

BACKGROUND BRIEF

CLIMATE FINANCE & SYSTEMS THINKING



This level-setting brief provides an accessible framing of climate finance and its relevance for Market Systems Development (MSD) practitioners. It assumes familiarity with [MSD](#), and focuses on four main questions: What is climate finance? Why does it matter? How is it accessed and structured? And what does it mean in practice for MSD practitioners? It was prepared by Maha Elhayek, Senior Consultant at [the Canopy Lab](#), for the [Green Avengers Community of Practice](#). Join our [LinkedIn Showcase Page](#) to receive invitations for future sessions.

What is Climate Finance?

“Climate finance refers to all financial flows addressing the causes and consequences of climate change.” [UN Environment Program](#)

Climate finance refers broadly to the financial resources directed toward addressing climate change through both mitigation and adaptation. In practical terms, this includes finance for reducing greenhouse gas emissions, supporting low-emission development pathways, strengthening resilience, and helping people, systems, and economies adjust to climate impacts. It can come from public or private sources, and from domestic or international channels.

At its core, climate finance is distinct from several related concepts that are often used interchangeably, even though they overlap in practice. **Climate finance** focuses specifically on climate mitigation and adaptation.¹ **Green finance** has a wider environmental scope and may also cover issues such as biodiversity, pollution control, water, and waste.² **Sustainable finance** is broader still, incorporating environmental, social, and governance (ESG) considerations.³ **Low-carbon finance**, by contrast, is narrower than climate finance, as it focuses mainly on decarbonization and emissions reduction rather than adaptation, resilience, or wider sustainability objectives.⁴ **Carbon finance**⁵ is more specific and usually refers to financial instruments and transactions linked specifically to carbon markets, carbon credits, or payments tied to verified emissions reductions or removals. In practice, climate finance overlaps with green finance in areas such as renewable energy, energy efficiency, and clean transport; with sustainable finance where climate-related considerations form part of ESG decision-making; with low-carbon finance in relation to mitigation, particularly where investments are directed toward decarbonization and the transition to a low-carbon economy; and with carbon finance where mitigation activities are financed through carbon market mechanisms.

Within the international climate regime, climate finance is rooted in the recognition that countries differ significantly in both their contribution to climate change and their capacity to respond to it. It is therefore often understood as a mechanism through which countries with greater historical responsibility and financial capacity support those with fewer resources and greater vulnerability. In this sense, climate finance is closely linked to international cooperation, equity, and climate justice. This understanding was reflected in earlier political commitments made at COP 15 in Copenhagen in 2009 and was reaffirmed in Article 9 of the [Paris Agreement](#) (signed at COP 19 in 2015).⁶ Climate finance is also increasingly connected to the “Just Transition”, which emphasizes that the shift to low-emission and climate-resilient

¹ UNFCCC, Introduction to Climate Finance. [Accessed online](#) (April 1st, 2026).

² World Bank/Global Environment Facility, [Introduction to Green Finance](#). Accessed online (April 1st, 2026).

³ OECD, Sustainable Finance. [Accessed online](#) (April 1st, 2026).

⁴ Cochran, I., Hubert, R., Marchal, V. and Youngman, R. (2014), [Public Financial Institutions and the Low-carbon Transition: Five Case Studies on Low-Carbon Infrastructure and Project Investment](#), OECD Environment Working Papers, No. 72, OECD Publishing.

⁵ A related discussion on carbon finance was covered in an earlier Green Avengers session. For further reference, see [The Canopy Lab's Carbon Finance briefing note](#) and [presentation](#).

⁶ London School of Economics and Political Science (LSE) (2023), Grantham Research Institute on Climate Change and the Environment, [“What is climate finance and where will it come from?”](#).

development should be fair, inclusive, and attentive to the needs of affected workers, communities, and countries.

For MSD practitioners, these framing matters because the effectiveness of climate finance depends both on mobilizing resources and on whether finance is accessible, effectively deployed, and capable of supporting durable changes in market system functions and in the incentives and capacities of the market actors, leading to sustainable, inclusive, and systemic change in the real economy.

Why Does Climate Finance Matter?

Climate finance is essential because climate ambition cannot be translated into action without adequate, accessible, and appropriately structured investment. Delivering mitigation and adaptation at scale requires substantial capital for resilient infrastructure, clean energy systems, climate-smart agriculture, disaster risk reduction, and social protection. In many developing countries, however, progress is constrained by limited fiscal space, high borrowing costs, debt distress, and restricted access to affordable capital. In practice, climate finance is what enables countries to move from climate commitments to implementation.

