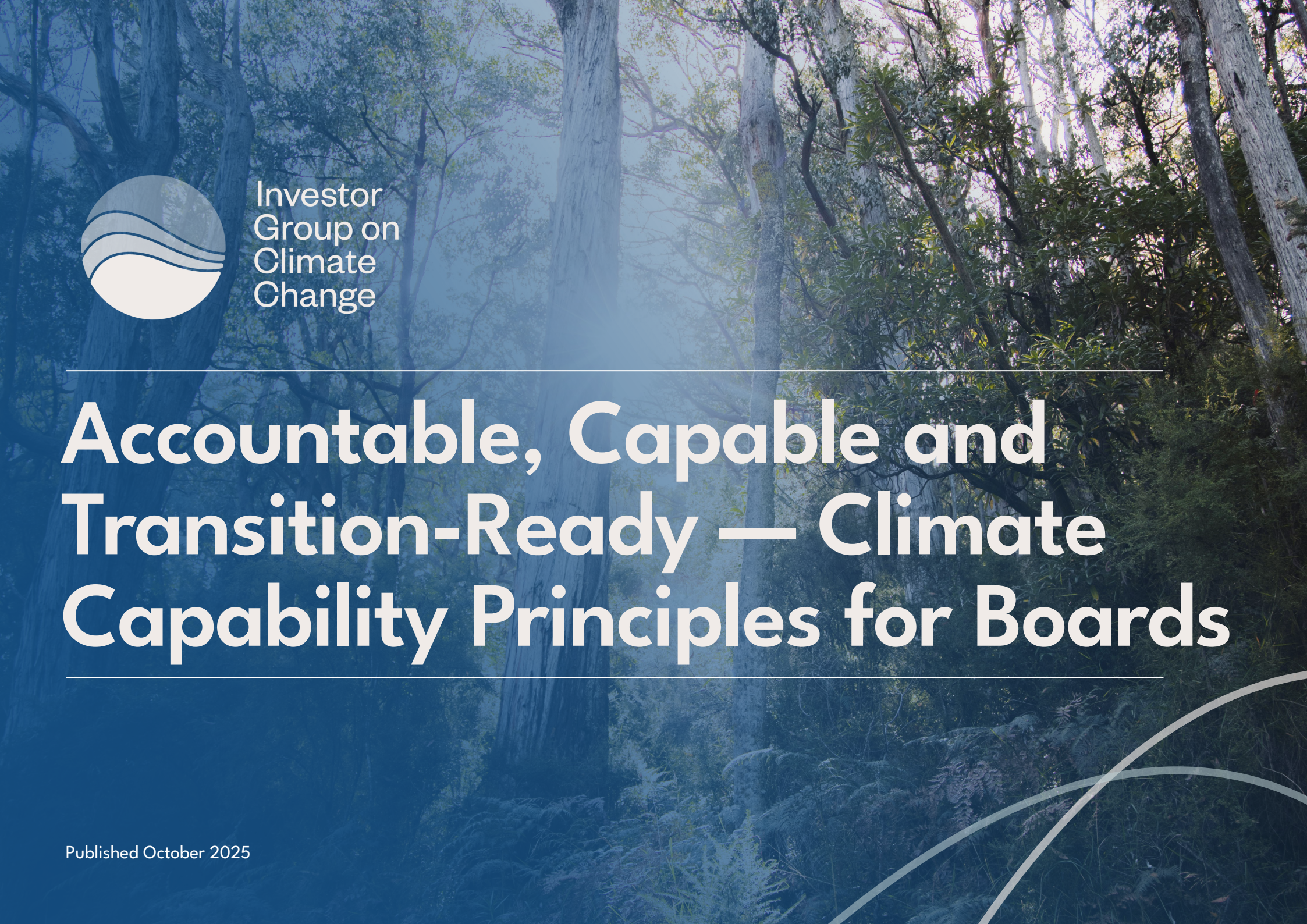

Investor Group on Climate Change

Accountable, Capable and Transition-Ready — Climate Capability Principles for Boards

Published October 2025

About the Investor Group on Climate Change

We are the leading network for Australian and New Zealand investors to understand and respond to the risks and opportunities of climate change.

Our members include our countries' largest superannuation and retail funds, specialist investors and advisory groups.

Their beneficiaries include more than 15.8 million Australians, and millions more in New Zealand.

Our members manage nearly $40 trillion in global AUM, and over $4.5 trillion locally.

This report supports our Corporate Engagement workstream as a component of a thematic focus on barriers to corporate decarbonisation. It was developed referencing domestic and industry papers and similar benchmarking reports, and in consultation with key stakeholders, including investors, industry experts and non-executive directors from Australian corporates.

Acknowledgments

Moribus Advisory

This report was written by Alice Martin, Director of Moribus Advisory, an independent responsible investment and strategic impact consultancy. IGCC commissioned this report, led by Director of Corporate Engagement, Richard Proudlove.

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We acknowledge the Traditional Owners of the land on which we work and live, and recognise their continuing connection to land, water and culture. We pay respect to Elders past and present.

About this report

This report provides investors with guidance to strengthen their engagement with companies on aligning governance practices with the demands of the climate transition. It also aims to support companies in embedding climate considerations into governance structures, strategic planning, board oversight and stakeholder[1] engagement to deliver real world decarbonisation outcomes.

It sets out a principles-based framework to help ascertain whether boards have the structures, capabilities and decision-making processes needed to oversee climate-related risks and opportunities, and to steer their organisations toward credible transition pathways.

Key elements of this report include:

- **Challenges and key findings** – outlines the overarching governance challenges companies face in aligning with the climate transition, summarises key research findings and insights from the literature and roundtables with investors and company directors, and provides guidance for investors and companies.
- **Climate governance principles** – a set of principles developed to guide assessment of board climate governance, covering areas such as strategic recognition of the transition, scenario use, capital oversight, board composition and capability and continuous learning. Each principle includes signposts and illustrative indicators.
- **Engagement framework and appendices** – includes a company evaluation matrix to help both investors and companies qualitatively assess alignment of governance practices with climate transition demands, and a structured Engagement Framework to guide constructive and additional dialogue between investors and company executives on enhancing climate governance capability, oversight and accountability.

1 Stakeholders refers to any person or group with an interest in or impact on an organisation, encompassing investors, regulators, employees, customers, suppliers, local communities, Indigenous people, representative organisations and NGOs.

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01: Executive Summary

The ability of boards to govern in the context of the climate transition[2] is now a critical determinant of long-term value and risk management for an increasing number of companies. Investors and other key stakeholders expect directors to demonstrate clear oversight of climate-related risks and opportunities – not as a niche ESG issue, but as a core strategic and financial responsibility.

Building on IGCC's 2021 report *A changing climate: what investors expect of company directors on climate risk*, this document sets out practical principles and guidance to help inform and assess the collective capability of company boards in responding to climate-related risks and opportunities. It highlights capability priorities at both general and sector specific levels and provides a series of tools for enabling effective climate governance, drawing on global best practice frameworks and insights from Australian directors and institutional investors.

2 References to "transition" throughout this report refer to the transition to a low-carbon economy, encompassing both transition and physical climate risks. This framing is intended to capture the material implications for long-term value creation, capital allocation and risk management.

How To Use This Report

This report examines how Australian company boards are building capabilities needed to oversee the climate transition. Its purpose is to support constructive dialogue between investors and companies on climate governance, and support companies in embedding climate considerations into governance structures, strategic planning, and board-level oversight and engagement.

The report is structured as follows:

- **Executive summary and introduction:** A summary of the strategic importance of board climate capability, key research findings and practical guidance for investors and boards.
- **Guiding principles:** A set of guiding principles to help investors and companies evaluate the extent to which board composition, oversight structures and governance processes enable effective climate transition leadership. Each principle is supported by signposts, illustrative examples and global best practice case studies, and summarised results from ASX company assessments.
- **Appendices:** Sector specific guidance on priority board capabilities in oil and gas, electric utilities, resources, industrials, transport, and consumer goods, reflecting each sector's unique transition challenges including stranded asset risk, low-carbon technology readiness, regulatory pressure, and shifting customer demand. Detailed board capability assessment and engagement frameworks are also provided to help investors and companies identify capability gaps, prioritise targeted actions, and strengthen governance alignment with transition objectives.

For investors, this framework can inform:

- Board assessments and stewardship engagements
- Voting decisions on director elections, remuneration structures and climate transition plans
- Disclosure expectations on governance, transition plans and climate-linked remuneration

For companies, this report provides:

- A clear articulation of the board-level capabilities expected to enable an effective transition from the perspective of both company directors and investors
- A tool for board evaluation, director training, succession planning and recruitment
- Guidance on how to embed credible climate oversight across governance structures
- Disclosure recommendations to enhance transparency around how companies are building and demonstrating board-level capability to oversee the climate transition

The Challenge

Regulators including ASIC, APRA and ACCC in Australia, along with legal commentary and industry guidance on fiduciary duty,[3] indicate that boards must govern climate risk with the same diligence as any other material financial risk.

As the global economy decarbonises, the capacity of boards to guide companies through this transition is now a critical determinant of long-term value and risk management. However, evidence suggests that many Australian boards – particularly those overseeing high-emitting companies — are not yet aligned with the urgency or complexity of the climate transition.[4]

3 AICD & ACSI. *Governing for net zero: the board's role in organisational transition planning*. 2025; CPD, *2016 Hutley Opinion on directors duties and climate change*. 2016.
4 CA100+, Net Zero Company Benchmark. 2025.

Meeting this expectation remains a challenge. The Australian Institute of Company Directors' (AICD) 2024 Climate Governance Study[5] found that nearly half (49%) of ASX-listed directors do not believe their boards have the requisite knowledge and experience to address contemporary climate issues. Globally, a BCG survey[6] of over 800 directors found that only 29% felt they had sufficient knowledge to challenge management on sustainability plans, and less than 30% said sustainability was fully integrated into their board's investment decisions. These capability gaps are compounded by competing short-term priorities, making it difficult for boards to dedicate sufficient time to forward-looking climate strategy. As directors' legal responsibilities on climate risk evolve, material capability gaps need to be addressed – particularly given Australian Accounting Standards Board S2 s.6ai(i) now requires explicit disclosure of climate-related governance.

The challenge extends beyond gaps in individual knowledge. Many boards are still developing the collective structure, culture and processes required to detect early signals, anticipate systemic change, and make strategic long-term decisions under uncertainty. These elements are not only important for navigating climate-related risks and opportunities, but relevant for other economic disrupters such as AI and cyber security. Insights from the Climate Governance Initiative's 2025 report[7] reinforce this, with 88% of directors surveyed recognising the need for new forms of leadership in the boardroom to effectively respond to climate risks and opportunities. Strengthening board diversity, refreshing traditional skills matrices and enhancing succession planning are all seen as critical enablers of more adaptive and future-fit governance. Equally important is greater collaboration – across sectors and through public-private partnerships – to build the collective capacity needed for systemic transition.

Why This Matters

- The climate transition presents systemic risks and opportunities that demand new forms of board oversight and thinking.
- Boards that lack transition capability risk missing or mismanaging material climate-related risks and opportunities, undermining long-term company performance and value creation.
- Regulators, asset owners and broader stakeholders increasingly expect directors to embed climate governance across board structures, strategy, capital allocation and risk frameworks.
- There is a decreasing number of boards that are embedding climate into risk frameworks, with AICD research showing a drop from 45% in 2021 to 34% in 2024,[8] and most ASX listed CA100+ companies only partially aligned with global climate governance benchmarks.[9]
- Boards that fail to demonstrate credible climate transition capability face rising scrutiny, investor disengagement and potential legal risk.[10]
- Detailed information disclosure on climate change governance, strategy, risk management, and metrics and targets is now a requirement under the Australian Sustainability Reporting Standard AASB S2.

5 AICD. *Climate governance study 2024: moving from vision to action*. 2024.
6 BCG et al. *The role of the board in the sustainability era*. 2023.
7 CGI. *Empowering board directors to drive climate action: director perspectives from across the globe*. 2025.
8 AICD, *Climate governance study 2024: moving from vision to action*. 2024.
9 See n6.
10 According to the Grantham Institute (LSE), as of 2023 over 230 climate aligned lawsuits had been filed against corporations and trade associations, including 47 'climate washing' cases, with more than 70% of completed cases decided in favour of claimants; LSE. *Global trends in climate change litigation – 2024 snapshot*. 2024.

