

# State of Nature and Climate 2025

Centre for Nature and Climate



## BRIEFING PAPER

JANUARY 2025

### Objectives

The *State of Nature and Climate* briefing paper is an inaugural effort by the World Economic Forum, Potsdam Institute of Climate Impact Research (PIK) and CDP to provide a global stock take on the health of planetary systems and the state of corporate action in addressing the nature and climate emergency. By placing the latest data on planetary health next to data on corporate action, the paper seeks to provide a benchmark for businesses to drive more transparency, accountability, comparability and urgency on their nature and climate action and performance.

### Planetary Health Check

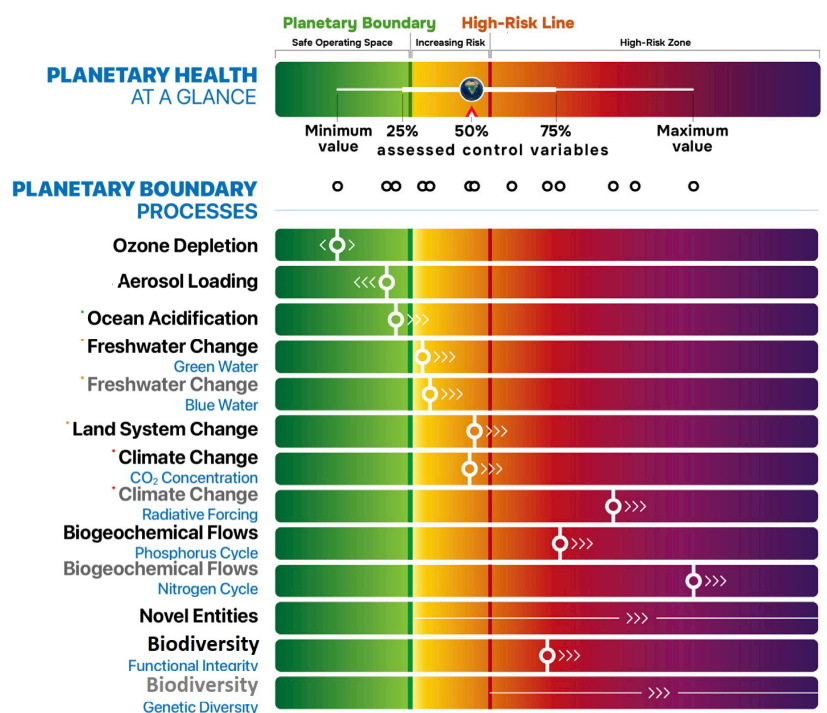
#### Key Findings

The [Planetary Health Check](#) provides strong scientific evidence that humanity is putting the stability of the entire Earth system at risk, jeopardizing global economic development. Overall, the planetary boundaries are in the “zone of increasing risk”. Six of the nine boundaries are already breached, with trends indicating further worsening.

The six breached boundaries are **climate change**, **novel entities**, **biogeochemical flows**, **freshwater change**, **land system change** and **biodiversity**. **Ocean acidification** is worsening and rapidly approaching the planetary boundary. **Aerosol loading** is improving and **ozone depletion** is stable.

While the Planetary Health Check focuses on safe boundaries for a stable and resilient planet, the Earth Commission has shown that humans and all living species are often hit by unacceptable levels of harm

Figure 1 Status of the nine planetary boundaries



Caesar & Sakschewski et al., 2024  
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Planetary Boundaries Science | POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH  
PIK

Source: Adapted from Planetary Health Check

well before planetary boundaries are breached, suggesting that safe and just boundaries may result in even more stringent limits.

In 2024, the world experienced deterioration and cascading risks to overall planetary health:

- **Annual global warming reached a record 1.54°C above the pre-industrial average.** Extreme weather events have become more prevalent with each incremental rise in global temperature.