Climate finance also matters because it is closely linked to fairness as well as effectiveness. Countries and communities that have contributed least to climate change are often those most exposed to its impacts and least equipped to respond. This has made international climate finance a central pillar of global climate cooperation. Public finance remains particularly important where private capital is unlikely to flow on its own, especially for public goods such as flood protection, water systems, and early warning services. At the same time, well-designed public finance can help mobilize private investment by reducing risk and improving the viability of climate-relevant markets and technologies.

Climate finance is no longer a marginal issue; it has become a major pillar of international climate and development policy, with targets now measured in the hundreds of billions, even trillions, of dollars. After developed countries agreed in 2009 (COP 15 in Copenhagen) to mobilize USD100 billion annually for developing countries, that goal was reached for the first time in 2022, at USD115.9 billion. However, much of this finance took the form of loans and did not sufficiently reach low-income countries. Reflecting the scale of unmet need, governments agreed at COP29 in 2024 to a new goal of at least USD300 billion per year by 2035, alongside broader efforts to scale total finance to USD1.3 trillion annually in support of the Paris Agreement goal of limiting warming to 1.5°C. Even so, estimated needs in emerging markets and developing countries remain far higher, at USD2.3–USD2.5 trillion per year by 2030. The gap is especially acute for adaptation: despite a pledge to double adaptation finance to around USD40 billion by 2025, only USD32.4 billion was provided in 2022, while needs may reach USD387 billion annually by 2030. Most adaptation finance also continues to be provided as loans rather than grants. In light of these trends, the global agenda is now shaped by interrelated priorities: increasing the overall scale of finance; closing the adaptation finance gap; and reforming the international financial system so climate-vulnerable countries can

access finance on fairer and more affordable terms. Additional insights on global climate finance flows can be explored through this [dashboard](#).⁷

Experience already shows that climate finance can deliver concrete and diverse results across mitigation, adaptation, and resilience. As illustrated in the [UN Climate Action article](#), international finance has supported disaster preparedness, climate-smart agriculture, forest restoration, and off-grid renewable energy in **Nepal**; accelerated solar expansion and reduced electricity costs in **Cambodia**; strengthened protection of **Egypt's** Nile Delta from sea-level rise and extreme weather; and supported livelihood adaptation in **Zambia**, particularly for women in drought-affected areas. Other examples include investments in Small Island Developing States (SIDS) and Somaliland to improve water security, renewable energy, food security, and resilience. Together, these cases show that climate finance supports not only emissions reduction, but also livelihoods, economic transformation, and survival in highly climate-vulnerable contexts.⁸

How is Climate Finance Structured, and How Did it Emerge?

Climate finance today operates through a layered institutional architecture shaped by the United Nations Framework Convention on Climate Change (**UNFCCC**) (adopted at the Rio Earth Summit in 1992), the **Kyoto Protocol** (since entry into force in 2005), and the **Paris Agreement** (2015). This architecture evolved gradually as the international climate regime expanded its understanding of what climate action requires. Early climate finance was anchored in the creation of the [Global Environment Facility](#) (GEF) in 1991, which later became part of the UNFCCC financial mechanism after the Convention was adopted in 1992, establishing the basic framework for support from wealthier countries to more vulnerable developing countries.

Over time, new funds and platforms were added to respond to emerging priorities: the [Adaptation Fund](#) (AF), established in 2001, reflected growing recognition that adaptation required dedicated resources; the [Climate Investment Funds](#) (CIF), launched in 2008, introduced larger-scale investment approaches linked to multilateral development banks; and the creation of the [Green Climate Fund](#) (GCF) in 2010 marked a major step in scaling and formalizing climate finance under the UNFCCC financial mechanism, which is accountable to the Conference of the Parties (COP). The Paris Agreement, adopted in 2015, further broadened the ambition of climate finance by shifting the focus from financing individual projects to aligning finance flows with pathways toward low-emission, climate-resilient development. Most recently, the establishment of the recent the [Fund for Responding to Loss and Damage](#) (FRLD) in 2022, followed by its operationalization in 2023, signalled that the architecture is continuing to evolve in response to the growing urgency of unavoidable climate impacts.⁹ Table 1 summarizes the main funds and their strategic roles within this architecture.

⁷ United Nations Climate Action, Finance and Justice, Accessed [Online](#) (April 1st, 2026).

⁸ United Nations Climate Action, why finance climate action? Accessed [online](#) (April 1st, 2026).

