



STATE OF BLENDED FINANCE

2023

CLIMATE EDITION

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LETTER FROM CEO



As we introduce the 7th edition of Convergence's State of Blended Finance, political and business leaders are increasingly recognizing climate change as the defining crisis of our time. Yet with the climate crisis squarely upon us, the growth rate for public financing for climate is in decline, private climate financing volumes have lagged, and blended finance flows for climate have regressed.

Concrete action is urgently needed, and blended finance – a structured form of financial collaboration between public, private and philanthropic actors – must be utilized more ambitiously to mobilize private investment at scale into climate solutions tailored to the unique realities of developing economies.

That is why we again focus this report on climate blended finance. Our 2023 edition highlights country-level challenges and opportunities, spotlighting regions with potential for positive developments and identifying areas where blended finance can immediately and materially contribute.

At Convergence, we recognize climate's centrality to the investment world, including the blended finance market. But we also acknowledge the need for data and trends analysis on other sectors, themes, and aspects of the blended finance space. Convergence is pleased to announce that, beginning in 2024, we will publish two "State of Blended Finance" reports per year. The first, to be issued in the spring, will encompass the entire blended finance market and the second, to be released in the fall, will serve as our climate-focused edition.

We hope this 2023 report's data, trends, insights, and recommendations serve as an impetus for donors and investors alike, to increase the flow of capital into the places that need it most as part of an urgent, comprehensive response to confront the greatest collective challenge of our lifetimes.

A handwritten signature in black ink that reads "Joan M. Larrea".

JOAN M. LARREA

CHIEF EXECUTIVE OFFICER, CONVERGENCE

GLOSSARY OF KEY TERMS

A/B LOANS AND BONDS – Financial instruments used by a selection of multilateral investors, specifically multilateral development banks (MDBs). In an A/B loan structure, the MDB or multilateral acts as the lender of record, providing a portion of the loan for its own account (A loan), with the loan balance funded by the B loan participation (typically a commercial bank or institutional investor). Principal and interest on the loan are paid to the lender, which is then distributed on a pro rata basis. An A/B bond functions similarly. The MDB originates an A/B loan with the borrower. The A loan is funded by the MDB, while the B loan is funded by a special purpose vehicle via issuance of a B bond to institutional investors in the capital market.

ADAPTATION BLENDED FINANCE – The use of blended finance structures to deliver private sector investment to climate adaptation transactions in developing countries.

BLENDED FINANCE – The use of catalytic capital from public or philanthropic sources to increase private sector investment in developing countries to realize the Sustainable Development Goals (SDGs). Blended finance is a structuring approach, not an investment approach.

BLUE ECONOMY – The sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

CARBON CREDIT – A carbon credit represents a volume of greenhouse gas (GHG) emission reduction, typically about one metric tonne, created by a specific project or activity, such as reforestation. Carbon credits are verified/certified by specialist agencies such as Gold Standard. Credits are sold by credit generating projects, on a “carbon market” to buyers who are seeking to “offset” their own GHG emission production with the carbon reduction represented by the credit. The exchange facilitates carbon neutrality. Part of the credit verification process ensures

a threshold of additionality – that is, the GHG emission reduction would otherwise have not occurred if the project was not implemented.

CARBON MARKET – The primary and secondary financial markets where carbon credits are traded. Carbon credits represent one metric tonne of GHG emission reduction. In the primary carbon market, companies buy and sell carbon credits based on their emissions allowances determined by relevant domestic and supranational regulations. In the secondary market, companies, banks and other market actors engage in trading of carbon credits to provide liquidity to the market and hedge exposure to future price increases in carbon credits.

CARBON OFFSET – Carbon offsets are used by net emitters of GHG to “balance-out” an equal share of their emissions output. Offsets come in the form of carbon credits which are bought and sold in the carbon market, with each carbon credit representing one metric tonne of atmospheric carbon reduction. The exchange facilitates “carbon neutrality” equal to the carbon credit value. Carbon credits are generated by companies (in a cap-and-trade system) or projects that are funded with carbon credit proceeds. Offsets are often used by entities in an effort to achieve net zero emissions.

CATALYTIC CAPITAL/FUNDING – Financial instruments allocated to transactions with the intent to mobilize private sector investment. The definition of catalytic capital can vary widely. In this report, catalytic capital only refers to financial instruments priced below-market (concessional), with evidence of the intent to mitigate investment risks and/or enhance the expected returns for private sector investors and deployed through one of Convergence’s four blending archetypes: (i) concessional debt/equity, (ii) concessionally priced guarantees/insurance, (iii) project preparation or design-stage grant funding, and (iv) technical assistance grant funding.

CARBON CAPTURE, UTILIZATION AND STORAGE (CCUS)

– [CCUS](#) involves the capture of CO₂, generally from large point sources like power generation or industrial facilities that use either fossil fuels or biomass as fuel. If not being used on-site, the captured CO₂ is compressed and transported by pipeline, ship, rail or truck to be used in a range of applications, or injected into deep geological formations such as depleted oil and gas reservoirs or saline aquifers.

CLIMATE ADAPTATION FINANCE – Climate adaptation involves channeling investment to efforts focused on adjusting to the already apparent and expected effects of climate change. Such climate change effects include, but are not limited to, rising ocean levels, the increasing temperature of the oceans, increased frequency and intensity of extreme weather events (hurricanes, droughts, monsoons), and irregular seasonality. Climate adaptation interventions are often linked to the concept of the improved “resiliency” of humankind to the changing biological, ecological and geological systems of the planet. The term resiliency encompasses, but is not limited to, resilient food systems, resilient livelihoods and resilient natural systems, like biodiversity.

CLIMATE BLENDED FINANCE – The use of blended finance structures to deliver private sector investment to transactions that explicitly aim to produce outcomes that combat and/or respond to the effects of climate change in developing countries.

CLIMATE MITIGATION FINANCE – Climate mitigation finance consists of channeling investment towards interventions explicitly aimed at limiting the current level of GHG emission output produced by human activity to reduce the future consequences of climate change. It also involves investing in efforts dealing with the removal of GHG from the atmosphere through carbon sequestration methods.

CONCESSIONAL CAPITAL – Funds provided on below-market terms within the capital structure of a financial transaction to reduce the overall cost-of-capital for the borrower and/or provide additional downside protection to more senior investors

(if in a first-loss position). Concessional capital can be provided through a diversity of financial instruments, including debt, equity, grant funding, and mezzanine capital.

CONSERVATION FINANCE – Investment targeting the support and management of natural systems, including land, water, air, and natural resources. Conservation finance is distinct from climate adaptation finance in that it can also produce climate mitigation outcomes and exclusively targets natural capital. Climate adaptation finance includes the targeting of human systems impacted by climate change.

CURRENCY SWAP – Two parties agree to exchange principal/interest payments of a loan in one currency for an equivalent loan in another currency. Investors/borrowers use currency swaps to hedge (at least partially) their exposure to currency risk.

GREENHOUSE GASSES (GHGS) – Gases, produced both as a result of human activity and natural occurrences, that are trapped in the atmosphere and increase the temperature of the planet. The main GHGs are carbon dioxide, methane, nitrous oxide, water vapor and fluorinated gasses (synthetic).

JUST ENERGY TRANSITION PARTNERSHIP (JETP) – A financing mechanism designed to deliver large scale financing to emerging markets for the decarbonization of the energy sector that is also inclusive of domestic development priorities. Funding for JETPs are led by public resources from the International Partners Group (IPG), a group of donor governments (primarily advanced economies) as well as the mobilization of private sector capital. To date, JETPs have been announced for South Africa, India, Indonesia, Senegal and Vietnam.

JUST TRANSITION – Climate mitigation and adaptation efforts in emerging markets and developing economies that are conscious of other development goals to ensure equitable transitions to greener economies.

LEVERAGE RATE – The ratio of concessional capital (below market-price) to all commercial capital (market priced) in a financial transaction. Commercial capital includes capital from private, public, and philanthropic sources.

MITIGATION BLENDED FINANCE – The use of blended finance structures to deliver private sector investment to climate mitigation transactions in developing countries.

MOBILIZATION RATE – The ratio of concessional capital (below-market-price) to commercial capital from only private sector sources.

NATIONAL ENERGY MATRIX – A country's composition of all primary energy sources from which secondary energy sources, like electricity, is produced. This includes both renewable energy sources and non-renewable energy sources. The energy matrix is distinct from the power generation matrix which is only concerned with the sources that are used in electricity production.

NATIONALLY DETERMINED CONTRIBUTIONS (NDCS) – The country-specific commitments to cut GHG emissions and/or adapt to the effects of climate change required by all parties to the Paris Agreement and the collective commitment to limit global warming to 1.5oC. NDCs must define how targets will be met, outline how progress towards the goals will be monitored and verified, and be updated by the country on a five-year cycle.

NATURAL CAPITAL – The planet's stocks of water, air, land, and renewable (wind, solar energy, trees) and non-renewable resources (mineral deposits). The term links the economic concept of capital (resources, goods or services which are used for the creation of other resources, goods or services) to the natural environment. Certain natural assets provide free flowing benefits to foster and/or enable human activity. These particular types of natural capital are called ecosystem services.

NATURE-BASED SOLUTIONS – Efforts to protect, manage and/or rehabilitate ecosystems that can assist in addressing societal challenges, such as food insecurity, climate change vulnerability, and human health. Nature-based solutions are rooted in the concept that healthy natural capital assets are both critical to functioning natural ecosystems and sustainable economic development by yielding shared benefits to modified or human-built systems.

NET ZERO – A state whereby the amount of greenhouse gasses emitted into the atmosphere is equal to the amount of greenhouse gasses being removed from the atmosphere. Reaching global carbon net zero effectively stops the process of the progressive warming of the planet. Net zero commitments are made at different levels of economic granularity, for example, at the supranational level, sovereign level, industry level, or company level. Net zero is different than Absolute Zero Emissions, in that the latter refers to the complete cessation of greenhouse gas emittance. The net zero Emission (NZE) Scenario is a model proposed by the International Energy Agency outlining the investment requirements in low-emission and emission reduction technologies to reach net zero CO₂ by 2050. Under the framework, developed economies reach net zero by 2045, China by 2050 and emerging economies after 2050.

SMALL ISLAND DEVELOPING STATES (SIDS) – A distinct group of 58 developing countries that face unique social, economic, and environmental vulnerabilities. They are particularly vulnerable to natural disasters and the impacts of climate change.

EXECUTIVE SUMMARY

This year's edition of the State of Blended Finance once again focuses on climate. Climate change continues to be central to the blended finance market and to sustainable development more broadly. Official flows to lower- and middle-income countries, including official development assistance (ODA), increasingly target climate objectives. In 2020, [a third of bilateral ODA from the Organization for Economic Co-operation and Development \(OECD\) Development Assistance Committee \(DAC\)](#) countries went to climate finance; for Multilateral Development Banks (MDBs), the share was almost a quarter. Yet in [2021](#), only 27.6% of allocable bilateral ODA pursued climate objectives, dropping back to the trends observed between 2015-2019. Although the aggregate ODA numbers have increased by 59% as [providers](#) report over \$83 billion in annual climate finance towards the \$100 billion target since 2013, private investment mobilized by official development finance for climate is, on average, lower today than before the 2015 Paris Agreement. The decline mirrors challenges in the overall blended finance market in 2022, which saw a 45% drop in deal volume and a 55% decrease in climate blended finance.

A 2021 [report](#) from the International Energy Agency (IEA) projects that over \$1 trillion per year will need to be invested in emerging markets through 2030 to get them tracking towards net zero emissions by 2050. And when accounting for adaptation costs, the number is likely much higher. Alone, emerging markets cannot meet investment needs, particularly amidst the complex and changing macroeconomic landscape. Yet the current flow of public and private funds remains inadequate.

Scaling and achieving climate finance is the chief imperative. However, discussions on increasing climate finance quantities must be matched with ambitions to improve quality, particularly in emerging markets. There must be increased focus and accountability on how climate finance is programmed and disbursed in developing countries. Otherwise, quantity discussions alone may prove fruitless. Indeed, there are many institutional impediments in developing regions,

such as deficient and unstable regulatory systems, inefficient policies and laws that will support the transition, and ineffective government planning to create pathways for multi-stakeholder financing partnerships. These are some of the root causes of country risk for which reforms are ongoing.

Recognizing the aforementioned challenges and in view of the above trends, it is apparent that

- 1 mobilization of private investment must be prioritized as an explicit goal of development finance, and must be championed by the MDBs and Development Finance Institutions (DFIs) within their operating models, and
- 2 scarce concessional capital must be deployed efficiently and judiciously in order to maximize its leverage.

Furthermore, beyond prioritization, a deeper understanding of how climate blended financing mechanisms and solutions can be applied and designed at local, national, and regional scales can also contribute to increasing resilience to climate extremes and uncertainties.

As emerging markets and developing economies (EMDEs) grapple with the dual challenges of pursuing rapid development and transitioning to low-carbon economies, innovative financing mechanisms like blended finance have become increasingly relevant. The report therefore spotlights blended finance transactions that seek climate mitigation and adaptation outcomes in EMDEs by examining practical applications and impacts.

In **PART I** of the report, blended finance data and insights provide a market overview with a look back to last year's report and an assessment of the current challenges, macroeconomic impacts, and exogenous shocks that have equally shaped the broader climate finance market and the climate-related blended finance market. This section also reviews recent downturns in sustainable investment and points at specific opportunities where blended finance can serve as an active mechanism to respond to the global challenges that adversely impact funding flows.

In **PARTS II & III**, climate data, deal trends, and investor trends are presented. Climate blended finance trends are analyzed through three lenses:

- 1 mitigation blended finance;
- 2 adaptation blended finance; and
- 3 hybrid blended finance.

They are further broken down across vehicle type, geographic region and country, country income level, recipients, SDG alignment, and archetype and instruments. Investor trends focus on investor activity and investor type and incorporate stakeholder perspectives of key market participants engaging in climate blended finance.

PART IV provides a comparative breakdown of mitigation blended finance and adaptation blended finance transactions by analyzing and contrasting deal and investor types, addressing fundamental challenges and barriers to catalyzing private capital, and revealing

solutions, opportunities, and viable business cases for scaling. Nature-based Solutions are highlighted along with associated funding challenges and opportunities. The disparity between mitigation and adaptation blended finance is further explored through key stakeholder interviews with experts in the field.

PART V explores country-level platforms in climate blended finance and evaluates Just Energy Transition Partnerships (JETPs), as a partnership model for mobilizing climate blended finance. JETPs are analyzed and compared through stakeholder interviews that identify strengths, challenges, opportunities, and recommendations.

PARTS VI & VII highlight key areas where blended finance can contribute and offer specific recommendations on the role climate blended finance can play in driving private investments at scale while identifying the appropriate blended finance architectures in developing regions.



KEY FINDINGS FROM THIS YEAR'S REPORT INCLUDE:

- Despite capturing a similar deal count in 2022 compared to 2021 in the overall blended finance market, Convergence found that total deal volume decreased by approximately 45% in 2022 and about 55% in climate blended finance, reaching a ten-year low in total financing. These trends are symptomatic of larger macroeconomic challenges impacting financing flows to EMDEs, characterized by inflationary pressures, mounting debt burdens, and geopolitical instabilities.
- Climate blended finance transactions accounted for under 40% of all blended finance deals in 2022, down 10% when compared to each of the previous five years where climate-focused transactions accounted for 50% or more of the annual deal count.
- Climate blended finance transactions have been concentrated in Sub-Saharan Africa (SSA) (48% of transactions between 2020-2022), followed by Latin America and the Caribbean (24%). The proportion of transactions that are focused in SSA grew 14 percentage points between 2017-2019 and 2020-2022, representing an absolute increase of nearly 90%.
- Just over half of the commitments to climate blended finance transactions between 2020-2022 have come from public sector investors. Development agencies comprised a growing share of public sector activity, accounting for 49% of commitments in 2020-2022 and are increasingly the primary suppliers of concessional capital.
- Since 2017, Convergence has captured \$12.9 billion of investment committed to climate blended finance transactions by commercial investors. However, financing flows from the private sector are declining — from \$7.13 billion between 2017-2019 to \$5.87 billion between 2020-2022.
- Adaptation blended finance continues to be under-represented, with only 15% of deals since 2013 having a pure adaptation focus. This equates to \$7.5 billion in total financing, compared to \$64.2 billion for pure mitigation and \$18.5 billion for hybrid transactions.
- Hybrid transactions, which address both climate mitigation and adaptation goals, represent an area of opportunity for the private sector to invest using an adaptation lens; 45% of institutional investments into climate finance are in hybrid solutions, compared to 35% in mitigation and 20% in adaptation.

WHERE CAN BLENDED FINANCE CONTRIBUTE?

Given the trends outlined above, blended finance levels will need to exponentially increase if they are to contribute meaningfully to meeting the SDG financing gap by 2030. To this end, this report identifies several key areas where blended finance can directly and immediately contribute to mobilizing private sector investments for climate.

- 1 Adaptation Finance:** If the broader climate finance community begins to effectively outline a more expansive taxonomy for adaptation, concessional players could pay for adaptation benefits that are otherwise not monetizable, thereby mobilizing private investment.
- 2 Currency Risk:** Blended finance can directly address currency risks in volatile and high-interest markets by strategically combining public and private capital. Such de-risking can effectively open the door for substantially greater engagement from risk-averse private institutional investors in emerging market climate projects.
- 3 Country-Level Partnerships:** As a structuring approach, blended finance places parties into specific roles that align with their mandates. Conceptually, blended finance can frame country-level partnership design through its existing language for identifying each stakeholder's roles, requirements, and motivations.

- 4 **Technical Assistance:** The provision of technical assistance (TA) through blended finance structuring can offer targeted support to various aspects of climate projects, including boosting capacity, facilitating monitoring and reporting, and supporting the enabling environment for climate investments.
- 5 **Reduce Financing Costs for Private Investors:** By creating National Green Banks, for example, blended finance can help lower the cost of capital through credit enhancements or loan guarantees and concessional loans for climate project financing.
- 6 **Coal Decommissioning:** Blended finance is a critical tool in facilitating transition financing and decommissioning initiatives, which often require a nuanced financial approach given their cost and complexities. In particular, using public finance to manage phase-out programs and incorporating carbon credits in renewable transactions as a complementary financing instrument in a blended structure is a workable approach.

RECOMMENDATIONS

This report identifies key recommendations for increasing blended climate transactions and mobilizing private sector capital for climate projects in EMDEs.

- 1 MDBs and DFIs should integrate climate and private sector mobilization KPIs into their operating models and prioritize data and analytics.
- 2 Navigating non-financial risks and political dependencies will be crucial to optimize the potential of blended finance.
- 3 Philanthropic capital must be incorporated and integrated in blended finance as a viable source of catalytic funds.
- 4 Lower- and middle-income countries must be empowered to lead bottom-up approaches to country-level financing platforms.





INTRODUCTION

Climate finance stands at a critical juncture. Although global climate finance flows have grown consistently over the past decade, they still lag far behind what is needed to meet the goals of the Paris Agreement¹. One recent [study](#) estimates that delivering net zero will require over \$6 trillion of climate finance annually between now and 2030 and over \$7 trillion by 2050 – a total of almost \$200 trillion. Yet, current global climate finance is only expected to surpass \$1 trillion for the first time in 2022.

