

Redefining Fiduciary Duty: Climate Risk, Stewardship, and the Transition Imperative

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Fiduciary duty, the obligation to act in the best interest of beneficiaries, is being reshaped by the realities of climate risk. Once narrowly focused on short-term returns, it is now evolving to include long-term systemic risks, such as environmental and social factors. This shift reflects growing recognition that climate change materially threatens both portfolio performance and the broader financial system. Leading asset owners worldwide are embedding climate transition planning into investment oversight, reframing climate stewardship as essential rather than optional to prudent fiduciary practice. .



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HIGHLIGHTS

The historical evolution of fiduciary duty

Grounded in loyalty, prudence, and care, fiduciary duty is shifting from short-term financial metrics to long-term systemic risks like climate change. U.S. interpretations still trail the EU, but momentum is building. .

The limits of Modern Portfolio Theory (MPT)

MPT fails to account for how investments shape and are shaped by real-world systems. It treats climate risk as background volatility rather than a core risk factor, an outdated view in today's interdependent financial landscape.

The emergence of universal ownership and systemic risk awareness

Large institutional investors are effectively "universal owners" with exposure to the entire economy. They cannot diversify away from climate risk and must manage it directly to protect long-term returns and the broader financial system.

Concrete case studies from leading asset owners

Case studies of leading practices from CalSTRS, the New York City Comptroller, WSIB, UPP, Border to Coast, and La Caisse show how robust transition strategies and targeted stewardship advance climate action as part of fiduciary duty.

Legal and regulatory shifts reinforcing climate integration

From ERISA reforms in the U.S. to SFDR and TCFD mandates in Europe and the UK, laws are increasingly requiring fiduciaries to account for climate-related risk. UN, European, and UK regulators have signaled that ignoring climate risk may violate fiduciary duty, while U.S. guidance remains less explicit.

The concept of fiduciary duty, the legal obligation to act in the best interests of beneficiaries, is undergoing a profound transformation. Traditionally interpreted as the pursuit of maximum short-term financial returns, fiduciary duty is evolving to incorporate long-term systemic risks, particularly climate change. This evolution reflects growing recognition that investors cannot fulfill their obligations to beneficiaries without considering how climate change threatens the stability of the global economy and, by extension, long-term investment returns across all asset classes.

The United Nations-backed Principles for Responsible Investment (PRI) reports that over 730 hard and soft law policy revisions across 48 of the world's 50 largest economies now support investors in considering sustainability factors¹. This shift has moved fiduciary duty from an implicit consideration of environmental, social, and governance issues to an explicit requirement in many jurisdictions. As former French Minister of Economy and Finance Bruno Le Maire notes, "The financial system has a crucial role to play in the shift towards a more sustainable economy... without a strong signal from investors, insurers, bankers, no significant change in our economic system will be possible²."

The Traditional Framework of Fiduciary Duty

Fiduciary duty is built on core principles of loyalty, care, and prudence that guide investment decision-making. However, its interpretation varies across jurisdictions. In the United States, fiduciary duty has often been narrowly defined, focusing primarily on short-term financial performance and return maximization. This approach tends to exclude broader systemic risks, such as climate change, unless they pose an immediate financial threat.

In contrast, European legal and regulatory frameworks more explicitly incorporate environmental, social, and governance considerations into fiduciary responsibilities. EU regulations have increasingly prioritized sustainability and long-term value creation. This reflects a more expansive view of what it means to invest prudently and responsibly. As a result, fiduciary practice in the EU has moved more quickly to embed climate risk management into standard investment oversight, while many U.S. institutions continue to treat it as optional or secondary.

This divide has sparked growing criticism of the traditional U.S. model. Critics argue that it fails to account for large-scale, long-term risks that directly affect portfolio resilience and financial security. As Saker Nusseibeh, CEO of Federated Hermes International, noted, "The current interpretation of fiduciary duty needs to be updated to include stewardship responsibilities... Climate change constitutes the biggest systemic risk to our economies, and fiduciaries who ignore it are failing in their duties³." Dutch asset management firm Robeco has similarly emphasized that "a forward-looking understanding of fiduciary duty requires incorporating climate risks into investment decision-making, as these risks materially impact the long-term resilience of investment portfolios."⁴ Conventional definitions of fiduciary duty are no longer adequate in a climate-threatened economy.