Insights from Roundtables and Stakeholder Interviews

Key observations from interviews and roundtables with institutional investors, company directors and governance experts were:

- Boards across all sectors require a common set of core capabilities to oversee the climate transition effectively. These include systems thinking with a climate lens, strategic foresight, strong capital allocation judgement, cross-disciplinary fluency, and cultural traits such as intellectual curiosity, resilience, and openness to challenge.
- Effective climate governance demands embedding climate considerations into enterprise risk oversight and executive remuneration[11], integrating scenario planning into strategy, and ensuring capital discipline[12] reflects both near-term market dynamics and long-term transition risks and opportunities.
- Board renewal and independence are important to bring fresh perspectives, avoid legacy bias, and align governance capabilities with evolving transition contexts. This includes deliberate succession planning and recruitment of directors with diverse professional and lived experiences, as well as sector specific transition expertise.[13]
- Capability assessments should go beyond binary skills matrices to reflect the depth, maturity, and practical application of climate transition knowledge in governance and strategy. More transparent disclosure of board capabilities and governance processes can help build trust and demonstrate alignment with the company's transition pathway.
- While core governance skills apply universally, sector specific priorities vary according to emissions profiles, disruption risks, and transition challenges. Leading boards tailor their governance approach to address these risks, engage external expertise, and adapt oversight structures to enable transformation and safeguard long-term value creation.

11 Incentivising Climate Action with Executive Remuneration in Australia, 2024.
12 Financing Australia's Corporate Climate Transition, 2025.
13 IGCC has also published detailed reports outlining investor expectations on the integration of climate considerations into capital allocation and remuneration.

A New Framework for Investors

This report introduces a set of Climate Governance Principles, designed to help companies and investors consider board-level practices and capabilities in the context of the climate transition. The Principles provide a structured lens for evaluating how boards integrate climate risks and opportunities into strategy, risk oversight, capital allocation, and organisational culture. They are informed by sector specific transition challenges, critical knowledge domains, and leadership attributes identified through research and consultation.

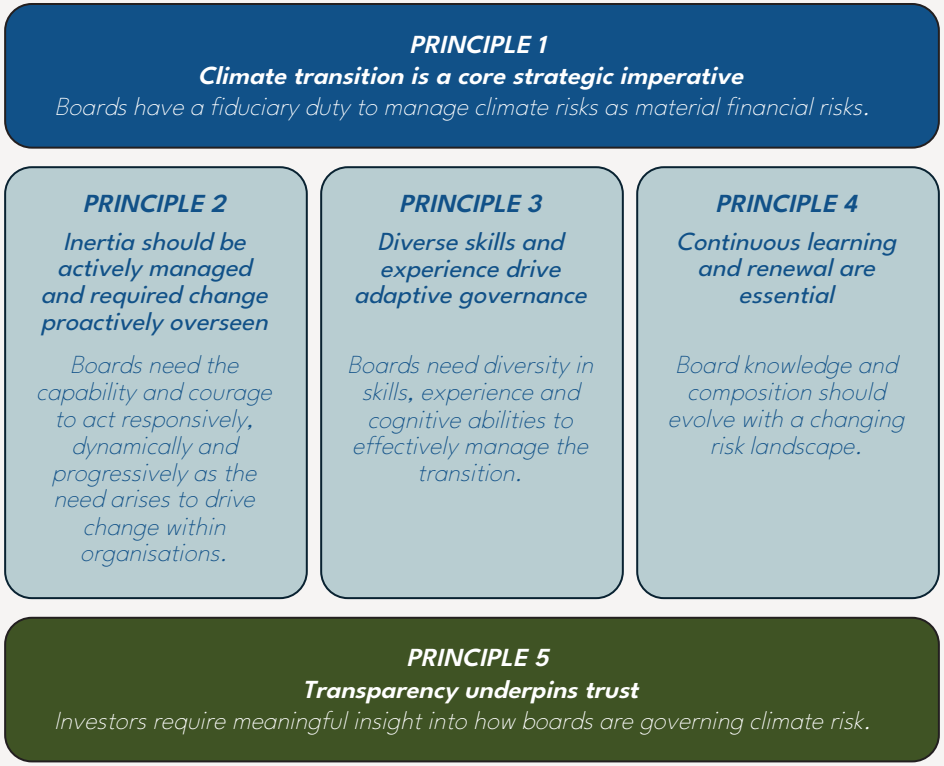
The framework recognises that effective climate governance is not a checklist exercise. Board capabilities should be tailored to each company's sectoral context, emissions profile, and strategic priorities.

The Principles are supported by two practical tools:

1. Evaluation matrix – a qualitative assessment tool aligned to the Principles, used to evaluate board governance practices against transition oversight needs. This includes illustrative indicators, signposts, and examples of effective practice.
2. Engagement framework – a structured set of questions designed to guide dialogue between investors and companies on board capabilities and climate governance, helping to identify capability gaps, strengthen oversight, and embed transition priorities into board processes.

These tools are intended as flexible, practical resources to support ongoing improvement, not as compliance mechanisms. They provide a consistent basis for assessment, engagement and capability development, with the aim of equipping boards to guide their organisations through the complexity and uncertainty of the climate transition while safeguarding long-term value creation.

Figure 1: Summary of guiding principles for climate governance



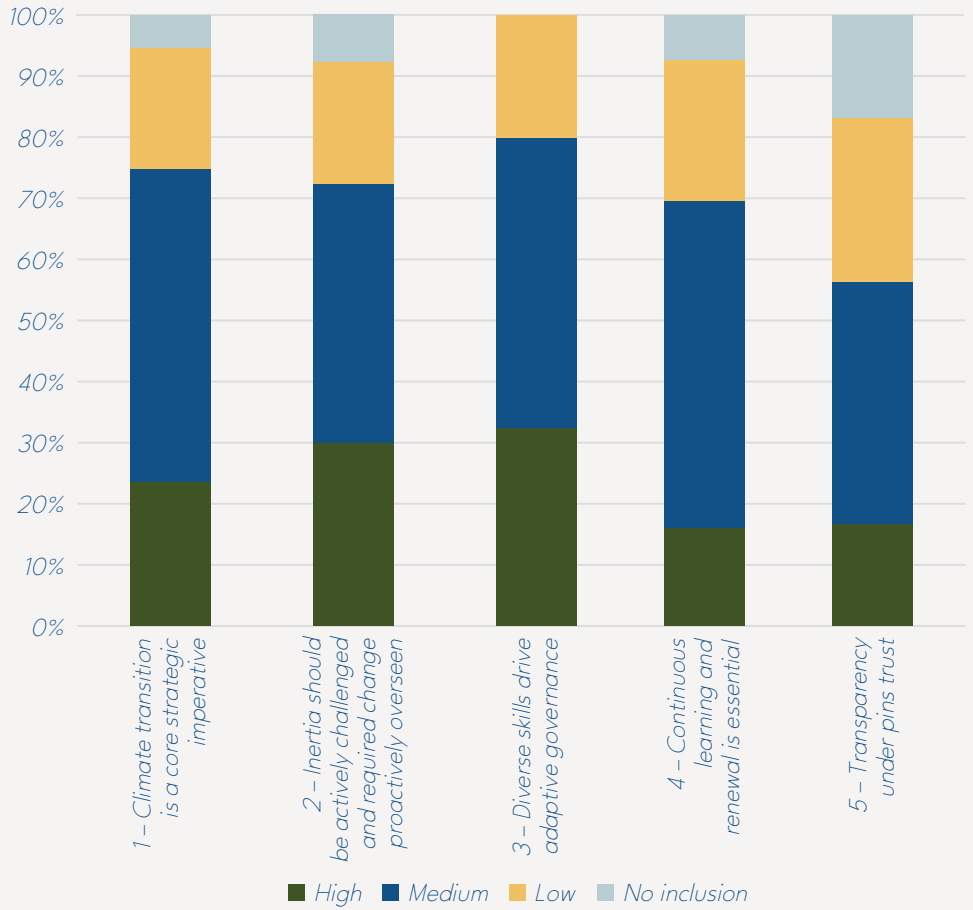
Insights From Company Analysis

To test our approach, we evaluated the climate governance practices of eight major ASX-listed companies using the Evaluation Matrix (Appendix B). These companies span high-emitting sectors — transport, energy, resources, consumer goods, and industry/manufacturing — each with unique transition requirements shaping their climate governance approaches.

The analysis indicated that these companies perform best on assigning formal board responsibility for climate oversight, incorporating transition-relevant competencies into director skills matrices and referencing climate drivers within core strategy documents. Principle 3 — diverse skills drive adaptive governance — was the only principle where most companies achieve high- or medium-alignment. Several boards have updated skills matrices to include transition-relevant expertise and show a level of diversity in professional backgrounds. In contrast, very few boards achieve high-alignment on transparency or continuous learning. None of the companies discloses capability gaps or mitigation actions to address potential skill or expertise gaps, with few clearly linking executive mandates to transition outcomes or drawing on independent expertise, underscoring that Principles 4 and 5 are the most underdeveloped.

Overall, boards are beginning to recognise climate as a strategic imperative. But there is potential to expand continuous learning, explain how governance processes support the transition, ensure capital allocation meaningfully integrates climate considerations and better align executive incentives with climate objectives to meet evolving investor and regulatory expectations.

Company assessment against the Guiding Principles



Looking Ahead

Boards play a critical role in ensuring organisations have the skills, experience and adaptive capabilities needed to navigate the climate transition. This goes beyond endorsing climate ambitions – it requires equipping boards with the sector-relevant expertise, strategic insight and decision-making acumen to steer transition risks and opportunities.

Effective climate governance demands clear expectations for director capabilities, regular board renewal aligned with evolving transition challenges, and governance processes that integrate diverse perspectives and independent expertise. Targeted engagement and practical tools can help boards assess whether their collective skillset is positioned to drive strategic pivots, oversee capital allocation decisions consistent with a net-zero pathway, and embed climate considerations into risk oversight and organisational culture.

By referencing the principles-based framework provided in this guidance, companies and investors can work to ensure company boards have the capabilities necessary to guide their organisations through the complexity of the transition while safeguarding long-term value creation.

02: Introduction

In 2021, IGCC published *A changing climate: what investors expect of company directors on climate risk*, which highlighted that many Australian company boards at that time lacked skills and experience relevant to managing climate-related risks and leading the transition to net zero emissions by 2050. The report emphasised the need for boards to integrate climate considerations into their strategies, risk management and disclosures, in alignment with investor expectations and emerging global standards.

This follow-up guidance builds on those findings and explores the specific transition-related capabilities that company boards require to effectively oversee company transition in the context of the global shift to a net zero economy and the escalating impacts of climate change. The guidance draws on insights from both investors and directors across key Australian sectors and is grounded in global best practice frameworks – particularly the World Economic Forum's *Climate Governance Principles*,[14] that provide high-level guidance on board accountability, structure, subject matter command, strategic integration, incentive alignment, disclosure and stakeholder engagement.

While the climate transition has implications for all sectors, the nature and urgency of required board capabilities will vary depending on a particular company's exposure to transition drivers, regulatory expectations and capital market pressures. To acknowledge this, we provide a sector-specific perspective of capability priorities, informed by sector research and director and investor input.

> Delivering business transformation aligned with a credible net zero transition requires more than intent – it calls for strategic, informed and accountable leadership at the board level that leads to action.

The principles outlined in this guidance offer practical tools to help boards steer companies through the climate transition. At the same time, the skills required for effective climate governance are equally valuable in addressing other systemic challenges such as technological disruption, geopolitical uncertainty, shifting ESG expectations and changes in global trade. Because many directors serve on multiple boards, strengthening board capability in line with these Principles can create broader, system-wide benefits for how companies adapt to an evolving global context.

14 WEF, *How to set up effective climate governance on corporate boards: guiding principles and questions*. 2019.

Climate Change Presents a Distinct Set of Challenges for Boards

- **Complexity and uncertainty:** Unlike traditional risks, climate risks and opportunities are systemic, long-term, and lack historical precedence. They require multidimensional, forward-looking thinking to anticipate both downside risks and emerging growth pathways across sectors and value chains. Timing major investment decisions to support asset decarbonisation or entry into emerging markets is especially challenging amid limited data and a shifting global economic and political context. Complexity also arises as value chains decarbonise at different rates depending on country or sector, and are impacted by physical climate risks. In addition, while the nature of direct physical risks may be certain, the magnitude and timing is less certain, as are the physical risks within supply chains and essential infrastructure.
- **Evolving expectations:** Investor expectations, regulatory requirements, and stakeholder scrutiny are increasing – driven not only by the emergence of new mandatory disclosure regimes and the growing frequency and severity of physical climate impacts, but also by the expanding focus on a company's role in enabling the net zero transition through investment in technology solutions and capturing associated opportunities. Boards also face the challenge of balancing long term transition investments with near term financial performance expectations. Delivering shareholder returns and meeting market forecasts can sometimes discourage companies from pursuing capital intensive decarbonisation initiatives, slowing momentum on transition commitments.
- **Capability gaps:** Many directors may lack the subject matter expertise or strategic insight required to navigate certain climate-related risks and identify transition-aligned opportunities. Sustainability skills and related capabilities remain underrepresented in board composition.[15]
- **Governance misalignment:** Climate responsibilities are not always clearly embedded across committees, and boards may lack the requisite engagement with executives, investors or external experts. This can hinder their ability to guide company strategy and capital allocation to harness both risk mitigation and value creation in a low-carbon economy.[16]

IGCC initiated this project to respond to these challenges. It aims to provide clear, investor and company director-informed principles which provide practical guidance on board capabilities to enable credible and effective transition governance and maintain shareholder value in the context of a dynamic economic, policy, technology and market context. By addressing both cross-sector and sector-specific priorities, the report facilitates a rigorous and proactive approach to board assessment, education, recruitment, renewal and accountability in the context of corporate climate change risks and opportunities.

