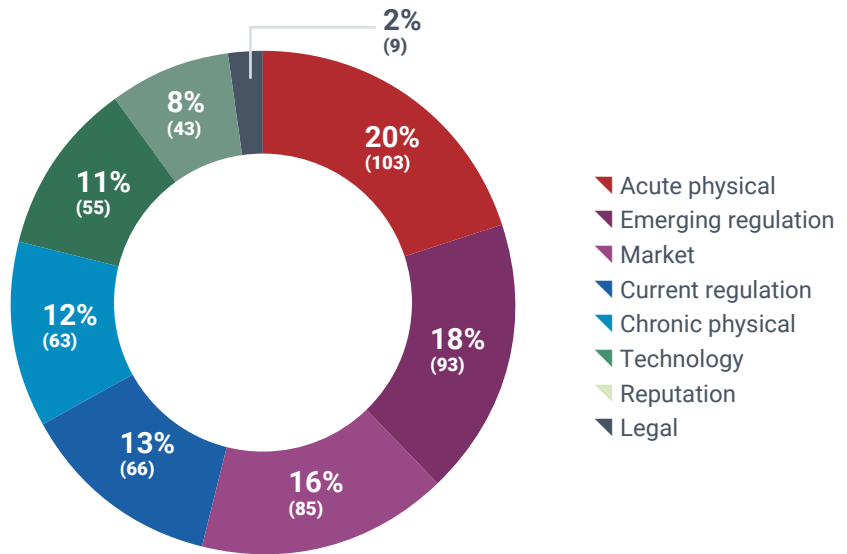
<sup>9</sup> IPCC. (2022). Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

<sup>10</sup> Deloitte Economics Institute. (2021). Asia Pacific's turning point: How climate action can drive our economic future



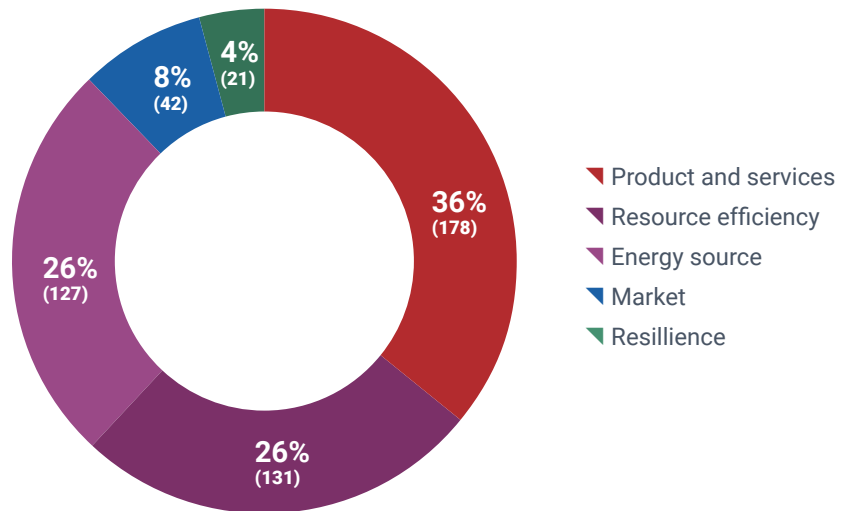
**The top three climate risks identified are acute physical risk, emerging regulation risk and market risk.**

Figure 5: Types of climate risks identified by 2022 disclosing companies in Southeast Asia



**The top three climate opportunities identified are products and services, resource efficiency and diversifying of energy sources.**

Figure 6: Climate opportunities identified by 2022 disclosing companies in Southeast Asia



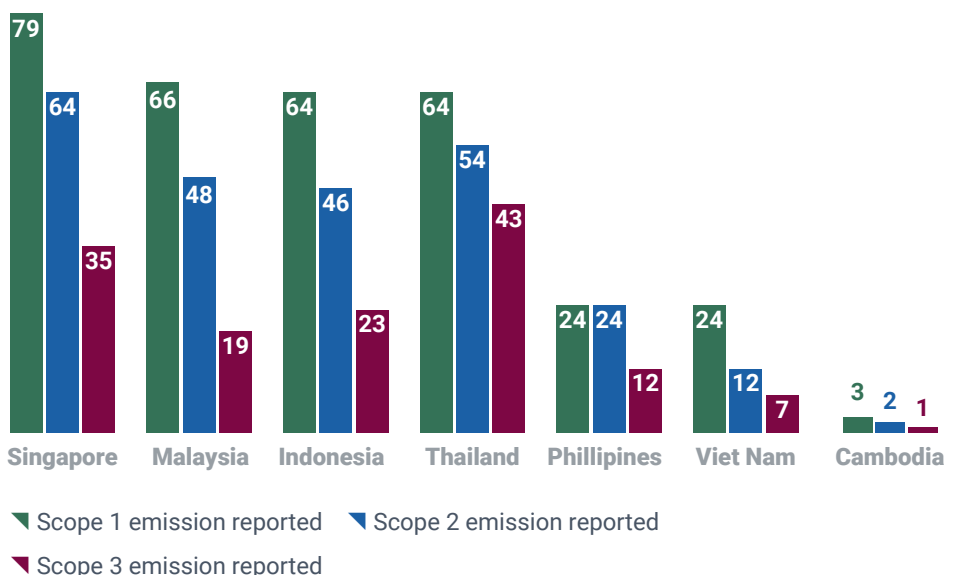
## Metrics and targets

### Emissions

GHG emissions data is undoubtedly crucial in informing stakeholders' decisions on climate-related issues. Governments may introduce stringent environmental policies to meet their net-zero commitments. Investors need to have ambition to do the right thing beyond investment returns. From reported data, the percentage of Southeast Asian companies reporting GHG emissions has increased over the years. However, the percentage of reporting in Southeast Asia remains low, especially for Scope 3 emissions and when compared to other developed markets. Verification of GHG emissions, even for Scope 1 and 2 emissions, has also yet to become a common practice, which casts doubt on the credibility and comprehensiveness of the data organizations reported. Jointly, these would create difficulties in assessing and monitoring the progress of net-zero targets, and we are hopeful of improvements in the future.