Despite the pressing need for ambitious climate action, recent trends indicate public financing for climate, while increasing, has seen the overall growth rate decline, private climate financing volumes dwindle, and climate blended finance, more specifically, regress. In particular, aggregate climate blended finance flows from private sector investors have declined, as has

financing from DFIs and MDBs for climate mitigation and adaptation. This troubling trajectory underscores the urgency for increased concessional capital from donors and philanthropic sources to attract the trillions in commercial investment required to steer the globe towards net zero emissions.

The stark reality is that climate blended finance currently operates well below the threshold demanded by global climate goals. In theory, abundant private capital stands ready to be mobilized for the climate transition. However, challenging investment climates in many emerging markets reveal a harsh truth – without enhanced risk-sharing and greater public sector willingness to shoulder potential losses, substantial private flows into these regions remain arduous. Current incentives to attract private capital are proving sluggish and disproportionate to the scale

¹ At COP15 in 2009, developed countries committed to a collective goal of mobilizing \$100 billion per year by 2020 to support climate action in developing countries

and urgency of the crisis. Climate change will not idle as developing countries undertake institutional reforms or attain coveted investment-grade status. While such systemic reforms have merit, the pressing goal of halving emissions within a decade necessitates immediate, decisive action within existing developing country frameworks. As the window for action narrows, the onus lies on public funders to urgently catalyze blended finance structures that absorb risks impeding private sector participation. To this end, in a recent [report](#) on financing the net zero transition in emerging markets, BlackRock states public grants and grant equivalent financing have been too targeted on funding for individual projects rather than being used to mitigate risks more broadly to crowd in private investment. To effectively mobilize substantial private capital, significant volumes of public resources must be deployed strategically and provide substantial de-risking support at the facility level rather than project-specific capital allocation.

Convergence estimates that to mobilize sufficient private investment for developing countries to reach net zero, over \$500 billion in concessional capital is needed through 2035 in the energy sector alone. Yet, concessional flows to climate blended

“The path forward involves **fostering partnerships** among governments, international financial institutions, philanthropic entities, and private sector players...”

finance deals have stagnated since 2017, showing little sign of an upward trajectory. This stagnation poses a severe threat to both mitigation and adaptation efforts in emerging markets. Mitigation projects face increasing pressure as rising interest rates tighten the grip on commercial bank lending. Meanwhile, inherently burdened by perceived risks and diminished returns, adaptation deals struggle to attract commercial capital.

In the climate finance equation, the private sector remains a critical player. It is now imperative for commercial banks, institutional investors, corporations, and other private sector investors to urgently commit and align their investments with the growing global climate finance needs. In leveraging instruments such as guarantees and TA to de-risk transactions, blended finance can serve as the mechanism to attract private investment. However, the chronic shortfall of concessional capital remains a formidable obstacle.

Further, the importance of country-level financing cannot be overstated when charting the course toward sustainable development and climate resilience. EMDEs often bear the brunt of climate change impacts, yet their access to the vast pools of private sector capital remains limited. Here, in these regions, the need for uncovering the appropriate blended finance architecture becomes paramount. Blending public and private capital, strategically tailored to local contexts and risk profiles, can act as a powerful catalyst for driving the necessary investments at scale. However, to harness this potential, it is critical to structure tailored financial instruments and risk mitigation strategies that align with the unique challenges and opportunities that characterize these developing economies.

The path forward involves fostering partnerships among governments, international financial institutions, philanthropic entities, and private sector players to establish a resilient financial ecosystem that can effectively channel resources toward the most pressing development and climate objectives.

ABOUT BLENDED FINANCE

Blended finance uses catalytic capital from public or philanthropic sources to increase private sector investment in developing countries to realize the Sustainable Development Goals (SDGs) and climate goals. Blended finance allows organizations with different objectives to invest alongside each other while achieving their own objectives (whether financial return, social/environmental impact, or a blend of both).

The main investment barriers for private investors addressed by blended finance are:

- 1 high perceived and real risk and
- 2 poor returns for the risk relative to comparable investments.

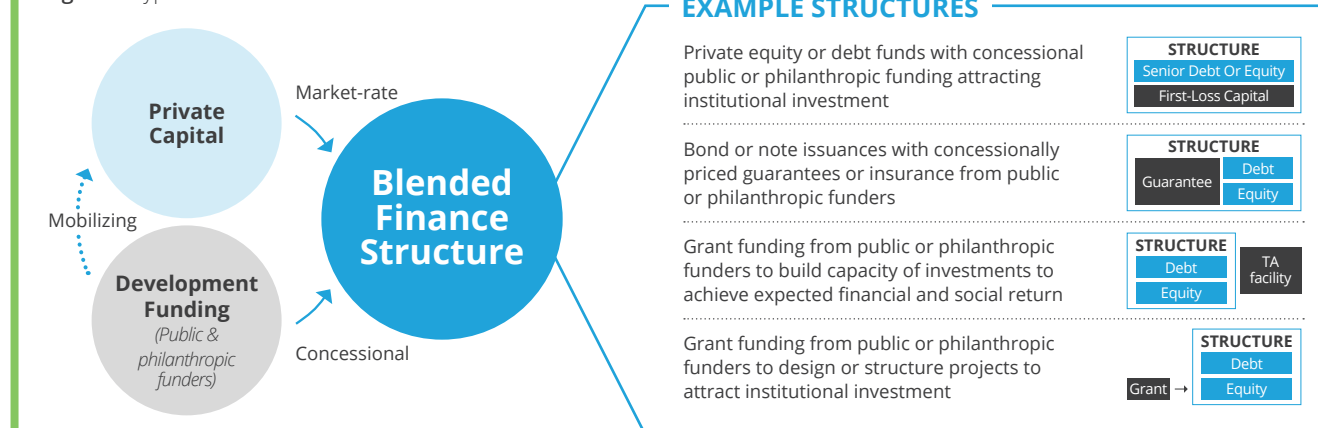
Blended finance creates investable opportunities in developing countries as means to deliver more development impact.

Blended finance is a structuring approach. It is not an investment approach, instrument, or end solution.

Figure 1 highlights four common blended finance structures:

- 1 Public or philanthropic investors provide funds on below-market terms within the capital structure to lower the overall cost of capital or to provide an additional layer of protection to private investors
- 2 Public or philanthropic investors provide credit enhancement through guarantees or insurance on below-market terms
- 3 The transaction is associated with a grant funded TA facility that can be utilized pre- or post-investment to strengthen commercial viability and developmental impact
- 4 Transaction design or preparation is grant funded (including project preparation/design stage grants)

Figure 1: Typical Blended Finance Mechanics and Structures



Concessional capital and guarantees or risk insurance are used by the public or philanthropic sector to create an investment opportunity with acceptable risk-return profiles for the private sector by

- 1 de-risking the investment or
- 2 improving the risk-return profile to bring it in line with the market for capital.

Concessional funding includes scenarios where the public or philanthropic funder takes a higher risk profile for the same or lower rate of return. Design-

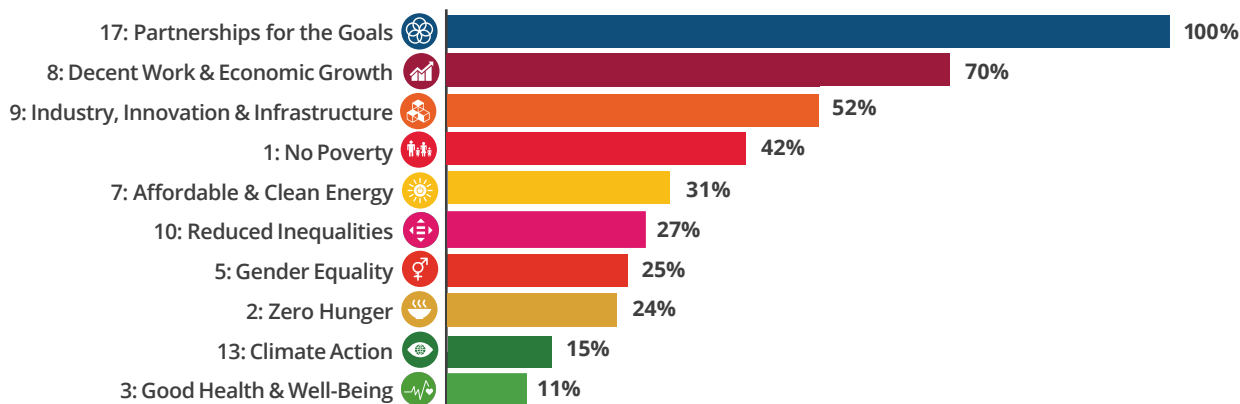
stage grants are not direct investments in the capital structure, but improve a transaction's probability of achieving bankability and financial close; similarly, TA funds operate outside the capital structure to enhance the viability of the endeavor and improve impact measurement.

It is important to note that blended finance can address a subset of SDG targets that are investable or on a pathway to investability. According to an analysis conducted by the Sustainable Development Solutions Network (SDSN, a global initiative of the

UN), approximately half the funding required to achieve the SDGs in developing countries can be in the form of investment. For example, blended finance is highly aligned with goals such as Goal 8 (Decent Work and Economic Growth) and Goal 13 (Climate Action) while less aligned with SDGs such

as Goal 16 (Peace, Justice and Strong Institutions). In addition, emerging trends suggest blended finance is key to creating a pathway to investability for Nature-Based Solutions (Nbs) business models, addressing the undercapitalized climate SDGs (Goal 14 (Life Below Water) and Goal 15 (Life on Land)).

Figure 2: Alignment between blended finance transactions and the SDGs



REPORT METHODOLOGY & OVERVIEW

The State of Blended Finance is Convergence’s annual report on blended finance trends, opportunities, and challenges. The 2023 edition provides an updated analysis of the blended finance market and follows the 2022 edition with a continued thematic focus on climate. The report is based on Convergence’s continuous data and intelligence collection efforts, as well as input from Convergence’s 165 member institutions and other stakeholders.

Convergence curates and maintains the largest and most detailed database of historical blended finance transactions to help build the evidence base for blended finance. Given the current state of information reporting and sharing, it is not possible for this database to be fully comprehensive. Still, it is the best repository globally to understand blended finance’s scale and trends. Convergence continues to build out this database to draw better insights about the market and disseminates this information to the development and finance communities to improve the efficiency and effectiveness of blended finance to achieve the SDGs. All data in this report reflects Convergence’s data collection efforts as of December 31, 2022. Information is collected from i) credible

public sources such as press releases, ii) information sharing agreements with key data aggregators like the OECD, and iii) data validation exercises with Convergence members and partners.

To be included in Convergence’s database, a deal must meet three main criteria:

- 1 The transaction attracts financial participation from one or more private sector investor(s)
- 2 The transaction uses catalytic funds in one or more of the following ways:
 - Public or philanthropic investors provide concessional capital, bearing risk at below market returns to mobilize private investment, or provide guarantees or other risk mitigation instruments
 - Transaction design or preparation is grant funded
 - Transaction is associated with a TA facility (e.g., for pre- or post investment capacity building)
- 3 The transaction aims to create development impact related to the SDGs in developing countries.



PART I:
**MARKET
OVERVIEW**

PART I: MARKET OVERVIEW

OVERALL BLENDED FINANCE MARKET

In 2022, Convergence launched its inaugural climate-focused [State of Blended Finance](#). This year's edition once again zeroes in on the core component of the blended finance market known as climate blended finance² — blended finance transactions that seek to generate positive outcomes in the fight against climate change in EMDEs.

This report draws on Convergence's Historical Deal Database (HDD), the most comprehensive database of financially closed blended finance transactions in the market. Our HDD comprises over 1000 transactions, 485 of which are climate-focused. Aggregate transaction value totals \$198 billion, with climate blended finance deals accounting for 55% or \$109 billion of the total market size. Over the last decade, the blended finance market has comprised 77 deals per year on average, with 41 deals per year targeting climate outcomes. In the last ten years, the median annual financing volume for the overall market totaled \$14 billion, while the median financing volume for climate blended

finance deals stands at \$7.69 billion. A closer look at the broader market of blended finance across a range of data dimensions can be found on [Convergence's website](#).

Overall, Convergence has captured more than 6800 financial commitments to blended finance transactions, disbursed by 1800 unique investors. About 1000, or 55% of investors made at least one commitment to a climate blended finance transaction, for more than 3200 total commitments. The overall average investment size for blended finance deals currently stands at \$22 million and \$30 million when isolating climate blended finance transactions.

Figure 3: Transaction count, total blended finance market vs climate blended finance market, 2014 – October 2023

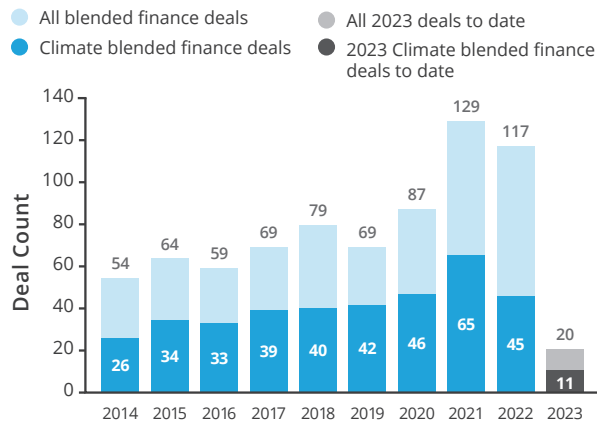
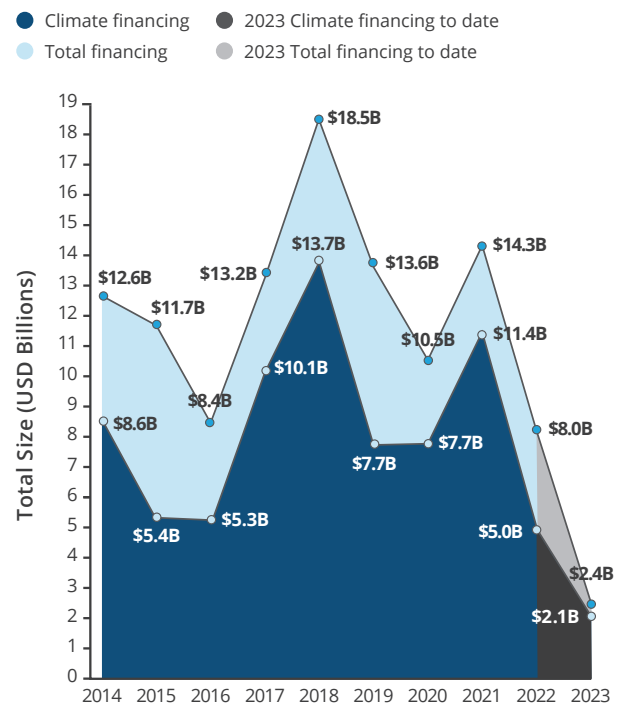


Figure 4: Aggregate annual deal volume, total blended finance market vs climate blended finance market, 2014 – October 2023



² Transactions were considered climate-focused first based on their alignment to select SDGs: SDG 2 (Zero Hunger), SDG 7 (Clean Energy), SDG 11 (Sustainable Cities), SDG 13 (Climate Action), SDG 14 (Life Below Water) and SDG 15 (Life on Land) and second, manually verified by Convergence to verify evidence of explicit climate outcomes. SDG 2 was added as a filter to this year's report. SDG alignment is verified and assigned to transactions in the Historical Deals Database by Convergence while conducting deal sourcing activities. This process includes both evaluating self-assignment of SDGs to transactions by deal sponsors and investors, as well as further research performed by Convergence.

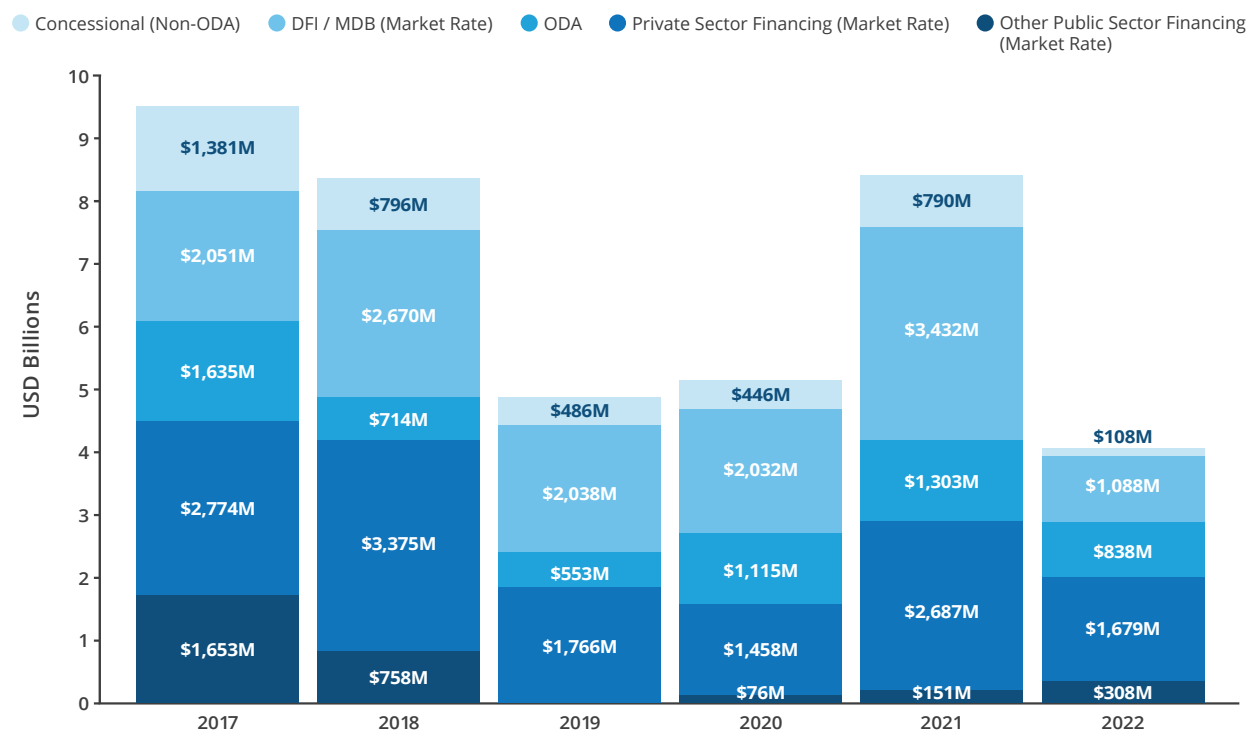
Despite capturing a similar deal count in 2022 compared to 2021, Convergence found that total deal volume decreased by approximately 45% in 2022 and about 55% in climate blended finance, reaching a ten-year low in total financing. Moreover, climate blended finance transactions accounted for under 40% of all blended finance deals in 2022, while in each of the previous five years, climate-

focused transactions accounted for 50% or more of the annual deal count.

Convergence continues to research deal flow for the current year. The preliminary totals for 2023 stand at 20 blended transactions, 11 of which incorporate a climate focus, and aggregate financing of \$2.4 billion overall, with 96% or \$2.3 billion directed towards climate blended finance.

SOURCES OF FINANCING TO CLIMATE BLENDED FINANCE

Figure 5: Sources of financing to climate blended finance deals, 2017-2022



Based on investment amounts captured by Convergence from 2017 to 2022, private sector investors are the main source of capital to climate blended finance transactions by volume. The private sector invested an average of \$2.3 billion in commercial capital to climate blended finance deals. This is expected given that, by definition, blended finance transactions must include the participation of at least one private sector investor on market terms. However, private sector climate financing totals have plateaued. Aggregate financing flows from private sector investors decreased by 45%

in 2020-2022 from totals registered between 2017-2019.

