



In collaboration
with Deloitte

Board Leadership for Growth and Resilience: Guiding Principles for Climate and Nature Governance

WHITE PAPER
JANUARY 2026



Contents

Foreword	3
Executive summary	4
Introduction to foundations and principles	6
Foundation 1: Skills and knowledge	9
Foundation 2: Stakeholder collaboration	11
Foundation 3: Culture	13
Principle 1: Oversight and responsibility	15
Principle 2: Strategy	17
Principle 3: Risk and opportunity	19
Principle 4: Disclosure and transparency	21
Appendix	23
A1 Research methodology	23
Contributors	25
Endnotes	26

This report is interactive



Look out for this icon for pages that can be interacted with



To ensure interactive capability, please download and open this PDF with Adobe Acrobat.

Disclaimer

This document is published by the World Economic Forum as a contribution to a project, insight area or interaction. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the World Economic Forum but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners or other stakeholders.

© 2026 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

Foreword



Andre Hoffman
Interim Co-Chair,
World Economic Forum



Anna Marks
Global Board Chair,
Deloitte



Julie Baddeley
Chair, Chapter
Zero Alliance

Boardrooms today face a landscape where complex risks and emerging opportunities are accelerating at pace. Board discussions now routinely cover issues that were rarely on the agenda a decade ago, from geoeconomics and artificial intelligence to cyber threats. Forces such as climate change and natural resource allocation will continue to shape competitiveness, resilience and advantage in the years ahead. In this environment, board members are expected to look further ahead through scenario analysis and to engage more deeply with a broader range of stakeholders.

While short-term disruptions can distract boards from long-term objectives, board members are uniquely positioned to challenge whether decisions align with a clear vision for the future and will deliver sustained value for organizations and society. Good governance which drives organizational resilience can be measured in the ability to look beyond immediate pressures, anticipate change and guide organizations toward lasting outcomes.

In this context, we encourage board members to consider climate and nature impacts as integral to their resilience building agendas and to view them as part of a wider set of interconnected challenges where the future will not resemble the past. Responding requires foresight, courage and a balanced view of risks and opportunities. Transitioning business models to meet climate and nature goals can drive innovation, attract investment and talent, and unlock new markets.

These principles are intended as a tool to support boards in fulfilling that responsibility and in governing with the future in mind. They highlight how directors can:

- Set strategic direction amid uncertainty
- Anchor ambition in purpose and values
- Hold management accountable for actions that build resilience and create enduring value, including embedding climate and nature into strategy and decisions

The framework is simple: four principles of board leadership supported by three foundations that strengthen effective governance. Together they are intended to provide a clear view of the fundamentals needed to create adaptable, innovative businesses with sustainable advantages.

We recognize that boards are navigating immediate pressures while also needing to keep sight of the longer term. Yet the issues of climate and nature are shaping the future in ways that cannot be ignored. Responding to them is part of boards' supervisory and stewardship role and is essential to sustaining lasting value. We hope these principles support you as board members in translating disruption into opportunities that drive innovation, build resilience and deliver enduring growth.

Executive summary

For today's boards, climate and nature represent some of the greatest opportunities for growth and renewal. They are redefining markets, driving technological innovation and influencing where investment flows. Subjects that once sat outside the boardroom are now central to business performance, resilience and value creation.

While climate- and nature-related pressures are intensifying,^{1,2} they are also catalysing new opportunities.³ Entire sectors are being reshaped by demand for products and services that deliver both performance and sustainability. Geopolitical shifts, combined with advancements in artificial intelligence, have altered the narrative on

climate and nature. Innovation and investment are flowing into solutions that create efficiency, strengthen resilience and deliver both financial and societal returns.

For boards, this shift is not only about mitigating risk but about seizing the upside of the transition. Directors who understand climate and nature as drivers of change can position their organizations to lead in emerging markets, attract long-term investment and build enduring stakeholder trust. Effective governance in this realm is good for business. It signals confidence, supports resilience and equips organizations to stay competitive in a rapidly evolving environment.

This guide provides a practical framework to help boards move from awareness to action. It sets out four guiding principles:

1 Oversight and responsibility



2 Strategy



3 Risk and opportunity



4 Disclosure and transparency



Together, they are designed to integrate climate and nature into governance as enduring sources of resilience and advantage. These principles rest on three essential foundations:

1 Skills and knowledge



2 Stakeholder collaboration



3 Culture



Skills and knowledge are strengthened through intentional learning and direct experience, such as site visits that allow board members to witness first-hand how climate and nature affect assets, ecosystems and communities. Stakeholder collaboration brings foresight and collective momentum towards a specific goal, such as working across industries to accelerate renewable energy connections, collectively scale low-emission technology in mining and manufacturing, and expand circular material use in retail and construction. The right culture enables these efforts to take root by signalling that climate and nature are organizational priorities. It empowers people to question, innovate and act with purpose, reinforcing that progress

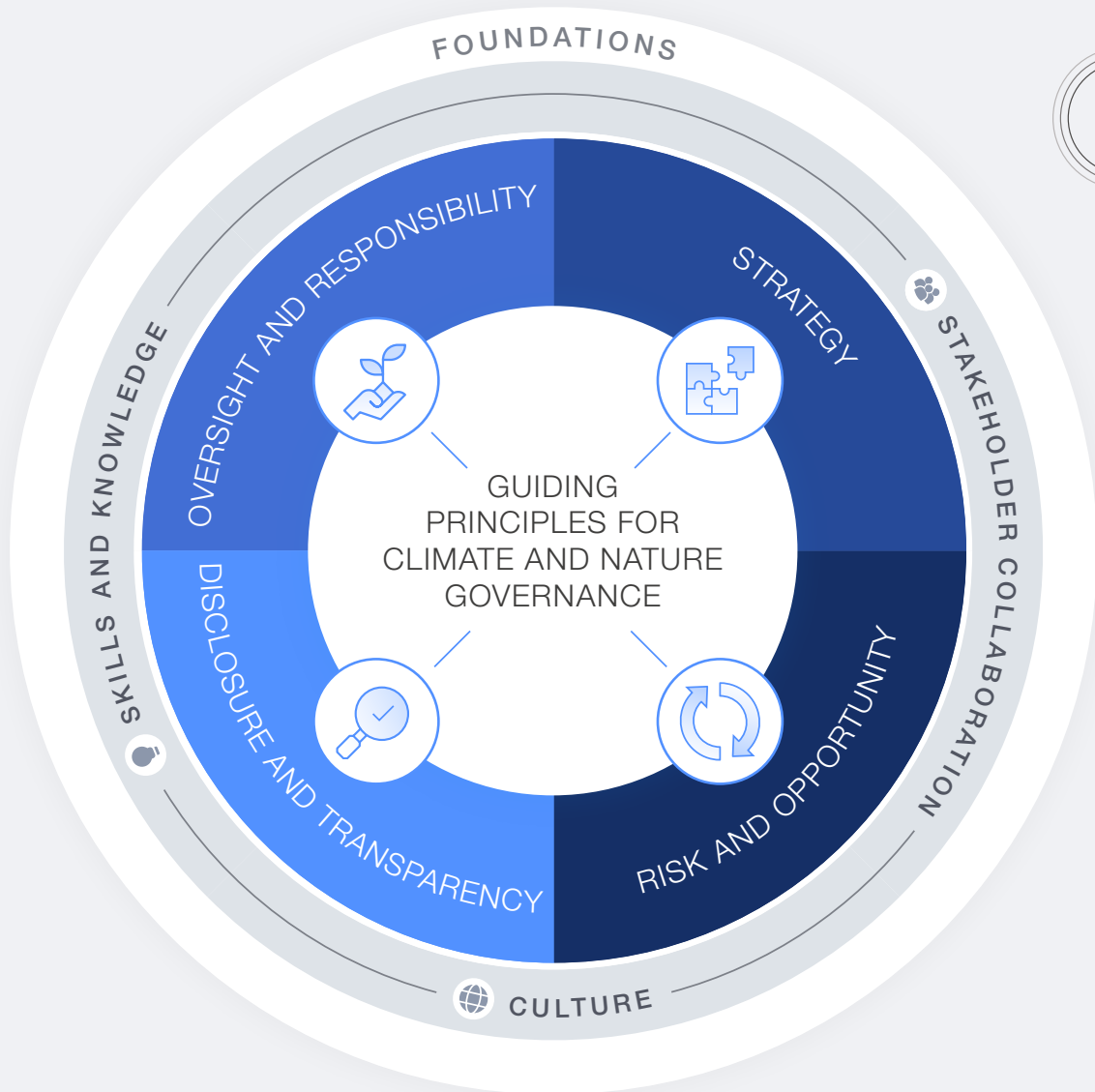
is both expected and valued. Together, these foundations create the conditions under which governance shifts from aspirational to actionable.