- **Carbon stored in nature is vulnerable to a changing climate.**  
The ability of nature on land to sequester carbon shows vulnerability to changing climate conditions, particularly in the face of intensifying drought and fire activity. Historically, nature on land has absorbed around a quarter of anthropogenic emissions, and thus buffered the warming effects of fossil-fuel burning. If this function weakens, more and more carbon will end up in the atmosphere, driving further climate change.
- **Ocean heat uptake is at an all-time high.**  
Ocean heat uptake is higher than at any time in recorded history, driving sea level rise, ocean heat waves and coral bleaching. The Atlantic meridional overturning circulation

(AMOC) – an ocean circulation pattern responsible for regulating climate and the ocean carbon cycle – is showing signs of slowing down, and the most recent science shows a collapse this century cannot be excluded, threatening catastrophic global consequences.

## Corporate Health Check

### Key Findings

Only 10% of corporates demonstrate tangible action to address the climate and nature emergency and only 1% are performing at the highest assessed level - Level 4. The companies analysed under the [CDP Corporate Health Check](#) represent 67% of global market capitalization. These companies are assessed on 4 levels.

Table 1 Corporates are assessed at four levels, with the following criteria :

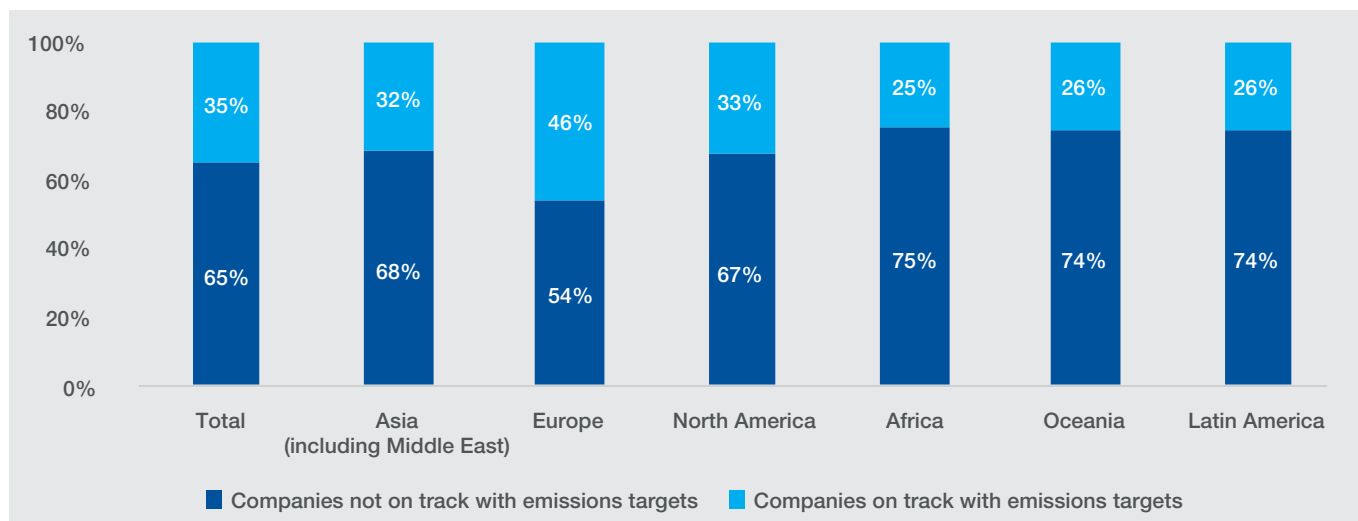
| Laggards – 90%   |  | Frontrunners – 10%  |  |
|--|--|---|--|
| Level 1  | Level 2  | Level 3   | Level 4  |
| <ul style="list-style-type: none"> <li>– No or limited emissions-related disclosure or targets</li> <li>– Poor governance</li> <li>– No integration of climate into business strategy</li> <li>– No impact reductions</li> </ul> | <ul style="list-style-type: none"> <li>– Disclosure of Scope 1 and 2 emissions</li> <li>– Company-wide emissions target across any scope</li> <li>– Board oversight and risk assessment on climate</li> <li>– Some positive progress on climate targets</li> </ul> | <ul style="list-style-type: none"> <li>– Disclosure of full value chain emissions (Scope 1, 2, 3)</li> <li>– Disclosures on at least 1 material nature topic</li> <li>– Any emissions reduction target covering Scope 1-3 (not SBTi-approved or a net zero target)</li> <li>– Stronger environmental governance mechanisms</li> <li>– Integration of climate and nature into strategy</li> <li>– On track to reach targets</li> </ul> | <ul style="list-style-type: none"> <li>– Disclosure of full value chain emissions (Scope 1, 2, 3)</li> <li>– Disclosures on majority material nature topics</li> <li>– Net-zero or SBTi-approved climate targets</li> <li>– Robust environmental governance</li> <li>– Integration of climate and nature into strategy, including aligning investment with transition plan</li> <li>– On track to reach targets</li> </ul> |