Additionally, Convergence observed that financing from the DFIs and MDBs dropped by 3% over the two periods. An important consideration is not just the increase of financing flows but the rate of increase as well. Climate Policy Initiative (CPI), a donor-funded advisory organization addressing global capital flows to climate finance (speaking to both emerging and developed markets), finds that while climate financing has increased, the growth of private finance has slowed over the past couple of years.

As shared with Convergence:

“Private and public investment flows have increased. Annual climate finance flows are crossing the \$1 trillion mark for the first time in 2021. But growth can no longer be incremental. CPI found that climate finance increased at an average annual growth rate (CAGR) of 7% per year between 2011-2020, but climate finance must increase 20% every year to stay within range of the 1.5C goal and avoid the worst impacts of global warming scenario.”

According to a recent CPI [report](#), private finance is expected to continue to grow as the 30 largest global commercial banks have cumulatively committed annual climate financing of \$870 billion in 2023, up from the \$600 billion committed in 2021. Conversely, the recent growth seen in public financing may be moving in the opposite direction, as only six of the 27 largest national and bilateral DFIs have set specific climate investment targets.

DFIs and MDBs are also key suppliers of capital to climate blended finance, with the vast majority of investment deployed on market terms – from 2017 to 2022, DFIs/MDBs supplied \$2.2 billion of commercial capital per year to climate blended finance deals.

In terms of concessional investment deployed to mobilize commercial investment into the climate blended finance market, ODA³ allocated by OECD DAC members averaged about \$1.3 billion per year from 2017-2022, while concessional investment from non-ODA sources (e.g., concessional instruments from philanthropic sources and impact investors) averaged \$675 million per year.

Critically, the supply of concessional capital to climate blended finance deals has been stagnating since 2017 (only a minor increase from \$967 million per year between 2017-2019 to \$1.08 billion 2020-2022) and is nowhere near the levels required to reach key mobilization targets, such as the United Nations Conference on Trade and Development’s (UNCTAD) recent estimate that [\\$6 trillion in climate finance](#) to developing economies by 2030 is needed to reach just half of their Nationally Determined Contributions (NDCs). The OECD has noted similar trends, finding [little change in the proportion of ODA disbursement to climate-related investment](#) since 2017, and research by the DFI Working Group on Blended Concessional Finance notes that DFI market rate and concessional allocations to climate finance deals [have not exhibited any real growth since 2019](#).

A LOOK BACK AT LAST YEAR’S REPORT

The State of Blended Finance Report for 2022 extensively explored the blended finance landscape, with a particular thematic focus on climate-related investments. Notably, the report highlighted that climate-oriented investments constituted a substantial share of blended finance commitments in recent years, accounting for two-thirds of such commitments. Moreover, the report underscored the increasing significance private investors attribute to climate finance, as evidenced by their growing commitment to environmental, social and corporate governance (ESG) strategies and alignment with net zero transition objectives. Despite this mounting interest in climate-aligned development goals, the

“...the report highlighted that **climate-oriented investments** constituted a substantial share of blended finance commitments in recent years...”

3 ODA-eligible investments include: DFI / MDB concessional investments derived from donor government shareholder paid-in capital; wholly donor funded capital pools (facilities, funds) administered by DFIs / MDBs on a concessional basis; donor government funded multilateral organizations (GuarantCo) or investment funds / facilities investing on a concessional basis (Green Climate Fund); and direct concessional investments from donor governments to blended finance transactions.

report highlighted a critical challenge – the declining flow of blended finance toward climate initiatives. While the private sector exhibited a heightened appetite for climate-related investments, particularly those aligned with purpose, ESG, and sustainable finance, it generally displayed a reluctance to invest in developing countries and emerging markets. This is where blended finance’s role becomes increasingly vital as a tool to mobilize private capital for climate opportunities in these regions. The report underscored the need to increase the supply of concessional capital and expand knowledge in climate blended finance to meet the surging demand for climate-aligned investments. Additionally,

it highlighted increases in climate adaptation investments, including positive growth from specific institutional private equity and venture capital investors.

While the 2022 report provided invaluable insights into the overall blended finance landscape, the 2023 report will, in addition, narrow its focus to explore how to empower nations to navigate their unique developmental and climate challenges effectively. In placing greater emphasis on the intricacies of country-level challenges and opportunities concerning the development of country-led climate blended finance architectures, the 2023 edition aims to cast light on areas and regions ripe for growth and positive developments in climate blended finance.

THE MACROECONOMIC ENVIRONMENT

Climate investment and blended finance initiatives navigate a complex web of challenges in the ever-evolving global macroeconomic landscape. These challenges, characterized by inflationary pressures, mounting debt burdens, and geopolitical instabilities, profoundly influence the flow of climate blended finance funds. The world, having weathered the intertwined crises of the COVID-19 pandemic, escalating geopolitical conflict, and natural disasters, now grapples with a stark reversal of decades of development progress.

With global inflation reaching a [twenty year high of nearly nine percent in 2022](#), central banks initiated aggressive monetary tightening measures to curb demand-side inflationary pressures. However, this swift tightening has cast a shadow over developing

countries. The spillover effects of interest rate hikes triggered significant capital outflows and currency depreciations across low and middle-income countries. As a result, balance of payment pressures and debt vulnerabilities intensified, with [nearly 60 percent of low-income countries already in or at high risk of debt distress](#), a stark contrast to the 22 countries in a similar predicament in 2015. These realities, coupled with a fragile global growth outlook and persistent inflation, have alarmed investors as emerging economies’ risk profiles continue to increase.

The invasion of Ukraine by Russia has further exacerbated conditions for investing in emerging markets. Supply chain disruptions have amplified inflationary pressures and decreased the purchasing power of investments. Short-term cost volatilities due to the war in Ukraine have resulted in [increased energy costs](#), slowing down the energy transition across Asia. This, coupled with Southeast Asia’s abundance of coal, has contributed to continued coal power generation. Additionally, ODA has had to pivot toward addressing urgent humanitarian needs, such as food security, further diverting funds away from climate interventions. To compound these challenges, many EMDEs face the stark reality of being highly vulnerable to climate change, enduring threats like extreme weather events and rising sea levels that necessitate significant investments in climate resilience.

“The world, having weathered the intertwined crises of the COVID-19 pandemic, escalating geopolitical conflict, and natural disasters, now grapples with a **stark reversal of decades of development progress.**”

Interest Rates, Currency Risk, & Debt Servicing:

Amidst these challenges, interest rate hikes in advanced economies have played a pivotal role in directing the currents of climate blended finance. Designed to combat rising inflation, these hikes have rerouted cross-border capital as investors seek more stable environments with comparable returns, diverting resources away from riskier markets in developing economies. This shift threatens to create liquidity crises in these nations, potentially endangering funding for climate-related projects. This scenario exposes the vulnerability of climate finance to external monetary policy decisions, illustrating how macroeconomic developments can ripple across borders, making it more challenging for climate finance to scale.

Forex (FX) volatility is an additional hurdle that climate financiers must navigate. This phenomenon is acutely felt as the US dollar appreciates relative to currencies in developing economies. Not only does borrowing in hard currency become more costly, but repayment profiles, expressed in local currency equivalents, become unpredictable. This, in turn, augments credit risk for climate blended finance initiatives as the elevated risk potentially erodes project viability and increases overall investment risk.

The issue of rising debt in developing economies has also emerged as a macroeconomic impediment to climate blended finance. As these countries grapple with the economic

“The issue of rising debt in developing economies has also emerged as a macroeconomic impediment to climate blended finance.”

repercussions of the COVID-19 pandemic, they find themselves compelled to allocate significant resources to relief efforts. The result has been a mounting debt burden that has increasingly strained their ability to invest in climate adaptation and mitigation. This fiscal position has left developing economies at a crossroads as many must prioritize internal recovery or longer-term climate change adaptation investments.

Macroeconomic Concerns for Emerging Market & Developing Economies

EMDEs are currently caught in a fiscal quagmire, forced to address multiple crises while wrestling with long-term climate commitments. Achieving their climate goals, particularly those enshrined in the Paris Agreement, necessitates a substantial increase in capital spending. Climate mitigation and adaptation efforts, which demand significant financial resources, require transitioning to low-carbon economies, fortifying climate-resilient infrastructure, and disseminating sustainable practices across sectors. Balancing immediate fiscal vulnerabilities, fulfilling climate commitments, and securing funds for climate action becomes an intricate challenge. EMDEs must secure the necessary financial resources and manage their debt sustainably, lest they fall into a vicious cycle of weak growth, unsustainable debt, and austerity.

Although global financial conditions have eased in the second half of 2023, global financial stability risks remain. The macroeconomic challenges and exogenous shocks facing climate blended finance are diverse and multifaceted and underscore the imperative to adopt robust risk mitigation strategies and blended financing mechanisms that can respond to the realities of the current macroeconomic landscape.

Blended finance has always been a tool to solve large-scale global problems. In the specific context of the current macroeconomic setting, blended finance is exceptionally apt in mitigating country risk and currency risk concerns.

Country Risk:

By employing credit enhancement instruments like guarantees, blended finance effectively addresses the concerns that often deter private investors from entering high-risk or developing countries. Guarantees act as a protective shield against potential losses due to factors such as political instability and currency devaluation. The backing of reputable DFIs or MDBs enhances a project's creditworthiness, attracting private investors who may have strict investment grade mandates. According to World Bank estimates, [every \\$1 invested in improving creditworthiness leverages \\$100](#) of additional private sector financing. Therefore, creditworthiness and credit enhancement should be major priorities for stakeholders seeking to reduce borrowing costs and tap into more financial resources.

This sort of credit enhancement approach has proven successful in several instances. For example, GuarantCo offers credit enhancement for infrastructure projects to an acceptable level to enable local currency credit investors (e.g., banks and institutional investors) to extend longer-term debt. Using this type of guarantee also allows for efficient leverage of capital whereby GuarantCo can leverage 3x for each \$1 of donor capital in the form of guarantees. Such guarantees enhance the credit quality of these projects, making them more enticing to private sector participants. Relatedly, the Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, extends political risk insurance and credit enhancement to global private sector investors, assisting them in navigating country-specific risks.

Ultimately, by mitigating country risk and elevating credit ratings, blended finance enables projects in riskier countries to align with the investment grade mandates of institutional investors. This influx of private capital is essential for accelerating climate and development initiatives in emerging markets where financing gaps persist. Blended finance mechanisms incorporating credit enhancements continue to prove their mettle in fostering sustainable development and mobilizing private sector funds to address pressing global challenges.

“...by mitigating country risk and elevating credit ratings, **blended finance enables projects in riskier countries** to align with the investment grade mandates of institutional investors.”

Currency Risk:

Blended finance can also be a viable instrument for tackling currency risk in sustainable development and climate initiatives. Currently, the lack of a robust market for foreign exchange swaps makes them mostly an illiquid instrument. Concessional resources supplied by donors or development banks could be more heavily used to buy down the cost of illiquid exotic currencies.

For example, TCX (Currency Exchange Fund) has become a vital source for international funders in providing cross-currency swap solutions for currency mismatches on loans to protect against exchange rate fluctuations. In Myanmar, TCX uses blended donor funding to subsidize the interest rate levels of local currency loans to meet the central bank rate regulation. [TCX created a local currency funding option](#) at below-cap rates for international investors by converting a \$10 million subsidy to catalyze \$80 million of funds in local currency.

Blended finance mechanisms can effectively lower FX volatility risks by facilitating swaps for local currency financing. This is especially crucial in regions like Myanmar, where rapid currency depreciation can erode the value of returns for investors.

In this tumultuous macroeconomic environment, blended finance emerges as a highly apt tool for mitigating country risk and currency risk concerns, thus serving as a critical instrument in the pursuit of climate change mitigation and adaptation goals.



PART II: DEAL TRENDS

PART II: DEAL TRENDS

CLIMATE MITIGATION V. CLIMATE ADAPTATION V. HYBRID

This report will explore climate blended finance through three lenses:

- 1 mitigation blended finance;
- 2 adaptation blended finance;
- 3 hybrid mitigation-adaptation blended finance.

Mitigation Blended Finance

The goal of mitigation blended finance is to limit the impacts of climate change by reducing carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions from human-made sources into the atmosphere. Mitigation transactions may additionally seek to remove GHGs from the atmosphere through carbon “sinks”⁴.

Overall, most climate blended finance, by both transaction count and aggregate financing volume, is focused on mitigation. Since 2013, approximately 58% of the annual climate deal count within the Convergence database is exclusively focused on mitigation, representing more than \$64.2 billion in total mitigation finance. Blended mitigation deals also tend to be the largest type, with the median deal size over this period being \$90.9 million, versus \$43.0 million for hybrid and \$34.5 million for adaptation. Moreover, blended mitigation deals have a higher leverage ratio of 6.1, compared to 3.9 for hybrid and 2.7 for adaptation.

Mitigation transactions tend to be [more attractive to investors than adaptation deals](#) for several reasons. Generally, mitigation activities are easier to define because they are linked to a reduction in GHG emissions. Since GHG reduction is a familiar

target, this can also mean it is easier for investors to understand the impacts of their commitments. Additionally, mitigation deals can be more readily linked to revenue-generating activities, making returns on investment more apparent.

Adaptation Blended Finance

Adaptation transactions target adjustments to the already apparent or expected consequences of climate change, including the intensity and frequency of extreme weather events, rising sea levels, and less predictable and changing crop-growing seasons.

Adaptation blended deals have historically struggled to attract investors, yielding only \$7.5 billion in aggregate financing since 2013. On average, only approximately six adaptation deals per year have been recorded. Investors may hesitate to fund adaptation blended finance transactions because there is an ongoing perception that adaptation deals are riskier and present lower financial returns. Moreover, the size of the deals may be too small to meet investor criteria, and timelines for investment may be too long. Lastly, the lack of standardized criteria could lead to difficulties in measuring the outcomes of adaptation initiatives.

Due to the hesitancy of private investors, public investors have been the primary funders of adaptation transactions. Within the past decade, public sector investors have increased their commitments to focus specifically on adaptation financing. In 2015, for the first time, the Paris Agreement established a global goal on adaptation, and in 2019, nine MDBs made [a joint commitment](#) to double the total level of adaptation finance provided to clients to

⁴ Carbon sinks are anything that remove more carbon from the atmosphere than they release. The process by which carbon sinks remove carbon from the atmosphere is called “carbon sequestration”. Biological carbon sinks include oceans, mangrove forests, and soil. Artificial carbon sinks are human created sites such as landfills, or technological processes such as direct air capture of CO₂.

\$18 billion annually by 2025. Two years later, in 2021, [MDB flows of finance for adaptation surpassed their pledge](#) to increase finance for adaptation and reached \$19.2 billion.

Hybrid Mitigation-Adaptation Blended Finance

Hybrid climate transactions contain elements of both mitigation and adaptation finance. Sectors can also be considered hybrid if they seek to address mitigation and adaptation outcomes, such as the sustainable agriculture sector. Sustainable agriculture can benefit climate mitigation by improving soil health and increasing carbon sequestration through organic material, and climate adaptation by increasing food security in vulnerable populations.

Hybrid opportunities represent a particular opportunity for investors to recognize the investment potential of adaptive and resilient solutions. Convergence found that 45% of institutional investments into climate finance are in hybrid solutions, compared to 35% in mitigation and 20% in adaptation. As shared by Cecilia Tam, Acting Head of the Energy Investment Unit at the IEA:

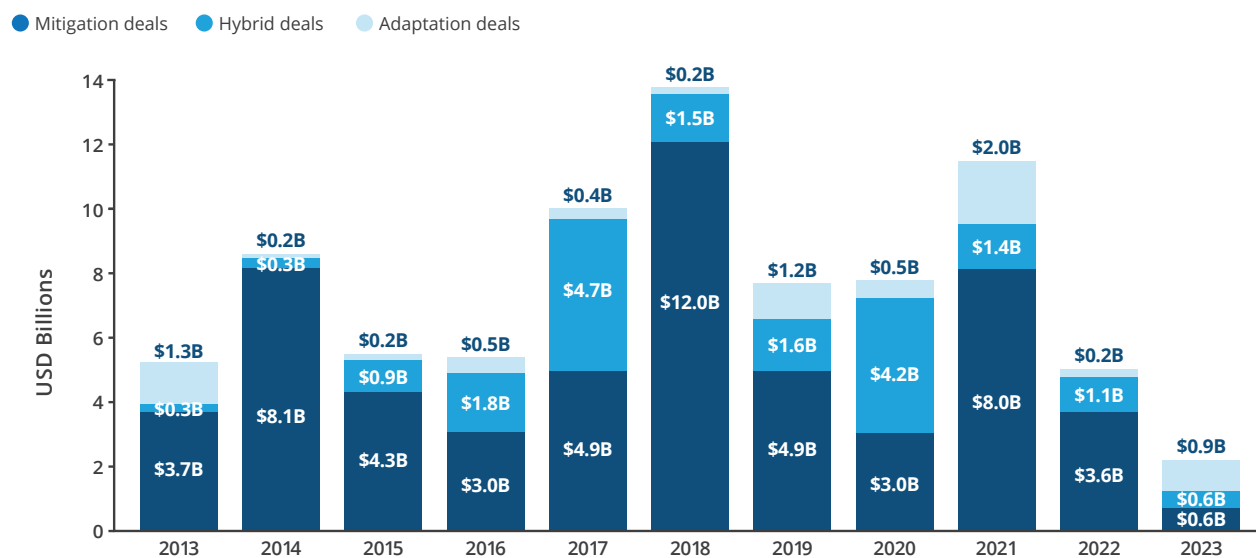
“There is a need to start looking at the adaptation / energy nexus, because we need to find projects that are commercial and near commercial. It may be

difficult to find commercial projects in other sectors, where the revenue streams aren’t necessarily there yet. A better understanding of adaptation investments in the energy sector can help to spur investments in adaptation investments.”

Hybrid, or cross-cutting blended finance transactions, comprise approximately ten transactions annually since 2013. Overall, the total value of hybrid transactions is \$18.5 billion. Hybrid transactions can occur in various sectors, including infrastructure, financial services, housing, and real estate. The largest portion of hybrid deals (27%), however, are transactions that focus on agricultural inputs and farm productivity, since the characteristics of this sector tend to be well-positioned to produce dual mitigation-adaptation benefits.

For example, the [Planting Climate Resilience Project](#) is a \$217 million project situated in the Northeast region of Brazil with the goal of improving smallholder farmer productivity on degraded agroecosystems, particularly those suffering from water scarcity and drought. It aims to introduce technologies for water harvesting, storage and recycling, and diversification strategies to strengthen rural populations’ resilience. The project contains mitigation elements by introducing low-emission technologies to increase farmer productivity and adaptation by focusing on producing climate-resilient agriculture.

