

Going Beyond the Value Chain

FERMA Seminar 2025

Keynote on Physical Risks

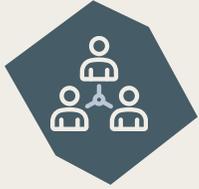
Fiona Watson

Vice President & Member of the Leadership Team



World Business
Council
for Sustainable
Development





250+

Member companies representing



24%

Of global corporate revenues



19 million

employees



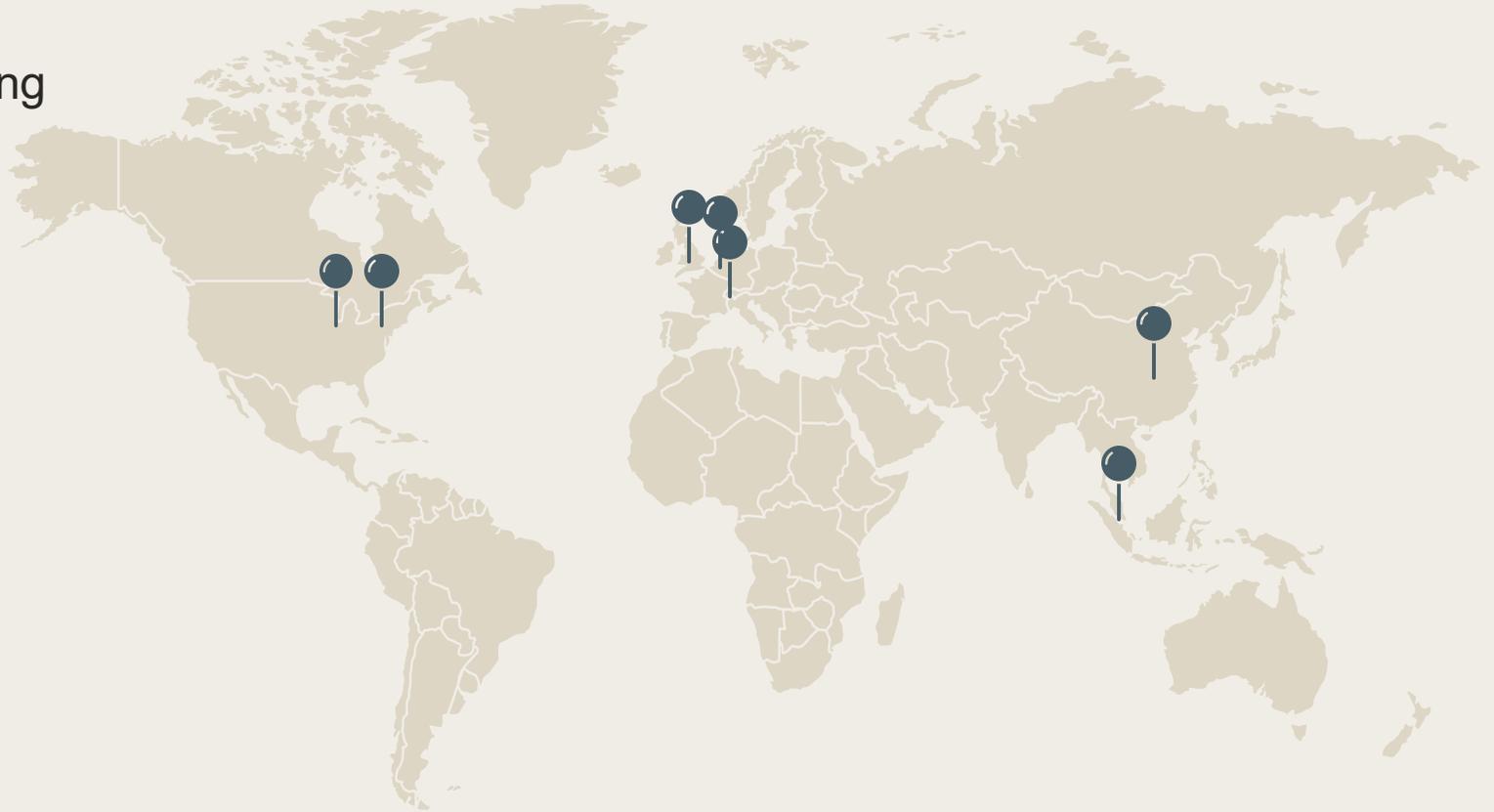
60+

Global network partners



Member-led

Not for profit association



7 WBCSD offices

Chicago • NYC • London • Amsterdam • Geneva • Singapore • Wuhan



1. Facing into our *Reality*

2. Closing the *Capacity Gap*

3. Creating Conditions for *Change*

Facing into *our reality*



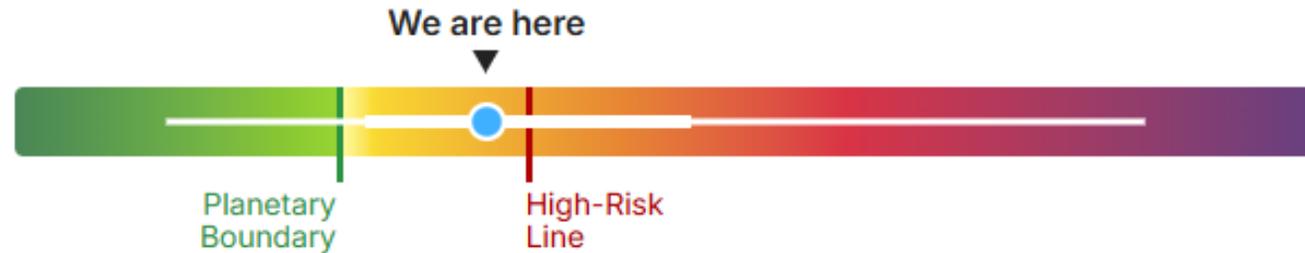
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Our planet's vital signs are flashing red

We have breached 7 out of 9 Planetary Boundaries.
The Planetary Health Check 2025 makes it clear: We have to act
now.

Current State



Source: <https://www.planetaryhealthcheck.org/>

Extreme weather events and chronic physical changes are intensifying globally, driving economic losses to \$320 billion in 2024 - up from \$268 billion in 2023



Oct '24: Torrential rains from an isolated high-altitude storm (DANA) triggered flash floods across the Valencia region, resulting in over 220 lives lost and economic damage equivalent to 0.2% of Spain's Q4 GDP²



In 2024: India lost an estimated \$100 billion in productivity due to heat-related work disruption, with 75% of the workforce engaged in heat-exposed sectors like agriculture and construction⁵



Jan '25: Palisades and Eaton Fires in Southern California destroyed over 16,000 structures, led to 30 fatalities, and caused estimated losses up to \$131 billion³



In June and July 2025: Ocean warming and flood-fed nutrients triggered a massive toxic algal bloom in South Australia, killing over 8 thousands marine animals across 390 species and shutting down fisheries, aquaculture, and costal tourism operations⁷