Moving Beyond Modern Portfolio Theory

Defining Modern Portfolio Theory (MPT) is essential to understanding how mainstream investment frameworks fall short in the face of climate risk. MPT, which has dominated investment practice for decades, focuses on optimizing risk and return at the portfolio level through diversification. It assumes that investors can mitigate most risks by combining uncorrelated assets, treating systemic threats as background volatility rather than issues requiring direct intervention.

While universal ownership explains why climate risk is unavoidable for long-term investors, MPT reveals why many are still failing to respond adequately. In their book *Moving Beyond Modern Portfolio Theory*, Jon Lukomnik and James Hawley argue that MPT's design encourages investors to ignore the feedback loop between their investments and the real-world systems those investments help shape⁵. The model treats the economy as external to markets, abstracting away the consequences of capital allocation on environmental, social, and long-term economic outcomes.

This blind spot becomes especially dangerous when facing large-scale risks like climate change. As Duncan Austin notes, we are trapped in a system of "externality-denying capitalism" where billions of investment decisions routinely overlook ecological and social costs. The accumulated damage, referred to as the "unmentionable foot" of the market, remains unpriced and therefore invisible to conventional investment tools⁶.

Evidence increasingly shows that incorporating environmental, social, and governance factors, including climate considerations, can enhance financial performance. A 2015 meta-study by Friede, Busch, and Bassen reviewed over 2,000 empirical studies and found that approximately 90 percent demonstrated a non-negative relationship between ESG performance and corporate financial results. This research challenges the assumption that environmental responsibility conflicts with fiduciary duty and supports a more modern, systems-aware interpretation of prudent investing⁷.

Universal Ownership and Systemic Risk

The concept of universal ownership offers a compelling framework for understanding why large institutional investors must account for broad-based financial threats such as climate change. Universal owners, including pension funds and asset managers with highly diversified, long-term holdings, effectively own a representative slice of the global economy. Because of this, they cannot shield themselves from economy-wide disruptions simply by reallocating capital. As Jon Lukomnik and James Hawley note, one of the core failures of modern portfolio theory is its assumption that systemic risk affects an investor's holdings but is not affected by them in return. This mismatch between investor exposure and analytical tools leaves universal owners vulnerable to overlooked, large-scale risks⁸.

Climate change exemplifies this kind of risk. It imposes both physical threats, such as extreme weather events and rising sea levels, and transition risks arising from policy shifts, technological disruption, and evolving market preferences. A

2015 study by Preventable Surprises estimated that climate change could cause up to a 50 percent loss in global economic value with a 3 percent probability, potentially reducing global portfolio values by 10 percent, or approximately \$7 trillion in equity market overvaluation. Although early, this warning has since been reinforced by the Network for Greening the Financial System (NGFS), whose “Disorderly” and “Hothouse World” scenarios project significant long-term economic damage under high-risk climate pathways⁹.

Despite growing support for universal ownership theory, critics argue that expanding fiduciary duty to address systemic climate risks could distract trustees from their core obligation to maximize financial returns. Some experts contend that sustainable investing is consistent with fiduciary duty only when it serves a financial purpose and maintain that trustees should not sacrifice returns to pursue collateral environmental and social benefits. These perspectives highlight ongoing debates about how broadly fiduciary duty should be interpreted in a changing investment landscape¹⁰.

Legal and Regulatory Evolution

The concept of fiduciary duty has deep historical roots, with landmark legal cases defining its scope and interpretation. Two pivotal cases, *Harvard College v. Amory* in the United States and *Cowan v. Scargill* in the United Kingdom, established foundational principles that continue to shape fiduciary responsibilities¹¹. Initially, these interpretations allowed trustees to act prudently and with discretion to protect both income and capital, representing a forward-looking approach that recognized the complexity of investment management¹².