Of the companies making the most progress against their targets, there are four key levers:

1. Having a 1.5°C-aligned climate transition plan
2. Placing a price on carbon
3. Linking executive pay to environmental targets
4. Engagement across the value chain

Globally, only 35% of the companies are on track to meet their targets. Regionally, Europe leads with 46% of companies on track to meet their own targets. North America comes next with 33%, followed by Asia (32%), Latin America and Oceania (27%), and Africa (25%). Among companies that are on track with their emissions targets, they have cut their average emissions by 2% per year since 2016, bucking the wider trend of rising global emissions.

Figure 2 Regions on track to reach their climate targets



Of the five dimensions assessed (disclosure, target setting, governance, strategy and progress), companies are showing the most advancement in their disclosures, with 93% of companies reporting on at least Scopes 1 and 2 emissions. Important gaps remain on disclosure of Scope 3 emissions,

with only 55% of companies disclosing the full emissions of their value chain, including their most important Scope 3 categories covering supply chain buying and the product use phase, which consists of the bulk of impacts.

Figure 3 Company emission disclosures

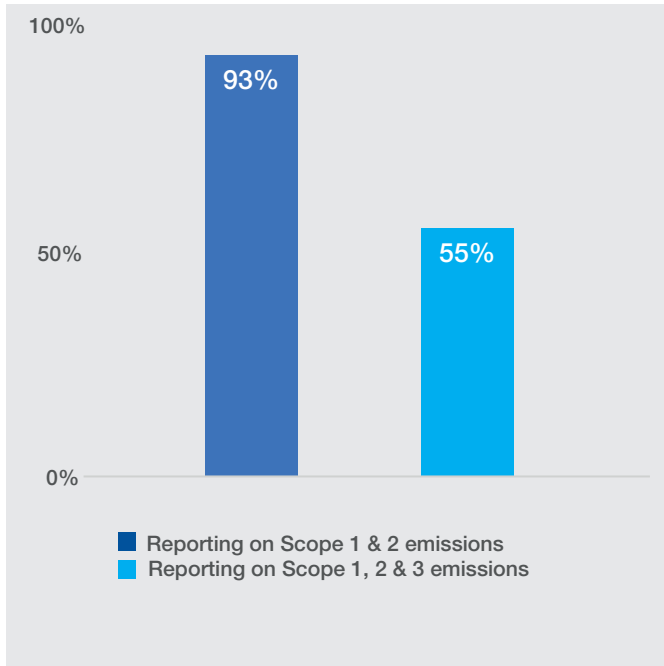
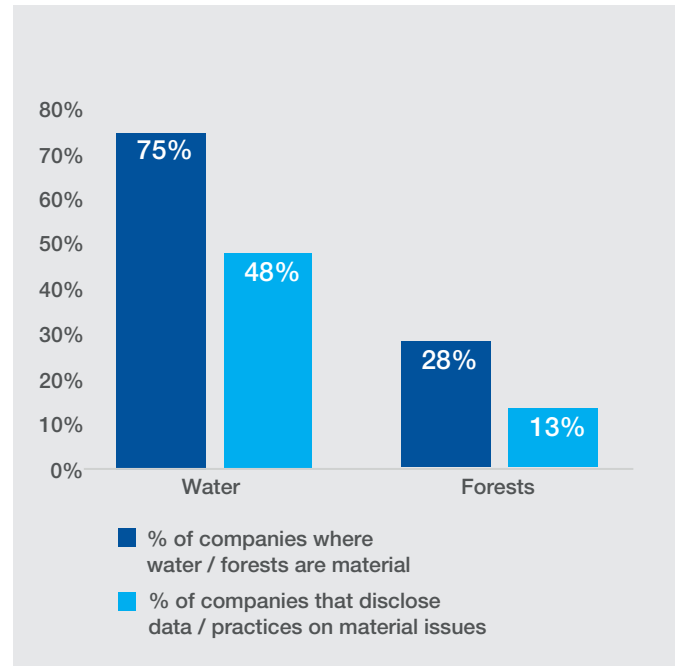