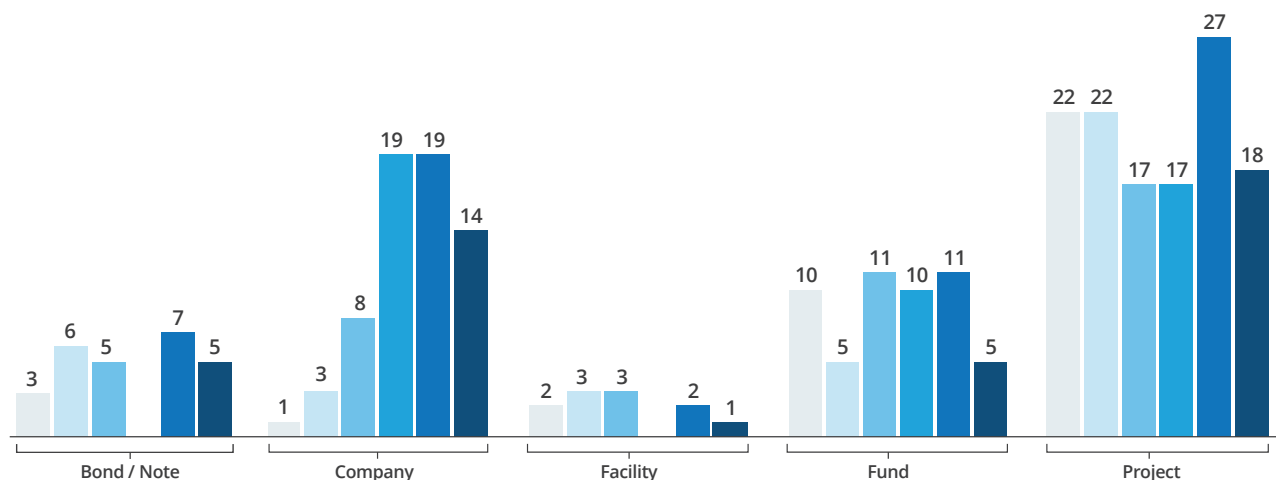
Figure 6: Aggregate annual financing flows to mitigation blended finance, adaptation blended finance, and hybrid blended finance deals, 2013-October 2023



VEHICLES

Figure 7: Number of climate blended finance transactions by vehicle type per year, 2017-2022

● 2017 ● 2018 ● 2019 ● 2020 ● 2021 ● 2022



Convergence’s database categorizes blended transactions across five primary financial vehicle types;

- 1 Bonds / notes (including both privately placed issuances and listed instruments on public exchanges)
- 2 Companies (i.e., direct private equity and debt financing of businesses on both market rate and below market rate terms)
- 3 Facilities⁵
- 4 Funds (i.e., limited partnership private equity and debt funds, as well as funds-of-funds)
- 5 Projects (i.e., greenfield and brownfield projects, project finance and programs funded through a combination of market rate and below market rate capital)

Projects

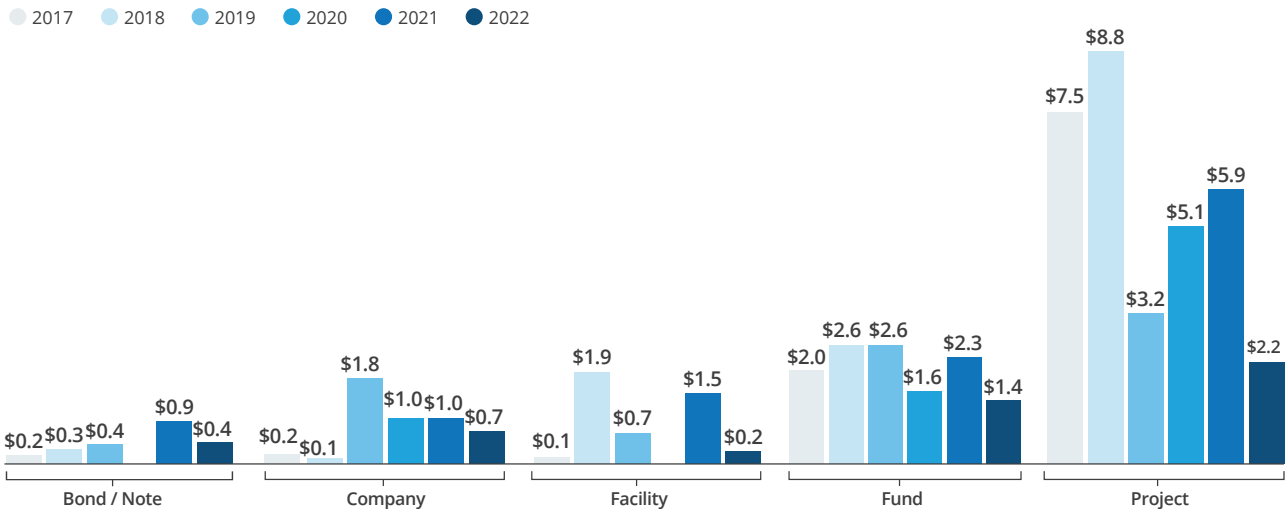
Since 2017, climate blended finance has typically been structured as greenfield and brownfield projects. Apart from 2020, project transactions have been the most common transaction type on an annual basis over the past six years, on average comprising 40% of climate blended finance deals per year.

Project structures also account for the largest share of total financing volume to climate blended finance, both on an absolute and proportional basis. From 2020-2022, projects mobilized an average of approximately \$4.4 billion of climate finance annually (funds were the second most effective mobilizers of climate finance at about \$2.1 billion). Proportionally, projects received an average of 55% of total annual climate blended finance flows between 2020-2022, down slightly from 59% between 2017-2019. However, it is notable that projects are the only blended transaction type to experience a progressive decline in their share of total annual climate blended finance flows in recent years, while flows to blended bonds, companies, and particularly funds, have remained constant. This is partly a product of the growing proliferation of smaller project transactions integrating mitigation (emissions reduction) components into brownfield projects otherwise targeting separate development objectives (job creation, food security).

Of the 123 climate blended finance projects captured by Convergence between 2017-2022, 94 or 77% were projects targeting purely mitigation outcomes, while only 7% were exclusively focused on adaptation

⁵ Convergence defines a blended facility as an earmarked allocation of public development resources with private capital at the vehicle level, for deployment towards a specific recipient or intervention. This also includes risk-sharing facilities, or bilateral transactions, typically between donor or public entities and financial intermediaries, where the concessional capital helps mitigate potential losses on underlying loans originated by the financial institution.

Figure 8: Annual climate deal volume by vehicle type, 2017-2022 (USD Billions)



outcomes. Convergence has observed little year-on-year change in this composition. In fact, the share of adaptation blended finance projects drops to less than 1% (2020-2022) when considering the entire blended finance market.

“Climate blended finance projects continue to be heavily oriented towards renewable energy...”

Climate blended finance projects continue to be heavily oriented towards renewable energy, particularly, the creation of new renewable energy assets. Nearly 75% of projects between 2017-2022 were in the renewable energy sector. While activity has remained buoyant, the size of renewable energy projects has declined in recent years. Of the approximately \$13.1 billion channeled into climate blended finance projects between 2020-2022, \$6.9 billion (53%) went to renewable energy projects. This is a reduction from \$13.6 billion or 73% of total climate blended financing between 2017-2019. Additionally, the average size of renewable energy projects dropped from \$347 million (2017-2019) to \$171 million (2020-2022).

A confluence of factors is responsible for shrinking blended capital flows to the renewable energy sector. Firstly, some segments of the sector are experiencing

a graduation effect. Blended structures for larger, utility-scale renewable energy projects are being replaced by wholly commercial financing as perceived and real investment risks converge. Conversely, smaller projects present additional risks, like high counterparty risk, that still necessitate blended finance risk mitigation mechanisms. The current macroeconomic landscape is also fuelling the decline. In the rising interest rate environment, international commercial banks, a critical provider of project finance to blended renewable energy projects, [have restricted lending operations](#) due to their inability to offload existing exposures without significant loss.

Finally, there has been a growing frequency of renewable energy projects in least developed countries (LDCs) – 40% of energy projects in 2020-2022 took place in an LDC, up from 33% in 2017-2019. While these projects tend to be smaller (\$44.1 million median LDC transaction size vs. \$124.5 million median transaction size in non-LDCs), they require greater shares of concessional capital and capital from public investors and attract comparatively lower levels of investment from the private sector, their need for scaled climate finance investment is arguably most urgent. The inclusion of blended finance instruments that focus on key risk factors, specifically credit and political risk, such as those offered by MIGA under the [International Development Association Private Sector Window](#) (IDA PSW), is vitally important to enable participation from private sector investors.

Funds

Blended funds for climate have declined noticeably in recent years, comprising just 11% of climate blended finance deals in 2022, down from 26% in 2017. The total annual aggregate value of funds has also fallen, dropping to \$1.8 billion per year between 2020-2022 from \$2.4 billion in 2017-2019. This downtrend in activity has been experienced equally across the climate sub-themes, with mitigation, adaptation and hybrid classified funds comprising 36%, 24% and 40% of all climate funds from 2017-2022.

The downturn is symptomatic of the macroeconomic factors challenging the wider investment industry. [Preqin noted](#) that globally, private equity, venture capital, and, to an extent, private debt fund activity reduced significantly in 2022, resulting from lower company valuations and as restricted risk appetites fuel capital flight from emerging markets. Fundraising challenges are particularly acute for new fund managers as risk aversion among private sector investors is concentrating capital in the hands of fewer, more established fund managers. This trend is evident in Convergence's historical data, with the median size of funds increasing to \$112 million in 2020-2022 from \$96 million in 2017-2019, despite only five funds closing in 2022. Moreover, our fundraising dataset illustrates the capital raising challenges of the past year – only 8% of funds actively looking for capital tracked since last year's report achieved a financial close.

The role and importance of concessional capital availability are magnified in this environment, especially for new fund managers. For example, TA funding

“...**technical assistance (TA) funding** can enhance fund managers' capacity to improve due diligence approaches...”

can enhance fund managers' capacity to improve due diligence approaches for better pipeline management. Relatedly, Clarmondial leveraged TA funding from the Global Environment Facility (GEF) to establish its impact monitoring and reporting system for its [Food Securities Fund](#) (\$67.5 million). Following key proof-of-concept support from Convergence to stand up the fund, TA grants enhanced the fund's operational viability, creating a more attractive investment for investors.

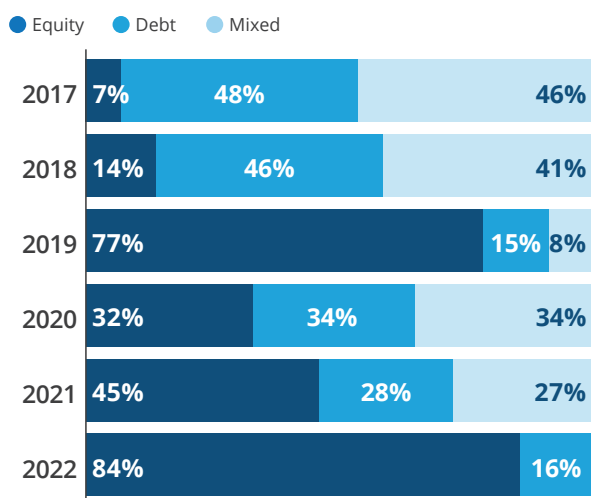
Private equity funds have comprised a greater share of climate blended fund activity in recent years, accounting for about 55% of all climate blended funds launched since 2020 (vs. 34% of climate blended funds between 2017-2019). Conversely, the proportion of private debt funds for climate has gradually declined since 2020, making up 23% of climate blended funds on average per year (2020-2022) vs. 36% of climate blended funds per year between 2017-2019. Aggregate deal volume of private debt climate blended funds plummeted even more steeply, dropping by 82% in 2020-2022



from 2017-2019 totals. On the other hand, total investment into private equity climate blended funds grew by 42%. It is clear that in the context of the current fundraising difficulties, funds are in a state of transition in the climate blended finance market. The spread between required returns on private equity and private debt has narrowed due to rising interest rates and equity devaluations. However, as debt costs rise, private debt climate blended funds are exposed to increasing levels of credit risk as default concerns grow. Together, these trends may push private sector investors towards equity markets, where they can capture greater upside with comparable levels of risk. Company devaluations and FX risks will also likely limit investment pipelines for General Partners (GPs) in emerging markets. This volatile macroeconomic landscape underscores the need for a more robust supply of concessional capital into fund structures to

- 1 help GPs reach financial close and
- 2 reduce capital costs for ultimate borrowers, effectively expanding the universe of potential investees.

Figure 9: Breakdown of climate blended funds by investment strategy, 2017-2022



Bonds

As discussed in a [recent report published by Convergence](#), blended bonds (sovereign and corporate) have yet to gain significant traction or scale, including in the climate blended finance space. Despite blended bonds accounting for

a progressively greater proportion of annual blended climate financing volume since 2017 (2% of total climate blended finance in 2017 to 9% in 2022), climate-focused bonds have only accounted for 11% of climate blended transactions per year on average between 2020-2022. Additionally, Convergence has not observed a secondary market for blended climate bonds. All bond transactions captured in our database were privately placed and held to maturity for their impact attribution.

The past year has been turbulent for fixed-income instruments, especially in emerging markets. According to the [World Bank Global Economic Prospects Report](#), one in four emerging market sovereigns has effectively been cut off from the international bond market due to a high debt accumulation, high interest rates and reduced access to credit. Likewise, Amundi and the International Finance Corporation (IFC) noted in their [Emerging Market Green Bonds](#) report, that sovereign issuances of Green, Social, Sustainable, and Sustainability-linked (GSSS) bonds fell by over 45% in 2022, while corporate issuances of GSSS bonds grew by just 6%, driven mainly by financial institutions.

Despite these recent downward trends, sovereign and corporate blended bonds have significant mobilization potential for climate blended finance. Amundi found GSSS bonds, particularly green bonds, to be more resilient than the overall fixed-income market and expects emerging market issuances to rebound in 2023 and 2024. Blended bonds also present an efficient channel for institutional investors to allocate risk capital to assets that match long-term liabilities, and according to a [Bank of America study](#), investment-grade corporate issuances in emerging markets yield about 60 basis points (bps) above US corporates. When comparing corporate green bonds to otherwise identical conventional instruments, green bonds yielded over seven bps more in 2022 (what is referred to as a “greenium”). Institutional investors and asset managers are poised to play a larger role in climate blended finance as restricted commercial bank balance sheets limit traditional project finance sources and structures. Bonds are an attractive vehicle to grow their participation and have

already been deployed in the blended finance market for [energy asset refinancing](#), [green infrastructure](#) and [sector-agnostic green financing](#). However, bonds need to scale⁶ to tap into this investor class.

Convergence has observed that the size of climate blended bonds is trending in the right direction – the median size of bonds grew to \$70 million in 2020-2022 from \$46.5 million in 2017-2019. Secondly, climate blended bonds can provide the requisite credit risk mitigation to speculative rated bonds to secure institutional investor investment while also delivering cost of capital relief for borrowers⁷. This is particularly important for [lower-income countries](#) (CCC rating and lower),

who are facing reduced growth prospects amid mounting debt pressures (only 33% of all green bonds (sovereign and corporate) issued in emerging markets in 2022 were investment grade). A few markets in Latin America, specifically Brazil, Colombia and Mexico, are showing noticeable promise for the scaled use of blended climate bonds, including local currency bonds. Early efforts to control inflation are now paying off as select markets offer yields exceeding many developed markets, backed by high rates and stable currencies. Emerging Asia (excl. China) is also [a leader in GSSS issuance](#), accounting for over \$330 billion in cumulative outstanding issuances in mid-2022.

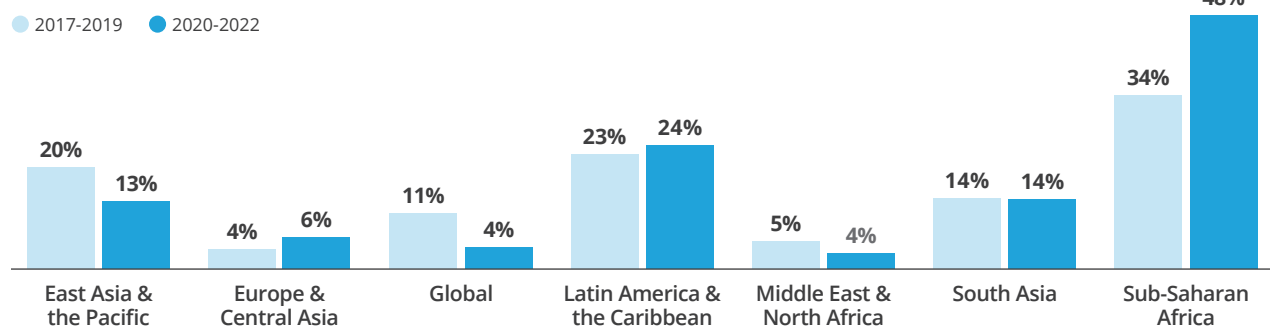
REGIONS & COUNTRIES

Climate blended finance transactions have been concentrated in SSA (48% of transactions between 2020-2022), followed by Latin America and the Caribbean, which accounts for 24% of climate blended finance deals. According to the Convergence database, the geographic spread of climate finance transactions in the blended finance market has changed slightly in the three preceding years (2017-2019). In particular, the proportion of transactions that were focused in SSA grew 14 percentage points between 2017-2019 and 2020-2022. This represents an absolute increase of nearly 90%, with 40 deals targeting the region in the

former three years and 75 in the latter. Additionally, there was a decrease in the proportion of deals targeting East Asia and the Pacific, from 20% in 2017-2019 to 13% in 2020-2022.

Convergence data further suggests the volume of climate blended finance flows across regions does not perfectly mirror transaction distribution, with the largest volume of financing from 2020-2022 flowing to Latin America and the Caribbean. Two large deals drive this. One is [PUMA II](#), a \$2.1 billion project led by Klabin S.A. to grow its existing pulp and paper

Figure 10: Proportion of climate blended finance deals by regional breakdown, 2017-2022



6 Many large-scale private sector investors are governed by liquidity requirements that prevent investment in publicly listed securities below a \$250 million threshold.

7 Prior to 2013, bond guarantees could “uplift” the issuance credit rating, even above the sovereign rating ceiling. Following regulatory changes in 2013, credit uplifts are only tenable through full (100%) bond guarantees. However, blended finance tools including concessional partial guarantees, concessional debt service reserve accounts or subordinated concessional notes can in effect improve the credit outlook of an issuance and aligned it with investment grade characteristics.

manufacturing facility using equipment to reduce the company's environmental impact. The second is a \$1.2 billion project, sponsored by Lenzing AG, that involves the construction of [LD Celulose](#), a greenfield dissolving wood pulp plant located in Minas Gerais, Brazil.

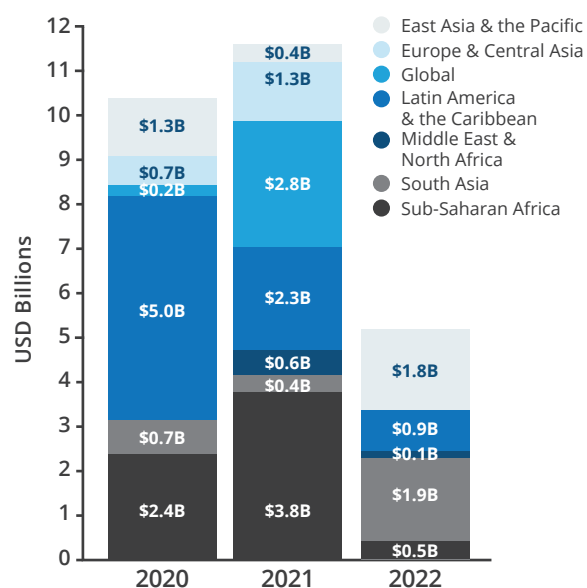
Meanwhile, transactions in SSA tend to be more frequent but smaller, with the largest transaction captured between 2020-2022 being the \$750 million [Bumbuna II hydropower project](#), sponsored by Blue International and located on the Seli River in northern Sierra Leone.