"Boards are grappling with how to define commerciality in the context of the transition. Traditional financial forecasting models don't always capture the long-term risks and opportunities of climate, which makes board oversight more complex — especially given rising fears about liability and greenwashing." Board Director

"Every director should be equipped to interrogate climate strategy and challenge assumptions." Asset owner

15 In its 2024 Climate Governance Study, AICD found that only 45% of directors surveyed agreed their board had the knowledge and experience to adequately address climate governance. They also found that only 20% of ASX200 companies specifically reference climate in their skills matrices, indicating a lack of formal recognition and integration of climate expertise in board composition and succession planning. BCG also found that sustainability knowledge is rarely fully integrated into director recruitment (<15% of board searches), with many boards relying instead on ad hoc external advice – limiting continuity in expertise and engagement.

16 In its 2024 Climate Governance Study, AICD found that whilst climate is appearing in more board charters, fewer boards have climate embedded in risk frameworks (down from 45% in 2021 to 34% in 2024). Climate oversight often sits in a single sustainability committee with insufficient integration across audit, risk, remuneration and nomination committees.

03: Investor and Company Director Insights

In 2025, IGCC convened a series of roundtables and interviews with investors and listed company directors to explore how boards can most effectively oversee the climate transition. These conversations defined shared expectations around board capability by identifying how director knowledge, skills, and traits contribute to effective climate oversight and long-term company resilience.

To inform these conversations, IGCC analysed the main trends and challenges across six priority sectors, mapping them to core capabilities required at board-level. This process also identified critical knowledge domains, such as climate policy, technological innovation and stakeholder behaviour, and essential leadership attributes including strategic foresight, systemic thinking, autodidactism, resilience, integrity and openness to challenge. Together, these insights offered a practical reference point for investors and directors to provide feedback on the key transition-related capabilities required by boards in 2025.

"The readiness to pivot a business is a core board skill. Climate demands strategic thinkers — not just risk managers." Company Director

Regardless of sector, investors and directors agreed that all company boards require a common set of core capabilities to enable effective climate governance, including:

- **Systems thinking with a climate lens:** Understanding complex interdependencies across markets, policy, infrastructure, and technology.
- **Strategic foresight:** Applying insight to identify long-term risks and opportunities amid uncertainty – recognising that while the direction of change is clear, the timing, pace and pathway remain uncertain.
- **Capital allocation judgement:** Differentiating between compliance, maintenance and transformation-aligned investments.
- **Risk oversight evolution:** Embedding climate into enterprise risk and integrating scenario planning.
- **Cross-disciplinary fluency:** Navigating intersections of science, economics, technology, regulation, stakeholders, competitors and customer dynamics.
- **Cultural traits:** Intellectual curiosity, resilience, and the ability to challenge norms constructively.
- **Board renewal and independence:** Ensuring independence from legacy capital decisions, enabling fresh perspectives to challenge sunk cost bias, and committing to regular board refreshment aligned with evolving transition risks and opportunities.

"Effective directors bring curiosity and a problem-solving mindset – traits essential for navigating the complexity and uncertainty of the climate transition." Governance expert

"Long board tenure can create a reluctance to course-correct on past capital decisions — highlighting the need for independent thinking and periodic board renewal." Governance expert

Investor insights underscored the need for improved systems thinking, macroeconomic fluency, and deeper board renewal processes. Binary skills matrices were seen as inadequate to assess depth or experience. Instead, capability assessments should reflect maturity, experience, and leadership in applying climate and business transformation knowledge and understanding to governance and strategy. These expectations are not unique to climate; they reflect a broader shift in what boards should bring to bear in navigating complex, interconnected challenges across multiple domains.

Tenure and Succession

Effective climate governance requires boards that can adapt, innovate and challenge the status quo. However, research shows that entrenched boards, or those anchored to conventional views of required capabilities and experience, may hinder innovation – a critical risk in the context of the climate transition.

AICD resources refer to "zombie board directors"[17] highlighting that without structured renewal, long serving directors may resist stepping down, limiting diversity of thinking and reducing a board's responsiveness to emerging risks. This concern is reinforced by research published in the European Accounting Review,[18] which found that boards with a high proportion of long-tenured directors are less effective at supporting innovation, produced fewer patents, and had lower R&D productivity and weaker exploratory innovation.

17 AICD, *Succession planning*. 2024.
18 Ning Jia. *Should directors have term limits? Evidence from corporate innovation*. European Accounting Review, Taylor & Francis Journals, vol. 26(4). 2017. (pp 755–785).

Material Differences Between Investor and Director Perspectives

While both investors and directors acknowledge the importance of climate-related board capabilities, nuanced differences shape expectations and oversight.

- **Perspective on strategic risk:** Investors tend to approach climate as a systemic financial risk that must be integrated into capital allocation and long-term value creation. Directors, while aligned in principle, often cited short-term constraints, such as regulatory uncertainty or lack of validated commercial pathways, as reasons for hesitation.
- **Policy engagement:** Investors expressed interest in boards taking more active roles in policy advocacy to guide and encourage policymakers in shaping a supportive and enabling transition environment, provided boards use advocacy to accelerate genuine progress and not delay action or protect narrow commercial interests.
- **Board renewal and composition:** Investors were more direct in questioning whether boards had the right mix of skills and experience. They highlighted the need for better succession planning and fresh perspectives to avoid legacy bias, particularly in sectors with high transition risk. Directors acknowledged this need but often framed it as continuous learning rather than structural change. Several directors also highlighted the value of board diversity, including the recruitment of younger professionals with non-traditional skillsets.
- **Assessment and accountability:** Investors voiced frustration with limited visibility into how boards assess and disclose capability. They called for clearer articulation of transition-related capabilities in skills matrices and performance evaluations. Directors supported capability development but raised concerns about the practicality of measuring and disclosing capability in meaningful ways.

These differences highlight the importance of ongoing, constructive engagement between investors and companies on board-level capabilities to address differing perspectives and work towards greater alignment. A shared understanding of time horizons, accountability expectations, and the strategic importance of transition planning are critical to ensuring effective corporate transition in alignment with rapid global decarbonisation and the need to address material climate risks.

Sector-Specific Priorities

Appendix A outlines sector-specific board capability priorities, recognising that while some governance skills apply universally, transition risks, emission profiles and disruption pressures vary significantly by industry. Drawing on director input, investor perspectives and sector research, this report identifies critical competencies for boards in oil and gas, electric utilities, resources, industrials, transport[19] and consumer goods. Case studies illustrate how leading boards embed climate oversight, engage external expertise, and reorient governance structures to enable transformation. These priorities help ensure boards in these key sectors are equipped to navigate complex transition challenges while safeguarding long-term value creation.

Case Study: Retail – Starbucks, United States

Starbucks provides an example of how board renewal can support enterprise transformation. In 2025, the board appointed an economist and a technology executive to strengthen oversight of its operational and digital reinvention strategy. The appointments brought new expertise in macroeconomics, innovation and AI-enabled business models, aligning board capabilities with emerging strategic priorities.

The board plays a central role in guiding the company's 'Back to Starbucks' strategy, which focuses on revitalising customer experience and modernising digital infrastructure. By aligning board composition with long-term transformation needs, Starbucks has embedded forward-looking governance into its oversight of technology investments, customer engagement and operational redesign.

This case illustrates how boards can support strategic change by refreshing director capabilities and ensuring alignment between board composition and the company's future operating model.

19 These are the sectors covered by the Australian Climate Action 100+ focus companies. IGCC is a founding partner of Climate Action 100+.

04: Guiding Principles for Companies and Investors

To help strengthen climate governance and support effective oversight of the transition, IGCC has developed a set of sector-neutral guiding principles. These seek to align company governance practices and board-level capabilities with credible, long-term climate outcomes. The principles outline how companies can embed climate into strategic oversight, cultural leadership, board composition and performance accountability. They reflect director and investor feedback, best practice guidance and the underlying rationale for stronger climate-aligned governance.

These principles have been supplemented with sector-specific guidance (see Appendix A), which outlines priority capabilities and focus areas tailored to the distinct transition and physical risks, opportunities and business model considerations of different sectors. This was informed by director and investor consultation on sector-level capabilities and material considerations.

Figure 2: Guiding principles for companies and investors

Principle 1 — Climate Transition is a Core Strategic Imperative

Principle 1 highlights that boards should treat climate as a strategic imperative, integrating it across oversight structures, capital allocation, scenario planning and incentive systems. Boards are expected to align their business model and investment decisions with credible climate pathways, supported by active governance and transparent disclosures. Misalignment is reflected in siloed climate efforts, lack of integration into financial planning and absent or passive board engagement.

"The transition challenge is not just technical — it requires directors to lead organisational change. Many boards are still developing the adaptive capabilities needed to effectively support implementation, not just endorse strategy." Investment Manager

Figure 3: Principle 1

Principle 1
Climate transition is a core strategic imperative

Investor expectation
Boards have a fiduciary duty to manage climate risks as material financial risks.

Rationale
Climate change is not just an ESG issue – it is a systemic risk and strategic transformation imperative.

Implications for boards

Boards should oversee the transition plan with the same depth as other strategic initiatives and governance tools such as capital allocation and risk frameworks.

- ***Strategic alignment and board-level oversight:*** *Boards should ensure that climate risks and opportunities are acknowledged, actively managed, and treated as strategic drivers that will reshape capital deployment, product mix, and the long-term business model. Climate should be present in, and integrated across, the core corporate strategy and risk management system (which integrate transition finance metrics).*
- ***Scenario analysis and business model resilience:*** *Boards should oversee the use of transition-aligned scenarios to test the resilience[20] of the business model and inform strategic decision-making. Transition risks and opportunities should be reviewed at the board level on a regular basis.*
- ***Capital alignment:*** *Boards should ensure that capital allocation decisions are aligned with a transition-consistent trajectory.*
- ***Governance structures:*** *Boards should embed climate oversight within the full board and a board-level committee, with clear lines of accountability for climate governance.*

Signposts

Strategic alignment and board-level oversight:

- *Climate risks and opportunities are referenced in core strategy documents (not just sustainability reports)*
- *Directors reference climate as being incorporated into and/or a change driver in, the long-term business and risk models*
- *Strategy documents and investor presentations show climate as a key factor in business model evolution*
- *Transition drivers influence long-term value creation discussions*
- *Clear identification of contingency factors to drive change*
- *CEO is incentivised to drive required change[21]*

Scenario analysis and business model resilience:

- *Business planning reflects credible climate scenarios (i.e. IEA NZE, IPCC pathways or jurisdictionally relevant scenarios) with assumptions tested across multiple pathways (i.e. accelerated, delayed, disorderly) and changes made toa company strategy as a result*
- *Regular scheduled climate scenario discussions tied to strategic or capital planning milestones*
- *Board committee terms of reference explicitly include responsibility for reviewing transition scenarios*

Capital alignment[22]:

- *Capital allocation decisions reflect transition risks and opportunities – not just short-term market signals*
- *Capital investment criteria may include emissions intensity and/or transition risk metrics*
- *Capital is allocated to assets aligned with long-term net zero emission climate scenarios*
- *Board applies scrutiny to carbon intensive investments*
- *Climate-adjusted cost of capital/hurdle rates and/or shadow carbon pricing is used*
- *Project rejection/approval criteria based on climate impact (with short-term ROI not the only criteria used to assess decarbonisation investments)*
- *Mitigation projects prioritised over growth projects (where hurdle rates are met)*

Governance structures:

- *Board or committee(s) have formal responsibility for climate strategy and risk oversight*
- *Climate oversight structures are tied to strategy and capital approval processes*
- *Climate components meaningfully integrated into executive remuneration[23]*

20 Resilience in this sense means ensuring the company can withstand and adapt to climate transition dynamics such as rapid policy shifts, technological breakthroughs, demand shocks, extreme weather events and supply chain disruptions. A resilient business model is one that remains viable under a range of plausible climate futures, including providing shareholders with an acceptable return on capital.
21 See IGCC's Incentivising Climate Action with Executive Remuneration in Australia report for detailed analysis.
22 See IGCC's Financing Australia's Corporate Climate Transition report for detailed analysis.
23 See IGCC's Incentivising Climate Action with Executive Remuneration in Australia report for detailed analysis.