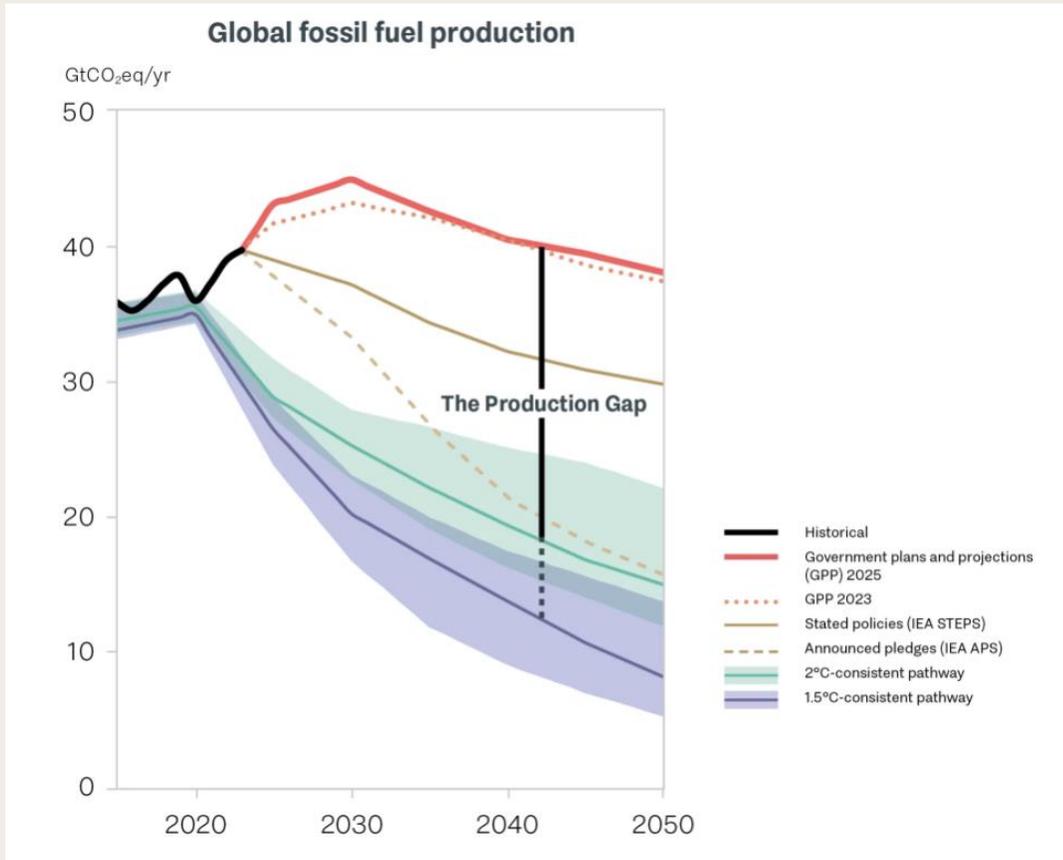
Apr '24: An outbreak of leafhopper-borne disease in Argentina reduced the corn harvest by 6.5 million tons, cutting crop value by \$1.3 billion and disrupting exports from the world's third-largest supplier⁴



In 2024: Floods across Nigeria killed 321 people and displaced over 740,000 – damaging more than 120,000 homes and submerging over 258,000 hectares of farmland⁶



The Emissions Reduction Reality: Not on Track



- Governments plan to produce around *120% more fossil fuels in 2030* than would be consistent with limiting warming to 1.5°C, and 77% more than would be consistent with 2°C.
- Policy makers will not fix this – the private sector must respond to *endure and thrive*

Source: [The Production Gap Report 2025](#) | SEI

Physical Risk is Now a Business Reality

Physical impacts are certain to increase – driven by intensifying extreme events and chronic environmental changes



Sea level rise

Cumulative emissions means future impacts are baked (in cm vs. 1960)



Drought

Percentage of world population facing water shortage



Extreme storms

Annual number of extreme storms Cat.3 or higher (Hurricane, Typhoons, Cyclones)