Over the past three years, aggregate blended finance flows toward climate peaked in 2021 before declining in 2022. In 2022, only East Asia and the Pacific, and South Asia saw an increase in the volume of climate blended finance. Despite this increase in South Asia, overall, it was one of the regions with the lowest volumes of financing flow towards transactions (\$2.9 billion from 2020-2022), along with Europe and Central Asia (\$2 billion) and Middle East and North Africa (\$700 million).

“Southeast Asia & South Asia will be increasingly important regions in the fight against climate change, given their dependence on coal...”

Southeast Asia and South Asia will be increasingly important regions in the fight against climate change, given their dependence on coal; coal plants in Asia and the Pacific account for one-fifth of global emissions and the dependency on the commodity is expected to continue. The challenge is acute, given that coal plants are relatively young and heavily owned by state-owned enterprises. Here blended finance has a potentially significant application in the early retirement of coal using Energy Transmission Mechanisms (ETMs), as championed by the Asian Development Bank (ADB).

Figure 11: Volume of climate blended finance by region, 2020-2022



ETMs, as envisioned, will be country-level blended finance facilities used to acquire coal power assets and retire them earlier than the plant's previously expected lifetime, while providing enough time to build up renewables that support a transition. Sellers of coal-fired assets use funds from their sales to invest in the transition, while a complementary clean energy facility supports renewable energy deployment. Blended finance can be used to help structure asset transfers and provide financial incentives to asset owners to phase out the plant early. In this way, blended finance is needed to ensure that the asset owner has the revenue stream that will allow them to offset the losses that come from bringing down a coal plant early. This is particularly important in countries such as Indonesia, where the devaluation of public assets is illegal. While still in its early days, ADB is currently piloting ETMs in Indonesia, the Philippines, Vietnam, Pakistan, and Kazakhstan.

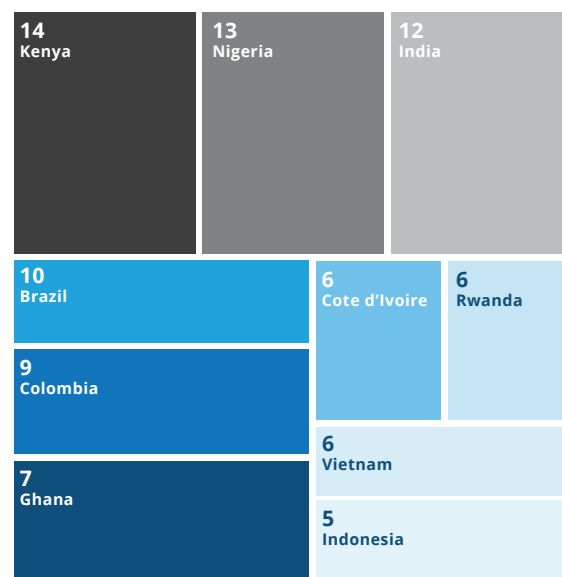
When looking at the volume of climate financing overall, CPI shared their most recent estimates indicating the majority of climate finance is concentrated in North America, Western Europe, and East Asia and the Pacific, primarily China. In 2021 and 2022, most of this (more than 80%) was spent domestically, highlighting the importance of a domestic enabling environment where investors perceive higher certainty. The differences in findings from the HDD can be partially attributed to the focus

of each data set. CPI attempts to capture all forms of climate finance transactions, including those without a concessional element, unlike the HDD, which requires transactions to contain concessional finance. Many of these non-concessional transactions are found within China, especially those that are led by state-owned enterprises.

The most frequently targeted countries by climate blended finance transactions over the past three years have been Kenya (14 transactions), Nigeria (13), India (12), Brazil (10) and Colombia (9). From an aggregate financing lens, the largest financing flows between 2020-2022 have targeted Brazil (\$4.7 billion), followed by India (\$2.2 billion). Brazil been home to several large-scale transactions launched since 2020, including the previously mentioned LD Cellulose facility (\$1.2 billion) and the PUMA II project (\$2.1 billion). Likewise, India has benefited from the [Green Growth Equity Fund](#) (\$741 million), a fund that allocates capital to environmentally conscious enterprises in India with a focus on renewable energy, resource efficiency, e-mobility, and energy services; and [Axis Bank](#) (\$400 million), a financial institution that secured funding to help grow its lending exposure to the e-mobility sector in India.

There are three recorded climate blended finance transactions in Ukraine. The country has recently emerged as a potential hub for green-led reconstruction efforts, with [government officials campaigning](#) for financing to become a world leader in low-carbon steel and renewable energy. It is estimated that Ukraine would need \$200 billion of investment to achieve this goal. Countries, including

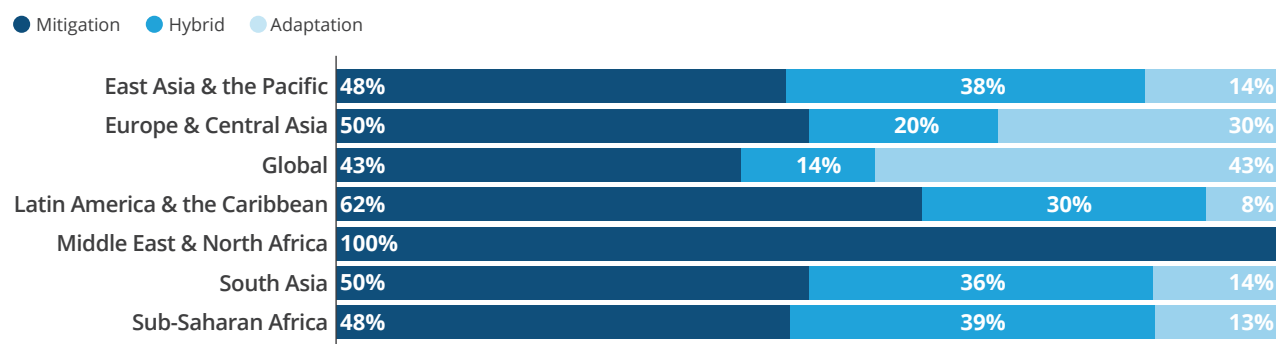
Figure 12: Number of climate blended finance transactions by country recipient, 2020-2022



the [UK](#), are relying on tools such as [guarantees](#) to mobilize funding from MDBs into Ukraine. Increasing the use of climate blended finance could continue to mobilize part of this necessary funding.

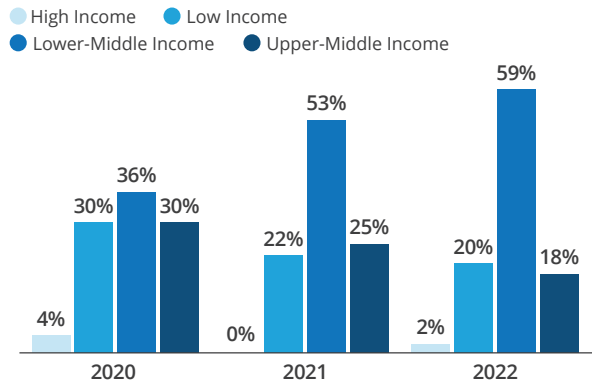
Across all regions from 2020-2022, apart from transactions that are multi-region in nature, climate mitigation is the primary focus of climate blended finance transactions. Multi-region transactions focus on mitigation transactions (43%) and hybrid transactions (43%). Besides multi-region transactions, the regions where there has been a stronger adaptation focus include Europe and Central Asia (30%), East Asia and the Pacific (14%) and South Asia (14%). The Middle East and North Africa had six recorded deals from 2020-2022, all of which were mitigation transactions.

Figure 13: Proportion of climate blended finance transactions across regions by climate sub-theme, 2020-2022



INCOME LEVELS

Figure 14: Proportion of climate blended finance transactions by country income level, 2020-2022



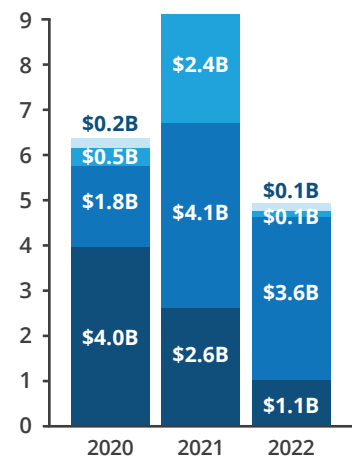
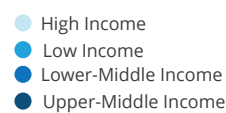
In each of the past three years, the largest portion of climate blended finance transactions have targeted middle-income countries. Lower-middle-income countries tend to appear in our data with the greatest frequency, representing 59% of transactions in 2022 vs. 18% of transactions in upper-middle-income countries. Aggregate financing volumes in 2022 are relatively outsized for both; the former represents approximately 73% of total financing volume, while the latter accounts for approximately 22%. Transactions in upper-middle-income countries tend to be larger, averaging a total size of \$203 million from 2020-2022, compared to \$123 million in lower-middle-income countries. The Global Infrastructure Hub (GI Hub), a G20 organization delivering data and intelligence on global infrastructure investing flows, capture infrastructure investments across all markets, including high-income countries, and find different trends when it comes to infrastructure development. Preliminary data from GI Hub's forthcoming Infrastructure Monitor Report 2023 shows that the majority of private investment into infrastructure is allocated to projects in high-income markets. While investment flows to middle income countries grew in the past year, investment into these markets has remained volatile over the past decade, with the aggregate annual financing gap between middle income and high income countries expanding since 2020. Meanwhile, low-income countries have accounted for a small fraction of total private infrastructure investment over the past

decade and experienced an absolute decline in total investment in 2022.

Overall, low-income countries have experienced a low level of investor support, accounting for just 3% of total climate blended financing (\$137 million) in 2022 while representing 21% of the deal count in the same year. [CPI found](#) that regions where the majority of low- and middle-income countries are located received less than 25% of climate finance flows. This is despite LDCs having experienced the worst impacts of the climate crisis. [Over the last 50 years, 69% of worldwide deaths caused by climate-related disasters occurred in LDCs.](#)

One initiative launched in 2021 that grapples with the financing gap in LDCs and developing countries is [JETPs](#). The JETP approach is to create a financing cooperation mechanism to support a selection of heavily coal-dependent economies as they move away from coal production and consumption, while addressing the social consequences involved. Later in this report, we will provide a more detailed analysis of country platform financing for JETPs. [The Green Climate Fund](#) (GCF) has created a Global Sub-national Climate Fund (SnCF), which aims to catalyze long-term public and private investment for mitigation and adaptation projects at a sub-national level in developing countries, of which approximately one-third are LDCs and SIDS. The SnCF consortium consists of private, public, and philanthropic organizations, including Pegasus Capital Advisors, L.P., International Union for the Conservation of

Figure 15: Climate blended finance volume breakdown by recipient country income-level, 2020-2022

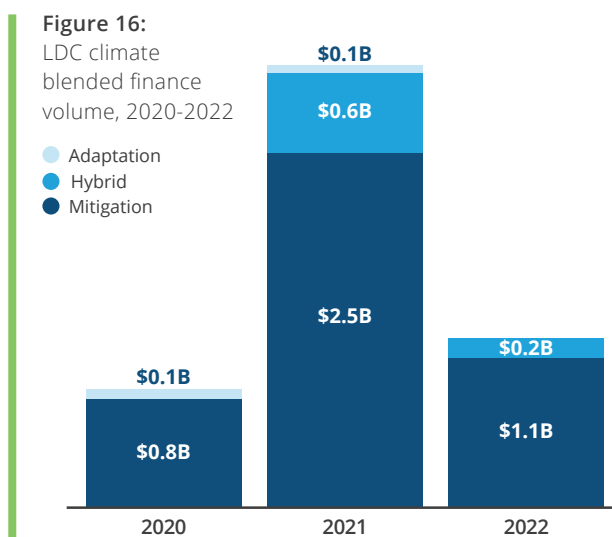


Nature (IUCN), R20: Regions of Climate Action, Gold Standard, and BNP Paribas. The Fund will commit \$150 million in concessional equity investments, agreeing to a first-loss position, with the aim of mobilizing additional equity contributions of \$600-\$750 million from private investors.

LDCs are also active actors in closing this financing gap. For example, 48 developing countries have submitted National Adaptation Plans (NAPs) to date. NAPs are country-level strategies intended to reduce vulnerability to the impacts of climate change and facilitate the integration of climate change adaptation. Another way LDCs are active participants is by creating national and local green banks to further crowd in private capital. One example of this is in Rwanda. [The Rwanda Green Fund](#) (FONERWA) is working with the Rwanda Development Bank (BRD) to set up a facility called the Rwanda Green Investment Facility (RGIF). The purpose of the RGIF is to support the country in meeting its climate goals by using blended finance to leverage private investment.

SIDS are a particularly vulnerable group of countries to climate change impacts. Of the 38 countries classified as SIDS, most are middle-income. However their economies are often small and gross national income varies widely. Nine of the SIDS are categorized as LDCs. Challenges related to SIDS

include high transportation and energy costs and limited capacity to raise domestic resources. The [Climate Funds Update found](#) that overall, the majority of funding for SIDS from multilateral climate funds has been grant-based (87%), with concessional loans and guarantees being a much smaller proportion of total funding (13%). In response to the unique challenges facing SIDS, the majority of climate blended finance has focused on adaptation deals: a total of \$1.3 billion, or 57% of climate finance in SIDS relates to adaptation transactions, while 20% relates to mitigation.



RECIPIENTS

The bulk of climate blended finance capital is directed toward corporations and project developers. The feasibility and scalability of renewable energy projects in developing countries have historically driven this trend. In recent years, Convergence has found project developer and corporation recipients encompass a large diversity of sectors, including agriculture, conservation finance, and infrastructure. Another notable trend has been the increased allocation of blended finance towards the “missing middle”⁸, and a corresponding decline in support for entrepreneurs and small enterprises. This growing preference for financing the “missing middle” is likely driven by investors’ preference for established business models and reliable revenue streams.

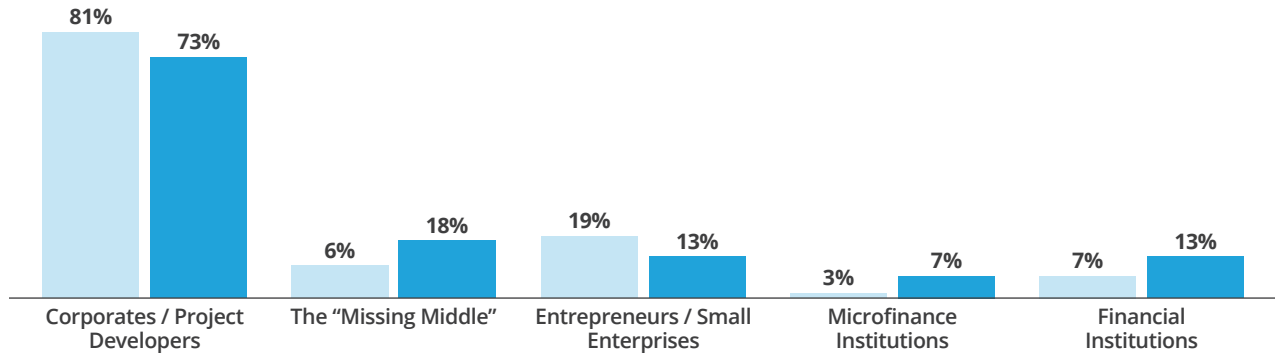
In addition, impact-first investors are drawn in by these businesses’ capacity to affect meaningful change on a larger scale.

There has been an increase in investments directed towards microfinance and financial institutions. These investments typically aim to improve an institution’s capacity to offer affordable climate-focused credit, savings, insurance, and other financial services to a broader client base. Often bound by robust regulations, financial institutions are perceived as credible, lower-risk borrowers, making them attractive investment partners, especially for new entrants into the climate blended finance space.

⁸ “Missing Middle” or Small and Growing Businesses (SGBs) are commercially viable firms with growth potential. Yet, they typically encounter fundraising challenges because they are too big for microfinance, too small or high-risk for traditional banks, and could be unsuitable for venture capitalists.

Figure 17: Direct recipients of climate finance blended finance transactions, 2017-2022

● 2017-2019 ● 2020-2022



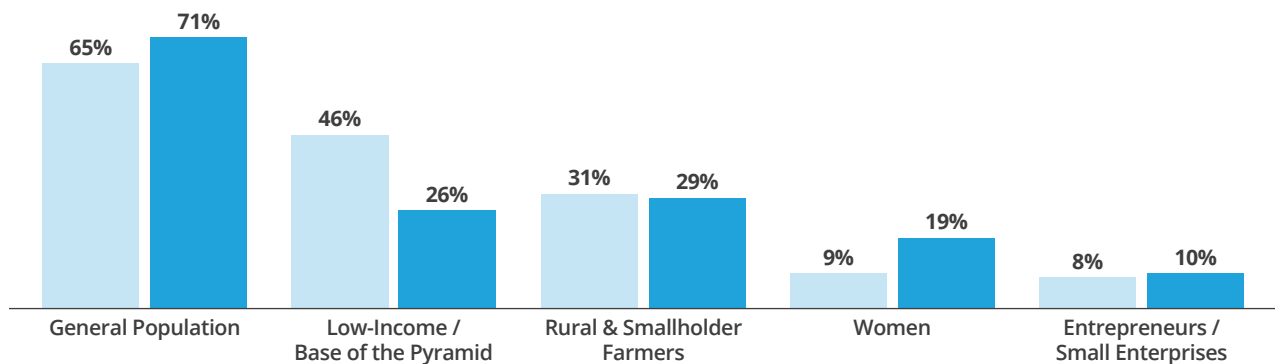
Climate blended finance deals often produce wide-reaching benefits that impact the population. Naturally, the central development benefits of increasing the installed capacity of renewable energy include both improved access to reliable sources of electricity for connected households and a reduction in GHG emissions compared to conventional thermal power plants. Nevertheless, it is crucial to recognize that the distribution and magnitude of climate impacts vary based on geographic and demographic factors. Climate finance is particularly significant for rural and smallholder farmers, considering these groups are often at the forefront of climate change's adverse effects due to their dependence on agriculture and natural resources for their livelihoods. In this context, it is encouraging to

witness rural and smallholder farmers consistently being the end beneficiary of around 30% of climate-focused blended finance transactions.

Moreover, women generally bear a disproportionate burden of the impacts of climate change because of deeply entrenched gender norms, roles, and vulnerabilities. From 2020 to 2022, the proportion of climate blended finance deals explicitly targeting women doubled to 19% from 2017-2019. These deals are primarily focused on enhancing women's access to financial services, restructuring value chains to be more inclusive, and setting employment targets for women. This trend indicates increasing involvement of women not merely as beneficiaries but as active participants and leaders in climate finance initiatives.