The Employment Retirement Income Security Act (ERISA) of 1974 remains the most influential legislation defining fiduciary responsibilities in the United States. ERISA requires trustees to act solely in the interests of beneficiaries, exercising care, skill, diligence, and prudence to provide benefits and minimize losses¹³. However, the definition of fiduciary duty remains intentionally broad, leading to multiple interpretations and ongoing debate about the precise boundaries of what prudence entails. The regulatory landscape has evolved through milestones such as the 1959 Prudent Man Rule and the 1992 Prudent Investor Rule, which expanded trustees’ ability to evaluate overall portfolio risk-return characteristics rather than isolate individual investments¹⁴.

The Enron scandal in 2001 marked a critical turning point in fiduciary oversight and corporate accountability. The company used complex accounting loopholes and off-balance-sheet entities to hide billions in debt, misleading investors and regulators, and ultimately causing one of the largest bankruptcies in U.S. history. The collapse was widely seen as a catastrophic failure of both corporate governance and fiduciary oversight. In its aftermath, the Sarbanes-Oxley Act of 2002 imposed sweeping governance reforms, including stricter financial reporting requirements, increased executive liability, and the creation of the Public Company Accounting Oversight Board¹⁵. These measures raised the stakes for fiduciaries by mandating greater transparency and due diligence, especially in light of ERISA’s increasingly stringent interpretations post-Enron.

More recent regulatory developments reflect a growing awareness of systemic risks, including climate change, and the need for a broader approach to investment stewardship. In 2022, the U.S. Department of Labor issued a rule titled “Prudence and Loyalty in Selecting Plan Investments,” which explicitly allows ERISA fiduciaries to consider ESG factors in investment decision-making¹⁶.

This shift signals a departure from past interpretations that focused narrowly on short-term financial returns, instead emphasizing long-term value and sustainability as valid fiduciary concerns.

Different jurisdictions have progressed at varying rates. The European Union has taken a particularly proactive stance by embedding sustainability into its regulatory framework through the 2016 Institutions for Occupational Retirement Provision (IORP II) Directive¹⁷. This directive explicitly required pension funds to consider ESG factors in risk management, establishing a formal expectation for climate integration.

This was followed by the 2019 Sustainable Finance Disclosure Regulation (SFDR), which mandated enhanced transparency of ESG strategies, and further amendments to MiFID II, Solvency II, and related directives¹⁸. These changes require asset managers and institutional investors to incorporate sustainability factors into investment decision-making. The EU Shareholder Rights Directive II added an engagement component, obligating institutional investors to disclose policies that include ESG considerations, reinforcing investor responsibility in promoting systemic risk management.

In the United Kingdom, the 2014 Law Commission report on “Fiduciary Duties of Investment Intermediaries” concluded that “there is no impediment to trustees taking account of environmental, social, or governance factors where they are, or may be, financially material¹⁹.” This interpretation was codified in the 2018 amendments to UK pension regulations, which now require trustees to account for financially material ESG risks. Pension schemes with more than £1 billion in assets are also required to report in alignment with the Task Force on Climate-related Financial Disclosures (TCFD), explicitly linking climate risk oversight to fiduciary accountability²⁰.

These legal and regulatory developments reflect a broader transformation in the interpretation of fiduciary duty. What was once a narrow focus on maximizing short-term returns has expanded to include the long-term stability of financial systems, acknowledging that environmental and social risks are often material to financial outcomes. As global expectations evolve, fiduciaries are increasingly being called to adopt governance models that consider systemic risk, resilience, and long-term value creation alongside traditional investment performance.

Universal Owners: Climate Transition Planning as Fiduciary Imperative

Universal owners, given their significant size and diversified holdings across the global economy, have an inherent interest in addressing systemic risks that threaten economy-wide returns. These investors cannot simply divest from climate-exposed sectors without facing proportional exposure elsewhere in their portfolios. Instead, they must apply transition planning and systemic risk management as core elements of fiduciary responsibility.

