

Blended Finance as a Catalyst to Achieve 1.5°C Target

A Decade-Long Integrative Literature Review

By Benedict Libanda, 25 March 2026

Summary

Achieving the Paris Agreement's 1.5°C target requires unprecedented mobilisation of climate finance, yet an annual investment gap of US\$4.4–9.2 trillion persists. Although private capital is substantial, high perceived risks, misaligned incentives, and regulatory uncertainty limit its participation in mitigation and adaptation. Blended finance, combining concessional public funds with private investment, has emerged as a key mechanism to de-risk projects and improve returns. This integrative review synthesises research from 2014–2024, examining how blended finance has evolved, the barriers limiting its effectiveness, and strategies to overcome them. Instruments such as guarantees, first-loss capital, and performance-based incentives enhance bankability, particularly in renewable energy, sustainable agriculture, and urban resilience. However, complex structures, fragmented regulations, and weak impact metrics constrain scale. Guided by stakeholder theory, the study highlights the roles of public, private, and development actors. Evidence shows leverage ratios above 4:1 are possible, but implementation remains uneven. Standardised instruments, enabling policies, and robust impact monitoring are critical to accelerate a just, low-carbon transition.

Motivation

Limiting global warming to 1.5°C under the Paris Agreement demands a fundamental transformation of global financial systems. Yet, despite growing commitments, climate investments remain far below what is required. This research is motivated by a central question: How can blended finance be structured to mobilise private capital at scale for climate action? It further explores: What systemic barriers constrain its effectiveness? And what practical strategies can unlock greater impact, particularly in developing countries? Grounded in real-world financing challenges, this study bridges theory and practice, offering actionable insights for policymakers, fund managers, and development partners seeking to accelerate climate-resilient, low-carbon transitions.

Approach and methods

The research adopts an integrative literature review methodology, employing a thematic synthesis of peer-reviewed articles and key publications from 2014 to 2024. A systematic screening process was applied to ensure relevance and quality, followed by structured data extraction and comparative analysis. Through rigorous theme identification, the study synthesizes recurring patterns, emerging trends, inconsistencies, and critical gaps within the existing evidence base, thereby providing a coherent and comprehensive understanding of blended finance in climate action. The Scopus citation database was chosen as the principal source owing to its superior coverage. Supplementary searches were conducted in Web of Science, Google Scholar, JSTOR, ResearchGate, and specialized platforms, including Convergence Blended Finance and the Blended Finance Taskforce. The preliminary literature search yielded 116 articles. The review was restricted to journal publications published in English.

Key findings

The review reveals that blended finance has evolved into a central instrument for mobilising private capital toward climate action, particularly in renewable energy, climate-smart agriculture, and resilient infrastructure. Risk-mitigation tools such as guarantees, first-loss capital, and performance-based incentives significantly improve project bankability and can achieve leverage ratios exceeding 4:1 under well-structured arrangements. However, effectiveness is constrained by complex transaction structures, high structuring costs, fragmented regulatory environments, and inconsistent impact measurement frameworks. Developing countries face additional institutional and capacity limitations, reducing scalability. The findings underscore that standardized instruments, stronger enabling policy environments, improved impact metrics, and better alignment of stakeholder incentives are critical to scaling blended finance and accelerating a just, low-carbon transition.

Insights and interpretation

The findings matter because they highlight both the promise and the limitations of blended finance as a tool for closing the global climate investment gap. While blended finance can successfully mobilise private capital and improve the bankability of climate projects, the research shows that its impact is still uneven and often constrained by structural and institutional barriers. This reveals a broader challenge: the global financial system is not yet fully aligned with climate and sustainable development objectives.

A notable trend is the increasing use of risk-mitigation instruments such as guarantees, concessional capital, and first-loss structures to crowd in private investment. However, what was surprising is that despite strong theoretical support and policy attention, implementation remains inconsistent, particularly in developing countries where institutional capacity and regulatory frameworks are weaker. These findings align with existing literature emphasizing the importance of enabling policy environments, clear investment pipelines, and strong institutional coordination. The implications are significant. For policymakers, there is a need to strengthen regulatory frameworks and national investment platforms. For practitioners, standardizing financial instruments and improving impact measurement could reduce transaction costs and increase scalability. The research reinforces stakeholder theory by showing how coordinated action among public, private, and development actors is essential for mobilizing climate finance at scale.

Recommendations

- **Blended finance can mobilise significant private capital, but only under the right conditions.** It works best where policies are stable and governance is credible. Investors need clear risk allocation and predictable returns. Strong environmental, social, and governance (ESG) standards further increase confidence and attract long-term capital.
- **Risk mitigation is necessary but not sufficient; institutional quality matters equally.** Guarantees and concessional capital reduce financial risk. However, weak institutions and unclear regulations still deter investors. Sound governance and strong ESG compliance frameworks are essential.
- **Developing countries require stronger capacity support.** Many countries lack technical expertise and bankable project pipelines. Institutional strengthening and ESG integration support are critical. Without this, blended finance remains underutilised.
- **Standardisation and transparency are critical for scaling.** Harmonised documentation lowers transaction costs. Clear ESG reporting improves comparability and trust. Standardised structures make replication easier across markets.
- **Coordinated stakeholder engagement is essential to move from niche innovation to mainstream practice.** Governments, development finance institutions, and private investors must align incentives. Shared accountability and measurable ESG outcomes drive systemic impact.

Attribution: This Research Brief is an output associated with the ClimateFiGS Speaker Series. It was shared in relation to the session “Blended Finance for a 1.5°C World: Unlocking Private Capital for Climate Action” on 25 March 2026; ClimateFiGS did not fund, commission, or substantially edit the underlying paper.



Funded by
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European Research Council
Financed by the European Commission

ClimateFiGS is funded primarily by the European Union (ERC, ClimateFiGS, 101117670). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Council. Neither the European Union nor the granting authority can be held responsible for them