Extreme heat

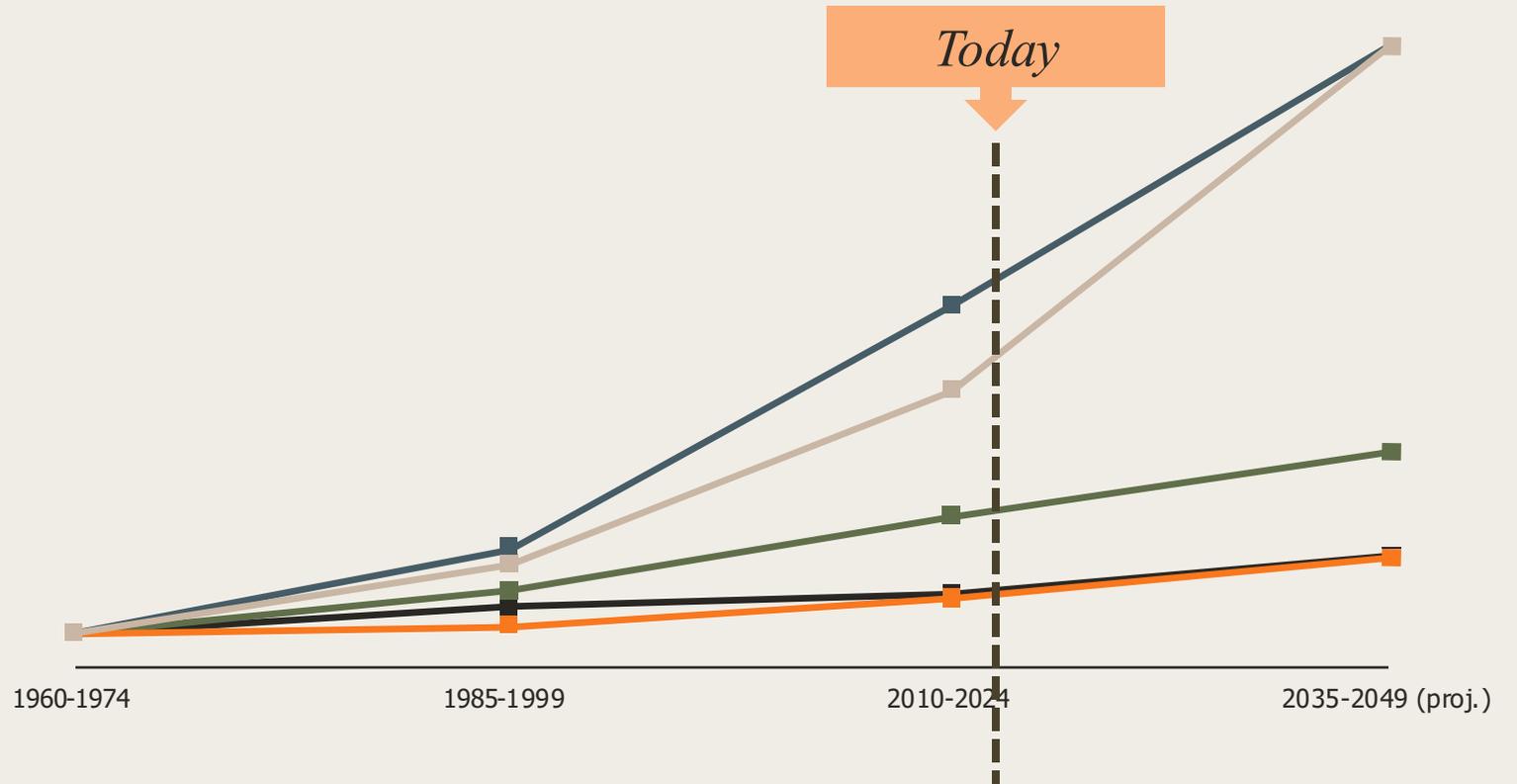
Average global annual number of hot days (>35°C/95°F)