Principle 2 — Inertia Should Be Actively Managed and Required Change Proactively Overseen

Principle 2 requires boards to be willing and able to challenge inertia and oversee the strategic shifts required by the climate transition. Boards are expected to foster a culture of constructive challenge, adaptive thinking and open debate, ensuring that assumptions are tested and legacy models and conventional wisdom do not go unexamined. Effective governance under this principle translates investor and stakeholder feedback into meaningful change in leadership, strategy and capital allocation. Misalignment is evident where engagement occurs without impact, transition risks are downplayed or executive leadership is not held accountable for delivering climate-aligned outcomes.

"The ability to understand and engage with a dynamic stakeholder landscape is now a critical board competency — particularly in contested transitions." Investment manager

Figure 4: Principle 2

Principle 2
Inertia should be actively challenged and required change proactively overseen.

Investor expectation
Boards need the capability and courage to act responsively, dynamically and progressively as the need arises to drive change within organisations.

Rationale
Effective oversight requires boards to confront cultural, structural and commercial inertia within companies and to appoint, incentivise and hold a CEO to account for delivering the change needed.

Implications for boards

Directors need the capability to challenge dominant paradigms, steer strategic shifts, embrace change, and appoint a CEO equipped to lead the climate transition.

- ***Board culture and challenger capability:*** *Boards should foster a culture that encourages constructive challenge, embraces systems thinking, and supports adaptive decision-making.*
- ***From dialogue to action:*** *Boards should ensure that decisions reflect the use of innovation, transition insights and stakeholder feedback.*
- ***Executive leadership as change agents:*** *Boards should appoint and incentivise CEOs to lead the transition, with accountability for delivering climate-aligned outcomes.*

Signposts

Board culture and challenger capability:

- *Examples that demonstrate how the board creates space for dissenting views, embraces complexity, engages with interdisciplinary perspectives or encourages reflection and debate on assumptions*

Board dialogue vs. action:

- *Board decisions demonstrate innovation or transition insight*
- *Level of support from investors on climate transition action plans*
- *Frequency and quantum of climate-related engagements with stakeholders relative to strategic changes*

Executive leadership as change agents:

- *CEO appointment and incentives linked to climate transition delivery*
- *Remuneration tied to clear transition KPIs*
- *CEO track record or mandate includes driving strategic change for transition*

Principle 3 — Diverse Skills and Experience Drive Adaptive Governance

Principle 3 calls on boards to bring together the diverse skills and sector-specific capabilities needed to govern effectively through the climate transition. Boards are expected to maintain a fit-for-purpose skills matrix that includes transition-relevant expertise, and draw on cognitive, sectoral and lived experience that enables informed oversight and strategic innovation. This includes practical application of directors' expertise in shaping climate strategy and business model evolution. Misalignment is evident where board composition lacks diversity of thought, climate capabilities are absent or symbolic, and skills assessments are vague, self-referential or disconnected from transition planning.

"[An important trait is] to be willing to embrace diversity and look for different backgrounds to bring different views."
Company Director

Figure 5: Principle 3

Principle 3
Diverse skills and experience drive adaptive governance

Investor expectation
Boards need diversity in skills, experience and cognitive abilities to effectively manage the transition.

Rationale
Skill and cognitive diversity enables better decision making in uncertainty and complexity.

Implications for boards

Directors need the capability to challenge dominant paradigms, steer strategic shifts, embrace change, and appoint a CEO equipped to lead the climate transition.

- ***Skills matrix quality**: Boards should maintain a skills matrix that reflects sector-relevant climate capabilities*
- ***Cognitive and experiential diversity**: Boards should ensure diversity of thinking, sectoral backgrounds, and lived experience among directors*
- ***Practical deployment of skills**: Boards should ensure that climate-relevant expertise is actively applied to strategic decision-making and business model evolution.*

Signposts

Skills matrix quality:

- *Skills matrix includes capabilities that are relevant to the company sector and the transition challenges being faced*
- *Required board skills are independently assessed and updated regularly to ensure the board has appropriate skills present*

Cognitive and experiential diversity:

- *Board includes directors with diverse professional and lived experience relevant to the climate transition and their sector*
- *Board composition includes at least some members with non-financial, non-legal backgrounds*
- *Board capability is assessed regularly by a suitably qualified independent third-party*

Practical deployment of skills:

- *Directors with transition-relevant experience are visibly engaged in strategy development*
- *Director input leads to business model changes e.g. innovation investment, divestment, new capabilities*

Principle 4 — Continuous Learning and Renewal Are Essential

Principle 4 requires boards to demonstrate a commitment to continuous learning, renewal, and external engagement in response to the evolving climate context. Boards are expected to undertake regular and sector-specific climate education, integrate feedback from investors and stakeholders and refresh board composition in line with forward-looking capability needs. Effective governance under this principle also includes drawing on independent expertise to challenge internal assumptions and inform strategic decisions. Misalignment is evident where climate education is infrequent or superficial, renewal processes ignore climate capability gaps, and boards rely solely on internal resources without external input to guide transition planning.

Figure 6: Principle 4

Principle 4
Continuous learning and renewal is essential

Investor expectation
Board knowledge and composition should evolve with a changing risk landscape.

Rationale
Static knowledge is not sufficient in a rapidly changing climate, technology, and regulatory environment.

Implications for boards

Ongoing board development, external input and skill refresh cycles are critical.

- ***Engagement and training****: Boards should ensure directors receive regular, sector-relevant climate education and integrate feedback from stakeholders and investors into governance policies.*
- ***Board refresh policies****: Boards should review and renew their composition based on forward-looking capability needs, with climate oversight roles evolving as the transition context shifts.*
- ***External expertise and board evolution****: Boards should draw on independent scientific and strategic expertise to inform decision-making and challenge internal assumptions.*

Signposts

Engagement and training:

- *Climate training is provided regularly, not just one-off briefings*
- *Training covers topics including scenario development, regulatory changes, investor expectations, innovations and sector-relevant transition capabilities*
- *Board integrates feedback from investors and stakeholders into governance processes*
- *Director participation in external climate forums and industry dialogues*

Board refresh policies:

- *Board skills and composition are reviewed regularly against future strategic needs*
- *Transition capabilities are explicitly considered in director renewal, retirement and recruitment*
- *Investor feedback informs renewal decisions*
- *Climate oversight roles evolve as the transition context changes*

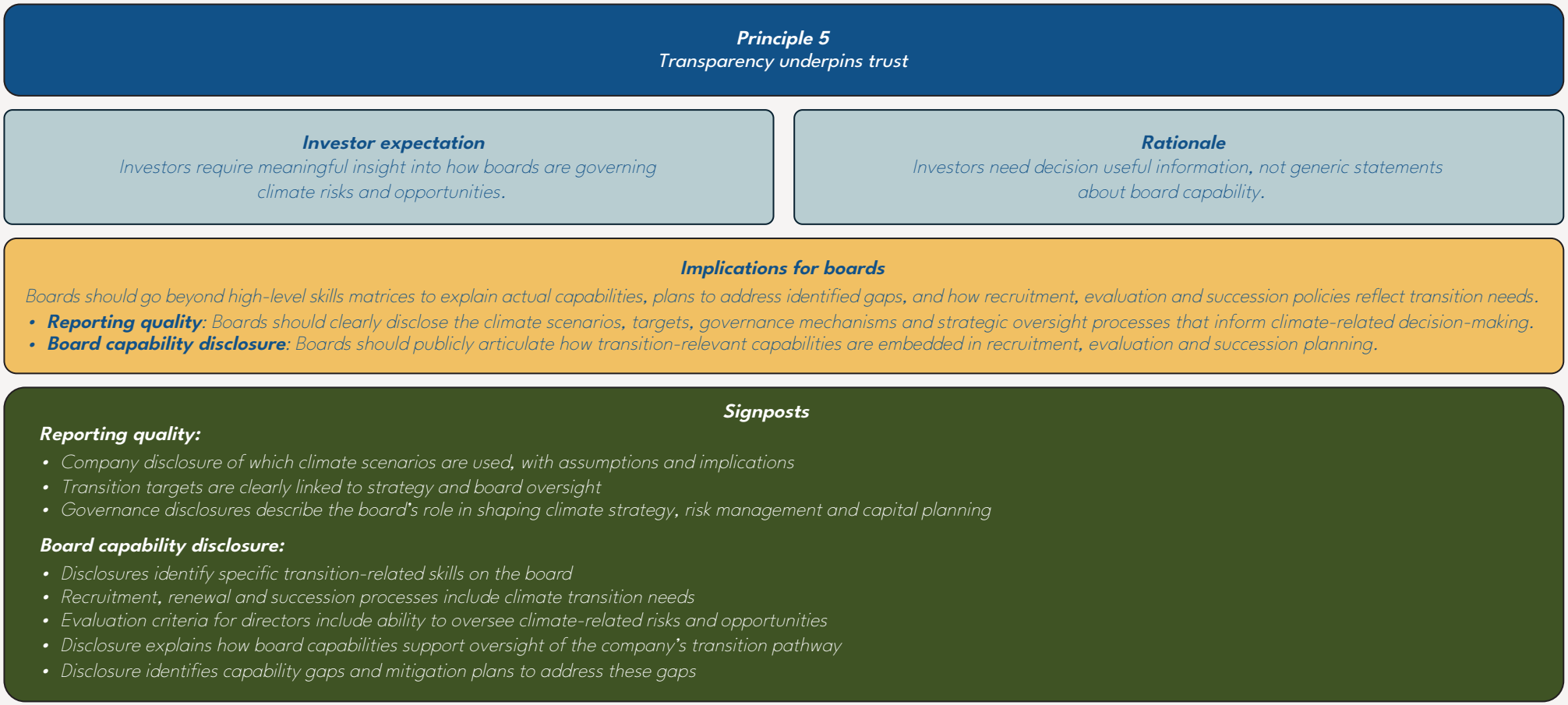
External expertise and board evolution:

- *Board engages independent advisors or experts to inform transition-related decisions*
- *Scientific and/or economic expertise is regularly brought into board strategy sessions*
- *External scenario testing is used to challenge internal assumptions*
- *Advisors help translate complex risks into board-relevant actions*

Principle 5 — Transparency Underpins Trust

Principle 5 requires boards to provide transparent, specific disclosures that build trust and demonstrate credible climate governance. Boards are expected to clearly articulate how they oversee climate risks and strategy, including the scenarios, targets, and governance processes that inform decision-making. Effective governance under this principle also includes public disclosure of capability gaps and steps to mitigate, including how transition-relevant skills are continuously assessed and embedded into board recruitment, evaluation, and succession planning. Misalignment is evident where disclosures are vague, generic or siloed in sustainability reports, with little evidence of how board capability supports the company's climate strategy or how governance processes are applied in practice.

Figure 7: Principle 5

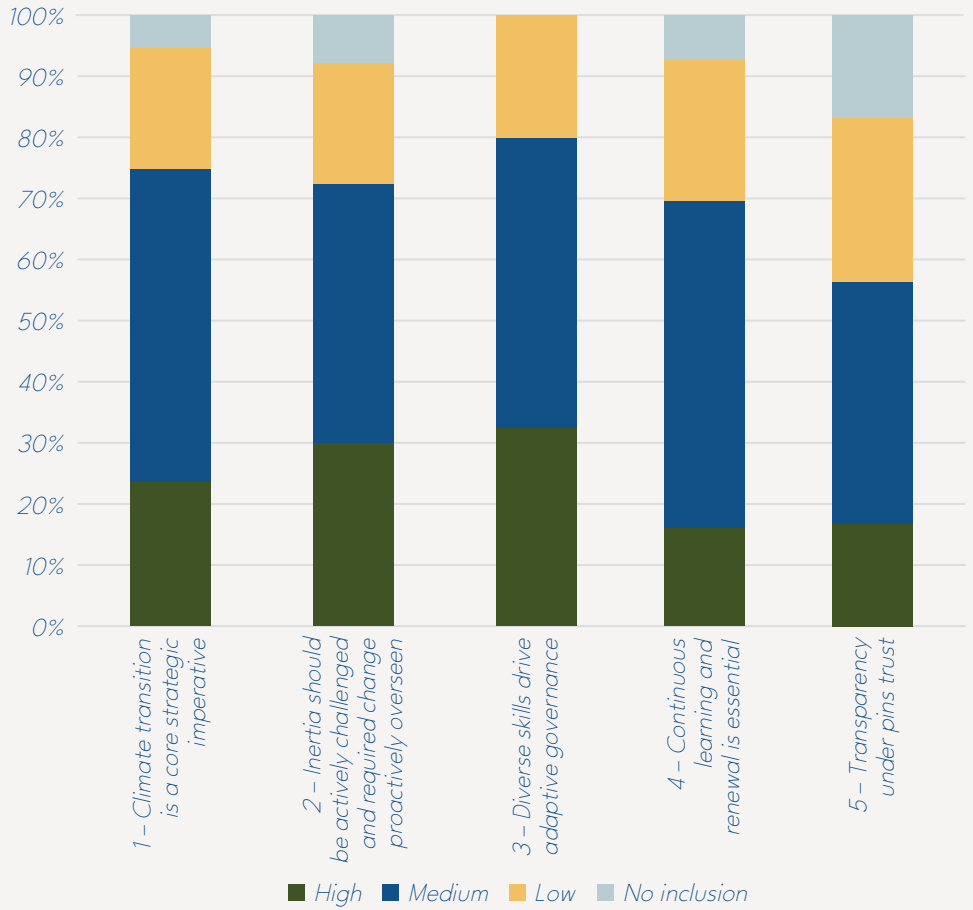


Company Analysis

The principles and corresponding evolution matrix (Appendix B) were tested and refined by conducting qualitative analysis of eight ASX-listed CA100+ focus companies, referencing publicly available disclosures. Each company was assessed against 40 signposts spanning the five governance principles: strategic recognition of the transition, the ability to manage inertia and oversee change, diversity of board skills, continuous learning and renewal, and transparency. Figure 8 shows aggregated scores from this analysis and provides some insight into where the boards analysed are demonstrating leading practice and where there is potential for governance practices to be better aligned with the principles.