The framework is designed for use in the boardroom to act as a simple reminder of the responsibilities each board member has in relation to climate and nature. Each principle is presented alongside questions for directors to reflect on, as well as questions to consider asking management and examples of practical application and insights from global peers. This combination is designed to sharpen oversight, stimulate rigorous debate and strengthen alignment between ambition and delivery.

The wheel illustrates that effective climate and nature governance is not a series of separate actions but an integrated approach. Boards may enter the framework at any point depending on what has prompted the need for consideration, whether that is a strategic decision, emerging

risk, investment opportunity or stakeholder consideration. Used as a reference point in the boardroom, the wheel helps directors connect oversight with strategy, link risk with opportunity and guide their organizations toward innovation, resilience and long-term value creation.

FIGURE 1 The building blocks: integrating principles and foundations



Introduction to foundations and principles

Today's boards operate in an increasingly dynamic and unpredictable environment. The systems on which organizations depend are becoming more interconnected, and pressures related to climate and nature are amplifying complexity across markets, supply chains and communities. Board members are being called on to lead in conditions where risks are interdependent and where decisions must be made amid uncertainty and shifting stakeholder expectations. Strengthening resilience in this context depends on governance that is integrated, adaptive and grounded in a clear understanding of how the external landscape is evolving.

At the same time, this environment offers extraordinary potential for innovation, growth and long-term value creation. Giving consideration to climate and nature can enhance competitiveness and serve as a powerful catalyst for transformation. Boards that approach these issues with foresight can identify new efficiencies, attract investment and shape the markets of the future. Board members who lead with this mindset can help their organizations anticipate change and navigate the transition on their own terms. In doing so, boards can turn complexity into momentum for progress, positioning their organizations as leaders in an increasingly competitive global economy.

Four guiding principles define the standards for climate and nature governance:

1 Oversight and responsibility

2 Strategy

3 Risk and opportunity

4 Disclosure and transparency

These principles provide guidance for how boards understand, oversee and communicate their approach to climate and nature, while allowing for alignment with local laws, regulations and operational contexts.

However, their effective implementation depends on three foundations: skills and knowledge (including mindset), stakeholder collaboration, and culture. These are the essential conditions that shape the environment in which governance

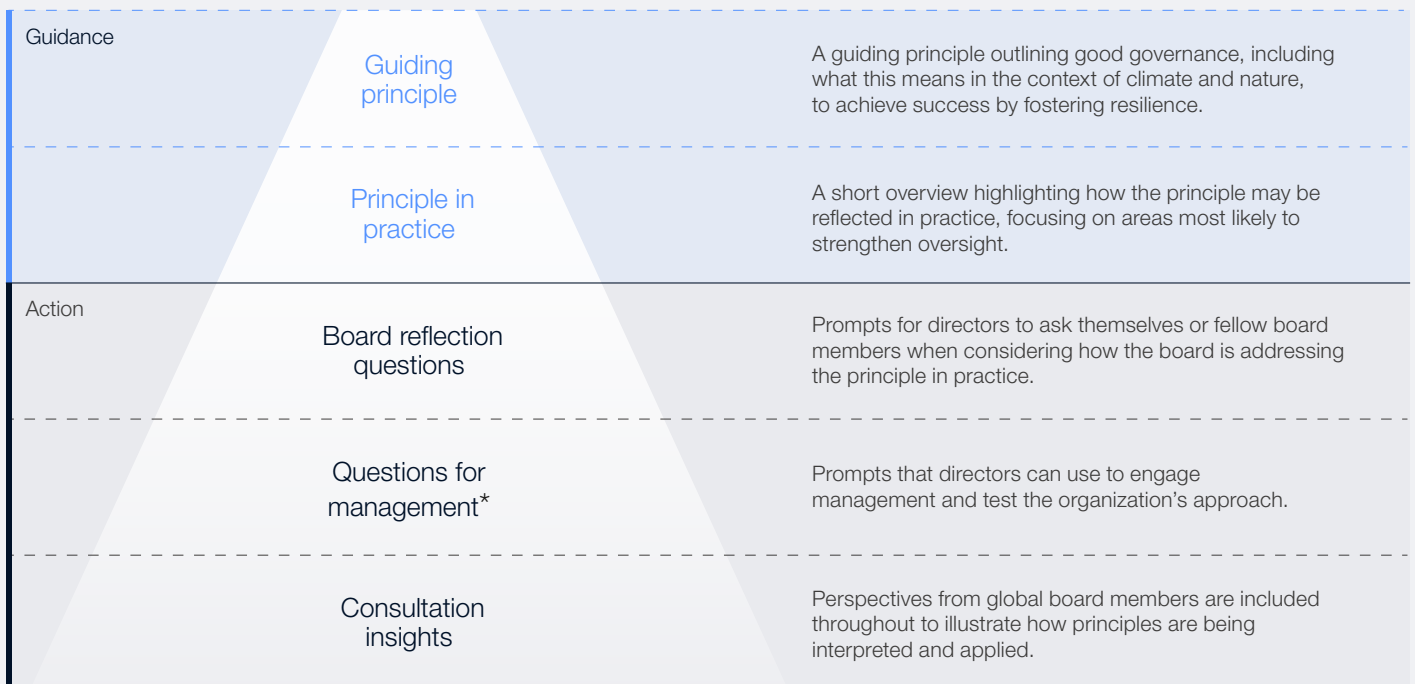
operates, equipping individuals and teams with the right capabilities, enabling robust and ongoing collaboration and embedding a culture conducive to climate and nature action. These foundations provide the surrounding context for the principles and support their practical implementation. Without them, the principles risk remaining aspirational rather than actionable. Recognizing and investing in these foundations is, therefore, fundamental to driving real-world impact and lasting change.



How to read this guide

Each foundation and principle is presented as a practical guide to enable board application:

FIGURE 2 | The core elements behind each guiding principle



Note: *The supplementary guide [Board Reflection and Management Oversight Questions](#) can be used as a toolkit to facilitate boardroom discussions.

What we mean by ‘climate’ and ‘nature’

The terms ‘climate’ and ‘nature’ may mean different things depending on your sector, geography and organization. While these principles can be applied by board members to any systemic disruption, this report uses the context of climate and nature to illustrate the point. **To get the most value, we encourage you to form a clear, boardroom-level view of what climate and nature mean to the organization(s) you serve.**

In this report, we use ‘climate’ to signify both the physical impacts of a changing climate, such as rising temperatures, extreme heat, floods, storms and sea-level rises, and the policy, market and technological shifts associated with the transition to a low-carbon economy. These dynamics influence how companies operate, invest and compete, creating both risks and opportunities across time horizons.

We use ‘nature’ to encompass biodiversity, natural resources and ecosystem services (or the benefits that people and economies derive from nature), such

as water, soils, forests, fisheries, pollinators and critical minerals, which underpin economic activity and human wellbeing. Nature loss may create direct operational risks, such as resource scarcity or supply chain disruption, as well as systemic risks through its impacts on communities, markets and regulatory responses.

Climate and nature are interconnected. Climate change is a major driver of ecosystem loss, while healthy ecosystems play a vital role in storing carbon and moderating climate impacts. For boards, this means considering the two together, as their risks and opportunities are often compounding and require integrated oversight.

Climate and nature in practice

Every sector depends on and affects natural systems in different ways. The examples below illustrate how climate- and nature-related risks, opportunities and dependencies appear across industries. They show how shifts in weather patterns, ecosystems and resource availability can influence operations, supply chains and long-term value creation, while also creating new opportunities for innovation and resilience.

BOX 1 Climate- and nature-related risks, opportunities and dependencies across industries



Mining and metals

- Water enables processing and rehabilitation, while land stability supports safety and waste management.
- Floods can damage tailings dams, heatwaves threaten worker safety and energy supply, and water scarcity disrupts metals processing.
- Recycling or material recovery reduces dependence on virgin extraction, stabilizes supply chains and enhances long-term operational efficiency.