- ▼ 68% reported Scope 1 emissions
- ▼ 52% reported Scope 2 emissions
- ▼ 29% reported at least one category of Scope 3 emissions
- ▼ 18% verified Scope 1 emissions
- ▼ 17% verified Scope 2 emissions
- ▼ 12% verified at least one category of Scope 3 emissions

**Figure 7: Country-by-country breakdown of 2022 disclosing companies in Southeast Asia which reported Scope 1, 2 and 3 emissions**

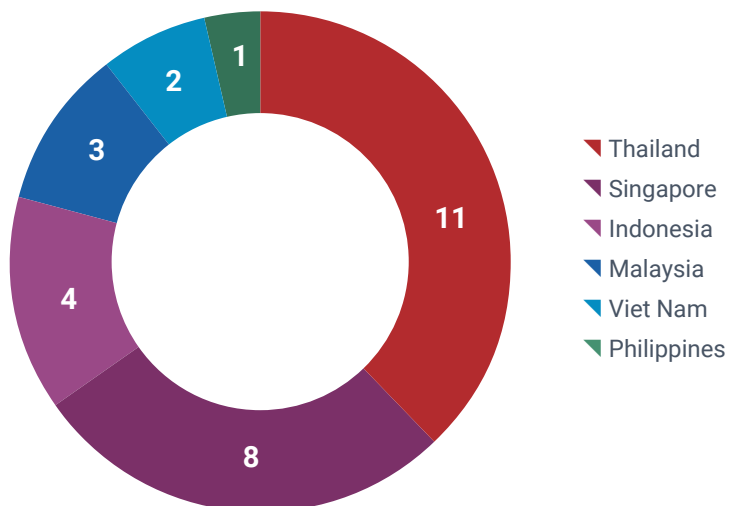


## Targets

Targets signal ambition and a sign of transition preparedness and maturity. Currently, from reported data, only around half of the companies reported having an active emission reduction target. In addition, a very limited number of companies had their targets reviewed or approved by Science-Based Targets initiative (SBTi). Setting SBTs can demonstrate the robustness and credibility of a company's emission reduction targets, and is considered best practice in target-setting.

- ▼ 49% of companies have an active emissions target in the reporting year.
- ▼ 6% of companies have their target reviewed or approved by SBTi.

**Figure 8: Country-by-country breakdown of 2022 disclosing companies in Southeast Asia which had their target reviewed or approved by SBTi**





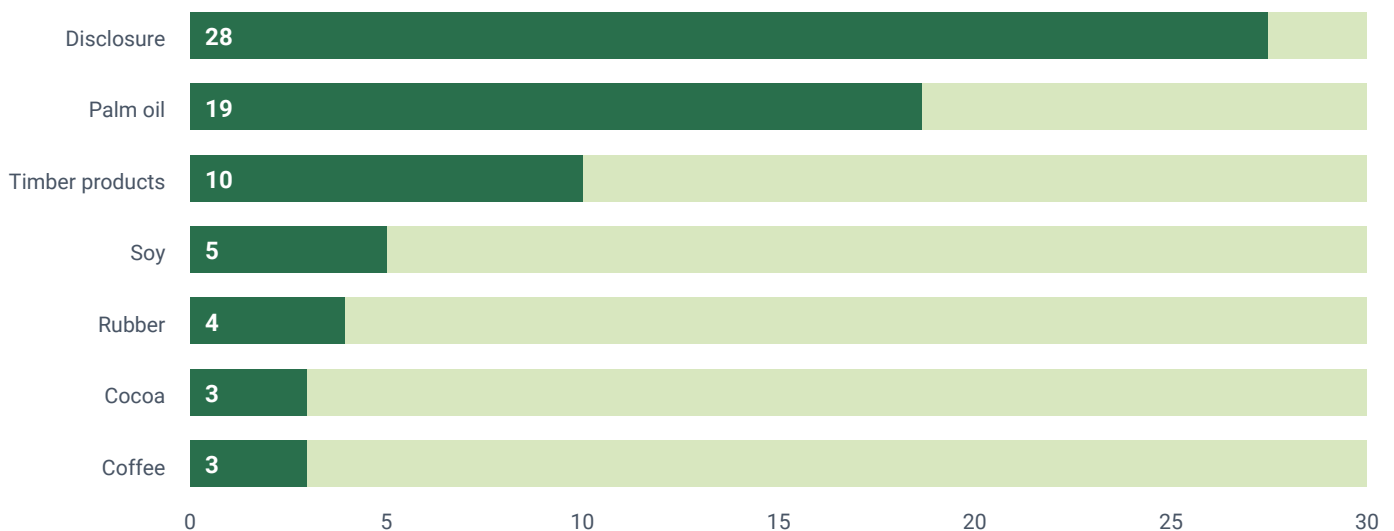


## Forests

Southeast Asia hosts one of the world’s largest tropical forests and is a key biodiversity hotspot<sup>11</sup>. Despite this, a forest area larger than Germany was lost between 1990–2020<sup>12</sup> due to the permanent conversion of forest into farmland for several commodities such as palm oil, rubber, sugar and pulpwood<sup>13</sup>.