Figure 4 Company nature disclosures



Disclosures on nature remain limited. Water is a material issue for 75% of assessed companies across industries, yet only 48% disclose data. Similarly, while forests are a material topic for 28%, only 13% of companies provide disclosures against their forest-related practices. Of the companies with nature-related disclosures, 22% of companies have reported progress against their water targets, and 15% on their forest targets.

On governance and incentives, 90% of companies have board-level oversight on climate issues, with 59% of companies having set up monetary incentive schemes for their management to meet climate-related targets. In addition, over a quarter (27%) of companies have set an internal carbon price, with an average price of \$70 per ton.

Figure 5a % of companies with an internal carbon price

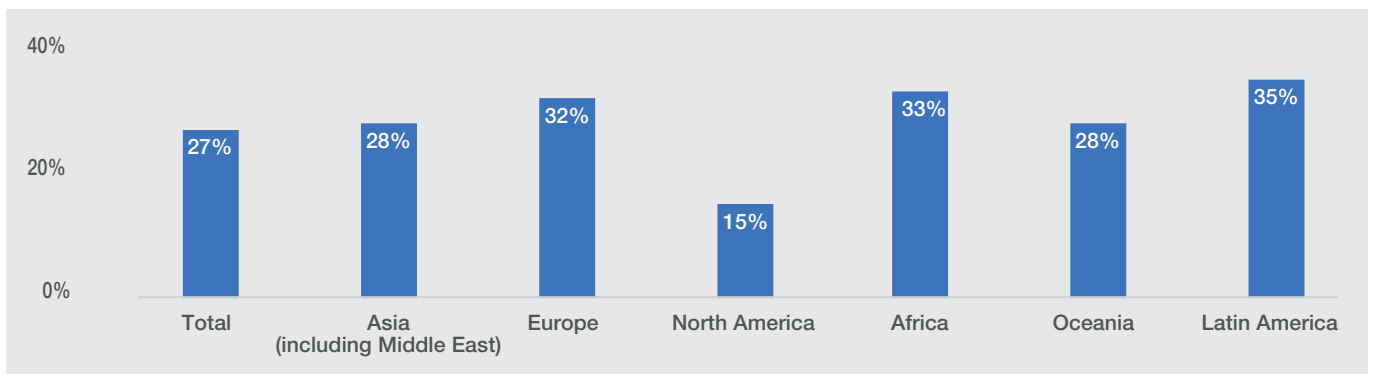
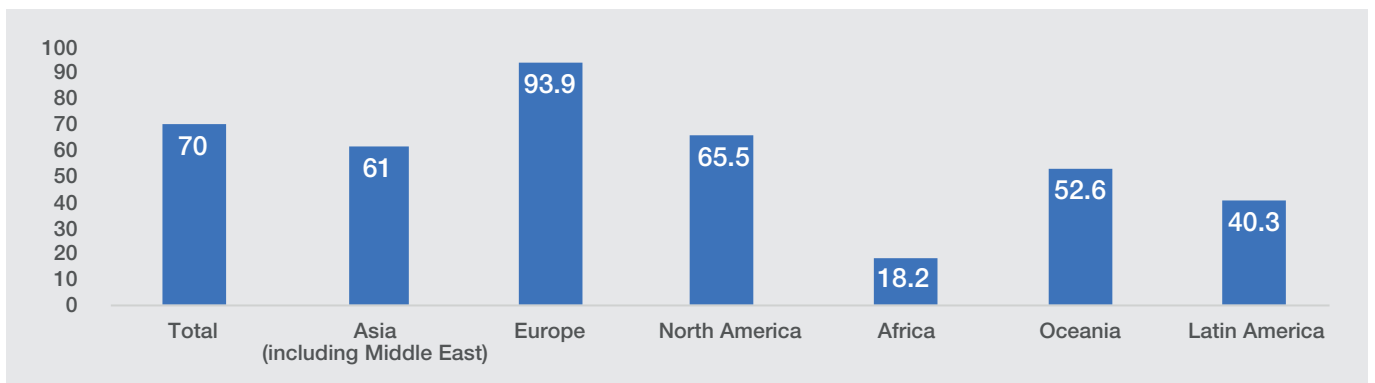