Variable across regions



Degraded Land

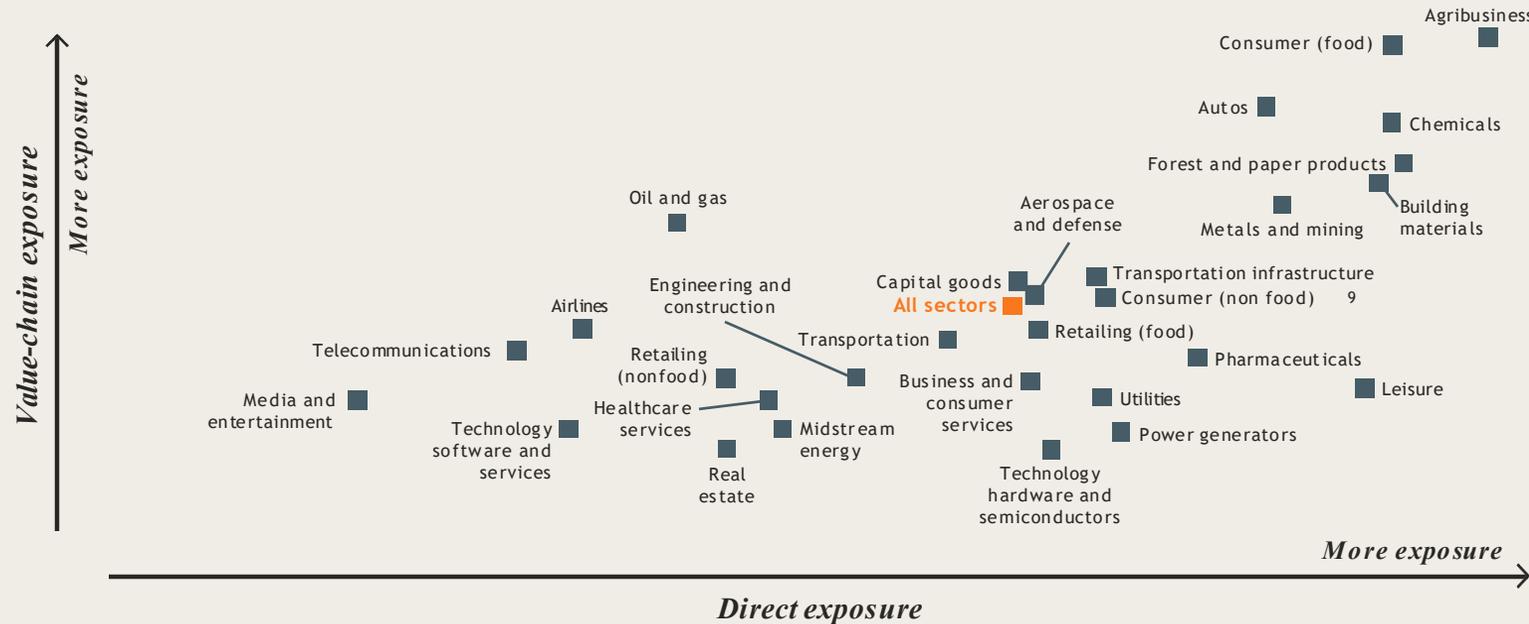
Percentage of total global land area degraded in relation to global land coverage



All businesses are impacted

All 29 sectors analyzed in S&P Global Survey inherit at least some physical risk from their supply chains.

Direct and Supply chain physical risk exposure per sector



- Sectors like agribusiness, food, autos, and chemicals are highly exposed — both directly and through their supply chains.
- Others, such as airlines or oil & gas, may appear less exposed at first glance, but carry significant hidden risk in their dependencies — risks that can go unnoticed if not properly assessed.

Note: S&P analysis includes upstream supply chain, but excludes downstream dependencies (e.g., markets and/or outbound logistics)

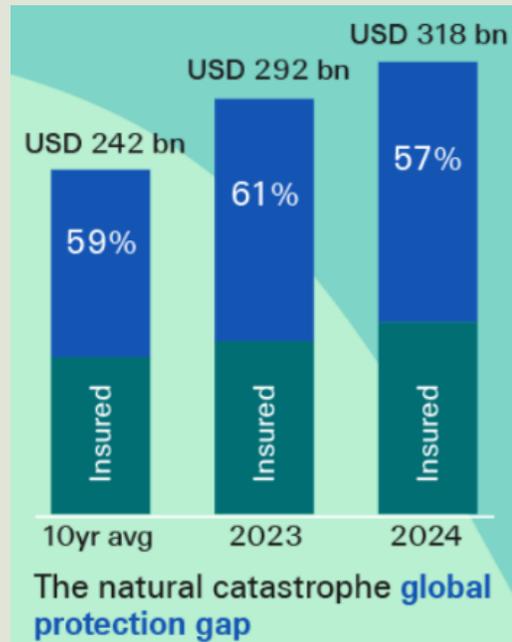
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We can't insure our way out of this risk



Global

Climate-related risks could cost businesses up to *\$1.2 trillion/year by 2050*.



Source: [Swiss Re](#)



Europe

72% of euro area firms are critically dependent on ecosystem services. Surface water scarcity alone puts almost *15%* of the euro area's economic output at risk

Source: [ECB](#)



Financial risk

60% of loans in the euro area are exposed to companies facing unmet flood protection needs.

Source: Ceglar, A., Marques, A., Boldrini, S. *et al.* [European banks face significant vulnerability to ecosystem degradation and climate change](#). *Commun Earth Environ* **6**, 750 (2025).