There are signs of positive change. For example, increased commitment and favorable climatic conditions have resulted in a decline in primary forest loss over the last five years in Indonesia. Yet, it will not be enough. To achieve the global no-deforestation commitment by 2030, robust actions must be accelerated. In addition, net-zero commitments will not be achieved without halting deforestation and land conversion. Up to 68% of Scope 3 emissions of consumer goods companies are attributable to land use change<sup>14,15</sup>. This is why the Science Based Target initiative for Forest, Land use, and Agriculture (SBTi FLAG) has set prerequisites for the adoption of no-deforestation/ no-conversion commitments as part of target-setting<sup>16</sup>.

**Figure 9: Number of 2022 disclosing companies in Southeast Asia reporting on different forest risk commodity types**



<sup>11</sup> Hughes, A. (2017). Understanding the drivers of Southeast Asian biodiversity loss. <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.1624>

<sup>12</sup> FAO. Global Forest Resources Assessment. <https://fra-platform.herokuapp.com/>

<sup>13</sup> Mongabay. (2015). Industrial concession causing massive deforestation in Cambodia. <https://news.mongabay.com/2015/08/land-concessions-responsible-for-large-scale-deforestation-in-cambodia/>

<sup>14</sup> Hershey. (2021). 2021 ESG Report. [https://www.thehersheycompany.com/content/dam/hershey-corporate/documents/pdf/hershey\\_2021\\_esg\\_report.pdf](https://www.thehersheycompany.com/content/dam/hershey-corporate/documents/pdf/hershey_2021_esg_report.pdf)

<sup>15</sup> Nestle. (2021). Nestle net zero roadmap. <https://www.nestle.com/sites/default/files/2020-12/nestle-net-zero-roadmap-en.pdf>

<sup>16</sup> Science Based Targets. (2022). The SBTi’s FLAG Guidance: A groundbreaking moment for addressing land-related emissions. <https://sciencebasedtargets.org/blog/the-sbtis-flag-guidance-a-groundbreaking-moment-for-addressing-land-related-emissions#:~:text=Deforestation%20is%20responsible%20for%2010,without%20stopping%20all%20land%20conversion>

### Forest governance

Setting and implementing comprehensive time-bound no-deforestation commitments is the first step in building ethical commodity supply chains to safeguard forests. Such commitments demonstrate a company's appreciation of forest-related issues and show a willingness to act. Disclosing companies in 2022 are showing encouraging signs, although commitments and the comprehensiveness of policies need to be strengthened.

- 79% have forest-related policies, but only 43% of companies reported publicly available general or commodity-specific company-wide no-deforestation policies with the inclusion of social and remedial elements.
- 71% have public forest-related commitments, but only 4% reported timebound quantifiable no-deforestation/no-conversion commitments that are aligned with the best practices.<sup>17</sup>

### Managing forest-related risks

Forest-related issues have gained recognition globally. In 2021, 145 countries, including 20 Asia Pacific countries, committed to halting and reversing deforestation and land degradation by 2030<sup>18</sup>. Under the Convention on Biodiversity (CBD), nearly 200 countries guaranteed the protection of at least 30% of nature on our planet by 2030<sup>19</sup>. This is encouraging, although from a company perspective, these policy changes translate to financial risks given the potential stranding of assets and market access risks.

- 91% of companies implemented forest-related risk assessments, but only 4% reported comprehensive risk assessment following best practices.<sup>20</sup>

<sup>17</sup> Companies with a public no-deforestation (no-conversion of natural ecosystems, zero gross deforestation/no-deforestation) forests-related commitment with social elements, remediation and restoration that is timebound, set to be completed by 2030, includes a cut-off date before 2020, with Free, Prior, Informed Consent (FPIC), covers 100% of production/consumption and applies to all relevant operations. Includes commitments to operations in accordance with the UN Declaration on the Rights of Indigenous Peoples, remediate any adverse impacts on indigenous people and local communities, adoption of the UN International Labour Organization principles, resolution of complaints and conflicts through an open, transparent and consultative process, recognition of legal and customary land tenure rights, restoration and compensation to address past deforestation and/or conversion.

<sup>18</sup> UN Climate Change Conference. (2021). Glasgow leaders' declaration on forests and land use. <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>

<sup>19</sup> Convention on Biological Diversity. (2022). Kunming-Montreal Global biodiversity framework. Draft decision submitted by the President. [https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf?utm\\_campaign=COP15+daily+briefing++19+Dec&utm\\_medium=email&utm\\_source=autopilot](https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf?utm_campaign=COP15+daily+briefing++19+Dec&utm_medium=email&utm_source=autopilot)

<sup>20</sup> Companies who conduct a comprehensive forest-related risk assessment: full coverage of relevant operations with risks beyond six years considered and availability of forest risk commodities, quality of forest risk commodities, impact of activity on the status of ecosystems and habitats, social impacts, local communities are included in the assessment.