Agriculture and food systems

- Consistent energy, water and climate conditions maintain food quality and safety.
- Soil degradation and erosion reduce fertility, cut yields and increase fertilizer dependence, driving higher costs and nutrient runoff.
- Regenerative and precision agriculture help rebuild soil carbon, enhance biodiversity and improve water retention, creating measurable benefits for climate mitigation, ecosystem health and long-term productivity.



Technology

- Stable land, clean water and predictable weather help secure essential metals like copper, lithium and rare earth minerals.
- Water scarcity and extreme weather events pose significant risks to operations and infrastructure, potentially compromising stability and business continuity.
- Resource efficiency, restoration and circular design allow tech companies to cut costs, build resilience and tap into a multi-billion dollar potential for new value.



Financial services

- Reliable weather supports crop yields that back agricultural loans, stable coastlines protect insured assets and predictable natural systems sustain the value of property, commodities and investments.
- Climate change and nature loss are material financial risks, transmitted through credit, market and operational channels, driving defaults, volatility and systemic exposure.
- Embedding climate and nature considerations across strategy, risk management and product design builds resilience and long-term value through green and sustainability-linked finance, climate-resilient insurance models and investment in clean, nature-positive infrastructure.



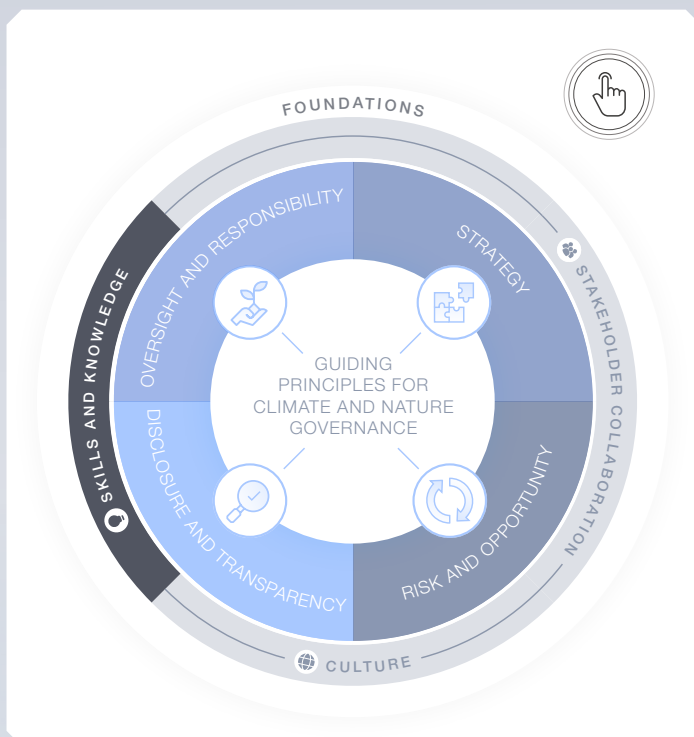
Manufacturing

- Clean water supports cooling and processing, reliable energy maintains production and sustainably sourced raw materials enable fabrication.
- Floods and heatwaves damage facilities and raise energy costs, while water scarcity and resource depletion threaten essential inputs. These pressures heighten operational risk and erode long-term resilience.
- Modern manufacturing is shifting from extraction to regeneration, drawing on clean energy, recycled materials and low-impact water systems. Advances in bio-based materials, additive production and smart factories are redefining how the sector sources, designs and distributes value.

Foundation 1

Skills and knowledge

The board maintains the skills, knowledge and mindset to challenge strategy, oversee risk and drive sustained value. It applies understanding of how shifts in climate and nature affect the organization, recognizing they present unprecedented opportunities and risks.



As we have the expertise to oversee financial reporting, we need to acquire the skills and knowledge to critically assess the risks and opportunities not only from climate change but also our reliance on natural resources. When setting climate targets, you need to have also considered the impact of your business on the natural environment, as they are inextricably linked.

 Penny Bingham-Hall, board member, Fortescue Ltd



Role of the board

To oversee risks effectively and instil a mindset of strategic opportunity, board members require robust skills and knowledge tailored to their organization's reliance on nature and the business impacts of climate change. To strengthen this foundation, boards can:

- ✓ **Build capability** by developing knowledge of climate and nature tailored to the organization's strategy, business model, sector and geography
- ✓ **Exercise diligence** by being sufficiently informed to challenge assumptions, interrogate risks and opportunities, and apply sound judgement in contexts where impacts are systemic, non-linear and longterm
- ✓ **Oversee management** capability by assessing whether executive teams possess the skills to integrate climate and nature considerations into strategic and operational decision-making, including recruitment and succession planning
- ✓ **Sustain board capability** through regular reviews of collective skills and expertise, using tools such as skills matrices, engaging external experts when appropriate and embedding continuous learning to maintain effective oversight

The duty to act with due care and diligence obliges board members to act on an informed basis and in good faith. This is demonstrated by the way in which they exercise their skills and judgement on the matters before them.⁴ Such action requires thoroughness, objectivity and the capacity to robustly and proactively question assumptions, as well as being sufficiently informed to assess the options available and the implications of decisions. Without this foundation of understanding, oversight of current and anticipated financial effects cannot be undertaken with the necessary diligence, and the present principles of oversight, risk and opportunity, strategy and disclosure cannot be enacted with confidence.

Foundational capability →

Board members are not expected to be climate scientists or nature experts. What matters is having the proficiency to robustly question how climate change and nature loss may affect the organization, including its business model, sector and geography. A baseline understanding of climate and nature is essential, enabling all directors to engage meaningfully in debate. When knowledge is limited and information is complex, decision-makers may be more vulnerable to cognitive shortcuts or biases that restrict the effectiveness of action.⁵ As such, intellectual curiosity and openness to new evidence are critical boardroom mindsets that support rigorous oversight and long-term judgement. Further, engagement with climate and nature enables board members to:

- Apply governance in contexts where risks are systemic, non-linear and not easily extrapolated from historical patterns
- Recognize how dependencies on natural systems influence supply chains, markets and access to capital
- Exercise judgement about which climate- and nature-related actions require a compliance lens and which demand transformation

These capabilities allow board members to interrogate risks and opportunities in the short, medium and long term and provide more rigorous oversight of strategic direction.

Oversight of management capability →

With this foundation in place, boards are better positioned to assess whether management has the skills and knowledge required to effectively integrate climate and nature considerations into the organization's strategy and operations. They can also evaluate whether management has the capability to deliver on that integration. This includes oversight of how capability gaps are addressed, when external expertise should be engaged and how insights are incorporated into decision-making. Recruitment and succession planning at both board and executive level also play a role in closing gaps and sustaining a balanced mix of skills and mindsets to interrogate strategic choices.

The relevance of climate and nature skills and knowledge →

Board members strengthen governance when they interrogate the assumptions, models and scenarios that underpin the organization's vision, strategy and operational plans. Intellectual curiosity, analytical rigour, cross-disciplinary fluency and commercial reasoning under uncertainty all support this function. Continuous learning across policy, markets, regulation and technology enhances foresight and improves the quality of decisions. Climate and nature capability is best understood as the intersection of knowledge, skills, mindset and experience, and it is this combination that enables boards to steward their organizations through resilience, innovation and transformation.

Guiding questions for board reflection

Question 1: To what extent is the board collectively equipped to understand and robustly challenge relevant climate- and nature-related risks and opportunities across different time horizons?

Question 2: What formal process (e.g. board skills matrix, board evaluation) do we use to identify knowledge gaps, benchmark our capabilities against peers and address blind spots through training, recruitment or external advisory support?

Question 3: How do we confidently evaluate whether the business has effective systems to integrate climate and nature issues into strategy, capital allocation and operational decisions?

Question 4: How do we oversee that our executive team is incentivized and has the resources and capabilities needed to manage climate and nature risks and pursue related opportunities?

Question 5: What systems and processes are in place to facilitate critical climate and nature decisions reaching the board when required?