8 Insights on current *Capacity Challenges*

1

• IDENTIFICATION & ATTRIBUTION IS LACKING

2

• LIMITED STRATEGIC FOCUS ON VALUE CHAIN

3

• EXECUTION/MONITORING IS FRAGMENTED AND SILOED

4

• INCONSISTENT DISCLOSURES

5

• GOVERNANCE IS SILOED/FRAGMENTED/LACKING

6

• DATA & TOOLS EMERGING

7

• NASCENT CAPABILITIES

8

• VALUE CHAIN ENGAGEMENT IS LIMITED AND CHALLENGING

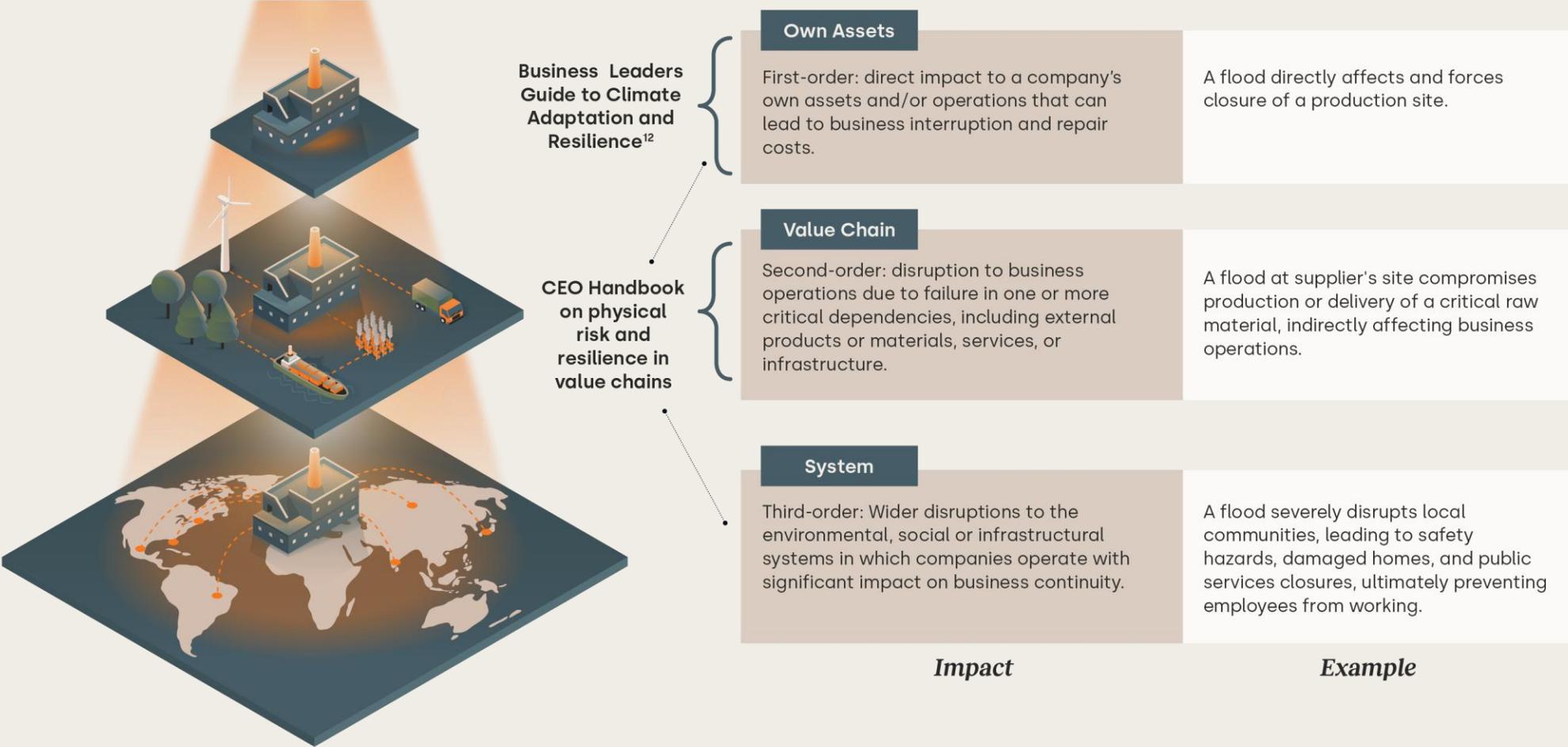
Closing the *Capacity Gap*



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Companies need visibility *beyond own assets*