Across the eight companies, results suggest boards are beginning to incorporate climate considerations into strategy, risk management and capital allocation, with several companies showing strong alignment on formal board oversight and skills diversity. However, the analysis also uncovers opportunities to improve continuous learning, succession planning and transparency. Regarding the latter, none of the companies assessed disclose capability gaps or how director expertise informs their transition strategy. Sectors such as Resources, where investor interest and regulatory oversight is high, tend to perform better against the climate governance principles than sectors with comparatively less scrutiny, such as consumer goods and retail. This may indicate how investors and regulators can influence governance practices or may be symptomatic of how climate governance is already somewhat tailored to company context and the role of certain sectors in the transition.

Figure 8: Company assessment against the Guiding Principles



05: Conclusion

Boards must adapt to address the complexity of the net zero transition and evolving corporate climate change risks. Climate governance is no longer a specialist sub-topic, it is a core board responsibility and a critical lever for long-term value creation. This report highlights that building board capability requires more than awareness – it demands structured skills assessment, strategic renewal and constructive stakeholder engagement. Importantly, this is not unique to climate change, but is relevant to multiple factors currently underpinning transformative shifts in the global economy.

The Principles outlined in this report offer a practical reference for boards and investors seeking to align governance with credible climate action. They can be used to inform director recruitment, education, board evaluations, succession planning and engagement agendas. The Principles are broadly applicable but economic sectors that are materially impacted by climate change require specific capabilities and considerations. This is addressed in Appendix A, offering a resource to support more targeted board engagement and capability development.

Transition hinges not only on technical solutions, but also on courageous, informed and forward-looking leadership at the board level. Investors, stakeholders and companies must work together to equip boards to navigate complexity, challenge inertia, and drive the strategic transformation necessary for companies to align with the global shift towards a low-carbon economy.

06: Appendix A

Sector-Specific Board Capability Priorities

While general capabilities apply across the board, certain skills are of heightened relevance in specific-sectors. These reflect sectoral transition risks, emissions profiles, physical risk exposures and business model disruption.

Informed by director input, investor perspectives and sector research, this section outlines capability priorities tailored to each sector's climate transition context.

1. Energy (Oil and Gas)

The oil and gas sector faces complex structural challenges in transitioning to a low-carbon future. Declining global fossil fuel demand coupled with rising regulatory and shareholder scrutiny require a strategic shift in business models, capital allocation and board oversight. The appropriate timing and balance of long-term value creation versus staged capital transfer as fossil fuel activities diminish or are supplanted depends on a board's ability to lead transformation while managing financial, technological and social risks.

Energy – Key Trends and Challenges[24]

- High emissions profile (particularly scope 3).
- Integration challenges within existing facilities.
- Development and widespread deployment of leak detection, repair programs and gas recovery systems.
- Lack of access to sufficient firmed decarbonised electricity.
- High upfront capital costs.
- Policy and regulatory uncertainty.
- Shrinking market for oil and gas products.
- Increasing pressures to responsibly exit fossil fuel assets.

Core Capability Needs

- **Skills to lead effective energy transition planning** and reposition the company within a structurally declining fossil fuel landscape.
- **Capability to direct forward-looking capital allocation**, identify and mitigate stranded asset risks, and pursue emerging low-carbon growth opportunities.
- **Capabilities in strategic foresight, innovation leadership and transformation oversight** – going beyond operational experience to challenge legacy assumptions and conventional sector narratives.
- **Recognition that these capabilities are essential**, not optional, for long-term resilience and value creation. Boards should also be mindful of overconfidence in existing skillsets, especially where directors' industry tenure may reinforce outdated beliefs about future demand trajectories or perceived immunity to transition risks.
- **Additional critical capabilities:**
  - **The ability to interpret and oversee scenario analysis and risk assessments** to evaluate organisational resilience across different decarbonisation pathways, including social and regional implications of transition strategies.
  - **Technical familiarity with low-carbon technologies and repurposing infrastructure** – such as hydrogen, carbon capture, synthetic fuels and emissions management tools — and ability to critically assess their strategic relevance and social impact.
  - **Capacity to reassess legacy assumptions and guide major capital shifts** in response to transition risks, while considering implications for affected workforces and communities.
  - **Diversity of thought and open-mindedness**, fostering robust boardroom dialogue, constructive challenge and responsiveness to external shifts
  - **Strong climate governance capabilities** to ensure alignment of climate strategy with board oversight structures, committee mandates and executive accountability.
  - **Financial markets experience** in navigating short-term investor expectations, respond to market pressures, balance immediate performance with long-term transition objectives and maintain investor confidence and share price stability during transformation.
  - **Effective stakeholder engagement and advocacy capability** – including the ability to engage with investors, regulators and policymakers on climate transition strategy, align with evolving market dynamics and expectations, and secure stakeholder support to drive long-term value creation.

24 CCA. Sector pathways review 2024. 2024.; Carbon Tracker. Responsible exit principles for oil and gas companies. 2024.; IEA. Net zero by 2050 – a roadmap for the global energy sector. 2021.; IEA. World Energy Outlook. 2024.; IGCC. Emissions-Intensive Asset Exits: A Universal Owner Perspective on Sales and Managed Closures. 2023.

Case Study: Energy – Eni, Italy[25]

Eni's board has overseen a strategic pivot from traditional oil and gas operations toward sustainable energy and industrial transformation. In 2024, the board approved a major reorganisation that created three new divisions — Transition and Financial, Global Natural Resources and Industrial Transformation — to accelerate decarbonisation and unlock value in renewable and low-carbon businesses.

A dedicated Sustainability and Scenarios Committee supports board-level oversight of climate strategy. It regularly engages external experts such as climate scientists to challenge assumptions and refine transition scenarios. The board's strategic plan embeds net zero targets by 2050, reviewed alongside financial outcomes through executive remuneration and sustainability-linked financing instruments.

These governance changes enabled the creation of satellite businesses focusing on renewables, retail, EV charging and biofuels, with each structured by independent management while still overseen by the board. This satellite model has allowed targeted capital allocations and investor partnerships to support Eni's transition efforts, while maintaining value from legacy assets.

25 Eni, 2025, Eni shareholders' meetings 14 May 2025: Message from the Chairman of the Board and Sustainability management; Eni, 2024, Eni: Board of Directors approves the new business structure.

2. Energy Utilities

Energy utilities play a critical role in enabling the broader energy transition. As providers of grid infrastructure and energy generation, their leadership in decarbonisation is foundational to system-wide change – particularly amid escalating electricity demand, ageing infrastructure and the growing complexity of integrating variable renewable energy. Boards should challenge conventional wisdom around the future use of existing gas and electricity networks, while positioning for new opportunities in distributed generation, storage and customer-integrated technologies. This demands advanced risk oversight and strong stakeholder engagement capabilities amid increasing market volatility and structural change.

Utilities – Key Trends and Challenges[26]

- Renewable electricity generation and storage capacity must substantially increase through to 2050.
- Skilled energy workforce needs to grow substantially.
- Additional transmission infrastructure required.
- Planning and approvals processes need to be better resourced.
- New system security technologies not all tested at grid scale.
- Global demand for transition materials increasing, placing pressure on supply chains.
- Government and industry need to earn social licence from impacted communities.
- Traditional owners need to be included as partners in the deployment of infrastructure on their land.

Core Capability Needs

- **Skills to lead grid decarbonisation** and integrate large-scale renewables.
- **Capability to allocate capital strategically** – prioritising investment in future-focused infrastructure rather than repeating legacy models of fossil fuel generation – as well as oversee asset transition, including investment in new transmission and storage infrastructure, planned and socially responsible asset closures and maintaining supply reliability and public trust.
- **Capabilities in regulatory and policy navigation**, including the ability to engage constructively with government and regulatory bodies, influence supportive energy and transition-related policy and respond flexibly to regulatory directions that may not always align with the company's net zero strategy.
- **Additional critical capabilities:**
  - **Strategic asset transition and transformation planning**, systems-level thinking in grid and energy infrastructure, and managing complex trade-offs between reliability, cost, decarbonisation and social impact.
  - **Capital agility and investment oversight** to fund large-scale transmission and grid upgrades, support distributed energy integration and emerging technologies, and align investment decisions with long-term system needs, not just legacy business models.
  - **Workforce and community transition capability** to proactively manage the impacts of asset closures on regional communities, lead equitable workforce reskilling, redeployment and stakeholder engagement; and maintain trust through inclusive, place-based transition strategies.
  - **Change leadership and transformation skills** to drive internal culture and operational shifts aligned with decarbonisation and maintain social licence during periods of major system and organisational change.

26 CCA. Sector pathways review 2024. 2024.

Case Study: Utilities – CLP Holdings, Asia Pacific[27]

The Hong Kong-based power generation company CLP Holdings has embedded climate governance across board structures, with formal oversight roles for both its Sustainability and Audit and Risk Committees. These bodies support the board in overseeing long-term climate strategy, material risk management and the integrity of climate-related disclosures.

Board-level commitment enabled early investments in renewable energy, even when returns were uncertain, and underpinned the advancement of the company's coal phase-out date by a decade (to 2040). Directors also oversee regular strengthening of emissions targets in line with climate science.

This sustained governance approach has helped CLP reduce carbon intensity and grow renewables to 16% of generation capacity, demonstrating how long-term board leadership can drive decarbonisation despite short-term trade-offs.

27 This summary is based on a case study published by the Climate Governance Initiative, 2024, CLP Holdings Ltd: Overcoming barriers to reach net zero in the energy sector.

3. Resources (Mining and Mineral Processing)

Resource companies play a pivotal role in the global energy transition — both by reducing emissions across their own operations and by enabling decarbonisation through the responsible supply of critical minerals such as lithium, copper and rare earths.

Resources – Key Trends and Challenges[28]

- Lack of access to sufficient firmed decarbonised electricity
- Integration challenges within existing facilities
- Low-carbon technology maturity
- Global market volatility and geopolitical influences
- Limited opportunities to reduce fugitive emissions (except for pre-mine methane drainage)
- Electrification of mining haulage and equipment
- High upfront capital costs (CAPEX and OPEX)
- Lack of supporting regulation/incentives for change

Core Capability Needs

- **Skills to lead decarbonisation of both existing (brownfield) and new (greenfield) assets**, ensuring that all operations are future-fit and aligned with transition pathways.
- **Capability to allocate capital strategically** – shifting investment from legacy emissions-intensive assets toward the commodities and production methods that align with a low-carbon economy.
- **Capabilities in strategic commodity foresight and demand forecasting**; upstream and downstream decarbonisation levers; assessing future commodity value based on energy transition scenarios; and managing operational emissions and embedding low-carbon production in capital planning.
- **Additional critical capabilities:**
  - **Low carbon technology and R&D literacy** including the ability to understand the role of minerals in enabling clean energy technologies; evaluate emerging technologies to decarbonise heavy industry and mining operations; and guide investment in metallurgical decarbonisation, e.g. green steel, electrification of processes.
  - **Geopolitical risk management and social licence oversight** with awareness of geopolitical complexities in global mining jurisdictions; understanding of local physical climate risks and their effect on community and regulatory engagement; and skills to maintain a social licence to operate across diverse cultural, political and ecological landscapes.
  - **Decarbonisation of legacy assets** recognising the technical and financial challenges of reducing emissions in aging or inflexible infrastructure; the need for differentiated strategies between greenfield and brownfield sites; board-level capability to engage in open, evidence-based conversations about write downs, stranded asset risk, reinvestment trade-offs and the just transition implications for affected workers and communities.
  - **Policy and regulatory navigation**, particularly as diversified miners and steelmakers face direct exposure to global and domestic climate policies, and governments shape strategic pathways around critical minerals, carbon border adjustments, and low-carbon manufacturing.
  - **Supporting suppliers and customers in decarbonisation**, including working with suppliers to develop electric mining equipment, trucks and trains and collaborating with customers to deliver products that enable downstream decarbonisation and enhance supply chain transparency.