**In Southeast Asia, the cost of responding to forest-related risks was estimated at only US\$223.5 million while the potential financial impacts was valued at US\$2.26 billion.**

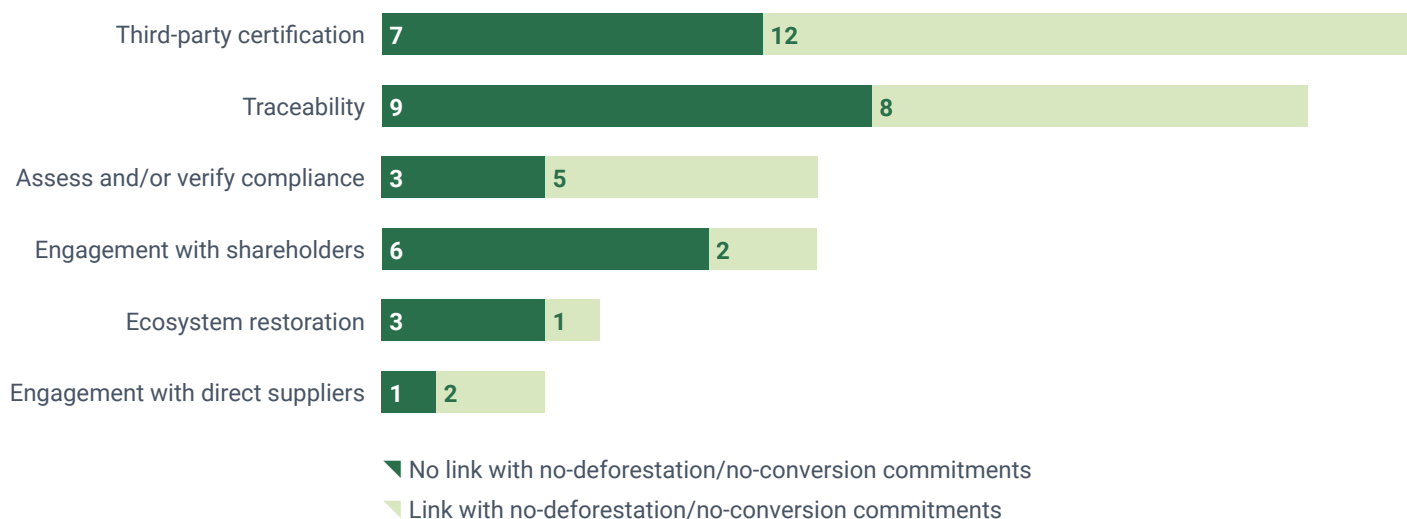
- 82% identified at least one risk that could have a substantial impact on their business.
- 39% reported forest-related risks with a value of up to **US\$2.26 billion**, but only a fraction of companies disclosed financial information, and it was observed that the potential financial impact is likely underestimated. On the other hand, the cost of responding to the identified risks was estimated at only **US\$223.5 million**.

### Forest-related targets and implementation

Targets are crucial in ensuring the effective implementation of policies and commitments. Regular reporting of progress against set targets allows companies, investors and other stakeholders to track a company's efforts in establishing deforestation and conversion-free supply chains.

- 79% of companies reported forest-related targets and 57% link their targets with a no-deforestation/no-conversion commitment, whether related to traceability, certification, compliance, supplier engagement or ecosystem restoration.
- Only 25% of companies have goals to source 100% no-deforestation certified commodities by 2030 were making progress on this target, while 36% reported making progress on their traceability targets.<sup>21</sup>

Figure 10: Type of forest-related target reported by 2022 disclosing companies in Southeast Asia



<sup>21</sup> These involve tracing 100% of at least one commodity supply back to the municipality or equivalent level at a minimum.



### Cascading actions in commodity supply chains

Achieving adequate traceability is an essential component of establishing and managing an ethical supply chain. Traceability for palm oil for example, involves the tracing of 100% of supply back to the municipality or equivalent level, at a minimum. It is also encouraged for companies to trace supplies along production and supply lines where performance is known. Certification schemes that have robust no-deforestation/no-conversion criteria and include chain-of-custody systems where volumes are physically certified to point of origin may also be used to achieve appropriate traceability<sup>22</sup>.

- ▼ 86% of companies have a traceability system for at least one commodity, but only 54% report that they can trace at least 90% of their production/consumption back to at least municipality or equivalent with no exclusions.
- ▼ 68% use certification for some of their commodity volumes, but only 4% of companies report that at least 90% of one of their commodities is certified by a certification scheme that provides assurance of no-deforestation/ no-conversion.

Forest-positive and net-zero commitments are also gaining momentum. To fulfill these commitments, companies must reduce their impacts on forests and land by adequately protecting forests, natural ecosystems, and local communities as part of their efforts.

- ▼ 68% of processors, traders, manufacturers and retailers engage with their direct suppliers to drive action on forest-related issues. While among traders, manufacturers and retailers, 64% of companies reported engagement beyond the first-tier suppliers.
- ▼ 74% of companies work with smallholders, but only 48% provide financial and technical assistance to support smallholders to transition to sustainable commodity production.