New York City Comptroller's Office

The New York City Comptroller's Office, now under Brad Lander, has significantly advanced its climate transition strategy. As of April 2025, three of the city's major pension systems (NYCERS, TRS, and BERS) achieved a 37% reduction in Scope 1 and 2 emissions since 2019, reaching that target one year ahead of schedule. The funds have also committed over \$14.4 billion to climate solutions investments as of June 2025, reinforcing the alignment of their portfolio with long-term decarbonization goals. As a universal owner with broad exposure to global markets, the NYC pension system recognizes that unmanaged climate risk threatens system-wide returns, making transition planning a fiduciary necessity rather than an option²¹.

In a bold escalation, Lander announced on Earth Day 2025 that all external asset managers must submit credible net zero transition plans, including Scope 3 where material, by June 30th or face dismissal and replacement. He also prohibited new private equity and infrastructure investments in midstream and downstream fossil fuel assets as of October 2024, closing key exposure gaps. This marks a shift from climate risk awareness to fiduciary enforcement, setting a new bar for climate-integrated governance and reframing decarbonization as an obligation central to prudent investment oversight²².

California State Teachers Retirement System (CalSTRS)

CalSTRS, under CEO Marcia Frost, continues to lead in climate-aligned investing with a multi-asset class transition strategy anchored in its 2021 net zero pledge. As of February 28, 2025, 20.5% of its Global Equity portfolio (amounting to \$29.7 billion) is managed internally against a low carbon index, achieving a 16.3% emissions reduction compared to conventional benchmarks. Its Fixed Income team has also implemented a 15% low carbon credit strategy, which has reduced emissions by approximately 7%. Meanwhile, the Sustainable Investment & Stewardship Strategies (SISS) Private Portfolio has deployed about \$2.9 billion into climate solutions across public and private markets²³.

CalSTRS is also expanding its stewardship activities, pressing over 2,000 companies for climate disclosures during the 2023 proxy season. It has increased its investments in natural climate solutions, including a \$175 million anchor commitment to Just Climate's biodiversity and land-use fund, in partnership with Microsoft. These efforts are not only reducing emissions but also reinforcing the fund's fiduciary responsibility by improving risk-adjusted returns. CalSTRS offers a clear example of a universal owner deploying detailed transition planning at scale²⁴.

Washington State Investment Board (WSIB)

The Washington State Investment Board (WSIB) has solidified its view of climate transition as a core fiduciary duty. In 2023, it formalized an agency-wide Climate Blueprint, embedding transition planning and governance across public and private asset classes. As of June 2023, WSIB held more than \$2.2 billion in renewable energy investments, reflecting steady portfolio exposure to climate solutions. It has also created dedicated staff roles for climate risk analysis and supported legislation that empowers the board to align proxy voting with sustainability-related risk factors.

This comprehensive approach integrates climate considerations into WSIB's investment framework, governance structure, policy advocacy, and asset allocation. It demonstrates how a universal owner can build transition planning directly into fiduciary practice. For WSIB, managing climate risk is integral to fiduciary duty, grounded in both prudent risk oversight and the pursuit of long-term returns²⁵.

Border to Coast Pensions Partnership

Border to Coast Pensions Partnership, one of the UK's largest pension pools with £38.3 billion in assets under management, exemplifies how universal ownership principles drive climate transition planning in the UK context. As a pool for 11 Local Government Pension Schemes with century-long investment horizons, Border to Coast has positioned climate risk management as a core fiduciary obligation. Their comprehensive Climate Change Policy establishes that "climate change poses a systemic risk, with the potential to impact our investments, our beneficiaries, employers, and all our operations." The partnership has developed a detailed Net Zero Implementation Plan with clear interim targets, including reducing portfolio emissions by 30% by 2030 compared to 2019 levels.