Guiding questions for boards to ask of management

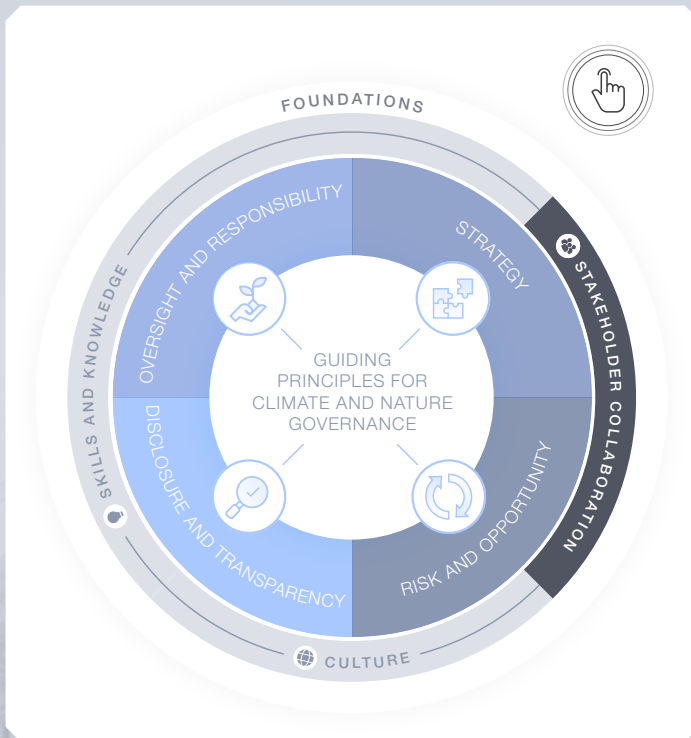
Question 1: How is the organization building and maintaining the skills, expertise and awareness needed to manage climate- and nature-related risks and opportunities across management and teams?

Question 2: How are insights from internal and external experts on climate and nature incorporated into decision-making?

Foundation 2

Stakeholder collaboration

The board oversees collaboration with stakeholders to strengthen resilience and inform decisions. It guides engagement with regulators, investors, industry and communities to build shared solutions and enhance preparedness for climate and nature challenges.



Role of the board

Boards that treat stakeholder perspectives as a source of intelligence and opportunity rather than an obligation can support informed decision-making that is resilient, trusted and aligned with long-term value creation. To do this, boards can:

- ✓ **Set expectations** that stakeholder interests should be reflected in strategy, risk assessment, growth opportunities and external reporting
- ✓ **Oversee management's stakeholder engagement**, ensuring identification, prioritization and integration of diverse views into decision-making
- ✓ **Seek timely and credible insights into stakeholder perspectives**, including independent or third-party reviews
- ✓ **Engage directly with stakeholders on material issues** or where board presence demonstrates commitment and curiosity
- ✓ **Encourage enduring relationships built on two-way dialogue and collective action**, rather than transactional engagement



Sustained and structured stakeholder engagement on nature and climate enables leadership to integrate external perspectives into decision-making. Regular dialogue platforms ensure that insights meaningfully inform both strategic direction and governance oversight. This is key for future proofing companies.

🗣️ Feike Sijbesma, Supervisory Board Chairman, Royal Philips

The best interests of an organization cannot be maximized without regard to the interests of its stakeholders. The board plays a critical role in aligning an organization's actions with stakeholder expectations, a balance that is vital to long-term value creation.⁶ While delivering financial returns for shareholders is always front of mind, employees, customers, suppliers, regulators and communities all influence, and are affected by, corporate decisions. In the context of climate and nature, these relationships are even more significant. Many climate- and nature-related risks and opportunities materialize locally, and stakeholder reactions can amplify or mitigate their impact on operations and reputation.⁷

No single organization can address the twin challenges of climate and nature in isolation. The scale and complexity of these issues demand coordinated effort across industries, sectors and communities. Proactive collaboration is particularly important where the goals of an organization depend on action beyond its direct control, such as shifts in supply chains, technology adoption or broader system-wide transition.⁸

A source of intelligence and foresight →

Boards can gain valuable external intelligence by engaging with stakeholders in line with agreed protocols, strengthening judgement and decision-making. Engagement can highlight where expectations are shifting (see the framework for earning and enhancing trust in [The Chairperson's Guide to Climate Integrity](#)),⁹ where misalignment may create exposure and where opportunities exist to build trust and resilience. In relation to climate and nature, stakeholder insight can reveal dependencies, pressures and innovations that have not been identified within the organization. Importantly, meaningful engagement creates the foundation for collaboration: when stakeholders are engaged early, it opens pathways for joint solutions that strengthen resilience and accelerate transition goals. When collaborative efforts deliver tangible results, they reinforce confidence and momentum, encouraging sustained commitment to collective action.

In certain contexts, direct board engagement may be beneficial, such as with major investors, industry peers or communities where the board's presence signals commitment or supports alignment on complex issues.¹⁰

Stakeholder collaboration, at both management and board level, may assist in:

- Anticipating risks and opportunities that may not be sufficiently visible through internal reporting or traditional approaches to assessment
- Identifying where coordinated solutions are needed to address shared dependencies, such as energy, water or natural resources
- Understanding how stakeholders weigh short-term trade-offs against long-term priorities and how perspectives may differ or shift
- Identifying where climate and nature impacts are most acutely felt, often at the community level
- Building a fuller picture of the systems in which the organization operates, reducing blind spots and improving foresight

Listening to external perspectives helps board members anticipate emerging risks, convert trade-offs into opportunities and position the organization appropriately in advance of enforced change.

Supporting effective governance →

When the views of stakeholders are systematically brought into the boardroom, they underpin the application of the four principles. They broaden risk oversight by surfacing issues beyond management's line of sight. They provide fresh perspectives on opportunities and strengthen judgement when difficult trade-offs are unavoidable. They sharpen strategy by testing resilience against external expectations. They highlight the benefit of disclosures by clarifying the needs of audiences who rely on information. Most importantly, they situate board decision-making within the broader context in which resilience, innovation, trust and competitiveness are built, helping organizations create lasting value while contributing to collective progress on climate and nature.

Guiding questions for board reflection

Question 1: Which stakeholders have the greatest influence on our business in relation to climate and nature risks, and how do we prioritize engaging with them?

Question 2: How do our stakeholder engagement processes give us reliable insights into climate and nature opportunities that affect our business decisions and market growth?

Question 3: How do we incorporate stakeholder views on climate and nature into our strategy discussions and public reporting?

Question 4: How is our external policy engagement aligned with our climate and nature commitments?

Question 5: How do our disclosures reflect the perspectives of stakeholders beyond investors and demonstrate their interests are considered in board oversight?

Guiding questions for boards to ask of management

Question 1: What mechanisms are in place to collaborate with stakeholders, including industry peers and our value-chain, to find opportunities for addressing shared climate and nature challenges?

Question 2: How do we decide which stakeholder insights are captured, escalated to the board and addressed?

Foundation 3

Culture

The board shapes culture through purpose and values that enable curiosity, challenge and foresight. It signals that climate and nature are central to strategy, resilience and long-term value creation.



Build a culture where climate governance principles are embedded into the very DNA of the organization, integrated into every operation and decision, just as workplace health and safety has become a non-negotiable standard.

👤 Anne Drinkwater, Deputy Chair, Equinor



Role of the board

Boards that lead through culture shape the quality of boardroom dialogue, set the tone for how climate and nature are integrated into strategy and decisions, and inspire innovation that drives sustainable, long-term performance. Boards can:

- ✓ **Demonstrate curiosity, respect and constructive challenge** in boardroom dialogue
- ✓ **Encourage a governance mindset**, equipped to navigate complexity, ambiguity and long timeframes, that supports decision-making in the context of competing pressures and systemic change
- ✓ **Enforce expectations** that long-term resilience and value creation guide all decisions
- ✓ **Use board evaluation, education and succession planning** to strengthen culture over time
- ✓ **Use incentives, KPIs and performance reviews** to reinforce desired behaviours and values
- ✓ **Intervene decisively** when behaviours undermine transparency, accountability or open debate
- ✓ **Reinforce that boardroom culture** sets the tone for the organization, shaping talent and embedding values at every level

Governance effectiveness rests not only on structures and processes but also on culture. Culture is what enables an organization to pursue its long-term purpose and vision, shaping how decisions are made, how risks and opportunities are weighed, how investment is approached and how resilience is built. It influences how confidently the board and management address climate and nature as drivers of innovation, capital allocation and long-term competitiveness.