⁹ UNFCCC, Introduction to Climate Finance. [Accessed online](#) (April 1st, 2026).

Table 1: Major climate finance funds and their strategic roles

| Fund | Indicative Scale | Strategic development | Core Purpose |
|---|--|---|---|
| GEF | USD 24.869 billion pledged (2025) | 1991: Established before the Rio Earth Summit; later became part of the UNFCCC financial mechanism. | Core multilateral finance for global environmental action, including climate change |
| Adaptation Fund (AF) | USD 1.2B pledged (2024) | 2001: Established under the Kyoto context to finance concrete adaptation projects and programmes in developing countries; later became known for pioneering direct access. | Finance for concrete adaptation projects and programmes in developing countries |
| Climate Investment Funds (CIF) | USD 12.5 billion pledged (2008 cumulative) | 2008: Established to scale up climate finance through programs delivered in partnership with multilateral development banks. | Scaled-up climate investment through MDB-linked programmes |
| Green Climate Fund (GCF) | USD 9.6 billion pledged (2024) | 2010: Established under the Cancún Agreements; 2015: moved into project approvals and portfolio building. | Large-scale finance for low-emission and climate-resilient development |
| Fund for Responding to Loss and Damage (FRLD) | USD 788.8 million pledged (2025) | 2022: Agreed in principle; 2023: operationalized; 2024: Board began meeting. | Support for responding to climate-related loss and damage |

What Does Climate Finance Mean for MSD Practitioners?

“MSD cannot solve climate change, but it offers tried-and-tested ways to support private sector investment in adaptation, mitigation and resilience in emerging markets.” *Angus Towart, “MSD as a practical approach for climate action,” BEAM Exchange, 2025*

Based on the current desk review, there appears to be limited literature that explicitly frames climate finance through a distinct MSD lens. Even so, the connection is clear in practice.

Addressing different parts of the same problem: under the UNFCCC and the Paris Agreement, climate finance is intended to mobilize and direct resources toward mitigation, adaptation, and broader pathways to low-emission, climate-resilient development. MSD focuses on how those resources can translate into lasting change in real economies, including through shifts in the incentives and capacities of market actors, business models, relationships, supporting functions, and rules. In this sense, climate finance helps answer how resources are mobilized and allocated for climate action, while MSD helps ensure those resources are used in ways that address critical constraints, particularly for vulnerable groups, and generate sustainable results in practice.

Both leverage private-sector investment: climate finance architecture increasingly emphasizes country ownership, delivery through accredited entities and intermediaries, and the strategic use of public resources to de-risk and crowd in private investment. This creates a natural entry point for MSD. The GCF, for example, positions itself not only as a source of finance, but also as a catalyst for shifting private capital into low-emission and climate-resilient investment in developing countries. Its Private Sector Facility, the part of the GCF dedicated to engaging and mobilizing private-sector actors, uses instruments such as concessional finance, guarantees, equity, lines of credit, and capacity support to reduce risk and improve investment viability. In this context, MSD can help address constraints that limit private-sector access to finance, information, and services, while strengthening intermediary and supporting functions such as technical advisory support, verification, audits, and market information, which help actors assess risks, identify investment opportunities, and make informed decisions.

MSD helps move from projects to systems: in many contexts, the constraint is not simply a lack of finance, but weak market systems around climate-relevant goods and services, including the availability of tailored services that help firms and households respond. An MSD lens shifts attention from one-off delivery to whether markets can continue to supply, finance, and improve climate solutions over time. This may involve strengthening markets for products such as solar systems, water storage, efficient appliances, or climate-resilient construction materials, while also improving access to finance, information, standards, and enabling regulation. By strengthening these functions, MSD can help climate finance generate outcomes that are more durable, scalable, and responsive to local market realities.

MSD helps bridge the gap between funds and firms: large climate funds rarely finance local actors directly. Instead, they typically work through accredited entities, financial intermediaries, banks, public agencies, and structured programmes. As a result, there is often a gap between top-level finance and on-the-ground uptake. MSD can help close this gap by connecting financial flows to the firms, service providers, and local institutions that ultimately drive adoption, delivery, and scale.

From this perspective, MSD adds value to climate finance by helping ensure that resources reach market actors, support commercially viable uptake, and contribute to longer-term systemic change. For MSD practitioners, the relevance of climate finance lies not only in where funds come from, but in how those funds can work through markets to deliver adaptation, mitigation, and resilience at scale.