<sup>22</sup> Accountability Framework. Traceability. <https://accountability-framework.org/the-framework/topics/traceability/>

### Collective actions on halting deforestation

The establishment of landscape/jurisdictional approaches<sup>23</sup> in the production ecosystem offers opportunities for companies to avoid deforestation, reduce emissions from land-use change, as well as improve water stewardship in the region.

- ▼ 18 companies participate in these approaches with the area of engagement mainly across Indonesia (eg Riau Province, Aceh Province, West Kalimantan Province) and Malaysia (eg Johor and Sabah)

Reducing deforestation and restoring degraded land can provide up to a third of the mitigation potential required by 2030 to achieve Paris Agreement targets<sup>24</sup>. Despite this, the quantity and quality of actions on forests among Southeast Asian companies are still far from sufficient. Companies must accelerate efforts to safeguard forests and biodiversity. This can be achieved through setting and strengthening No Deforestation, No Expansion on Peat and No Exploitation (NDPE) policies and commitments, increasing ambitions through target setting, and ensuring robust implementation of actions. In taking action to protect and restore forests, companies will not only enhance their sustainability commitments but will be supporting biodiversity, climate action and local communities. Through enhanced transparency and action, there can be financial, environmental, and social benefits for all.

<sup>23</sup> CDP. (2021). [Collective Action: Corporate Engagement in Landscape and Jurisdictional Approaches](#)

<sup>24</sup> World Economic Forum. 2022. [Forests for Climate: Scaling up Forest Conservation to Reach Net Zero.](https://www3.weforum.org/docs/WEF_Forests_for_Climate_2022.pdf)





**In Southeast Asia, Indonesia is the world's 9th largest groundwater abstractor<sup>29</sup>. It's capital city, Jakarta, is the world's fastest sinking city due to sea-level rise, construction on land prone to subsidence and reliance on pumping groundwater as a water supply. 40% of Jakarta lies below sea level<sup>30</sup>.**

## **Water security**

Southeast Asia is particularly vulnerable to climate change, with a large range of impacts falling under water-related impacts, including sea level rise, floods, storms, tropical cyclones, and drought. Countries across the region already rank as the most susceptible to natural disasters, which cost the region more than US\$86 billion each year<sup>25</sup>, and forced 69.2 million people away from their homes between 2010 and 2021<sup>26</sup>.

According to the IPCC Special Report on the Impacts of 1.5°C of Global Warming (2018), Southeast Asia faces the highest risk of coastal flooding from sea level rise in the world, as well as increasing frequency of heavy precipitation, runoff and high flows<sup>27</sup>.

Additionally, human-driven activities have significantly exacerbated water risks, which had knock-on impacts on nature and livelihoods. For instance, the construction of large dams along the Mekong River have resulted in unseasonal floods and droughts and declining fish stocks, affecting 60 million people across Cambodia, Laos, Myanmar, Thailand, and Vietnam<sup>28</sup>.

As climate change and human activities continue to threaten water security in Southeast Asia, it is imperative that the private sector makes water stewardship central to its business strategies - to safeguard natural ecosystems, societies, and economic growth.

<sup>25</sup> United Nations, Economic and Social Commission for Asia and the Pacific (ESCAP). (2020). The Disaster Riskscape across South-East Asia: Key Takeaways for Stakeholders. ST/ESCAP/2885.

<sup>26</sup> Asian Development Bank. (2022). [Disaster Displacement in Asia and the Pacific: A Business Case for Investment in Prevention and Solutions.](#)

<sup>27</sup> Cambridge University Press. (2022). [Global Warming of 1.5°C IPCC Special Report on Impacts of Global Warming of 1.5°C above Pre-industrial Levels in Context of Strengthening Response to Climate Change, Sustainable Development, and Efforts to Eradicate Poverty, pp. 175 - 312](#)

<sup>28</sup> The Third Pole. (2021). What are the impacts of dams on the Mekong river?. <https://www.thethirdpole.net/en/energy/what-are-the-impacts-of-dams-on-the-mekong-river/>

<sup>29</sup> United Nations. (2022). The United Nations World Water Development Report 2022: Groundwater: Making the invisible visible. <https://www.unwater.org/publications/un-world-water-development-report-2022>

<sup>30</sup> Adi Renaldi. (2022). Indonesia's giant capital city is sinking. Can the government's plan save it?. <https://www.nationalgeographic.com/environment/article/indonesias-giant-capital-city-is-sinking-can-the-governments-plan-save-it>



## Policy and governance

To achieve a water-secure and nature-positive future, government, finance, and corporate leaders need stronger commitments towards water targets by implementing appropriate policy mechanisms and directing capital away from water-intensive and polluting business activities. Mandating water disclosure can help stakeholders make better informed decisions to invest in and support sustainable technologies and practices that promote water stewardship while generating economic growth. Like the normalization of climate disclosure, the momentum towards mandatory water disclosure is growing worldwide, with policy actors in Southeast Asia also showing interest in incorporating information on water into mandatory and voluntary disclosure initiatives<sup>31</sup>.

Leading the way is the Philippines, having introduced the most comprehensive mandatory water disclosure requirements in the region. In 2019, the Philippine Securities and Exchange Commission further defined disclosure requirements in their Sustainability Reporting Guidelines for Listed Companies, covering metrics of water use, primary business impacts in direct operations and supply chains, and policies to manage impacts, risks, and opportunities. Malaysia, Singapore, and Indonesia have also introduced, or are in the process of introducing water metrics into their environmental disclosure requirements.