Figure 18: End recipients of climate blended finance transactions, 2017-2022

● 2017-2019 ● 2020-2022



SDG ALIGNMENT

According to the [SDG Progress Report](#), only 12% of the SDG targets are making the desired progress. In comparison more than 30% of the SDGs have either hit a standstill or experienced regression. In this context, realizing the 2030 Agenda and the Paris Agreement [requires integrated approaches](#) between the SDGs. Convergence's data shows that between 2020-2022 investment into climate-focused projects not only bolsters environmental initiatives but can also address multiple development challenges concurrently. On average, each transaction has consistently targeted four distinct SDGs during this time period. The majority of transactions (56%) are focused on SDG 7 (Affordable & Clean Energy), while 32% of deals target SDG 13 (Climate Action), which encompasses initiatives with adaptation components. This is evidence of increased private sector investment in climate adaptation via blended finance structures,

In addition to driving climate focused SDGs, climate blended finance transactions can contribute towards realizing economic and social SDGs. Convergence finds that over half (54%) of blended

climate deals since 2020 have targeted SDG 8 (Decent Work and Economic Growth), and over a quarter (27%) have focused on SDG 9 (Industry, Innovation & Infrastructure). Additionally, the data indicates significant progress with respect to SDG 5 (Gender Equality), with 21% of deals addressing this goal - up from 16% in the previous year's report. More specifically, Convergence found that 19% of climate blended finance deals launched since 2020 incorporated a gender lens in some form. However, transactions exclusively focused on the gender-climate nexus remain rare – only 5% of climate blended finance deals launched since 2020 were considered to have a comprehensive focus on gender and the empowerment of women or girls.

The proportion of deals supporting SDG 1 (No Poverty), SDG 10 (Reduced Inequalities), and SDG 3 (Good Health and Well-being) has remained relatively low. This finding is concerning, given that inclusive climate finance is essential for safeguarding [vulnerable populations](#) against the impacts of climate change. The underfunding of these SDGs signals a misalignment between financial flows and

Figure 19: SDG alignment, proportion of climate blended finance transactions by SDG, 2020-2022

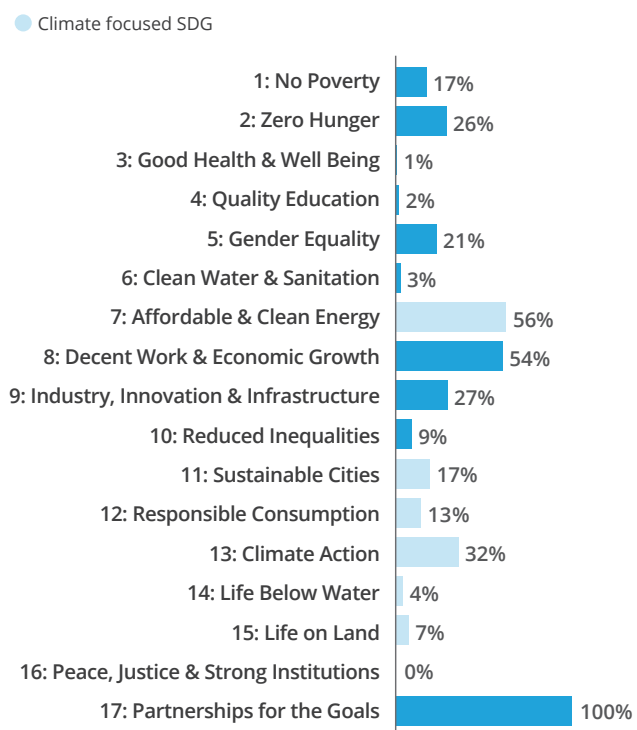
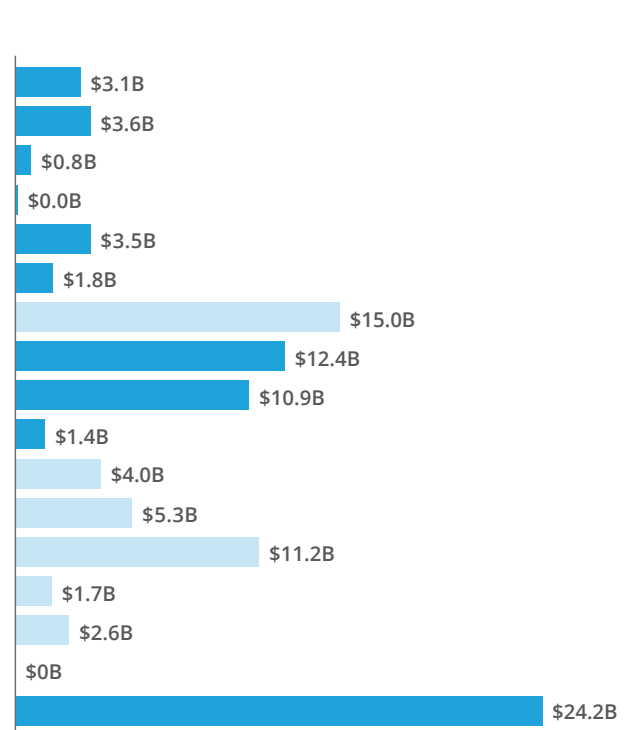


Figure 20: Total financing mobilized towards the SDGs by climate blended finance transactions, 2020-2022



the principles of a just transition, which emphasizes equitable and inclusive approaches to climate action. However, blended finance offers a pathway to address this problem. The participation of donor parties in blended finance deals can be a gateway to emphasize the additional development impacts that these deals can provide beyond climate outcomes. This approach

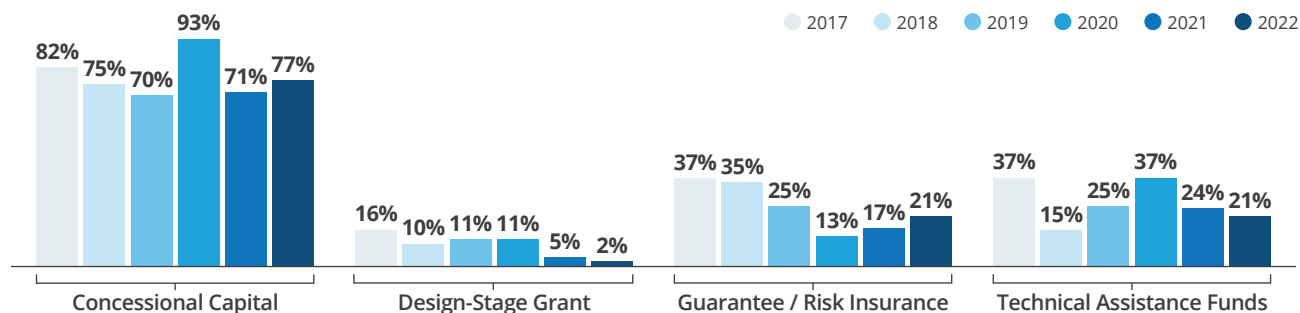
is also crucial in accelerating the entry of institutional investors and galvanizing investor action, which can propel progress toward a just transition. The Impact Investing Institute (III) has developed [criteria](#) to help ensure that fund managers align their investments with the just transition.

ARCHETYPES & INSTRUMENTS

Convergence categorizes blended finance transactions into four commonly used archetypes:

- 1 Public and/or philanthropic investors providing capital on below-market terms into a transaction's capital stack, thereby enhancing its credit profile or adding loss protection to the benefit of more senior investors (typically called "concessional debt or equity", or grant funding).
- 2 Public and/or philanthropic investors extending partial or full guarantees or insurance instruments on below-market terms to enhance the credit profile of a transaction and/or mitigate specific risks (i.e., currency risk, political risk).
- 3 Project design, preparation, and structuring activities being grant-funded to ensure and accelerate transaction launch (i.e., "design-stage grants").
- 4 A transaction being linked with a grant-funded TA facility used to finance pre-investment (business design), post-investment (personnel training), and cost-of-investment (legal structuring fees)

Figure 21: Proportion of Climate blended finance transactions by blending archetype, 2017-2022

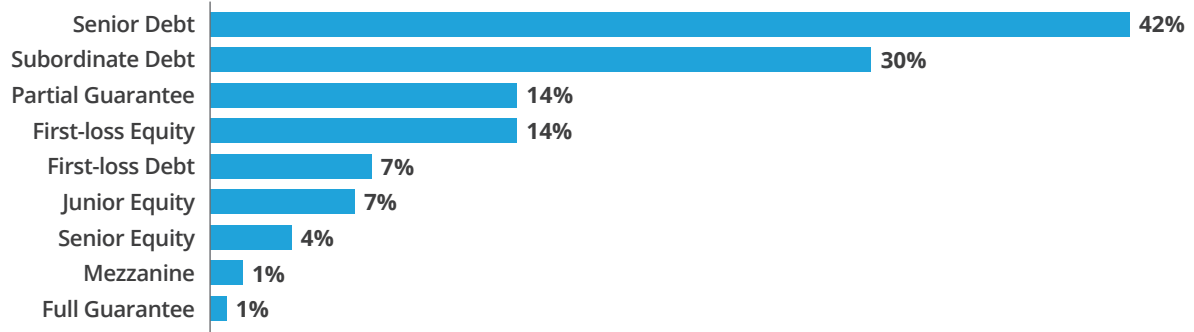


The predominant archetype of blended climate finance continues to be concessional debt/equity, evident in 77% of climate blended finance transactions in 2022. Senior debt is the most commonly used concessional instrument at 42%, followed by subordinate debt at 30% - as shown in Figure 19. Blended climate finance has traditionally leveraged concessional capital alongside various financial instruments. However, recent deals are simplifying, using fewer concessional tools to attract private investment. For example, the [Tropical Asia Forest Fund 2](#) (TAFF2), a private equity fund focused on investing in forestry and related companies

that prioritize sustainable practices, successfully achieved a total size of \$120 million with the concessional support of the Packard Foundation and the Australian Climate Finance Partnership. Convergence has long advocated for this kind of simplification, as it helps enhance the accessibility of blended finance for private investors.

As previously mentioned, increased use of currency swaps can help address the credit concerns presented by FX volatility common in emerging markets. For example, the [TCX - The Currency Exchange Fund](#) hedges exchange rate risk in order

Figure 22: Proportion of climate blended finance transactions by concessional instrument, 2017-2022



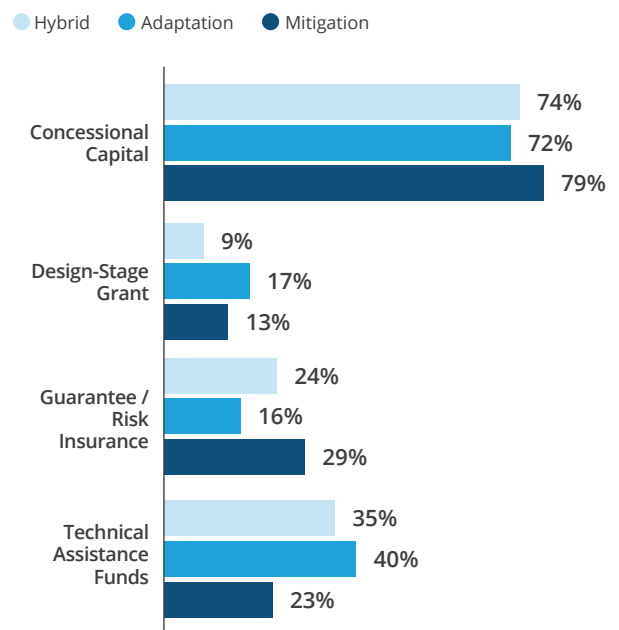
to protect international lenders and their local borrowers from exchange rate volatility. According to [TCX's 2022 Impact Report](#), the fund mitigated risks for \$1.38 billion of new development finance loans to emerging and frontier markets across 428 transactions and 43 currencies last year. Nevertheless, few currency swap providers are on the market despite significant demand for concessional resources that could be used to subsidize the cost of swaps of illiquid or high-risk currencies.

TA funds are another prominent instrument used in blended finance transactions. These funds can be deployed pre-investment (e.g., to develop pipeline), during investment (e.g., reforms), or post-investment (e.g., operational support). The aforementioned (TAFF2) and [Forestry and Climate Change Fund \(FCCF\)](#) reports recently published by Convergence with support from the Good Energies Foundation highlight the role that pre-investment TA funds can play in building a climate-focused fund's pipeline prior to dispersing capital. Figure 20 demonstrates that TA has been particularly common in adaptation deals (40% feature TA). This trend is likely driven by the perception that adaptation deals are more risky because their track records are unproven, revenue streams are untraditional, and ideas are innovative. Therefore, TA is useful because it helps build investees capacity to enhance their attractiveness and stability.

Concessional guarantees and risk insurance featured in 21% of deals in 2022. Guarantees typically target specific political or commercial

risk factors that exceed private sector investor risk thresholds and which would otherwise prevent investment. For instance, Kube Energy, a renewable energy service provider that primarily operates in Africa, received a \$5.67 million concessional guarantee from MIGA to cover its debt and equity investment in a hybrid solar power plant being established in Baidoa, Somalia. This guarantee offered protection against the risks of expropriation, war, and civil disturbance. Moreover, as highlighted in the [Action Plan for Climate and SDG Investment Mobilization](#), these measures help mobilize capital, given that the political risk index of a country is a fundamental consideration for many private investors.

Figure 23: Proportion of climate blended finance transactions by blending archetype and climate sub-theme, 2017-2022.



A [recent evaluation](#) of the Swedish International Development Agency's (Sida) portfolio by Convergence found that the agency's guarantee instrument advances development through four distinct avenues:

- 1 producing development impact through an identifiable theory of change aimed at poverty alleviation;
- 2 mobilizing private capital while avoiding negative market distortion;
- 3 creating value through policy and regulatory changes to improve the capacity of domestic markets and local institutions; and
- 4 innovating mechanisms to use guarantees to promote clean energy production and climate solutions.

Despite concessional guarantees' catalytic and developmental potential, few providers are in the market. Since 2017, the primary providers of concessional guarantees for climate-related transactions have been GuarantCo, IFC, World Bank, and the United States Agency for International Development (USAID). Apart from GuarantCo, guarantees only make up a small fraction of the instruments these institutions deploy and are typically only extended on an ad-hoc basis.

CPI recently highlighted the need for a Global Credit Guarantee Facility (GCGF) to help lower credit risk in EMDEs and scale renewable energy investment. Kushagra Gautam, Manager for US-India Clean Energy Finance (USICEF) at CPI, shares the rationale for a GCGF below:

"The idea of a Global Credit Guarantee Fund evolved from CPI's work with the International Solar Alliance to better understand investment risk and the delivered cost of capital for solar energy development – which is a proxy for all renewables in this context. CPI is increasingly investigating how guarantees could be used to mobilize private capital.

In line with this comes the question of how much and what type of public finance is needed to mobilize private capital. Building on some of CPI's work on MDB reform, we believe that a partial

credit guarantee for foreign debt could likely reduce the delivered cost of capital by about 4-9% in many developing economies. Such a reduction could significantly expand the countries of potential interest to private investors, particularly in Africa. For maximizing leverage, such a facility could be capitalized using a "hybrid" structure where expected losses (at about 7%) are fully funded and unexpected losses (low probability tail risk) rely on callable capital. Such funds could, but need not, utilize the callable capital already available with some MDBs."

Design-stage grants have historically been instrumental in structuring blended finance transactions, as they establish a pipeline of thoroughly assessed and bankable projects in developing countries. Convergence has hosted various climate-related design-funding grant windows, including the Catalytic Climate Finance Facility (CCFF, in partnership with CPI), the Asia Climate Solutions Design Grant, the Gender-Responsive Climate Finance Window, and the now-closed Indo-Pacific Design Funding and Asia Natural Capital Design Funding Windows. Nevertheless, design-stage grants are used less frequently in climate blended finance transactions than other instruments. In 2022, climate blended finance deals with design-stage grant support accounted for just 2% of climate deals, falling from 10.5% recognized between 2018 and 2020. This is partly related to the time lag between the issuance of grants at the design stage and the actual launch of transactions supported by those grants (Convergence only counts the latter as blended finance transactions).

Moreover, this time lag has likely been exacerbated by the recent reduction in venture capital activity. Venture capital is pivotal in the financial ecosystem, especially for startups and innovative projects that might be deemed too risky for other investors. With fewer venture capital firms actively investing due to risky macroeconomic conditions, projects that have received design funding grants may face additional hurdles in securing necessary follow-on private investment.



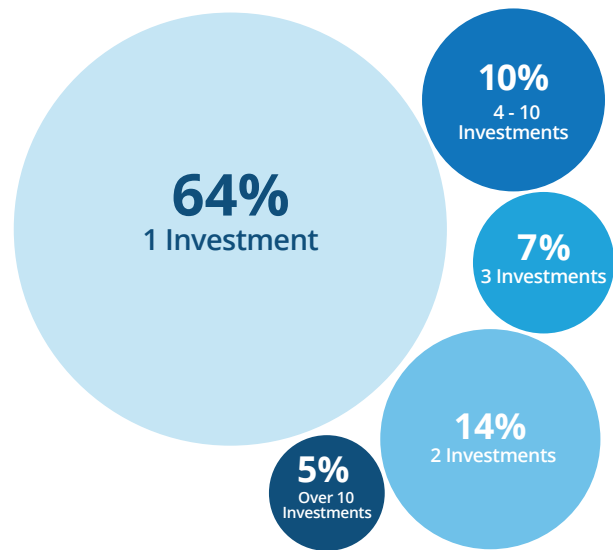
PART III:
**INVESTOR
TRENDS**

PART III: INVESTOR TRENDS

To date, Convergence has captured 3324 unique commitments to climate blended finance, disbursed from over 1000 distinct investors. More than half (52%) of these investments occurred since 2017, signaling an increased appetite among investors in blended finance transactions for investments that are climate sensitive.

Convergence has observed little variation in the frequency in which individual investors participate in climate blended finance from [last year's report](#). Participation in climate blended finance remains ad hoc, especially among private sector investors, with more than 75% of investors making two or fewer commitments to transactions. Programmatic or carved-out mandates for climate blended finance investment continue to be confined to the public investor class, and primarily DFIs and MDBs.

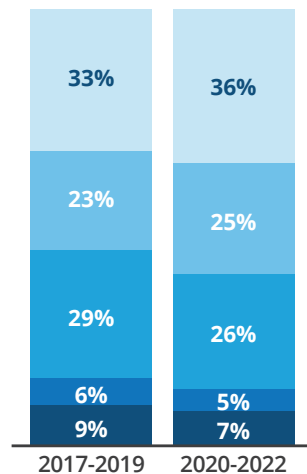
Figure 24: Frequency of investment into climate blended finance transactions (all investor types) by proportion of total investors



OVERALL LANDSCAPE

Figure 25: Breakdown of commitments to climate blended finance transactions by investor class, proportion of total commitments, 2017-2022

- Commercial Investor
- Development Agency
- DFI/MDB
- Foundation / NGO
- Impact Investor



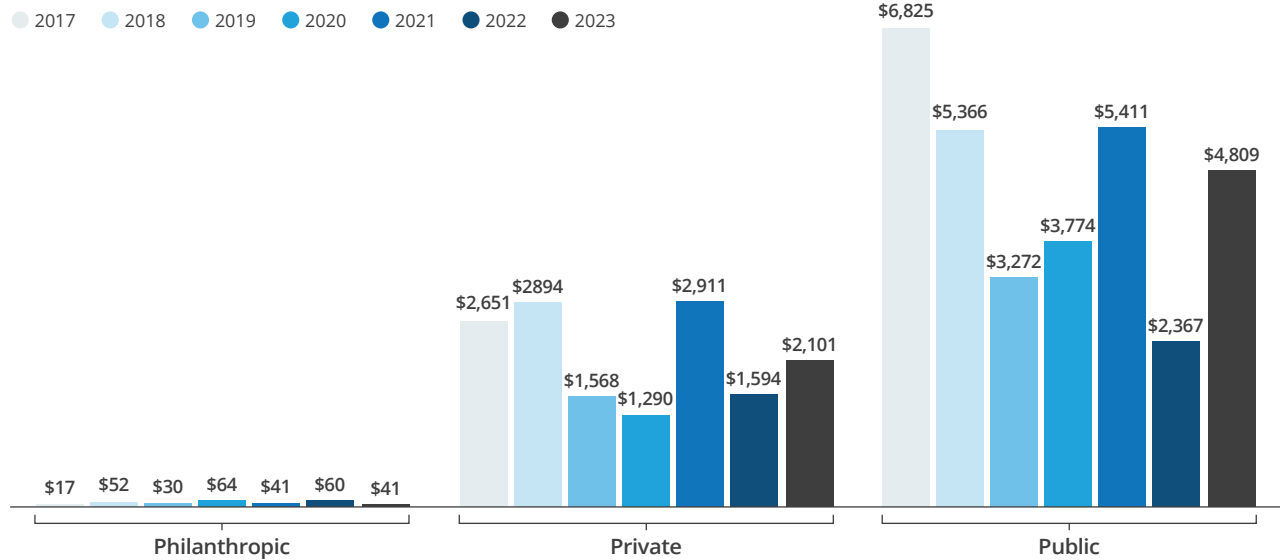
Just over half of the commitments to climate blended finance transactions captured by Convergence between 2020-2022 have come from public sector

investors. We have witnessed marginal shifts in the sources of these investments, with development agencies comprising a growing share of public sector commitments in recent years (49% of public sector commitments in 2020-2022 vs. 44% in 2017-2019). The proportion of DFI/MDB investment has decreased correspondingly (56% of public sector commitments 2017-2019 vs. 51% 2020-2022).