This blind spot prevents businesses from adequately assessing, managing and responding to these threats, leading to operational disruptions and financial losses



Physical Risk and Resilience in Value Chains



→ *A CEO handbook for executive engagement*

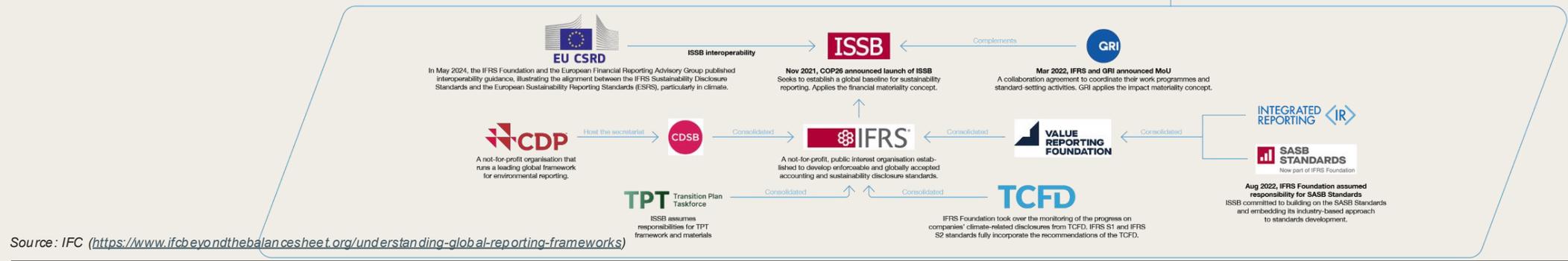


Equipping leaders to
identify, measure, and manage
physical risks across value chains

3 empowering elements of the regulatory agenda...

Increasing focus on risk-related exposures

Global ISSB adoption and regional initiatives are picking up pace



Source: IFC (<https://www.ifcbeyondthebalancesheet.org/understanding-global-reporting-frameworks>)