Figure 5b Mean average carbon price per ton (USD)



## The Path Forward

The convergence of science and economic action portrayed in this *State of Nature and Climate* briefing underscores the fact that while risks are escalating at the planetary scale, progress among corporations to mitigate these risks falls well short of the pace and scale conveyed by science. Business leaders who create data transparency and accountability through disclosures can ensure capital markets can thrive in a way that truly balances people, planet and profit. More companies need to follow the lead of the frontrunner companies and targets need to integrate climate action with efforts to protect biodiversity, water, land use, air quality, and other Planetary Boundaries.

Financial performance can co-exist with sustainability. Frontrunner companies in climate and nature accounted for nearly 20% of the total market capitalization and experienced the same 10% rise per annum since 2022 as companies that were not on track with their emissions targets.

This briefing is a call for companies across the global economy to accelerate and mainstream efforts to set and conscientiously pursue climate and nature targets along the entirety of value chains. Policymakers and society should ramp up support and rewards for businesses contributing to safeguarding our collective future.



## Annex

The Planetary Health Check, led by PIK, provides a holistic view of the state of the Earth system in terms of its ability to provide a safe operating space for humanity. It measures the state of the nine planetary boundaries to assess nature's ability to maintain a stable and resilient planet for humanity to thrive. The planetary boundaries cover climate change, novel entities (e.g. plastics, synthetic chemicals), ozone depletion, aerosol loading, ocean acidification, biogeochemical flows (nitrogen and phosphorus), freshwater change, land system change and biosphere integrity (biodiversity).

The state of each boundary is assessed to fall into one of three categories:

1. Within the "safe operating space", contributing to a stable and liveable Earth system
2. In the "zone of increasing risk" to Earth-system stability
3. In the "high-risk zone", indicating a significant threat to Earth-system stability

The Corporate Health Check by CDP evaluates corporates on their action in the areas of climate, forest, biodiversity and water. It assesses corporates across five dimensions: disclosure, target setting, governance, strategy and progress. The analysis is based on data voluntarily submitted by over 6,800 companies in 80 countries. This represents almost two-thirds of global market capitalization (including 85% of the S&P 500), and 17% of global emissions and provides a relevant assessment of economic action on the environment. The analysis is provided with the support of Oliver Wyman and informed by global reporting standards and mandatory frameworks.