What distinguishes Border to Coast's approach is their explicit connection between universal ownership and fiduciary duty, noting that, as long-term investors, they "need to ensure that the companies and assets in which we invest are aligned with the transition to a low-carbon economy." Their transition planning includes robust stewardship activities focused on high-emitting sectors, detailed carbon risk measurement across asset classes, and dedicated climate solution investments. By embedding climate considerations throughout their investment processes and governance structures, Border to Coast demonstrates how universal owners are redefining fiduciary duty in the UK context.

University Pension Plan Ontario (UPP)

University Pension Plan Ontario (UPP), which serves 39,000 members across four Ontario universities and manages \$10.8 billion in pension assets, has explicitly integrated climate risk management into its fiduciary framework. UPP's investment belief statement affirms that as a long-term investor, UPP has a responsibility to promote the health of the capital markets and the financial, social, and environmental systems on which capital markets rely.

As a universal owner with holdings across the global economy, UPP's Climate Action Plan directly connects climate risk management to fiduciary responsibility, stating that climate change poses a systemic risk to its investments and its members' financial security in retirement. Their approach includes explicit decarbonization targets, with a commitment to reduce portfolio carbon emissions by 60% by 2030 and reach net zero by 2040. UPP's transition planning encompasses both risk management and opportunity seeking, with dedicated allocations to climate solutions²⁶.

What makes UPP's approach particularly noteworthy is its governance structure's focus on climate, with board-level oversight of climate risks and regular climate stress testing of the investment portfolio. This integration of climate considerations into core governance processes demonstrates how universal owners are institutionalizing climate risk management as a fundamental aspect of fiduciary duty²⁷.

La Caisse de dépôt et placement du Québec (La Caisse)

La Caisse, one of Canada's largest institutional investors, announced on June 20, 2025, a commitment to invest \$400 billion in climate action by 2030. This ambitious target was unveiled in its 2025 to 2030 climate strategy. Having already exceeded its previous goals, including \$54 billion in low carbon investments and a 69% drop in portfolio carbon intensity since 2017, La Caisse is doubling down on systemic decarbonization. The updated strategy focuses on scaling solutions that contribute directly to the real economy's transition, including renewables, nature-based solutions, and climate-enabling technologies.

CEO Charles Emond emphasized that these commitments are grounded in fiduciary duty. He noted that the firm is moving beyond emissions metrics to actively drive transition across sectors. This approach stands in contrast to peers like CPPIB and RBC, who have recently walked back climate targets. By aligning long-term investment strategy with systemic climate action, La Caisse demonstrates how fiduciary duty is increasingly defined by an investor's ability to navigate and shape the low-carbon transition²⁸.

The New Fiduciary Paradigm

These case studies illustrate how major asset owners are not just passively considering climate risk; they are operationalizing fiduciary responsibility through decarbonization targets, portfolio realignment, and stewardship escalation. Today's "modern fiduciary duty," as defined by PRI and the United Nations Environment Programme Finance Initiative (UNEP FI), encompasses five key elements:

1. Incorporating ESG issues into investment analysis and decision-making processes
2. Encouraging high standards of ESG performance in investee companies
3. Understanding and incorporating beneficiaries' sustainability preferences
4. Supporting the stability and resilience of the financial system
5. Reporting transparently on how these commitments have been implemented

Conclusion

The evolution of fiduciary duty to include climate considerations represents a necessary adaptation to changing financial, environmental, and social realities. It recognizes that the health of investments is inextricably linked to the health of the systems in which they operate. As ClientEarth argues, failing to consider climate risk is itself a potential breach of fiduciary duty, as trustees must deliver benefits over the time horizon of the scheme, consider all relevant factors, including climate as a material financial consideration, and act according to current portfolio theory standards.

For asset owners and investment managers, this evolution presents both challenges and opportunities. Those who embrace a more comprehensive understanding of fiduciary duty—one that incorporates climate and other systemic risks—will be better positioned to protect long-term returns and contribute to a more stable, sustainable financial system. The question is no

longer whether climate should be considered within fiduciary frameworks but how quickly and effectively fiduciaries will adapt to protect both portfolios and the systems they rely on.

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