

# **HOW BOARDS GOVERN AI + CLIMATE RISK**



**Greenlane Partners  
Rand Manasse**

# How Boards Should Govern in an Era of AI and Climate Risk

## The Era of Artificial Intelligence and Climate Risk Has Arrived.

Not long ago, boards could treat artificial intelligence as a technology discussion and climate risk as a compliance discussion. That world is gone. Today, these two forces have fused into a single strategic fault line running through **strategy, disclosure, capital allocation, and enterprise value**—and it is already determining which companies adapt, and which fall behind.

Governing this intersection is no longer optional; it is a core fiduciary obligation. According to The Conference Board (October 6, 2025), nearly three-quarters of S&P 500 companies now disclose AI as a material risk in their public filings—up from just 12% in 2023. At the same time, climate risk continues to reshape capital markets and insurance pricing, forcing boards to confront not only physical hazards, but also how dynamic climate data and modeling are now informing critical strategic and capital allocation decisions.

Yet governance has not kept pace. In many organizations, AI oversight remains delegated to management or IT, with limited and inconsistent board engagement—even as regulators and investors increasingly signal expectations for structured board-level oversight. Climate considerations, meanwhile, remain siloed in sustainability discussions rather than fully integrated into enterprise risk management and core strategy.

## Boards Cannot Delegate What They Do Not Understand.

Effective governance has always required directors to look beneath the surface—beyond management narratives and into the assumptions, models, and data that drive decisions. In a climate-constrained world, that requirement has become more demanding. Today, artificial intelligence is increasingly embedded in the systems that underwrite risk, price products, allocate capital, and shape long-term strategy. Without AI, it is no longer possible to understand climate risk at the level of granularity that markets, regulators, and insurers now require.

Platforms such as ZestyAI illustrate both the power and the governance challenge. Its models assess wildfire, storm, and water-damage risk at the individual property level at scale, transforming how insurers and asset owners price risk, manage portfolios, and decide where capital can—or cannot—be deployed. This level of precision is strategically essential. But it also raises board-level questions about model transparency, data quality, bias, control frameworks, and ongoing validation—questions that cannot be responsibly delegated if directors are to fulfill their fiduciary duties.

The same is now true across climate strategy more broadly. AI increasingly underpins scenario analysis, asset-level transition planning, insurance availability, infrastructure investment, and long-range capital planning. Without disciplined governance that surfaces assumptions, limitations, and sensitivities to the board, climate-related decisions risk being built on opaque models and unchallenged data—even as those outputs drive disclosures, valuations, and multi-billion-dollar capital commitments.

This is why AI governance is no longer a technical or management issue. It is a core board responsibility. Directors do not need to be data scientists—but they do need to understand, at a governance level, what the models are doing, what decisions depend on them, and where their failure modes lie. In a world where AI mediates the enterprise’s understanding of climate risk, boards cannot oversee what they do not understand—and they cannot delegate that understanding away.

## What Effective Governance Looks Like.

Boards do not need to become AI engineers or climate scientists. But they do need **disciplined governance frameworks and the right questions** to ensure accountability, control, and evidence-based oversight of decisions that increasingly shape enterprise value.

**Establish a clear AI posture.** Is the company transforming AI deeply into core operations and decision systems—or a pragmatic adopter using AI selectively? Each posture carries different strategic, operational, and reputational risks. The board’s role is to ensure that this posture is explicit, aligned with strategy, and supported by clear metrics, controls, and escalation paths.

**Integrate models into enterprise risk oversight.** Climate and AI risk models should be treated as **enterprise assets**, not technical tools. They should be documented, validated, stress-tested, and periodically audited—with board-level visibility into their assumptions, limitations, and sensitivity to changing conditions. When models influence underwriting, pricing, asset values, or capital allocation, they belong squarely within the governance perimeter.

**Align committee structures and charters.** Some boards place AI and advanced analytics oversight within the risk or audit committee; others establish a dedicated technology or innovation committee. The structure matters less than **clarity of ownership, defined responsibilities, and a regular reporting cadence** that connects model outputs to business decisions and risk appetite.

**Make disclosure integral, not an afterthought.** If a company discloses climate risk while AI models inform key risk assumptions, boards must understand—and be able to defend—that linkage. Governance, modeling, and disclosure are now inseparable. According to EY’s 2025 proxy review, nearly half of (48%) of Fortune 100 boards explicitly disclose AI oversight as

part of their governance responsibilities. A threefold increase from the prior year—reflecting how quickly this expectation is becoming standard practice.

## The Strategic Advantage of Leading on Governance.

Boards that govern AI and climate risk well do more than reduce downside—they **create strategic advantages**. Capital allocation improves when decisions are grounded in transparent, validated, decision-grade data. Investor confidence strengthens when risk oversight is demonstrable and credible. And organizations become more resilient when governance anticipates regulatory scrutiny and reputational exposure rather than reacting to them.

Most importantly, governance that tightly integrates **risk, controls, and strategic intent** compounds enterprise value over time. It improves not just what decisions are made, but **how consistently and defensibly** they are made—precisely the outcome fiduciaries are charged with protecting.

---

## Conclusion: Governance Is Now a Source of Advantage.

Boards that adapt to this new risk environment will do more than avoid surprises. They will help ensure their organizations remain **credible, investable, and resilient** in a world where **assumptions embedded in models increasingly matter as much as reported outcomes**.

Artificial intelligence and climate risk are no longer emerging issues. They are **core governance imperatives**. Boards that continue to treat them as separate or as technical checkboxes invite risks that will not first appear in spreadsheets—but in **market trust, regulatory scrutiny, capital access, and ultimately long-term viability**.

In this environment, the question is no longer whether boards must engage deeply. It is whether they will do so **early enough—and well enough—to turn governance from a defensive necessity into a strategic asset**.