- CDP has been operating the world's only global corporate water disclosure mechanism since 2009 and represents the gold standard in corporate water disclosure frameworks.
- Corporate disclosure of water data in Southeast Asia has increased by almost four-fold in the past five years and shows promising signs of continued growth in the years to come as regulatory requirements take root.

<sup>31</sup> CDP's recent policy brief "[Setting the high-water mark for mandatory disclosure](#)" contains examples in a comprehensive analysis of global water reporting regimes as well as a set of recommendations for developing a robust water disclosure framework.

### **Risk management**

With the certainty of water risks, businesses and investors can look to adopting water risk assessments to identify, measure and make strategic decisions to mitigate and minimise their risk exposure. Data from disclosing companies in 2022 shows that companies are increasingly recognizing the physical, regulatory, and reputational water-related risks inherent in their operations, and the costs they face if left unchecked.

- ▼ 69% of companies have undertaken water-related risks assessments, up from 60% in the previous year.
- ▼ 29% reported water-related risks with an estimated value of up to US\$1.33 billion, over eight times higher than the cost of addressing these risks at US\$157 million.
- ▼ Acute physical risks are the top risk type identified, in terms of both frequency and cumulative potential financial impact, featuring in 67% of responses with a total estimated impact of US\$1.21 billion.

With the high financial impact, the business case for undertaking water risk assessments and responding to the identified risks is clear. Companies need to act now or risk paying significantly more later.

### **Metrics and targets – a spotlight on pollution**

In 2022, disclosing companies in Southeast Asia showed encouraging signs of increasingly integrating water stewardship into their business priorities, with the majority having water-related targets monitored at the corporate level.

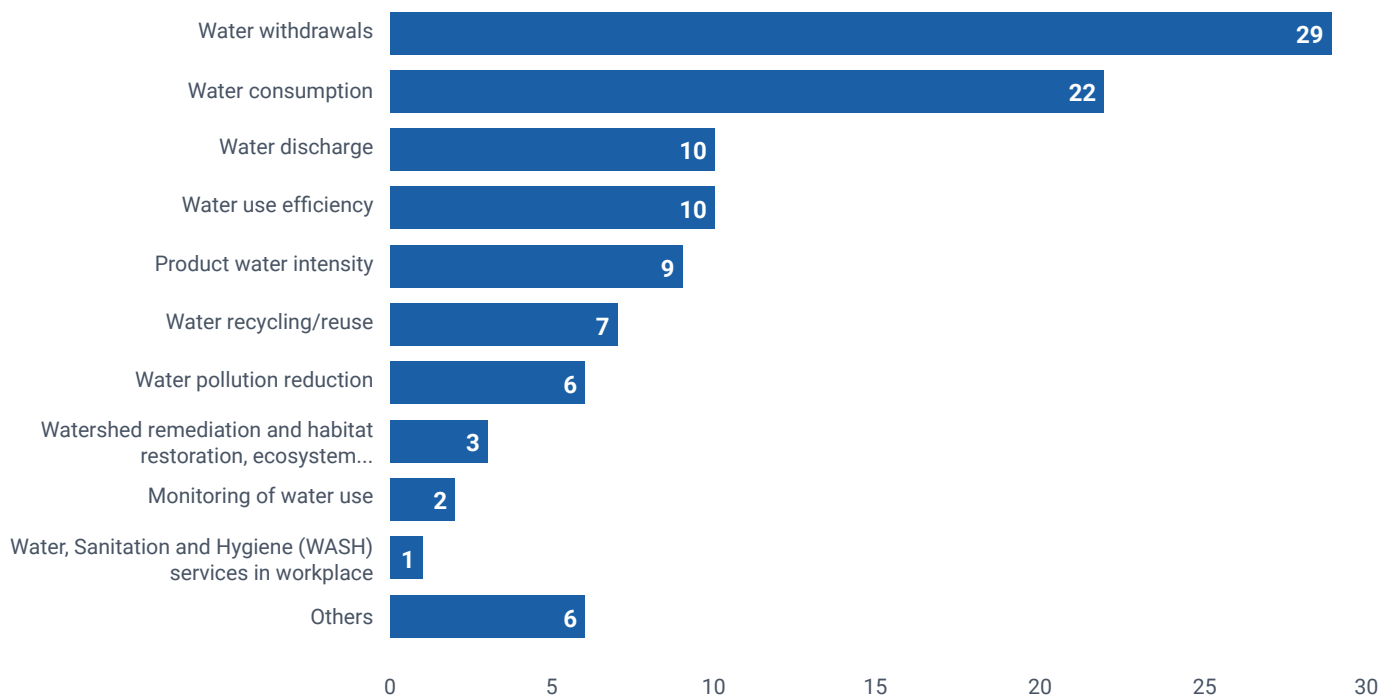
Globally, corporate efforts to address water issues have been largely focused on water quantities, where targets relating to water withdrawals and consumption were most frequently reported. There is, however, a lack of awareness and action amongst corporates of the importance of water quality and the need to tackle water pollution.

- ▼ 61% of companies have water-related targets monitored at a corporate level, up from 59% in the previous year.
- ▼ Only six companies (or less than 5% of companies) have targets relating to pollution reduction.
- ▼ 40% do not conduct any monitoring of water discharge quality based on standard effluent parameters.