In terms of financing volume, public-sector investors have far outpaced private-sector investors in recent years. Since 2017, public sector investors have provided an annual average of \$2.35 billion more than the private sector⁹. Public sector financing volume is driven by the DFIs/MDBs, with median investment size growing from \$10 million in 2020 to \$19.1 million in 2022. Convergence

⁹ These totals are affected by Convergence's ability to ascertain investment amounts from public and confidential sources. Private sector investors tend to disclose fewer investment details than public sector counterparts. However, while this may impact the accuracy of Convergence's database investment totals, we believe the relative distribution of capital sources to be accurate.

Figure 26: Aggregate annual financing by investor sector. 2023 totals are forecasted estimates.



forecasts both private and public sector financing flows to climate blended finance to grow in 2023 to \$2.1 billion and \$4.8 billion, respectively.

To achieve a net zero scenario, it is critical that private sector financing grows both in relative and absolute terms compared to public sources. Similar findings to Convergence are echoed by CPI, who shared:

“We are seeing the growth rate of public climate finance is faster (9.6%) than the private sector (4.8%), but we should be seeing more growth from the private sector. The IEA estimates that by 2030 private financing should account for 65% of finance needed in clean energy to achieve a net zero scenario, and 35% from the public sector. Currently, public climate finance makes up 50% of climate finance. We need to use public finance more strategically to mobilize significantly more sums of private finance, both domestic and international.”

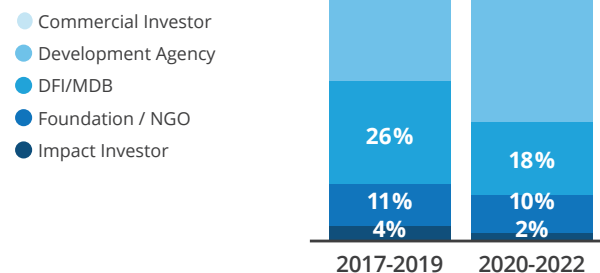
Development agencies are increasingly the primary suppliers of concessional capital to climate blended finance deals (56% in 2017-2019 to 67% in 2020-2022), while DFIs/MDBs more frequently participate on a commercial basis (proportion of all concessional investments fell to 18% in 2020-2022 from 26% in 2017-2019). When isolating for adaptation blended finance deals, development agencies are even more relied upon for risk-bearing capital. From 2020-2022, development agencies

provided 73% of concessional investments to adaptation transactions, a significant increase from 2017-2019 (47%). Comparatively, DFIs/MDBs only provided 9% of concessional commitments to adaptation deals in 2020-2022, down markedly from 22% in 2017-2019.

Finally, philanthropic investors have focused much of their concessional investment into deals with some degree of intentionality for adaptation outcomes (15% of all concessional investments in 2020-2022 into adaptation and hybrid deals vs. 6% into mitigation deals).

All investor classes have been primarily focused on mitigation blended finance transactions in recent years. Nearly two-thirds of DFI/MDB commitments have gone towards mitigation blended finance, making them the investor class most heavily

Figure 27: Breakdown of concessional commitments by investor class, proportion of total concessional commitments, 2017-2022

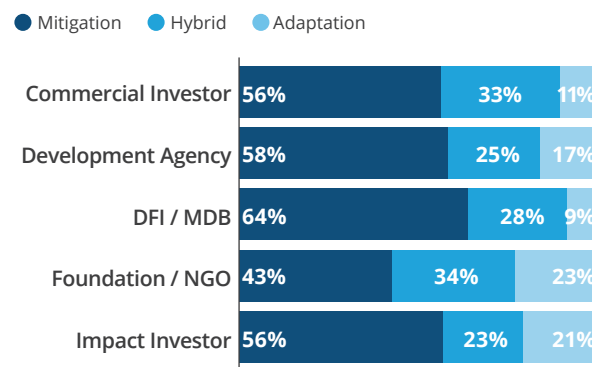


skewed towards mitigation outcomes and least engaged in adaptation blended finance (9% of commitments). There is evidence of DFIs / MDBs adopting market proving strategies, which could be particularly developed than traditional mitigation-focused transactions. As explained by [IDB Invest](#), social and climate externalities can and should be prioritized in blended finance alongside building scaled investment. This includes having MDBs participate in smaller, riskier transactions to instigate knowledge “spillover” to other investors. While this is a critical concept, we are yet to see substantial uptake in the climate blended finance space.

As alluded to earlier, foundations are taking on a central role in adaptation blended finance. They

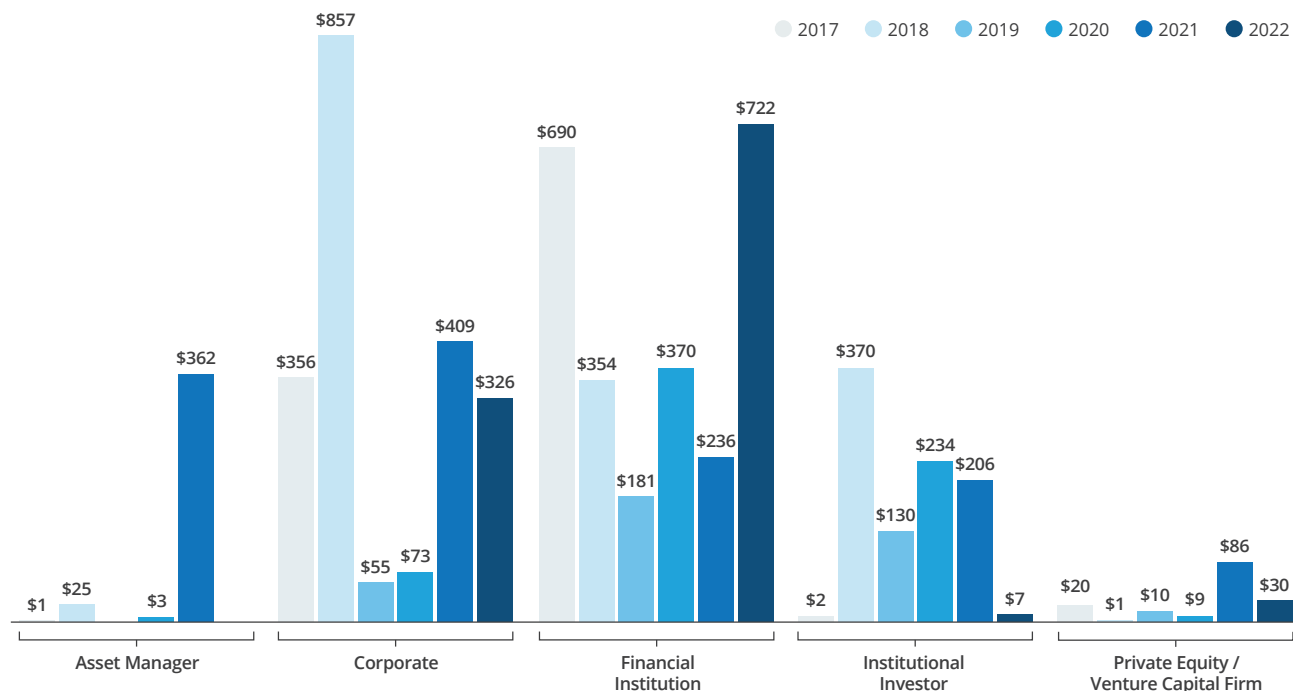
are the only investor class with more than 50% of investments directed towards transactions that have integrated at least some degree of an adaptation focus (adaptation + hybrid deals).

Figure 28: Proportion of commitments by climate sub-theme, 2020-2022



PRIVATE SECTOR INVESTORS

Figure 29: Annual captured financing totals, by commercial investor sub-type, 2017-2022



Since 2017, Convergence has captured \$12.9 billion of investment committed to climate blended finance transactions by commercial (private sector) investors. Financing flows from commercial investors have declined in recent years, from \$7.13 billion between 2017-2019 to \$5.87 billion in 2020-2022. The drop can be partially attributed to the contraction in

global investment activity during the early stages of the COVID-19 pandemic – apart from financial institutions, all commercial investor classes registered drops in the number of commitments to and total capital invested in climate blended finance deals in 2020. For example, investment totals from corporates plummeted over 90% in 2020 from 2018 amounts.

Likewise, committed capital from institutional investors dropped nearly 40%. While Convergence has observed a rebound in climate blended finance engagement among most investor types in 2021, emergent macroeconomic challenges in the second half of 2022 have once again restricted investment activity among commercial investors.

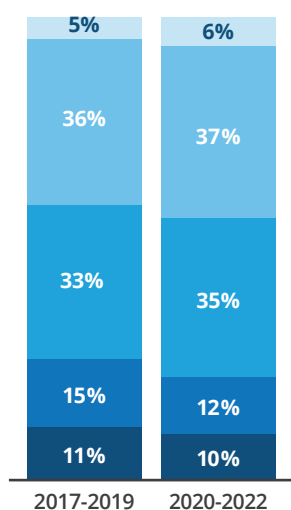
About two-thirds of private sector investments captured by Convergence between 2017-2022 were provided by commercial investors based in developed countries in Europe and North America. About 14% came from developing Asia, 14% from SSA and 7% from Latin America.

Institutional investors continue to favor larger climate blended finance transactions; the median deal size featuring institutional investor participation was \$136 million between 2020-2022. They are followed by corporates (\$110 million) and commercial banks (\$90 million). The median deal size featuring private equity or venture capital firm investment significantly dropped in 2020-2022, falling to \$20 million from \$97 million in 2017-2019.

Corporates

Figure 30: Breakdown of private sector commitments by private sector investor sub-type, proportion of total private sector commitments, 2017-2022

- Asset Manager
- Corporate
- Financial Institution
- Institutional Investor
- Private Equity / Venture Capital Firm



In recent years, corporates have been the most active commercial investor class in climate blended finance, disbursing 89 investments or just over one-third of all private sector commitments from 2020-2022. Corporate participation is primarily through equity; 96% of corporate investments between 2020-2022 are equity stakes, up from 65% from 2017-2019. From 2017-2019, about 60% of equity

investments from corporates was shareholder equity from project sponsors into greenfield renewable energy projects and greenfield green infrastructure projects. A new trend emerged from 2020-2022. Buoyed by strong private equity and venture capital markets in SSA and India, steep rises in equity valuations, and reduced cost of capital from expansionary monetary policy, 2021 saw a spike in equity investment from corporates across a greater diversity of deal types, including companies (26% of equity investment from corporates) and funds (23%).

Financial Institutions

Financial institutions (primarily commercial banks) have been the second most active private sector investor type in climate blended finance since 2017. Alongside DFIs/MDBs, commercial banks have long been an essential supplier of loans to climate blended finance; from 2017-2019, 83% of commitments came in the form of senior debt. That proportion has since fallen to 66% between 2020-2022. [As Convergence recently noted](#), rising interest rates to curb inflation in most developed and developing economies meant banks were facing a liquidity crunch. Unable to offload existing loans without risk of significant loss, many institutions substantially restricted lending activities. Various developments in the climate blended finance market are symptomatic of this trend. Firstly, while project finance debt remains the primary investment structure for commercial banks in climate deals (70% of loans were project finance from 2020-2022, down from 80% in 2017-2019), project financing volume decreased by 47%. These findings are aligned with UNCTAD's World Investment Report, which saw [the value of project finance in renewable energy fall by 40% and green agribusiness fall by 46%](#). Secondly, Convergence did not register any debt investment from financial institutions into climate focused funds in 2022. This illuminates the fundraising [struggles among private debt fund managers](#) in emerging markets as commercial investors scale back risk appetites. Looking forward, as rates stabilize, we expect a rebound in loan allocations to climate blended finance from commercial banks, and a greater concentration of capital in the hands of fewer, more established

project developers, fund managers and companies. Initiatives such as the Glasgow Financial Alliance for net zero (GFANZ), which represents over 450 major financial institutions from 45 countries who have committed to align their balance sheets in line with a 1.5 degree net zero transition, are supporting country-led financing platforms (e.g., JETPs) through the use of blended finance (Note: Convergence discusses the use of blended finance for JETPs in-depth in the challenges section of this report). At COP27, GFANZ committed to providing \$10 billion from private financial institutions towards the Indonesian JETP, following the commitment of \$10 billion in public finance from a coalition of donor countries, including the US, Japan, Canada, Denmark, the EU, Germany, France, Norway, Italy and the UK (referred to as the International Partners Group or IPG). Similarly, GFANZ has committed to providing \$7.75 billion in private finance in support of the Vietnam JETP. GFANZ has established a Working Group to support in-country JETP partners in identifying opportunities for private investment and reforms needed to address investment barriers. Importantly, GFANZ has recognized that blended finance and public sector support should only be deployed in specific instances where necessary in JETP countries. [GFANZ's Country Platform Statement](#) stresses the importance of country platform participants and the private sector

working together to identify where concessional donor funding will be most catalytic, and instances where concessional funding may risk crowding out the private sector. For example, renewables generation often does not require any concessional support and are most likely to present a role for private sector investors.

As 2030 nears and financial institutions face increasing pressure to meet their interim net zero goals, one issue that will increasingly come to head is clarifying the definition of transition finance and appropriate treatment of transition projects on the balance sheets of financial institutions with net zero commitments. Speaking to some of the challenges, John Murton at Standard Chartered shares:

Transition financing for coal decommissioning presents a number of challenges. Standard Chartered won't finance new coal power plants and is rapidly reducing our coal exposure. But early coal retirement will likely involve refinancing a coal-fired power plant in order to make the economics of early closure work. This may give the appearance of the Bank increasing its exposure to coal whilst in fact it would be enabling accelerated coal phaseout."



VOICES FROM THE FIELD:

Interview with Alexander Kennedy, Head, Sustainable Finance Solutions, Standard Chartered

How do concessional facilities fit within Standard Chartered's strategic approach to tackling climate change?

Concessional capital provision isn't normally provided by banks, so it doesn't have a place within our strategic approach to tackling climate change. However, in the context of the economic impact of the pandemic on our footprint markets in Asia, Africa, and the Middle East, we considered what we as a bank could do to help and saw that the provision of cheap capital was what was most needed. We pledged that we would provide \$1 billion of financing at not-for-profit rates to clients within our footprint. That is like putting blended finance on its head, as normally banks have the commercial capital and are looking for concessional capital to enter challenging markets at rates attractive to borrowers. Instead, the Bank ended up being the concessional capital provider. We completed bilateral loans with small corporates and larger financings with organizations like Afreximbank, who were providing vaccines under the African Vaccine Acquisition Trust (AVAT). We played the concessional role and looked to crowd in private sector actors. It's a good way to respond to disaster, but equally in less developed areas and impact themes like biodiversity or adaptation, it's a useful way to prime the market to get that initial flow of capital.

What lessons can be drawn from this experience?

The rate we provided was concessional and constant across our credit grades in markets. What that meant was that while our clients with higher credit ratings may have been able to access similar rates elsewhere, our clients with lower credit ratings in markets like Kenya, who were used to borrowing at LIBOR plus 250, would have seen our concessional rate loans at LIBOR plus 10 as almost

free. Since we were applying the same concessional rate across the board, it had a disproportionate effect for our smaller clients, which was intentional. We also wanted to be able to disperse as many loans as possible to as many clients, and prioritized providing smaller loans to smaller clients where the impact would be the greatest. At a time when credit markets were drying up, being able to access financing basically for free was very impactful.

We were keen to provide capital as quickly as we could. And, while there was a stipulation in our financing that clients would provide us with up-to-date impact reports every year, the methodology for obtaining that data needed improvement. When it came to year end, we were receiving impact reports in different shapes, formats, and sizes that weren't comparable across clients. That said, given the impact of the program in responding to the pandemic, we would look to establish a similar approach if there was need for it in the future.

What are the priorities of the Bank's Climate Adaptation Finance Innovation Hub?

Adaptation isn't new to Standard Chartered; the Bank has been financing adaptation for a long time, it just hasn't been calling it adaptation finance. One priority of the Bank's Adaptation Finance Innovation Hub is to identify pockets of activity that are adaptation focused within our current portfolio, or that show co-benefits, and try to baseline it. Another is to identify future opportunities. We conduct a climate risk assessment for our clients, which helps us to produce transition and adaptation readiness scores. These in turn allow us to see hotspots and areas of high or low adaptation readiness in which clients are either doing good or where they otherwise might need more support.

Another priority is simply to do more deals, but to do so we need to figure out what adaptation is. To this end, we're looking to produce an adaptation finance reference guide, like IFC's Biodiversity Finance Reference Guide, which will bring to life what an adaptation investment is in practice, since there's still a lot of confusion and a lack of clarity on this in the market, which is a blocker in terms of driving investment

towards adaptation. Adaptation finance lacks a comprehensive reference guide; that is, a set of rules and guidelines like there is with the green bond principles or the social bond principles for adaptation. Investors really like it when things are structured in a way that they can understand and that's acceptable to them and their end investors. Finally, we're also looking to train people internally on what adaptation is.