A boardroom culture that supports open dialogue and purposeful inquiry, reinforced by conversational receptiveness that encourages listening and constructive response, equips directors to navigate complexity, interrogate assumptions and consider long-term positioning in the face of disruption.¹¹ This becomes particularly important as boards weigh the implications of transition pathways and nature dependencies. The tone set by the board also defines expectations for management, influencing how goals are established, performance is assessed and values are reinforced throughout the organization.

A foundation for effective oversight →

Culture is what allows accountability, risk governance, strategy and transparency to be applied with rigour. When trust, respect and curiosity are embedded in boardroom dynamics, directors are better equipped to:

- Strengthen accountability through constructive challenge and clear expectations
- Deepen oversight of risks by encouraging debate and diligence, including around compounding and non-linear risks associated with climate and nature

- Spot and shape opportunities by testing emerging ideas, exploring competitive advantage and assessing value creation in areas such as low-emission innovation, resource efficiency and ecosystem restoration
- Sharpen strategic direction by creating space to weigh trade-offs and explore long-term implications
- Elevate disclosure by reinforcing clarity, integrity and honest communication with stakeholders
- Reinforce values that shape organizational culture and behaviours beyond the boardroom

Norms that encourage people to work together can further amplify these effects, building trust, collective energy and momentum for sustained action.¹²

Embedding a culture of innovation →

Culture in the boardroom shapes how openly directors approach uncertainty, how capital is allocated and how confident organizations feel in pursuing new ideas. When boards cultivate curiosity, collaboration and adaptive leadership, they create the conditions for resilience and long-term value creation. Board culture is a core factor in driving innovation, providing the conditions for organizations to adapt and evolve.¹³ In practice, this determines how effectively organizations invest in new technologies, form partnerships and innovate in response to climate and nature challenges, turning pressures into opportunities for growth and competitiveness.

Guiding questions for board reflection

Question 1: How do our board discussions on climate and nature demonstrate curiosity, challenge assumptions and drive purposeful action?

Question 2: How do we elevate the importance of climate and nature to our organization through our questioning, decision-making and resource allocation?

Question 3: How do our performance expectations, training and incentives reinforce behaviours that build climate and nature resilience across the organization?

Question 4: How does our organizational culture enable us to identify and capitalize on climate and nature opportunities while managing risks effectively?

Question 5: How do we know whether our culture is driving innovation and competitive advantage in response to climate and nature challenges?

Guiding questions for boards to ask of management

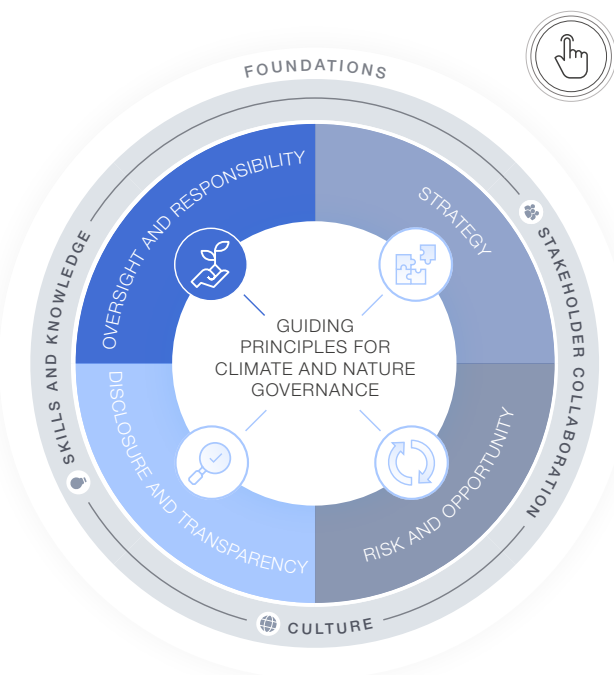
Question 1: How does management promote a culture that supports accountability, innovation and openness to the impacts of climate and nature on our business?

Question 2: How do we assess whether our culture supports effective climate and nature governance?

Principle 1

Oversight and responsibility

The board is accountable for promoting long-term resilience and value creation. It oversees systems and processes that formalize responsibility for the impact of changes to climate and natural resources on organizations.



Role of the board

Boards influence how responsibility for climate and nature is defined and applied when they:

- ✓ **Enforce board accountability** for climate and nature outcomes by defining board-level responsibilities, embedding the topic in board agendas and risk management, and receiving regular reports from management on KPIs and progress toward targets
- ✓ **Oversee organizational responsibilities** so they are clearly defined, appropriately resourced and effectively enacted
- ✓ **Align incentives** with long-term goals and organizational values to drive consistent, purpose-led performance
- ✓ **Review governance structures and board performance** to confirm that oversight of climate and nature remains fit for purpose, supporting resilience and long-term value creation



Effective oversight includes holding management to account for robustly analysing the impact of climate and nature on the business. Boards must have clear visibility into material risks, opportunities and mitigation measures to exercise informed and responsible judgment. True accountability extends beyond outcome reporting.

👤 Rodrigo Lauria, Director,
Climate Change & Carbon, Vale

Clear roles and responsibilities →

Boards are ultimately accountable for the long-term health and performance of the organizations they oversee. As climate- and nature-related risks and opportunities become more immediate and material, the responsibility of the board extends to how they are embedded into structures and processes. As this overarching accountability cannot be delegated, it is essential boards have oversight and clarity on responsibility for how climate and nature considerations are integrated into decision-making, organizational performance frameworks and incentives. This includes overseeing that responsibilities are appropriately distributed and resourced and that they are fulfilled through strategy, communication and reporting.

Effective board oversight includes challenging management to demonstrate clear and comprehensive accountability for climate- and nature-related dependencies. Establishing the appropriate board structure (such as a dedicated committee and charter) may be part of the approach. Another approach is to assign responsibility to multiple committees, with separate ownership of climate- and nature-related risk, strategic integration, disclosures or incentives.¹⁴ Cross-functional groups may also support the validation of risks and opportunities and translate them into actionable targets and capital-allocation decisions.¹⁵ These structures provide important support, but the board role extends to:

- Overseeing systems, strategies and policies to govern material risks and processes to identify and realize opportunities
- Overseeing that incentivization aligns with broader organizational purpose, goals and risk governance, including interrogation of potentially unintended outcomes
- Holding those responsible for disclosures to account for the assumptions underpinning forward-looking statements
- Periodically evaluating the board's own performance and effectiveness, supplemented by independent perspectives, to confirm that structures, processes and oversight of climate and nature remain fit for purpose

Turning intent into action →

Clear and consistent accountability is central to effective governance. Where roles are well defined and responsibility is widely understood and upheld, boards are better equipped to translate strategic intent into operational action.

As climate and nature dynamics reshape the business environment, board structures can reinforce stewardship, innovation and adaptive leadership, positioning organizations to seize opportunities. In doing so, they enable the responsiveness, innovation and long-term value creation that define high-performing governance in an era of transformation.

Guiding questions for board reflection

Question 1: How effectively do we integrate climate and nature considerations into our strategic oversight and decision-making processes?

Question 2: To what extent are climate and nature capabilities and responsibilities clearly defined, understood through the board skills matrix and allocated across our board committees and individual board members?

Question 3: What steps are taken to ensure the consistency and credibility of information used to inform board decisions on climate and nature?

Question 4: How do we ensure our governance processes adapt to capitalize on emerging climate and nature market opportunities?

Question 5: How are values, expectations and accountabilities for climate and nature communicated and reinforced across the organization?

Guiding questions for boards to ask of management

Question 1: How are responsibilities for identifying and overseeing climate- and nature-related risks and opportunities assigned across senior management, and how are dependencies on natural resources incorporated into those responsibilities?

Question 2: What systems are in place to monitor, measure and report progress on climate- and nature-related targets?

Question 3: How are roles and responsibilities structured to support the integration of climate and nature into strategic planning, risk oversight and operational execution?