Evidence is already on hand. The World Bank’s 2019 report on global water quality highlighted that poor water quality, largely a result of industrial activity, threatens economic growth, harms public health, and threatens food security. Many of the impacts from emerging pollutants are unknown and could potentially pose a greater hazard than anticipated to our already dwindling water resources<sup>32</sup>. Southeast Asia has been identified as a hotspot for eutrophication due to excessive fertilizer use in the food and beverage industry, particularly in Indonesia where palm oil production has increased 25-fold over the past 50 years.

The problems are further illustrated in Figure 12, where critically polluting sectors, such as food, beverage and agriculture, fossil fuels, manufacturing and materials, are shown to have inadequate effluent monitoring practices.

**Figure 11: Type of water-related targets being monitored at the corporate level across 2022 disclosing companies in Southeast Asia**



Corporates in Southeast Asia need to do more to address water quality issues and look beyond a “business-as-usual” approach should they aspire to ensure continued growth in an era of increasingly threatened water resources. The loss or pollution of these water resources will have an impact on nature. Companies should take greater strides to leverage opportunities to ensure effective and efficient wastewater treatment, and to design out or minimize pollutants in their products.

<sup>32</sup> The World Bank. (2019). Quality Unknown: The Invisible Water Crisis. <https://www.worldbank.org/en/news/feature/2019/08/20/quality-unknown>

Figure 12: Number of 2022 disclosing companies in Southeast Asia not monitoring standard effluent parameters in water discharges

Primary Industry	Water Impact Index – Pollution Banding	Activities Included	Companies Not Monitoring Standard Effluent Parameters in Water Discharges (om Southeast Asia)
 <b>Food, beverage &amp; agriculture</b>	<b>Critical</b>	Beverages, Food processing, Palm oil processing	4
 <b>Fossil Fuels</b>	<b>Critical</b>	Oil and gas extraction	2
 <b>Infrastructure</b>	<b>High</b>	Electricity networks	1
 <b>Manufacturing</b>	<b>Very High</b>	Plastic, rubber and paper products, Fabricated metal components, Electronic components and equipment, Computer hardware, Containers and packaging, Semiconductors, Shipbuilding	31
 <b>Materials</b>	<b>Critical</b>	Plastics, Aluminum, Pulp and paper, Chemicals	5
 <b>Retail</b>	<b>Medium</b>	Department stores	1
 <b>Services</b>	<b>Low/Not relevant</b>	Engineering services, Telecommunications, REIT	3
 <b>Transportation services</b>	<b>Medium</b>	Marine freight, Logistics	2
			<b>Total: 49</b> (40% of disclosing companies)



## Summary of disclosures across nature themes

Aspect	Climate Change	Forests	Water Security
<b>Governance</b>	<ol style="list-style-type: none"> <li><b>1</b> 70% have board-level oversight of climate-related issues</li> <li><b>2</b> 27% have at least one board member with competence on climate-related issues</li> <li><b>3</b> 33% provide incentives for the management of climate-related issues</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 91% have board-level oversight of forests-related issues</li> <li><b>2</b> 39% have at least one board member with competence on forests-related issues</li> <li><b>3</b> 71% have a publicly available policy that includes forests-related issues</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 76% have board-level oversight of water-related issues</li> <li><b>2</b> 25% have at least one board member with competence on water-related issues</li> <li><b>3</b> 24% provide incentives for the management of water-related issues</li> <li><b>4</b> 40% have a documented water policy that is publicly available</li> </ol>
<b>Strategy</b>	<ol style="list-style-type: none"> <li><b>1</b> 18% have a transition plan which aligns with a 1.5°C future</li> <li><b>2</b> 18% use scenario analysis to inform their business strategies</li> <li><b>3</b> 5% identify spending/revenue that is aligned with their organization's climate transition</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 68% integrated forests-related issues into financial planning, long-term business objectives and strategy for long-term objectives</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 55% integrated water-related issues into their long-term business objectives</li> <li><b>2</b> 20% use scenario analysis to inform their business strategy</li> <li><b>3</b> 20% have low water impact products and services</li> </ol>
<b>Risk Management</b>	<ol style="list-style-type: none"> <li><b>1</b> 65% have a process for identifying, assessing and responding to climate-related risks and opportunities</li> <li><b>2</b> 42% have identified climate-related risks with the potential to have a substantial financial or strategic impact on their business</li> <li><b>3</b> 42% have identified climate-related opportunities with the potential to have a substantial financial or strategic impact on their business</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 91% undertake forest-related risk assessments</li> <li><b>2</b> 82% have identified forests-related risks with the potential to have a substantial financial or strategic impact on business</li> <li><b>3</b> 71% have identified forest-related opportunities with the potential to have a substantial financial or strategic impact on their business</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 69% undertake water-related risk assessment</li> <li><b>2</b> 50% have identified water-related risks with the potential to have a substantial financial or strategic impact on their business</li> <li><b>3</b> 53% have identified water-related opportunities with the potential to have a substantial financial or strategic impact on their business</li> </ol>
<b>Targets</b>	<ol style="list-style-type: none"> <li><b>1</b> 49% have an active emission target in the reporting year, either intensity or absolute</li> <li><b>2</b> Only 6% have their target reviewed or approved by SBTi</li> <li><b>3</b> Among companies who choose science-based targets in absolute emission targets (both validated by SBTi &amp; self-proclaimed), only 61% are 1.5°C aligned</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 57% have forest-related target(s) linked to no deforestation commitment</li> <li><b>2</b> 29% have traceability target(s) linked to no deforestation commitment</li> <li><b>3</b> 43% have third-party certification target(s) link to no deforestation commitment</li> </ol>	<ol style="list-style-type: none"> <li><b>1</b> 61% have set water-related targets and/or goals that are monitored at the corporate level</li> <li><b>2</b> Less than 5% have water pollution reduction target(s)</li> </ol>