Source: IFC, Beyond the Balance Sheet, 2025





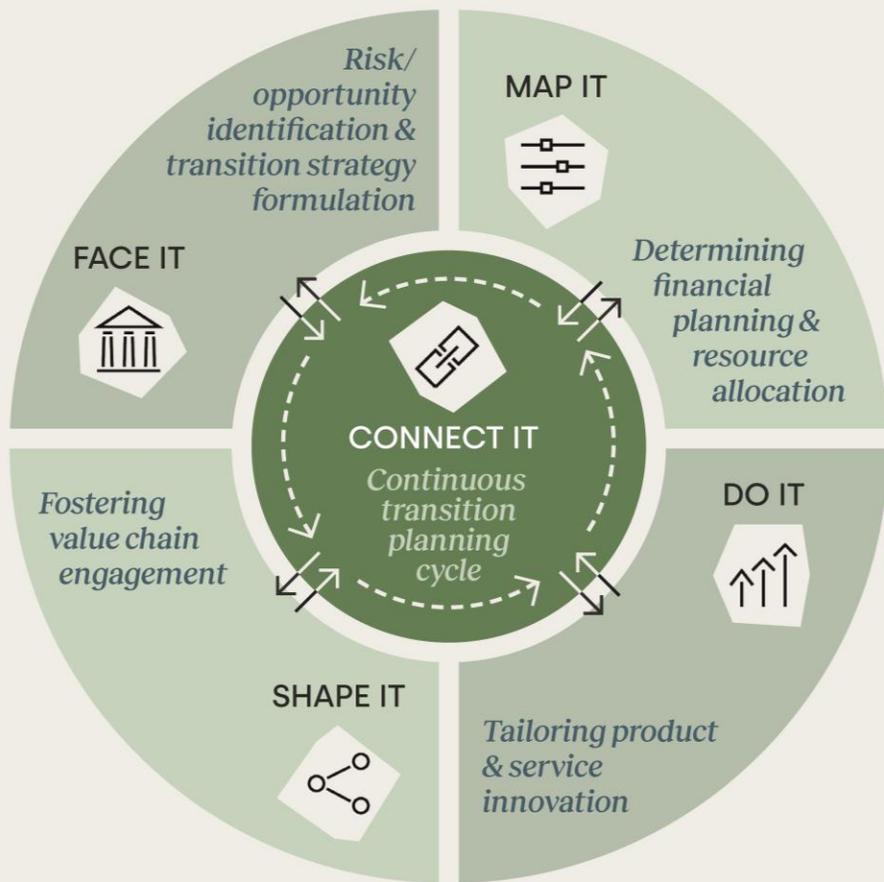
A *value chain* perspective

This blind spot prevents businesses from adequately assessing, managing and responding to threats, leading to operational disruptions and financial losses



Materiality as a *strategic tool*

Requires a more holistic view on risks & opportunities and impacts & dependencies



Credible transition planning

Puts risk at the centre of strategic decision making

Source WBCSD Transition Planning Primer 2024 [Moving transition from plans to action: A transition planning primer](#)

Creating Conditions for *Change*



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How do we build *new ways of working?*

4 enablers

Enable Insights on growing vulnerability

Recognize that physical hazards are not future threats — they are a present and certain reality, already impacting operations and financial performance, with effects set to intensify in frequency and severity.



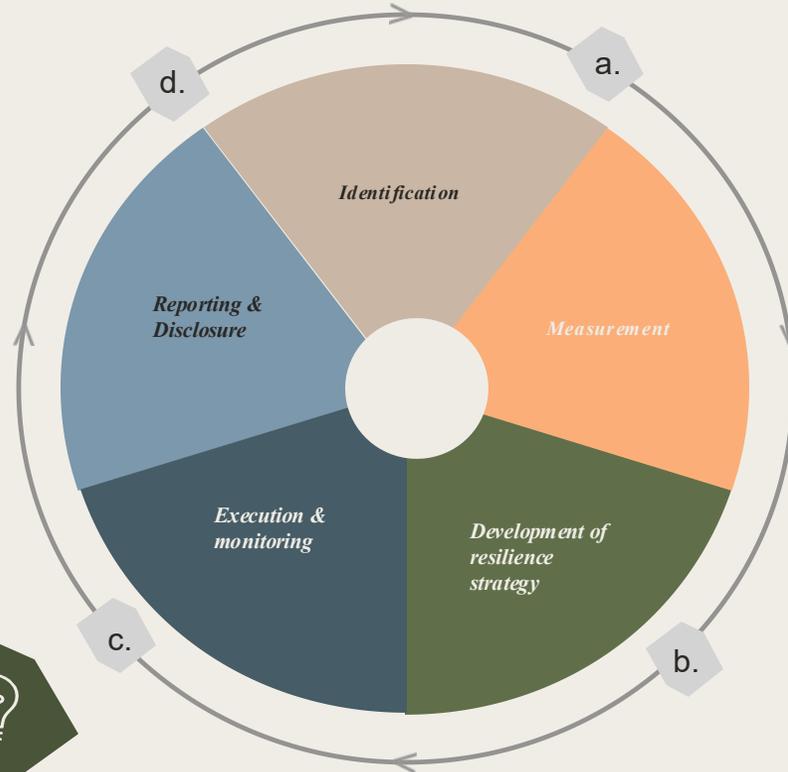
Mobilize executive action

The accelerating environmental shift demands new ways of working: adapting risk management to rising threats and embedding clear executive ownership into strategy, governance, and daily operations.



Build Capacity on what's needed to make resilience a strategic advantage

Internal capacity and network solutions



a. Governance
Establish cross-functional governance to embed physical risk into core decisions

b. Data and tools
Leverage reliable data and tools to assess, track and manage physical risk

c. Capabilities
Build and leverage internal capabilities to translate data into decisions

d. Engagement
Work with partners to build joint resilience across value chains

Re-imagine the role of risk managers....



...as the *strategic* architects
of business *resilience*



1. Facing into our *Reality*
requires a new mindset

2. Closing the *Capacity Gap*
with executive action and regulatory leverage

3. Creating Conditions for *Change*
*re-imagine the role of risk managers as we
develop new ways of working*

Thank *You*

Please get in touch with cp-a@wbcsd.org to learn more and/or to get involved.