28 CCA. Sector pathways review 2024. 2024.

4. Industrials

Industrial companies, particularly those with emissions-intensive processes such as steel, cement and chemicals manufacture, have a critical role to play in advancing low-carbon innovation. With limited abatement options available today for some processes in the value chain, the sector's transition depends on breakthrough technologies, product redesign and business model transformation.

Industrials – Key Trends and Challenges[29]

- Widespread deployment of energy efficiency and adoption of a circular economy approach
- Electrification, fuel and feedstock switching to decarbonise high temperature and carbon-intensive processes to produce steel, alumina, ammonia and cement
- Supply chain constraints for substitution feedstock materials for iron, ammonia, cement, chemicals, plastics and building materials
- Issues associated with access to sufficient raw, recycled or recovered materials
- Technological readiness of solutions for key processes is immature
- Highly dependent on the reliable supply of sufficiently firmed decarbonised electricity and new fuels where required
- Substantial new private investment will be required to replace or retrofit large assets
- Markets for low-emission products are still developing, lacking depth in demand and supply

Core Capability Needs

- Skills in **low carbon technology and R&D literacy**, including understanding technology readiness levels and innovation maturity within the organisation, among competitors and across government/private funding programs; evaluating the commercial viability and timelines of breakthrough solutions and ensuring R&D investments align with long-term decarbonisation objectives and global competitiveness.
- **Capability to lead business transformation**, ensuring companies move toward inherently lower carbon products and more resource-efficient production methods.
- **Capabilities in strategic R&D oversight and innovation governance**; embedding climate and carbon performance in product design and operational decision making; fostering joint ventures and collaboration with value chain partners, investors and government (including in R&D, technology deployment and financing) to accelerate scalable transition solutions; and anticipating global shifts in technology, customer expectations and regulatory frameworks to avoid being outpaced by international peers.
- **Understanding and leveraging abatement optionality**, including engagement with policymakers to ensure market competitiveness when deploying new low carbon technologies – such as advocating for supporting measures like carbon border adjustment mechanisms or equivalent policies that protect domestic investment in advanced steelmaking and other breakthrough processes from emissions-intensive imports.
- **Additional critical capabilities:**
  - **Skills in product and process innovation** to enable emissions reduction in sectors where traditional electrification and abatement measures are often insufficient.
  - **Upstream and downstream decarbonisation capabilities** to build stronger customer and supply chain relationships that inform decarbonisation strategies; understand emerging client demand for low-carbon products and how this influences future revenue models and capital allocation; and co-develop solutions that align with customer sustainability targets.
  - **Business model transformation and change leadership** to guide organisations through complex operational and cultural change; reorient legacy systems around future market demands, climate risk and innovation cycles; and embed transition pathways within core strategy, operations and customer value propositions.

29 CCA. Sector pathways review 2024. 2024.

Case Study: Cement – Cemex, Mexico[30]

Cemex, a global cement and construction materials company, provides an example of how structured board oversight can accelerate decarbonisation in a traditionally high-emitting sector. The board established a dedicated Sustainability Committee, which was renamed in 2022 to include explicit oversight of climate action. The full board receives regular updates on climate risks and reviews progress against the company's net zero strategy.

Climate targets are embedded into the broader business strategy and reviewed alongside operational and financial performance. The board also monitors emissions intensity trends and ensures capital allocation decisions are aligned with transition objectives.

This governance approach supported Cemex in reducing its carbon emissions by 30% (from a 1990 baseline), including a 9% reduction between 2020 and 2022. The board's active role has enabled Cemex to meet evolving regulatory expectations, accelerate low-carbon innovation and position itself competitively for a net zero future.

30 This summary is based on a case study published by the Climate Governance Initiative, 2024, Cemex: leading the way to net zero in the cement industry.

5. Transport

Aviation, heavy vehicle freight shipping and long-distance rail contributes to transport being one of the hardest-to-abate sectors. While global demand for passenger and freight movement continues to grow, cost-effective decarbonisation technologies including sustainable fuels, electrification and hydrogen-based solutions remain in early stages of development. As a result, emissions intensity remains high across modes such as aviation, heavy road transport and shipping. Transition planning requires careful balancing of technological innovation, capital allocation, infrastructure readiness and evolving customer and regulatory expectations.

Transport – Key Trends and Challenges[31]

- Green premiums – high upfront costs of low emissions technologies, including electric vehicles and sustainable aviation fuels
- Limited visibility on future supply, demand and pricing of renewable fuels and zero-emission technologies
- Global competition for renewable fuels, critical minerals and limited feedstock supplies for biobased alternatives
- Workforce and skill shortages – new capabilities required across manufacturing, fuel production, infrastructure development and digital systems
- Technology maturity and asset longevity – many zero emissions solutions remain in development or are costly to deploy at scale, alongside long investment cycles for transport assets
- Inadequate supporting infrastructure – including refuelling, charging and grid connection
- Regulatory gaps – lack of consistent, forward-looking policies and standards to drive investment, uptake and systems integration across transport modes

Core Capability Needs

- **Skills in fleet and infrastructure transition planning**, including long-term capital planning to guide investments in zero emissions vehicles, vessels, rail and associated infrastructure that are emissions aware, climate resilient and adaptable to evolving technologies and regulatory environments.
- **Capability to assess emerging low-carbon transport technologies** such as electric drivetrains, hydrogen propulsion, sustainable fuels, digital logistics optimisation and modal integration. This includes evaluating potential physical impacts in infrastructure, supply chains and technology performance.
- **Capabilities in strategic capital allocation for major investment decisions** across vehicle fleets, logistics systems and infrastructure. This includes integration of physical and transition risk assessments into procurement and asset management strategies, as well as navigating trade-offs between operational efficiency, emissions reduction, service reliability and affordability for customers and end users.
- **Additional critical capabilities:**
  - **Low carbon technology and innovation literacy**, including a working understanding of vehicle and infrastructure engineering, fuel switching options, and R&D strategy oversight. This includes promoting innovation, aligned supplier relationships, and supporting the scale-up of solutions such as electrification, hydrogen mobility, advanced biofuels and digital integration.
  - **Value chain decarbonisation capability** – with insight into upstream and downstream impacts across the transport ecosystem, including vehicle and fuel suppliers, freight and logistics providers, infrastructure operators and end-users. This includes recognising how organisational demand signals and sector collaboration can contribute to system-wide decarbonisation outcomes.
  - **Carbon market and offset strategy**, ensuring directors understand the current role and limitations of voluntary and compliance offset markets in transport; are literate in offset quality and reputational risks and can oversee a strategic shift away from offsets as viable low emissions technologies scale up.
  - **Change leadership and stakeholder navigation**, to manage evolving public, investor and government expectations, address workforce and supply chain shifts, and communicate credible, phased decarbonisation pathways. This includes building cross-sector partnerships to accelerate infrastructure deployment, innovation and system integration.

31 CCA. Sector pathways review 2024. 2024.

Case Study: Infrastructure – Metro Pacific Investments Corp, Philippines[32]

Metro Pacific Investments Corp (MPIC) demonstrates how board structures and capability development can drive climate integration in a high-risk, emerging market context. The board established a Governance and Sustainability Committee, chaired by an environmental economist, and embedded climate considerations into investment decisions and company-wide performance reviews.

The committee meets regularly and has the authority to intervene in project approvals. In one case, it required management to reroute a toll bridge to avoid damaging a mangrove forest, reinforcing the board's commitment to environmental integrity despite added cost.

Board oversight is supported by mandatory ESG training and regular engagement with external experts. The boards also endorsed a strategic pivot away from coal investments, reinforcing its role in long-term risk mitigation and aligning capital decisions with transition goals.

32 This summary is based on a case study published by the Climate Governance Initiative, 2024, Metro Pacific Investments Corporation (MPIC): A holistic approach to finance, risk, climate and sustainability.

6. Consumer Goods and Services

Consumer goods and services companies are uniquely exposed to both physical and reputational climate risks as the transition occurs. With complex, global supply chains spanning vulnerable ecosystems and diverse markets, and growing consumer and regulatory expectations for sustainability, boards must navigate a dynamic landscape shaped by climate, nature and social pressures.

Consumer Goods and Services – Key Trends and Challenges[33]

- Less predictable and reliable supply of food
- Decreased productivity and profitability of farming
- Higher input costs increasing prices
- Unavailability of staff at key times
- Large scope 3 emissions for certain products and changing purchasing priorities
- Logistical challenges – emissions and supply chain disruptions
- Replacing high-GHG-emitting refrigerants
- Packaging, waste management and the need to move to a circular economy.

Core Capability Needs

- **Skills to manage physical risk exposures across dispersed upstream and downstream supply chains and infrastructure**, including flood, drought and heat disruption preparedness.
- **Capability in upstream and downstream decarbonisation**, including understanding how to reduce scope 3 emissions in hard-to-abate areas; anticipating customer shifts towards low emissions and sustainable products; engaging value chain partners to align on science-based targets and emissions transparency.
- **Capabilities in supply chain resilience planning and natural capital risk awareness**; strategic oversight of emissions and resource intensity in procurement, production and logistics; and climate-informed sourcing and inventory strategies that minimise reputational and operational risk.
- **Additional critical capabilities:**
  - **Physical risk and disaster recovery planning**, including board-level capacity to anticipate and respond to climate-related disasters, especially in highly exposed regions; understanding insurance, business continuity and crisis management across a retail network; and the ability to interpret climate scenario tools and incorporate findings into capital and sourcing decisions.
  - **Circular economy and resource efficiency literacy**, ensuring familiarity with reuse, repair and recycling models and associated logistics; oversight of waste minimisation strategies, packaging innovation and extended producer responsibility policies; and ability to integrate circular design principles into product and supply chain innovation.
  - **Digitalisation, AI and decarbonisation technologies**, including oversight of data systems and emissions tracking technologies; understanding how digital infrastructure can enable real-time supply chain disruption management, performance improvement and customer engagement; and support for innovation in inventory and logistics management optimisation to reduce environmental impacts.
  - **Collaborative stakeholder engagement and climate policy navigation**, including capability to engage proactively with regulators and policymakers on climate related product disclosures, sustainable sourcing and circular economy regulations; experience building cross sector partnerships with suppliers, governments and civil society to align supply chain practices with climate goals and respond to climate-related disruptions; and strategic insight to anticipate and shape climate policy developments while ensuring company practices are aligned with emerging standards and stakeholder expectations.
  - **Logistics and operational emissions awareness**, including understanding emissions drivers in warehousing, transport, refrigeration and product end of life; oversight of decarbonisation strategies within third-party and in-house logistics operations; engagement in innovation to improve last-mile delivery, reverse logistics and cold chain sustainability.

33 Farmers for Climate Action. Fork in the road – impacts of climate change on our food supply. 2022.; McKinsey. Decarbonizing grocery - Here's how the grocery sector can protect the planet and position itself for green growth. 2022.

Case Study: Consumer Goods – Natura & Co, Brazil[34]

Global cosmetics group Natura & Co demonstrates how board-level oversight can embed sustainability into core business strategy. The board views environmental and social factors as material to long-term value creation and has tied a portion of executive compensation to sustainability targets since 2009.

To support strategic decision making, the board introduced an Integrated Profit and Loss (IP&L) methodology that monetises environmental, social and human capital alongside financial results. Reviewed quarterly at the board level, the IP&L helps assess trade-offs and align capital allocation with broader enterprise value.

The board also oversees ambitious targets, including net zero by 2030, and incorporates emerging climate and nature-related risks into planning processes. Natura's approach illustrates how boards can operationalise sustainability oversight and integrate non-financial risks into governance and performance frameworks.

Case Study: Consumer Goods – Unilever, United Kingdom[35]

Unilever's board has played a central role in steering the company through long-term transformation by embedding sustainability into governance processes and strategic oversight. Directors reformed board structures to support long-term value creation, including eliminating quarterly earnings reporting to focus on long-term sustainability and value creation rather than short-term financial performance, and elevating environmental and social performance alongside financial results in remuneration frameworks.

To strengthen board oversight, Unilever appointed directors with expertise in sustainability and social impact, and enhanced capability through direct engagement with stakeholders and site visits to better understand operational risks. The board also established dedicated processes to assess emerging systemic risks and to integrate stakeholder perspectives into strategic decisions. These changes enabled the board to align governance with Unilever's purpose-led business model to position the company as a leader in sustainable business transformation.