# The Way Forward

▾ ▾

**Whilst many companies and the investors behind them are starting to get their head around climate-related risks, they don't yet appreciate the nature-related risks that many of the industries and companies that they're investing in are exposed to.**

▾ ▾

**David Craig,**

Co-Chair of the Taskforce on Nature-related Financial Disclosures













Progress on action is not just limited by our natural mindsets to resist change. The world lacks both the necessary quantity and quality of data to guide efforts, as well as a comprehensive understanding of how climate and nature action should come together to ensure additionality and reduce the unintended consequences. Environmental disclosure is a necessary step to provide the fuel that drives our action. It provides us with the necessary information to understand the environmental complexities that are present in our human systems, how they are changing, and to highlight where we are not doing enough. CDP's A-listers are leading the charge, but every company has a part to play, whether in striving for a net-zero target, minimizing deforestation or reducing water pollution.









# Appendix

## 2022 Disclosure Number by Industry













### Climate change









Country/ Industry													Grand total
Cambodia	1	0	0	0	1	0	1	0	0	0	0	0	3
Indonesia	13	1	3	9	0	2	22	17	2	7	11	13	100
Malaysia	0	1	6	2	0	4	60	8	1	1	11	4	98
Philippines	1	0	4	0	0	6	7	2	3	3	5	2	33
Singapore	1	0	4	2	1	4	56	3	2	7	23	10	113
Thailand	1	2	10	4	1	3	39	19	3	4	9	3	98
Viet Nam	4	2	0	0	0	0	22	3	0	2	3	1	37
<b>Grand total</b>	<b>21</b>	<b>6</b>	<b>27</b>	<b>17</b>	<b>3</b>	<b>19</b>	<b>207</b>	<b>52</b>	<b>11</b>	<b>24</b>	<b>62</b>	<b>33</b>	<b>482</b>

### Forests

Country/ Industry							Grand total
Indonesia	5	2	0	1	3	0	11
Malaysia	6	0	1	2	0	0	9
Philippines	0	0	1	0	0	1	2
Singapore	4	0	0	1	0	2	7
Thailand	1	1	0	2	1	1	6
<b>Grand total</b>	<b>16</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>35</b>

### Water security

Country/ Industry													Grand total
Indonesia	1	1	2	0	0	0	2	6	2	0	1	0	15
Malaysia	0	1	3	0	0	1	25	3	0	0	1	0	34
Philippines	0	0	1	0	0	4	1	0	1	1	0	1	9
Singapore	0	0	5	0	0	2	15	0	0	1	1	1	25
Thailand	0	0	5	4	1	1	20	6	1	0	0	0	38
Viet Nam	0	0	0	0	0	0	2	0	0	0	0	0	2
<b>Grand total</b>	<b>1</b>	<b>2</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>65</b>	<b>15</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>123</b>

 Apparel 
  Biotech, health care & pharma 
  Food, beverage & agriculture 
  Fossil Fuels 
  Hospitality 
  Infrastructure 
  Manufacturing 
  Materials 
  Power generation 
  Retail 
  Services 
  Transportation



# Contact Us

## Authors

Kelly So  
Erica de Souza  
Rini Setiawati  
Rida Nurafati  
Matthias Ong

With great support from the rest of the CDP Team (Aidan Rowell, Dennis Wan, Maria Tsolaki, Fitriannisa Soegiharto, Dedy Mahardika and Thomas Renaldy)

Special Thanks to South Pole for partnering CDP in the development and publishing of the report.

## CDP Southeast Asia and Oceania

The Great Room  
Afro Asia  
63 Robinsons Road,  
Singapore 068894  
sea@cdp.net

## Media enquiries

Fitriannisa Soegiharto  
Communications Manager, CDP  
fitriannisa.soegiharto@cdp.net

Carly Youd  
Regional Marketing Lead, APAC, South Pole  
c.youd@southpole.com

## About CDP

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 680 financial institutions with over \$130 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Nearly 20,000 organizations around the world disclosed data through CDP in 2022, including more than 18,700 companies worth half of global market capitalization, and over 1,100 cities, states and regions. Fully TCFD-aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative.

Visit [www.cdp.net](http://www.cdp.net) or follow us @CDP to find out more.

## About South Pole

South Pole, recognised by the World Economic Forum as a Social Enterprise, has been at the forefront of decarbonization since 2006. Today, South Pole has a team of over 1,200 sustainability experts in 37 locations across six continents. With its global Climate Solutions platform, South Pole develops and implements comprehensive strategies that turn climate action into long-term business opportunities for companies, governments and organizations around the world. South Pole is also a leading project developer, and has provided nearly 1,000 projects in over 50 countries with climate finance to reduce over a gigaton of CO2 emissions that meet the highest industry standards for certifying reductions. These projects also provide social benefits to less privileged communities which are particularly vulnerable to climate change.

Visit [southpole.com](http://southpole.com) or follow us @SouthPoleGlobal to find out more.