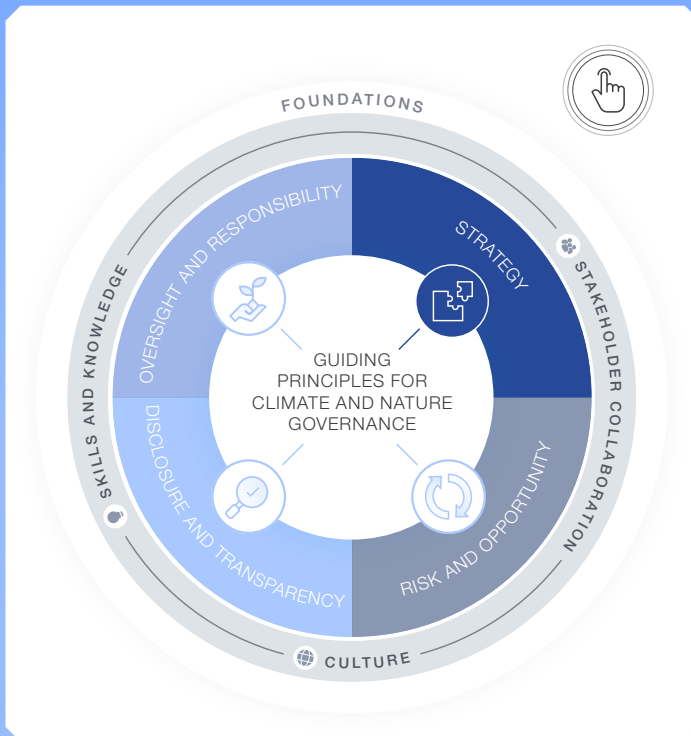
Question 4: What steps are taken to verify the integrity, consistency and credibility of information used to inform board decisions on climate and nature, and what mechanisms are in place to enable stakeholders to raise concerns?

Question 5: How is the organization meeting its legal, regulatory and stakeholder obligations related to climate and nature governance?

Principle 2

Strategy

The board oversees systemic integration of material risks and opportunities into organizational strategy and policy development. It steers the inclusion of climate- and nature-related considerations into decision-making to drive long-term value creation.



Leading organizations succeed by embedding climate and nature considerations into their core strategy, persisting through challenges by continuously monitoring, adapting and refining their approach, while maintaining steady progress toward their goals.

👤 Klaus Moosmayer, board member, Banking and Finance industry



Role of the board

The board has a role in embedding climate and nature into core decision-making to support long-term value creation. To do this, boards can:

- ✔ **Treat climate and nature as key drivers of change**, proactively assessing how they shape organizational values, culture, risk appetite and innovation
- ✔ **Align goals, capital allocation and incentives** with both short- and long-term performance objectives
- ✔ **Review plans and targets** by testing their resilience against different future scenarios and overseeing delivery of near-term progress and long-term stability
- ✔ **Guide responses to regulatory shifts, emerging risks and changing customer expectations**, while fostering partnerships that enhance competitiveness
- ✔ **Support climate- and nature-related innovation** to strengthen organizational adaptability and long-term value creation
- ✔ **Review the development and implementation of targets and transition plans** for credibility, accountability and alignment with strategic objectives

Aligning ambition and investment for long-term value →

Boards play a decisive role in shaping strategies that can withstand disruption and remain true to an organization's long-term purpose and values. Responsibility begins with understanding how climate change and nature loss may affect strategic direction, financial performance and the competitive landscape. These insights set the foundation for decisions that are both resilient and forward-looking.

For strategy to create lasting advantage, it must be grounded in the organization's purpose and vision while also recognizing climate and nature as fundamental drivers of change. When these forces are overlooked, strategic choices risk being built on assumptions about a business environment that no longer exists.

Boards translate this understanding into action by aligning ambition with investment and directing resources toward priorities that strengthen resilience, unlock opportunity and bolster competitiveness. This oversight includes:

- Testing the resilience of the business model in the face of disruption
- Guiding investment in innovation to create competitive advantage

- Challenging assumptions about future competitiveness, policy and market dynamics
- Assessing how emerging stakeholder expectations shape opportunities for growth
- Drawing insights from collaborations with customers, suppliers and other stakeholders to anticipate shifts in demand and align strategy with external conditions

Positioning for growth and resilience →

Boards have a central role in guiding the organization's response to climate change and nature loss. Integrating these considerations into strategy directs attention to how these forces will reshape markets, investment priorities and sources of differentiation.

By treating climate and nature as drivers of change, boards can identify opportunities in areas such as clean energy, sustainable finance, regenerative agriculture and circular business models, while also anticipating where existing models may need to adapt. This insight strengthens the organization's capacity to respond to disruption with confidence, capture growth from emerging climate and nature markets, and maintain relevance in a rapidly evolving environment.

Guiding questions for board reflection

Question 1: How well does the board understand how climate and nature factors could impact or benefit the business, and in what ways are these considerations integrated into strategy?

Question 2: What changes might we need to make to our business model or operations to stay competitive as climate and nature issues evolve?

Question 3: How are our performance measures and management incentives driving the climate and nature actions we need to create value?

Question 4: How can we effectively test if our strategy is compatible with likely changes to climate- and nature-related regulations?

Question 5: What reliable ways do we use to keep abreast of climate and nature issues relevant to our business, and are we using this information to inform our decisions?

Guiding questions for boards to ask of management

Question 1: How are climate- and nature-related risks and opportunities built into our strategy, capital allocation and planning, and how often does the board review progress?

Question 2: How have we tested whether our business model is resilient against both transition risks (e.g. policy changes) and physical risks (e.g. extreme weather events), and what does this mean for our long-term viability in a low-carbon, nature-positive economy?

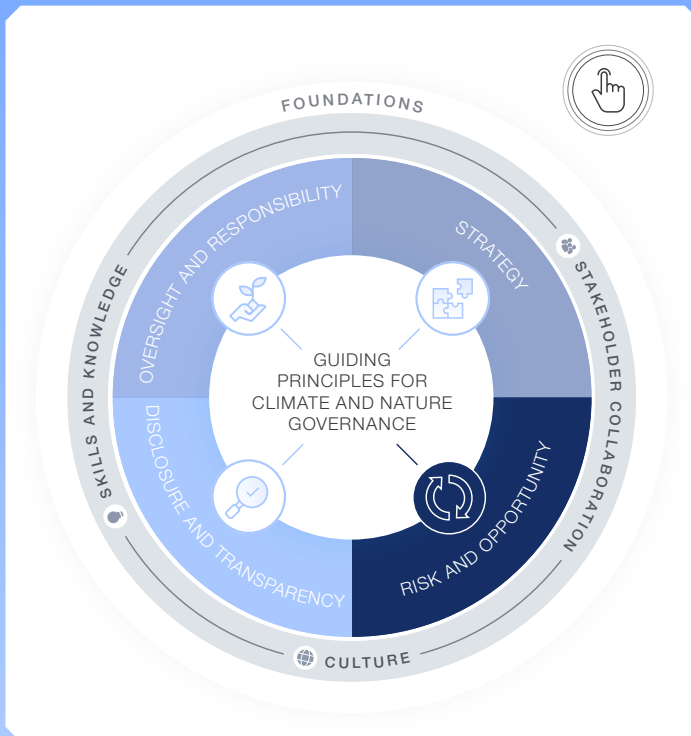
Question 3: Do we have the necessary systems, processes and decision-making structures to support consistent and informed action across the organization?

Question 4: How do we compare to peers in our ambition, strategy and investment planning?

Principle 3

Risk and opportunity

The board oversees material risks, opportunities and dependencies to protect and enhance stakeholder value. It considers how climate and nature both shape and are shaped by the organization's activities and financial performance.



Role of the board

Boards position organizations to navigate complexity and should:

- ✓ **Identify, assess and oversee climate- and nature-related risks and opportunities** across the organization and over different time horizons, including risks and opportunities that are indirect, systemic or fast-evolving
- ✓ **Support the use of scenario analysis** to explore plausible futures, tipping points and thresholds, while interrogating management's assumptions and materiality thresholds, including qualitative and long-tail risks
- ✓ **Recognize the organization's dependencies and impacts** on climate, nature and society and how these, in turn, shape financial performance and position
- ✓ **Balance near-term pressures with long-term resilience** by identifying true trade-offs and encourage the reframing of challenges as opportunities for innovation and new solutions



Seizing climate opportunities is no different from managing other risks; it requires focused attention, integration into the Board of Directors' existing governance processes and conscious decisions.

👤 Peggy Smyth, Audit Chair, Etsy

Supporting resilient and informed oversight →

Climate- and nature-related risks and opportunities are increasingly recognized as strategic business issues. They may emerge from direct impacts or from complex and indirect dependencies, and they can unfold gradually or manifest in sudden, compounding ways.