34 This summary is based on a case study published by the Climate Governance Initiative, 2023, *Nature & Co: IP&L, circular carbon and a triple bottom line approach*.
35 Bartlett, Christopher A., *Unilever's new global strategy: competing through sustainability*, Harvard Business School Case 916-414, November 2015. (Revised August 2016).

07: Appendix B

Company Evaluation Matrix

The following company evaluation matrix provides a qualitative assessment tool to guide the evaluation of board governance practices against the Principles.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
1 Climate transition is a core strategic imperative	Has the board explicitly recognised the climate transition as a core business strategy issue?	Strategic alignment and board level oversight	Climate risks and opportunities are acknowledged and managed.	Climate risks and opportunities are referenced in core strategy documents (not just sustainability reports).	The company's strategic documents do not mention climate transition risks or opportunities, with climate only appearing in separate sustainability materials.	References to climate risks and opportunities in strategy are cursory or generic, without integration into core business decision making.	Climate risks and opportunities are acknowledged in strategy and influence selected objectives/ initiatives, though not yet central to core strategy.	Climate transition is explicitly recognised in strategy as a material driver of long-term risk/value creation, with clear integration into core planning and governance.
				Directors reference climate as being incorporated into and/ or a change driver in, the long-term business model.	Board discussions and disclosures do not mention climate change as relevant to the company's future business model.	Climate is occasionally acknowledged but without clear links to how it will shape the long-term business model.	Some recognition in disclosures that the climate transition will require adjustments, with modest pivots beginning to appear in planning.	The board explicitly frames climate transition as a driver of long-term business model transformation (or change, as applicable to each sector), supported by detailed strategy.
			Core strategy recognises climate risks and opportunities as strategic drivers that will reshape capital deployment, product mix or the business model.	Strategy documents and investor presentations show climate transition as a key factor in business model evolution, with transition drivers influencing long-term value creation, strategic goals, KPIs and growth priorities.	Climate factors are absent from growth narratives, financial goals or product strategy.	Climate is mentioned in the company strategy but is not linked to capital priorities or value creation.	Climate factors influence selected growth priorities and KPIs, but links to core business model change remain partial.	Climate transition is embedded in strategic goals, KPIs and capital plans, with explicit recognition of how it reshapes products, investment and value creation.
				Climate adjusted assumptions are used in planning processes.	Business planning uses standard assumptions without consideration of climate risks or transition scenarios.	Climate factors are noted informally or through limited stress tests but remain marginal to planning assumptions.	Climate adjusted inputs such as carbon pricing and demand scenarios are incorporated selectively into planning.	Strategic and financial planning systematically embeds climate adjusted assumptions, supported by scenario analysis and disclosed methodologies.
				CEO is incentivised to drive the required change.	CEO goals and incentives do not reference climate or transition objectives. CEO has no background or mandate to lead climate transition.	Climate/transition is included in incentives at a token level, with little impact on CEO performance evaluation. CEO vaguely expected to support the transition, however there is no clear mandate from the board.	Climate objectives form a meaningful, though secondary, part of CEO appointment, tenure and rewards.	CEO mandate and incentives are strongly tied to climate transition outcomes, making delivery central to appointment, tenure and rewards.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
		Scenario analysis and business model resilience	Use of transition aligned scenarios to test the resilience of the business model and inform decision making.	Business planning reflects credible climate scenarios (i.e. IEA NZE, IPCC pathways or jurisdictionally relevant scenarios) with assumptions tested across multiple pathways (i.e. accelerated, delayed, disorderly).	The company does not apply climate scenario analysis to business planning.	Scenario references are limited, not credible, or disconnected from decision making.	The company uses recognised climate scenarios to stress test some assumptions, but integration is partial.	Multiple credible climate scenarios are embedded in planning, with clear influence on business model resilience and strategy.
				Changes made to company strategy because of scenario analysis insights.	Scenario insights have no effect on strategy or capital allocation.	Scenario analysis is undertaken but has not influenced material decisions.	Some incremental adjustments are made in response to scenario insights, though change is limited.	Scenario results drive substantive changes in strategy, capital allocation or portfolio mix, with disclosed examples.
			Regular board level review of transition risks and opportunities.	Board committee terms of reference explicitly include responsibility for reviewing transition scenarios.	No board committee is tasked with overseeing climate.	Climate oversight exists broadly within committees but without explicit scenario accountability.	Committees reference climate and risk in mandates, indirectly including scenario analysis.	Committee charters explicitly assign responsibility for reviewing transition scenarios, ensuring board level accountability.
				Regular scheduled climate scenario discussions tied to strategic or capital planning milestones.	The board does not review transition risks in its governance processes.	Transition risks are reviewed only sporadically and not tied to planning milestones.	The board reviews scenarios and risks at key planning junctures but not systematically.	Regular board review of transition scenarios is embedded in governance cycles, linked to capital and strategy milestones.
		Capital alignment	Capital allocation is aligned with a transition consistent trajectory.[36]	Climate is integrated into capital allocation processes with instruments which help direct capital to green and transition activities across all stages of maturity, financial return and impact and do not incentivise perverse outcomes.	No evidence of climate integration in capital decisions, no relevant instruments and no safeguards against harm.	Climate is nominally included in some capital decisions but instruments are poorly designed or misaligned, with high risk of adverse outcomes and weak or absent safeguards.	Climate is partially considered in decisions, with some but not fully aligned instruments, gaps in coverage, and safeguards that limit but don't eliminate adverse outcomes.	Climate is fully integrated into capital decisions, using fit for purpose instruments that fund green and transition activities, deliver returns, avoid environmental harm and meet social safeguards.
				Disclosures of capital allocation management processes is complete, detailed, clear and accurate.	No information provided on capital estimates or supporting methodology.	Information is limited, with major gaps, no ASRS/ISSB alignment or intent, and no clear basis for capital estimates.	Information is moderately detailed with some gaps, no current ASRS/ ISSB alignment but future intent, and partial support for capital estimates.	Information is detailed and complete, aligned or intending to align with ASRS/ISSB, with well supported capital estimates, breakdowns, timelines, returns and emission reductions.

36 For a more detailed methodology to assess capital alignment, see IGCC's capital allocation report.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
				Capital is allocated to assets aligned with long term net zero emission climate scenarios.	No evidence of any transition investments or capital allocated to low carbon opportunities.	Investments in transition activities are minimal, with limited initiatives, no quantified climate or financial impacts and insignificant capital allocated to low carbon opportunities.	Investments show ad hoc support for transition activities with partial climate and financial impacts, limited strategic alignment and some capital allocated to low carbon opportunities.	Transition investments align with the plan with significant capital allocated and earmarked for low carbon products, services and green technologies, showing a balanced mix with measurable climate and financial impacts.
			Climate factors are meaningfully shaping capital discipline.	Board applies scrutiny to carbon intensive investments, with climate adjusted cost of capital/hurdle rates and/or shadow carbon pricing potentially used.	Investment discipline does not consider climate factors such as carbon pricing.	Climate is noted qualitatively but has little impact on capital discipline.	Shadow carbon prices or hurdle rates are used selectively, influencing some decisions.	Climate adjusted hurdle rates and carbon pricing systematically shape capital approvals and rejections.
				Project rejection/approval criteria includes climate impacts (with short term ROI not the only criteria used to assess decarbonisation investments), with mitigation prioritised where potential projects could undermine climate goals (where hurdle rates are met).	Climate impact is not considered in project approval or rejection.	Climate transition is acknowledged but remains secondary to short term ROI in approvals.	Mitigation projects are prioritised in some cases, with partial climate screening applied.	Project approval criteria consistently integrate climate impact, with mitigation projects prioritised over growth projects where appropriate/applicable.
		Governance structures	Climate oversight is embedded in the full board or board-level committee with clear accountability.	Board or committee(s) have formal responsibility for climate strategy and risk oversight.	The board has no formal responsibility for climate strategy and risk oversight.	Climate oversight exists but is vague or nominal within governance structures.	Climate oversight is assigned to a committee or designated role, though depth of engagement is limited.	Climate oversight is explicitly embedded in the board and its committees, with clear accountability for climate strategy and risk.
				Climate oversight structures are tied to strategy and capital approval processes.	Climate oversight is siloed from core strategy and capital approval processes.	Climate governance outputs are not consistently fed into strategic or financial decisions.	Climate governance outputs are fed into strategic and financial decisions, however integration lacks consistency.	Climate oversight is structurally tied to strategy and capital approval milestones.
				Climate components meaningfully integrated into remuneration.	Remuneration has no climate-related metrics.	Climate components exist but are symbolic or low weighted.	Climate components account for a material portion of remuneration, though not yet transformative.	Climate performance metrics carry significant weight in remuneration, directly linking pay to transition outcomes.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
2 Inertia should be actively managed and required change proactively overseen	Does the board show a willingness and capability to confront and alter entrenched business models if the need arises?	Board culture and challenger capability	Board culture that supports constructive challenge, systems thinking and adaptive decision making.	Examples that demonstrate how the board creates space for dissenting views, embraces complexity, engages with interdisciplinary perspectives and/or encourages reflection and debate on assumptions.	The board shows no evidence of questioning entrenched assumptions or engaging with transition complexity/	Climate considerations are sometimes mentioned, but challenge of business-as-usual thinking is rare and superficial.	Directors occasionally raise transition issues and alternative perspectives, but these inputs are sporadic and not embedded in board culture.	The board fosters a consistent culture of constructive challenge, actively interrogating assumptions and embracing systems thinking in strategic decisions.
		Board dialogue vs. action	Stakeholder engagement and board dialogue on climate leads to tangible strategic outcomes	Board decisions demonstrate innovation or transition insight.	Strategic decisions reinforce the status quo with no sign of climate-related innovation or new business models.	The board discusses innovation but actions remain limited to rhetoric or small pilots without influencing core strategy.	Some decisions incorporate transition insight, such as selective low-carbon investments or incremental adjustments.	Decisions consistently demonstrate bold transition insight, with capital reallocation and strategic pivots driving business model change.
				Climate transition action plans receive strong investor support.	No transition plan or climate strategy or emissions targets exist.	Plans are presented but receive weak or divided support, often due to missing targets or misaligned capital strategy.	Plans gain moderate approval, with key elements in place but gaps limiting confidence and leaving some dissent.	Plans receive strong investor backing, with ambitious targets, credible capital commitments and high approval rates.
		Executive leadership as change agents	Board appoints and rewards CEO for delivering the required change	CEO appointment and ongoing role is linked to climate transition delivery, with CEO track record or mandate including driving strategic change for the transition.	Climate transition capabilities are absent from CEO selection and performance criteria, with no mandate for change leadership.	The CEO's mandate may reference climate broadly, but transition delivery is not a significant expectation, nor was it a key factor in their appointment.	The CEO's mandate and background include transition related objectives or experience, but these remain secondary to traditional priorities and are not the central basis of their role.	The CEO is appointed and evaluated explicitly as a change agent for the climate transition, with their mandate and track record centred on delivering strategic transformation toward a low-carbon and climate aware business model.
				Remuneration is tied to clear transition KPIs.	Executive remuneration does not contain any transition related objectives.	Climate is referenced in remuneration frameworks, but metrics are vague, qualitative or so lightly weighted that they have little influence on outcomes.	Remuneration includes defined transition KPIs, but they cover only part of the company's impact and carry modest weight, limiting their ability to drive strategy.	Clear, ambitious transition KPIs form a material component of remuneration, ensuring delivery of climate transition outcomes is a core drive of executive incentives.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
3 Diverse skills drive adaptive governance	Does the board demonstrate diverse and sector relevant skillsets aligned with the demands of the climate transition?	Skill matrix quality	A board skills matrix that identifies transition related capabilities relevant to the company's sector, clearly links these to business strategy, and is independently assessed and regularly updated.	Skills matrix includes transition capabilities that are relevant to the company sector.	The skills matrix excludes transition relevant capabilities entirely.	Transition skills are acknowledged only in generic terms without sector specific relevance.	Some transition skills appear in the matrix, though depth and coverage remain uneven/unclear.	Transition capabilities are comprehensively identified, sector specific, and actively used to guide recruitment and training.
				Required board skills are independently assessed and updated regularly.	The board does not conduct formal assessments of its skill requirements.	Skill requirements are self-assessed internally and reviewed only occasionally, with limited reference to climate.	Skill requirements are reviewed regularly with some external/ independent input, and transition capabilities are included but not deeply tested.	Skill requirements are independently assessed on recurring basis and benchmarked against best practice with matrices updated to address climate transition needs.
		Cognitive and experiential diversity	Diversity of cognitive, sectoral and lived experience among directors.	Directors bring diverse professional and lived experience relevant to the climate transition and sector context, with board composition including members from beyond financial and legal backgrounds.	Board members come from homogenous backgrounds with no transition relevant diversity of perspective.	Some limited diversity exists, but transition relevant expertise is scarce or superficial.	The board includes directors with varied professional and lived experiences relevant to transition challenges, though with gaps.	The board demonstrates broad cognitive, sectoral and lived experience diversity, ensuring robust oversight of transition issues.
				Board capability is assessed regularly by a suitably qualified independent third-party.	No third-party assessments of capability are conducted.	External reviews are rare, historic or superficial, with no focus on transition oversight.	The board periodically engages independent reviewers to assess capabilities, with transition oversight potentially included.	Independent third-party capability assessments are routine, comprehensive and directly linked to transition related governance improvements.
		Practical deployment of skills	Transition relevant experience informs strategic decisions	Directors with transition relevant experience are visibly engaged in strategy development with director input leading to business model changes (e.g. innovation investment, divestment, new capabilities).	There are no directors with transition relevant experience on the board.	Transition expertise is present but has little visible influence on outcomes.	Transition experienced directors shape some strategic adjustments, though influence is modest.	Director expertise in climate and transition visibly shapes strategic pivots, investments and innovation.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
4 Continuous learning and renewal is essential	Does the board commit to ongoing adaptation in line with evolving climate context?	Engagement and training	Regular climate and transition related director education, feedback loops from stakeholders and investor engagement on climate and transition governance.	Climate training is provided on an ongoing basis (not just one-off briefings) and covers scenario developments, regulatory changes, investor expectations, innovations, and sector specific transition capabilities.	The board receives no climate or transition related training.	Training occurs occasionally, but is ad hoc, narrow or incomplete.	The board undertakes structured training periodically, covering key aspects of climate transition.	The board receives frequent, structured and comprehensive climate education integrated into governance cycles.
				Board governance processes incorporate feedback from investors and other stakeholders.	The board disregards or excludes investor and stakeholder feedback on transition governance.	Feedback is sometimes received reactively but not systematically integrated into decisions.	Feedback processes exist and occasionally inform transition related governance adjustments.	Feedback loops are embedded, and board decisions clearly reflect investor and stakeholder input on climate and the transition.
				Directors actively participate in external climate forums and industry dialogues.	No directors participate in external climate or transition forums or industry groups.	Participation in external climate forums and industry dialogues is sporadic and individual, without formal board expectation.	Some directors engage in external forums and industry dialogues periodically, with insights occasionally shared.	Multiple directors actively and regularly engage in climate forums and industry dialogues, and feed insights back into governance.
		Board refresh policies	Board renewal responds to forward looking capability needs	Board skills and composition reviewed regularly against future strategic needs with climate oversight roles evolving as the transition context changes.	The board manages director succession reactively, with refreshments based only on tenure or age and no evidence of planning for future strategic needs or evolving climate oversight roles.	The board acknowledges the need for evolving composition but renewal practices show little forward planning, with succession processes following traditional patterns and climate oversight roles left static.	The board periodically reviews its composition against future needs, adding some transition relevant expertise and modestly adjusting oversight roles, though changes remain incremental.	The board proactively aligns succession and governance structures with the evolving climate transition context, recruiting directors with relevant expertise and adapting oversight roles to ensure readiness for future challenges.
				Transition capabilities explicitly considered in director renewal, retirement or recruitment with investor feedback informing renewal/election decisions.	Transition capabilities are not a factor in director recruitment or re-election.	Transition capabilities are acknowledged as desirable but not prioritised in appointments.	Transition capabilities are explicitly considered in nominations and sometimes influence renewal.	Transition capabilities are a central criterion in recruitment and renewal, with investor feedback shaping outcomes.
		External expertise and board evolution	Use of independent science and strategy expertise in decision making	Board draws on independent scientific and economic expertise to inform transition-related decisions, with independent external advisors regularly contributing to strategy discussions.	The board does not engage independent climate or transition expertise.	Independent external expertise is rarely sought and only at a high level, generic level.	Independent expertise is engaged periodically at key junctures.	Independent scientific and strategic expertise is regularly and systematically engaged to inform board decisions.