Board oversight should reflect this complexity. It requires diligent consideration of how material climate- and nature-related issues are identified, assessed and prioritized, how they influence strategy and planning, and how they inform judgement in the face of uncertainty and competing pressures. This includes testing how materiality thresholds are set and interrogating the scenarios management has selected to assess whether the parameters and assumptions reflect plausible futures.

Boards that actively oversee climate- and nature-related risks and opportunities, both in terms of their impact on the organization and the organization's impact on the environment and society, are better positioned to build long-term resilience. This oversight supports adaptation to a rapidly changing operating context and helps identify potential sources of innovation, efficiency and value creation.

Turning complexity into opportunity →

Boards are increasingly called on to oversee decisions that involve trade-offs between near-term pressures and long-term resilience or that require navigating imperfect information and differing stakeholder priorities.

This includes oversight of how opportunities are identified and prioritized and how climate and nature considerations are embedded within core governance and decision-making in ways that create value.

Opportunities emerge when boards look closely at where their organizations depend on climate and nature and how these dependencies might shift (see the LEAP framework¹⁶ for identifying and assessing nature-related risks and opportunities). For example, evaluating investment in low-carbon technologies can reveal efficiency gains, lower exposure to future carbon costs and access to new markets. Assessing supplier practices may highlight opportunities to reduce nature-related risks by working with partners using regenerative approaches, strengthening supply chain resilience and building brand trust. Preparing for such shifts can unlock operational, reputational and commercial value.

By approaching climate and nature through this lens, boards move beyond managing trade-offs to uncover pathways that build resilience, open growth opportunities and contribute to enhanced long-term performance.

Guiding questions for board reflection

Question 1: How do we identify and prioritize the climate and nature risks most likely to affect our business, including longer-term and less predictable impacts?

Question 2: How do we assess which opportunities from climate action and natural capital management can deliver the greatest strategic and financial value?

Question 3: How effectively are we testing our ability to adapt and respond under different climate and nature scenarios, and how does this inform our risk appetite?

Question 4: How do we balance protecting the organization from climate and nature risks while investing in the opportunities they create for growth and resilience?

Question 5: How does the board gain confidence that management is effectively monitoring emerging climate and nature risks and escalating material issues for oversight?

Guiding questions for boards to ask of management

Question 1: What are our most material climate- and nature-related risks and opportunities, how are these built into our risk framework and how are they tracked over different time horizons?

Question 2: How are we measuring, assessing and managing climate- and nature-related risks and opportunities across our full value chain, including suppliers and customers?

Question 3: What opportunities have been identified that could deliver business value, and how are we positioned to capture them?

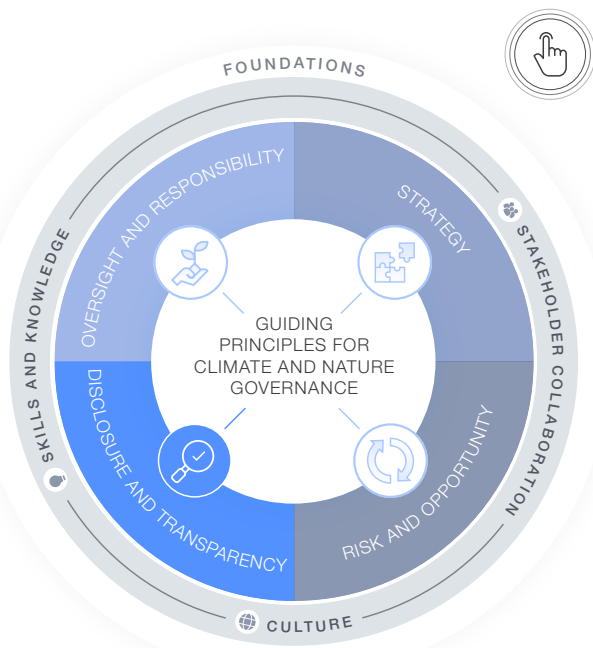
Question 4: How are climate- and nature-related risks and opportunities prioritized, what drives those decisions, and how are the most material issues addressed to inform strategy?

Question 5: What are the financial and resource implications of the identified climate- and nature-related risks and opportunities?

Principle 4

Disclosure and transparency

The board promotes transparency, integrity and accountability through disclosures that fairly inform investors and stakeholders. It oversees systems that enable true and fair reporting of how changes in climate and nature affect financial performance and long-term prospects.



Role of the board

Boards play a key role in overseeing climate- and nature-related disclosures when they:

- ✓ **Safeguard the accuracy and credibility of reporting on climate- and nature-related risks and opportunities**, aligning them with the organization's strategy, commitments and legal obligations
- ✓ **Apply consistent methodologies, metrics and frameworks** that enable stakeholders to benchmark climate and nature performance over time and across industry peers
- ✓ **Oversee the development of robust systems, expertise and independent assurance processes** that underpin the integrity of data, assumptions and disclosures
- ✓ **Promote coherence** across all internal and external reporting and communications, supported by independent assurance to aid transparency and comparability



Treating disclosures as a compliance exercise risks missing their strategic value. Instead, boards should use disclosure frameworks to deepen understanding of resilience and sustainability and to shape meaningful, forward-looking strategies.

👤 Pia Tischhauser, board member, SwissRe

Strengthening trust through clear and credible reporting →

Boards are accountable for climate- and nature-related disclosures that are transparent, are credible and reliably inform investment decisions. This includes overseeing what is disclosed, how information is prepared and verified, and whether disclosures are consistent with the organization's commitments, strategy and legal obligations.

Clear and consistent reporting builds stakeholder trust and reinforces organizational integrity by demonstrating that material risks are being actively managed and that progress is being tracked against stated goals. Investors continue to expect material climate- and nature-related risks to be disclosed as this provides confidence that the organization is navigating complex, long-term challenges. When disclosures are accessible and accurate, they enable stakeholders to assess performance over time and make more informed, forward-looking decisions.

Building organizational preparedness through effective oversight →

Disclosures offer boards a strategic lens to assess organizational preparedness in an increasingly dynamic

operating environment and provide reasonable grounds for forward-looking statements on climate and nature. When approached with rigour and intent, disclosures may surface critical gaps in systems or capabilities, while also revealing emerging risks and opportunities.

Disclosures signal how effectively an organization is navigating complexity and building resilience. They offer insight into the alignment between ambition and execution, helping boards evaluate whether the organization is equipped to deliver sustained performance in a changing context. By treating disclosure as a forward-looking discipline, boards can:

- Sharpen oversight
- Strengthen confidence in the organization's capacity to adapt and lead
- Evidence competitive advantage through consistent and comparable reporting
- Improve access to and cost of capital

Beyond compliance, robust reporting creates opportunity. By focusing attention on what matters most, disclosures can accelerate transformation, unlock insight and equip leaders to make smarter decisions that drive long-term resilience and growth.¹⁷

Guiding questions for board reflection

Question 1: How well do we understand our responsibilities, potential liabilities and stakeholder expectations regarding the information disclosed on climate and nature?

Question 2: How do we gain confidence that our sustainability disclosures are accurate, complete and consistent across all public communications, including filings, investor briefings, websites and financial statements?

Question 3: How effectively do our disclosure processes reflect the organization's actual performance, position and progress on climate- and nature-related topics, including areas where progress is limited?

Question 4: How confident is the board in its ability to explain and stand behind information disclosed on climate and nature to regulators, investors or other stakeholders?

Question 5: How do we remain aligned with evolving reporting requirements while staying mindful of differing or competing stakeholder expectations?

Question 6: Who in management is responsible for climate and nature disclosures, and what accountability mechanisms are in place to ensure compliance with regulatory and stakeholder expectations?

Guiding questions for boards to ask of management

Question 1: What systems and internal controls are in place to verify the quality, consistency and reliability of climate- and nature-related data used in external disclosures, and how do these differ from our financial controls?

Question 2: How does management determine which climate- and nature-related issues are material to disclose, and how is the board involved in that process?

Question 3: How are climate- and nature-related disclosures assured or verified, and what information does the board use to be confident in areas of uncertainty or key management judgements?

Question 4: How is consistency maintained between different forms of communication, including regulatory filings, investor briefings, annual reports and internal messaging?

Question 5: Who in management is responsible for climate and nature disclosures, and what accountability mechanisms are in place to ensure compliance with regulatory and stakeholder expectations?

Appendix

A1 Research methodology

The foundations and principles in this framework were formulated through a collaborative process led by the World Economic Forum and supported by Chapter Zero Alliance, Deloitte Asia Pacific and Deloitte Global. In total, over 90 stakeholders were engaged during the process. More than 80% of these contributors are executive or non-executive board directors, while the remainder includes C-suite leaders and specialists in climate, nature and governance.

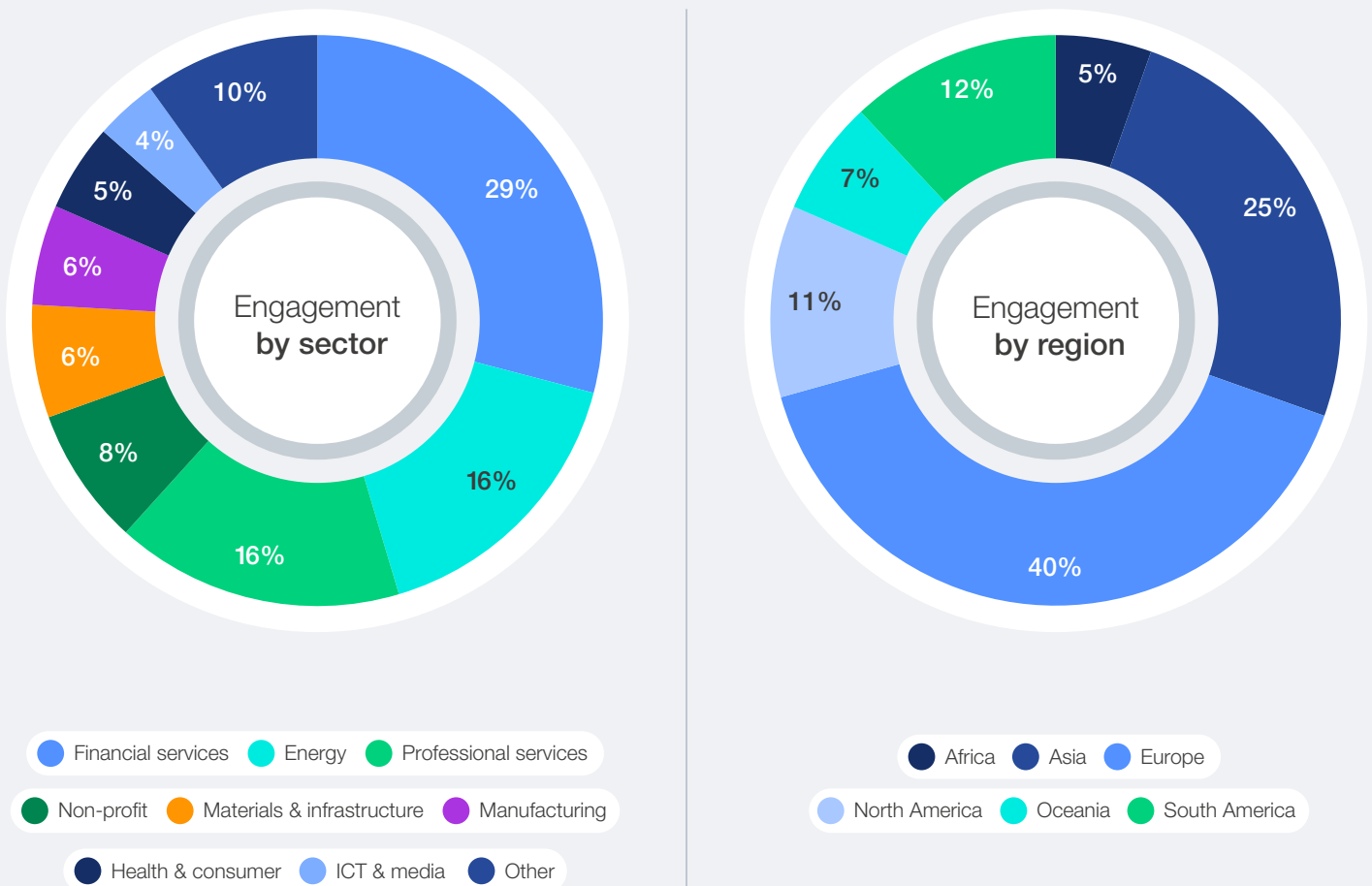
The perspectives gathered reflect input from 16 distinct industry sectors, with approximately 60% represented by directors from financial services, professional services and energy.

As many directors serve on multiple boards across sectors, their insights have been attributed to each relevant sector to capture the full breadth of their experience.

Our engagement process captured insights from across the Americas, Africa, Europe, Asia and Oceania. Approximately 65% of contributors were based in Europe and Asia, reflecting the current regional focus on climate- and nature-related governance challenges and opportunities.

We welcome continued dialogue and sector-specific engagement to further strengthen board-level governance practices for climate and nature.

FIGURE 4 **Who we heard from: a global view of stakeholder voices / Cross-sector engagement: who contributed to the conversation**



Contributors

World Economic Forum

Pim Valdre

Head of Climate & Nature Economy Agenda

Marlen Heide

Governance Lead, World Economic Forum, Switzerland

Deloitte

Jennifer Steinmann

Sustainability Business leader, Deloitte Global

Rebekah Cheney

Climate Governance Lead, Deloitte Asia Pacific

John O'Brien

Climate Governance Lead, Deloitte United States

Chapter Zero Alliance

Emily Farnworth

CEO, Chapter Zero Alliance, Global

Rachel Allen

Senior Manager, Chapter Zero Alliance, Global

Thank you to Deloitte contributors Tom Imbesi, Ally Schwertfeger, Eleanor Lee, Kaja Brodtkorb and Michelle Varney.

Thank you to the Global Future Council on Climate and Nature Governance, particularly Sarah Barker, Eva Zabey and Amelia Fawcett.

Thank you to World Economic Forum contributors Shivin Kohli, Laura Fisher and Andreas Obrecht.

Thank you to Chapter Zero Alliance contributors Jillian Neufeldt and the Board of Trustees, Chapters and Ambassadors.

Acknowledgements

Production

Laurence Denmark

Creative Director, Studio Miko

Sophie Ebbage

Designer, Studio Miko

Chris Parsons

Editor, chrisparsonswrites.com

Oliver Turner

Designer, Studio Miko

Endnotes

1. Intergovernmental Panel on Climate Change. (2023). *Climate change 2023: Synthesis report. Contribution of Working Groups I, II, and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 4–7).
2. Taskforce on Nature-related Financial Disclosures. (2023). *Recommendations of the Taskforce on Nature-related Financial Disclosures* (p. 7).
3. World Economic Forum. (2020). *New nature economy report II: The future of nature and business* (p. 8).
4. Organisation for Economic Co-operation and Development. (2023). *G20/OECD principles of corporate governance 2023*(Section V.A). OECD Publishing.
5. Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist*.
6. Gallego-Álvarez, I., & Rodríguez-Domínguez, L. (2023). Board of directors and environmental practices: The effect of board experience, culture, and tenure. *Environmental Science and Pollution Research*.
7. World Economic Forum. (2022). *The chairperson's guide to climate stakeholders* (p. 4).
8. Australian Institute of Company Directors. (2025). *Governing for net zero* (p. 31).
9. World Economic Forum. (2023). *The chairperson's guide to climate integrity* (p. 8).
10. Australian Institute of Company Directors. (2025). *Governing for net zero*, p.31.
11. Minson, J. (2020). Conversational receptiveness: Improving engagement with opposing views. *Harvard Kennedy School*.
12. Goldenberg, A., & Shuman, E. (2021). Addressing climate change with behavioral science: A global intervention tournament in 63 countries. *Harvard Business School*.
13. Tang, Y. (2023). Board authority culture, cultural diversity, and corporate innovation. *Journal of Sustainable Finance & Investment*.
14. Paine, L., & Srinivasan, S. (2023). Boards can continue to lead the way on climate governance. *Harvard Business Review*.
15. Deloitte Global. (2025). *Beyond compliance: Enhancing trust through reporting* (p. 8).
16. Taskforce on Nature-related Financial Disclosures. (2023). *Guidance on the identification and assessment of nature-related issues: The LEAP approach*.
17. Deloitte Global. (2025). *Beyond compliance: Enhancing trust through reporting* (pp. 5–12).



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland

Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org