Principle	Assessment question	Indicator	Sub-indicators	Signposts	Evaluation			
					No inclusion	Low alignment	Medium alignment	High alignment
				External scenario testing is used to challenge internal assumptions with advisors engaged to help translate complex risks into board relevant actions.	Scenario testing does not occur or is entirely internal, with no external validation or challenge.	External scenarios are occasionally referenced but not actively used to test management assumptions.	Independent testing is commissioned periodically to challenge and refine internal scenarios.	External advisors routinely conduct scenario tests, directly informing strategic pivots and capital decisions.
5 Transparency underpins trust	Are disclosures sufficiently specific, and do they link board capability to climate strategy?	Reporting quality	Scenario analysis, targets, board level oversight mechanisms, and meaningful discussion of climate governance are clearly disclosed	Company discloses the climate scenarios used, including detailed assumptions and their strategic implications.	No disclosure of scenarios or assumptions used in resilience testing.	Scenarios are mentioned but assumptions and implications are not disclosed.	Scenarios and some assumptions are disclosed, though detail is limited.	Detailed disclosure of scenarios, assumptions and strategic implications is provided, including financial impacts.
				Governance disclosures describe the board's role in shaping climate strategy, risk management and capital planning, with transition targets clearly overseen by board.	No disclosure of board involvement in climate governance.	Oversight is referenced generically without detail on board role or process.	Oversight roles and processes are described, with some examples of activity.	Disclosures clearly set out the board's role, processes and influence on strategy, risk and capital decisions.
		Board capability disclosure	Public articulation of how transition relevant capabilities are embedded in board recruitment, evaluation and succession planning	Recruitment, renewal and succession processes reflect the capabilities needed to oversee the climate transition.	No disclosure of how board processes consider transition capability.	Processes mention sustainability broadly but without specific detail.	Transition capabilities are referenced as part of board processes but not demonstrated with outcomes.	Clear evidence shows climate capabilities are embedded in board processes, with examples of appointments or succession reflecting transition needs.
				Director evaluation criteria include demonstrated ability to oversee climate-related risks and opportunities.	Evaluation makes no mention of climate oversight.	Climate is mentioned in generic terms but not used as a criterion.	Climate oversight is included in evaluations, though detail is limited.	Director evaluations explicitly test climate oversight capability, with results informing succession and renewal.
				Public disclosures identify board capability gaps and sets out mitigation actions to address them.	Disclosures do not cover board capability gaps.	Disclosures may hint at areas for board improvement, but capability gaps are not clearly stated.	Disclosures acknowledge some capability requirements; improvement needs and outline general actions.	Disclosures explicitly identify gaps and describe mitigation steps, such as recruitment, training or external advisors.
				Disclosure clearly links board capabilities to effective oversight of the company's transition pathway.	No connection is drawn between board skills and transition oversight.	Skills and transition oversight are discussed separately without explicit links.	Some statements link director skills to oversight of climate transition requirements.	Disclosures clearly show how board capabilities directly underpin transition oversight, with examples of skills influencing strategic outcomes.

08: Appendix C

Engagement Framework

This engagement framework is designed to support investors in assessing and constructively engaging with companies on board readiness to oversee the climate transition. It translates the overarching climate governance principles into clear, targeted questions that can guide dialogue with directors and senior executives.

The framework recognises that climate governance is an evolving discipline, and that boards will be at different stages of maturity. Companies can build investor confidence by being open about any gaps, particularly where they are accompanied by credible plans to strengthen oversight and capability. Transparent reflection and a commitment to improvement can signal a board's seriousness about the transition.

For investors, this is not a compliance exercise – it is a practical way to assess whether boards are equipped to navigate material climate risks and opportunities, respond to change and deliver long-term value in a decarbonising economy.

Principle	Intent	Engagement questions	Next steps
	Step 0 – Disclosure		
Disclosure	Is there sufficient information to assess the board's role in overseeing the climate transition and its alignment with business strategy and capital decisions?	Has the company provided specific information (the why, what and how) on its climate strategy and how the board governs climate transition? Are board capabilities, structures and responsibilities for overseeing climate transition clearly disclosed? Is there clarity on how the board oversees capital allocation in support of the transition?	IF NO: • Identify disclosure gaps and advocate for improvements. • Encourage the company to publish board governance structures and decision making responsibilities related to climate. • Request disclosure of scenario assumptions, board capability assessments and the link between climate governance and capital planning.
	Step 1 – THE WHY		
Strategic recognition of the climate transition	Has the board recognised the climate transition as a core strategic and financial issue?	How is the climate transition reflected in the company's core business strategy e.g. growth planning, product mix, long-term business model? How does the board ensure transition scenarios inform strategic planning and business resilience? What processes ensure capital allocation reflects long-term climate risks and opportunities – not just short-term financial returns? How are climate-related responsibilities structured across the board and committees, and are these linked to strategy and investment decisions? How are climate goals integrated into executive remuneration, particularly for the CEO?	IF NO: • Focus engagement on ensuring the company recognises climate transition as a material financial and strategic risk. • Recommend the integration of credible climate scenarios into business planning and capital decision making. • Request alignment of executive incentives with long-term climate strategy.

Principle	Intent	Engagement questions	Next steps
Strategic responsiveness and challenge to inertia	Step 2 – THE WHAT		
	Has the board demonstrated the willingness and capability to challenge inertia and oversee the strategic shifts required for the climate transition?	How does the board create space for debate, diverse perspectives and challenge to legacy business models and investment decisions? What role has the board played in appointing a CEO or executive team equipped for the transition and do they have a clear transition mandate? Are executive incentives tied to climate transition outcomes and how are these measured?	IF NO: • Recommend changes to board composition or culture to enable open challenge and diverse thinking. • Request demonstration of how engagement is translated into strategic action. • Encourage linking CEO incentives and selection criteria to transition leadership.
Board capability and composition	Step 3 – THE WHO		
	Does the board demonstrate diverse and sector-relevant skillsets aligned with the demands of the climate transition?	Does the company publish a board skills matrix showing alignment with climate strategy? Is the board's skillset assessed regularly for transition relevance, and is this independently validated? Does the board reflect cognitive and experiential diversity, including sector insights and lived experience, and does it embrace diverse perspectives? Are directors with relevant expertise actively shaping climate strategy? Are transition skills embedded in recruitment, succession and renewal processes?	IF NO: • Engage on improving the board's skill matrix and encouraging regular independent evaluation. • Encourage inclusion of transition relevant skills and diversity of experience in director appointments. • Recommend the integration of transition capability into governance policies.

Principle	Intent	Engagement questions	Next steps
	Step 4 – THE HOW		
Continuous learning and renewal	Does the board commit to ongoing adaptation in line with the evolving climate context?	What training has the board undertaken in the past 12-24 months?	IF NO: • Request regular and sector specific director climate education. • Recommend independent external input on transition strategy and risk oversight. • Encourage transparent renewal processes based on forward looking climate capability.
		How is stakeholder and investor feedback integrated into governance and strategy?	
		How is board composition reviewed against future capability needs?	
		Does the board engage independent experts to advise on transition risks and opportunities relevant to their sector to inform strategic oversight and risk management?	
		Can the board show how scenario testing or external inputs have influenced strategy?	
	Transparency		
Linking governance and strategy	Are disclosures sufficiently specific and do they link board capability to climate strategy?	Does the company disclose the climate scenarios used for planning, including assumptions and board involvement?	IF NO: • Recommend enhanced transparency on how board governance supports the company's transition plan. • Request disclosure of climate relevant skills, succession planning processes and any identified capability gaps. • Encourage integration of transition governance disclosures into strategy and financial reports – not just sustainability reports.
		Are climate targets clearly linked to governance structures and strategic decision making?	
		Are transition relevant board skills disclosed and is their relevance to strategy explained?	
		Are recruitment, evaluation and succession processes aligned to transition capability needs?	
		Are capability gaps identified and are mitigation plans in place?	

09: Appendix D

Interview Methodology and Acknowledgements

To inform the development of this resource, IGCC engaged directly with both investors and directors to better understand the key capabilities boards need to effectively support the transition to a low-carbon economy.

Roundtables and interviews

The project was underpinned by qualitative insights gathered through interviews and roundtable discussions with non-executive directors, institutional investors and corporate governance experts.

- In-depth interviews were conducted with major institutional investors and current non-executive directors of ASX-listed companies and not-for-profits. These conversations explored firsthand experiences with transition governance, the capabilities most critical for directors and the challenges they face in this evolving context.
- Two roundtables were convened in early 2025 – one with non-executive directors and another with senior representatives of Australian institutional investors. Both sessions focused on the governance challenges associated with climate transition and the core capabilities required of directors to address them.

Participants

IGCC would like to thank the nine company directors who participated in the director roundtable or were consulted in the development of this report.

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- Paul Murphy – Head of Governance and ESG Advisory APAC, Georgeson
- Phillip Foo – APAC Head of Research and Engagement, Glass Lewis
- Rajinder Singh – Portfolio Manager, Pendal
- Serena De Kretser – Senior ESG Specialist, QIC

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