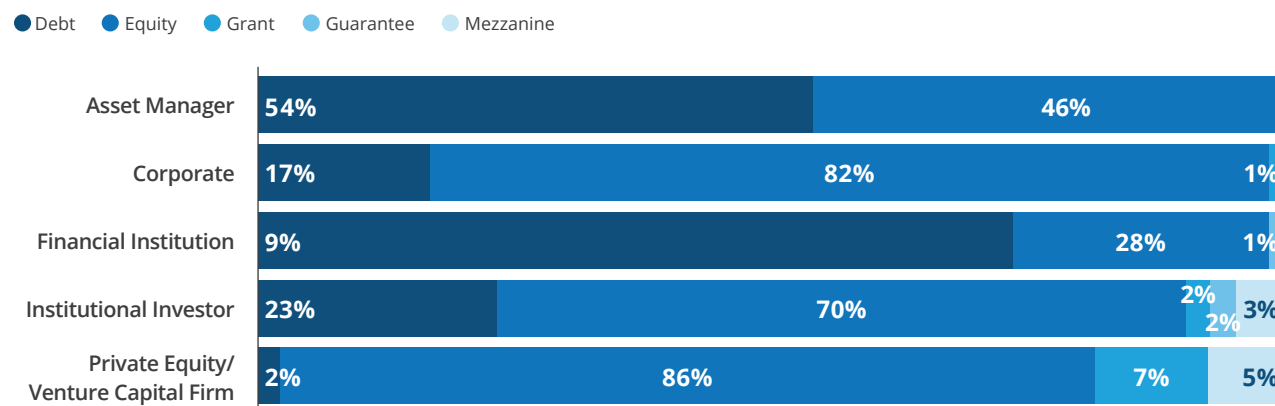
Institutional Investors

Convergence observed a slight decrease in institutional investor activity in recent years. Institutional investors have typically been equity holders in climate blended finance deals – 80% of commitments came via equity in 2017-2019. However, most recently, the trend has been towards debt – 50% of commitments in 2022 were through debt instruments. Convergence sees a promising opportunity for institutional investors to become a more relied-upon source of debt capital to climate blended finance, particularly as financial institutions, such as banks, face unique challenges that limit their ability to lend. UNCTAD notes that bringing institutional investors into project finance [can lower debt spreads by about 8%](#), almost as much as securing a DFI/MDB (10%). Additionally, credit risk fueled by a high interest rate and inflationary

environment has left institutional investors [over allocated to equity](#), opening the door to increased debt allocation as the macroeconomic environment stabilizes.

Liquidity and credit risk requirements are critical considerations for mobilizing institutional investors into climate blended finance transactions. For example, most institutional investors will not invest in non-investment grade (lower than BBB-) jurisdictions or securities. According to a [CPI report](#) examining the capital costs associated with developing solar capacity, required rates of return on equity in countries with speculative ratings (BB+ to B-) increase by 15-20% and upwards of 30% for highly speculative rated countries (CCC+ and lower). Likewise, the cost of debt can increase up

Figure 31: Breakdown of private sector investor commitments by instrument type, proportion of sub-type commitments, 2017-2022



to 20% for speculative ratings and 35% for highly speculative ratings. Blended finance instruments like concessional guarantees, concessionally priced loans and grants can provide the risk-mitigation benefits necessary to bring the perceived risks of these investment environments more in line with higher rated opportunities and enable institutional investor investment. Moreover, they can reduce capital costs for borrowers, effectively growing the pipeline of bankable opportunities for investors.

Amongst institutional investors, pension funds and insurance companies are well-positioned to invest in climate finance, given their longer-term investment horizons and liabilities. Climate projects often require longer investment terms in order to realize impact – consider sub-sectors such as forestry, which often require 15+ year investment horizons to realize full value. While the longer timeline can serve as a deterrent for private investors, pension funds and insurance companies are better positioned to navigate this trade-off in pursuit of both financial returns and impact.

Private Equity & Venture Capital Firms

Finally, private equity and venture capital firm activity has noticeably tapered off in absolute terms since 2019. Total number of commitments fell by nearly 70% in 2022 from a peak in 2019, when private equity markets in SSA and Latin America offered attractive risk-adjusted returns to cross-border investors and

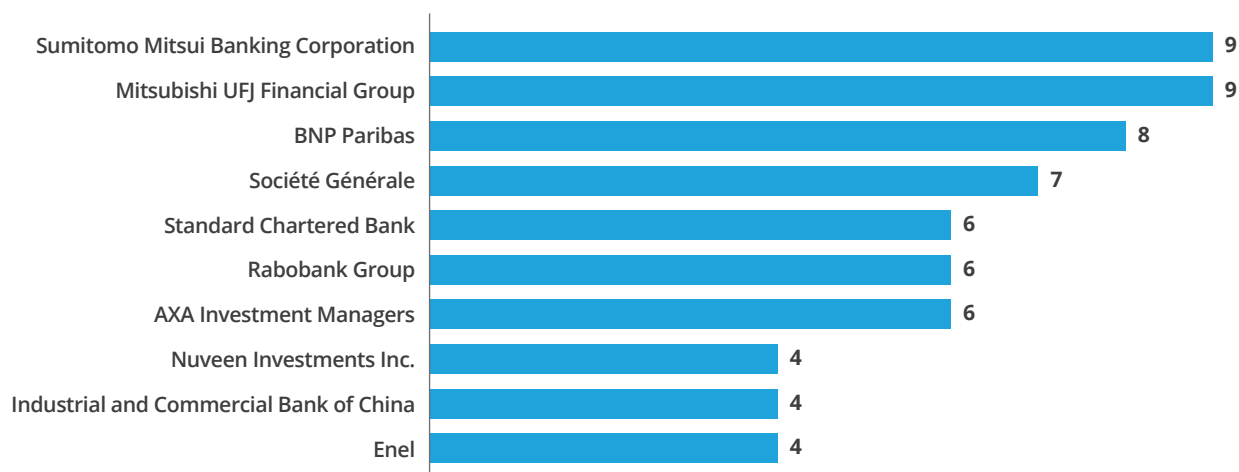
“The top, most consistently engaged private sector investors are composed primarily of commercial banks.”

drove fund activity. More concessional capital, such as first loss equity must be made available to de-risk direct investment in early-stage companies and fund structures to overcome the downturn in company valuations and increased perceived risk caused by the rate and inflationary environment.

Private Sector Investor League Table

The top, most consistently engaged private sector investors are composed primarily of commercial banks, who make up seven of the top ten private sector investors by number of commitments. We do not however, observe any significant uptake in climate blended finance engagement among these banks over the past year – five of the seven commercial banks featured on last year’s league table with only Sumitomo Mitsui Banking Corporation making more than 2 investments in 2022 (4 investments). This underscores the absence of mandated blended finance strategies within this critical investor class.

Figure 32: Most frequent private sector investors in climate blended finance by number of commitments, 2017-2022





MULTILATERAL DEVELOPMENT BANKS (MDBs) / DEVELOPMENT FINANCE INSTITUTIONS (DFIs)

The most active MDBs and DFIs in climate blended finance to date (2017-2022) have been IFC, FMO, IDB Invest, the ADB, and the European Bank for Reconstruction and Development (EBRD). Under the [World Bank Group's commitment](#) to increase the delivery of climate financing, both IFC and MIGA have pledged to align 100% of their Board-approved real sector operations with the Paris Agreement by July 1, 2025.

As previously mentioned, ADB is currently playing a leadership role in piloting Energy Transition Mechanisms (ETMs), which draw on blended finance to support the transition of fossil fuel plants to renewables. In June 2023, FinDev Canada and MUFG announced the launch of GAIA, a \$1.5 billion blended

finance platform to help drive climate-focused investment into developing countries.

MDBs may choose to deploy concessional capital to derisk their own investments, which can lead MDBs to be a source of both concessional and commercial finance within the same transaction. For example, the [AC Energy Wind Power project](#) involves the design, construction, and operation of an 88MW wind farm in Ninh Thuan province, Vietnam. ADB extended a \$35 million senior A loan, as well as a \$5 million grant on behalf of the Climate Innovation Development Fund (an ADB-led concessional financing fund) to improve the economic feasibility of the project.

Convergence has [previously advocated](#) for MDBs and DFIs to more ambitiously target private sector mobilization for climate finance within their operational model, including establishing a set of Key Performance Indicators (KPIs) that increase their mobilization amounts per annum. Beyond MDBs and DFIs, there is an important but untapped opportunity for national development banks to play in financing climate goals. National development banks are uniquely situated to ensure the integration of NDCs and Paris Agreement goals compared to larger,

“Beyond MDBs and DFIs, there is an important but untapped opportunity for national development banks to play in financing climate goals.”

more global MDBs, given their knowledge of national priorities and local financing needs. Yet, Convergence's HDD captures minimal climate commitments to blended finance transactions from national development banks. Similarly, CPI finds that only nine of 37 national and subnational development banks tracked in their 2022 dataset have announced climate finance goals, with only one making commitments specific to climate adaptation finance. As shared by Nicole Pinko at CPI:

"We're finding that the role of national development banks is very different based on that country's NDC ambition and capacity. For example, in some countries NDB climate strategies are closely aligned to their country's NDCs, whereas in other countries the bank's climate strategies and disclosures are more varied. There are some national banks that are very focused on climate finance, renewable energy, or adaptation, while other national banks do not have climate finance as a priority."

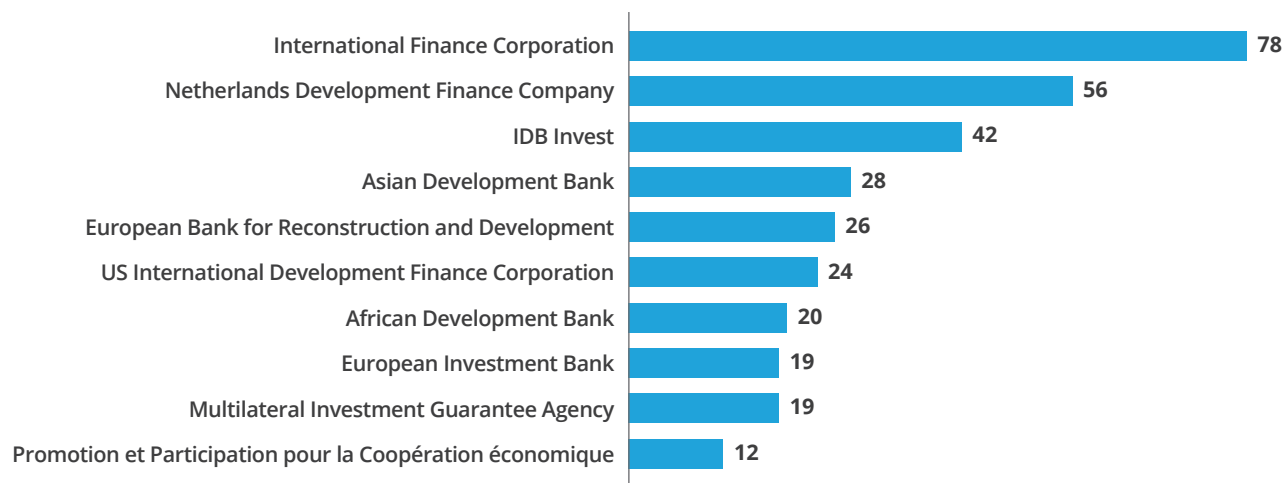
DFIs/MDBs mostly deploy debt (56% of transactions from 2017-2022) and equity (23%) in blended finance transactions. [A study by UNFCCC](#) found that MDBs contribute 15% of their adaptation financing through pure grants. There are opportunities for DFIs to use TA at a greater level, especially regarding adaptation transactions. DFIs are uniquely positioned within the market to provide concessionary TA grants with catalytic aims. Some are already providing TA within blended finance transactions through their

own TA facilities (TAFs). For example FMO oversees the Ventures Program, and the Canadian FinDev TAF launched in 2020. TA in blended finance transactions can be essential to capacity-building and de-risking potential investments in new or uncertain markets. It can be used for advisory, assistance, or training programs.

One example of a DFI participating in TA programs is through the [Acumen Resilient Agriculture Fund](#), which provides equity and grant funding to support pioneering and early-growth stage innovative agribusinesses that enhance the climate resilience of smallholder farmers in East and West Africa. FMO contributed \$500 thousand to support TA initiatives, such as climate adaptation interventions, including gender specific initiatives; business development services and management/employee training projects; and lean data projects.

"DFIs are uniquely positioned within the market to provide concessionary TA grants with catalytic aims."

Figure 33: Most frequent DFI/MDB participants in climate blended finance deals by number of commitments, 2017-2022



DEVELOPMENT AGENCIES & MULTI-DONOR FUNDS

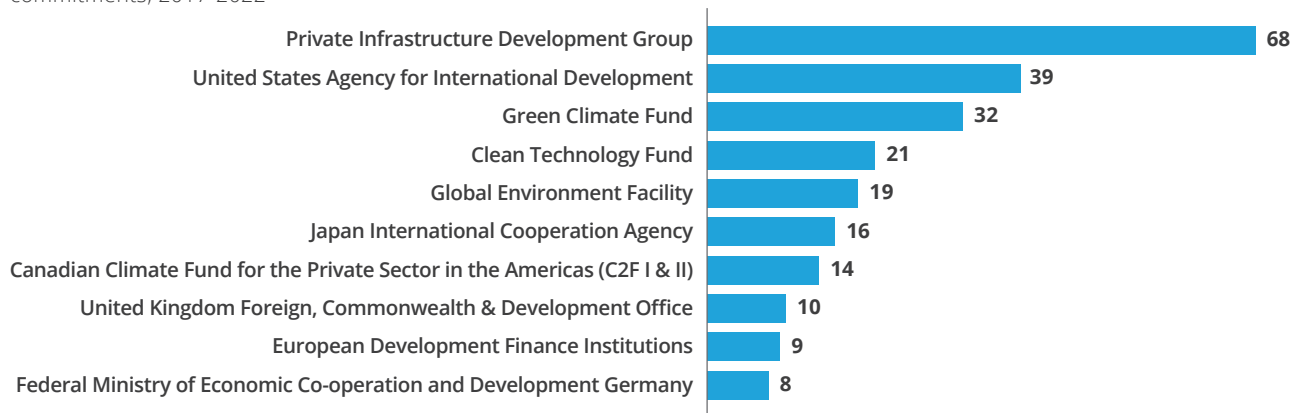
Development agencies and multi-donor funds are important sources of concessional capital in blended finance transactions. Half of the top 10 institutions in the table below are multi-donor funds, including: Private Infrastructure Development Group (PIDG), GCF, Clean Technology Fund, GEF, and the Canadian Climate Fund for the Private Sector in the Americas. While donor countries are continuing to make direct contributions through development agencies, with multi-donor funds representing 50% of the top 10 investors, there is a clear movement for these countries to finance climate outcomes through indirect and collaborative means.

An example of a recent climate blended finance transaction with participation from multiple development agencies is the [Gigaton Empowerment Fund](#). This private debt fund that lends to projects and businesses in the mini-grid, commercial and industrial, household and innovative energy spaces, primarily focused on Africa (60%), with a lesser focus on Latin American & the Caribbean and Asian

regions. Convergence awarded a proof-of-concept grant to Mirova SunFunder for the design and launch of the Fund. Gigaton was structured as a 3-tiered blended vehicle comprising catalytic junior debt and first-loss capital (15%), senior debt (35%) and super senior debt (50%). Development agencies were critical to creating appropriate conditions for private investors to enter in several ways. First, Global Affairs Canada, along with several partners, contributed to the catalytic tranche. Second, Sida backed a \$50 million guarantee. This concessional capital was crucial in decreasing risks and unlocking support from the United States International Development Finance Corporation (US DFC), Natixis and SwedFund.

Development agencies most commonly deploy TA in climate blended finance transactions, as well as senior debt. More recently, our data shows an increase in the use of investment-stage grants, from 4 transactions per year from 2017 to 2019, to 16 per year from 2020 to 2021.

Figure 34: Most frequent development agencies and multi-donor funds in climate blended finance deals by number of commitments, 2017-2022



PHILANTHROPIC INVESTORS

As mentioned, philanthropic investors comprise a comparatively small share of the climate blended finance market. While most active philanthropic organizations apart from the Shell Foundation, have not historically possessed a climate-exclusive mandate, some are taking significant strides to incorporate climate into their charitable mandates.

For example, the Rockefeller Foundation recently announced a [\\$1 billion commitment to fund climate solutions](#), including further support for Global Energy Alliance for People and Planet (GEAPP) interventions (highlighted below). Likewise, in advance of COP28, Bloomberg Philanthropies and the International Renewable Energy Agency formed

a [partnership to accelerate the renewable energy project pipeline](#) in emerging economies worldwide. The initiative aims to build domestic capacity through technical support and regulatory reform, increase the supply of project preparation funding, and ramp up private sector capital mobilization in collaboration with GFANZ members.

To date, we are yet to see a widespread commitment from foundations to take catalytic positions in climate blended finance deals – concessional investment from foundations to adaptation deals dropped from 15% to 13% of the field from 2017-2019 to 2020-2022 and from 8% to 5% in mitigation blended finance. Convergence believes there is real potential for foundations to increase the supply of concessional capital available to climate blended finance transactions through the deployment of PRIs¹⁰.

As Convergence investigated in a recent [case study](#), foundations, specifically US-based foundations, face a unique set of factors that must be considered when participating in risk-bearing positions in financial structures. US foundations are required by tax law to:

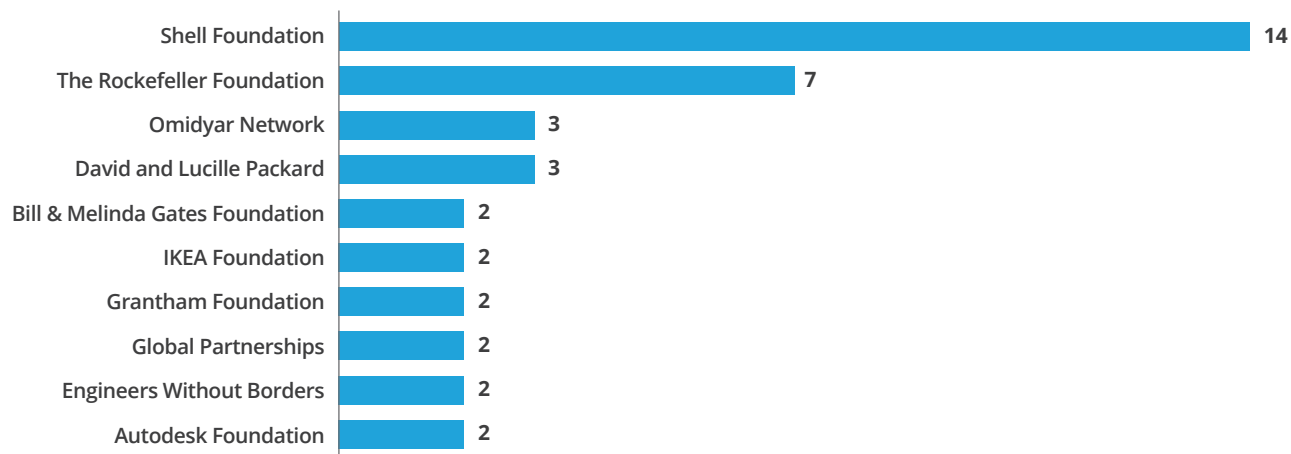
- 1 ensure that at least 5% of endowment assets are directed towards charitable purposes;
- 2 when deploying PRIs, tax code criteria are met to ensure the prudence of investment.

What makes climate blended finance opportunities attractive to these foundations is that concessional PRI participation satisfies both requirements. Climate blended finance deals are impact-centric, and concessional participation meets the PRI criteria. Not only that, but PRI investment into climate blended finance deals can be applied against the 5% charitable programing threshold, while traditional investment instruments cannot.

The opportunity presented by the philanthropic community to contribute towards climate blended finance has also become a focus of central banks such as the Monetary Authority of Singapore (MAS). Only \$800 billion or less than 2% of philanthropic giving per year goes to climate mitigation. Philanthropic capital is versatile and can potentially be flexible, risk tolerant, and patient. It can make an outsized contribution towards closing the financing gap. As shared by MAS,

“We have enhanced and expanded our tax incentive schemes for single family offices in July this year and this should raise their interest in giving and in making grants to or investing in climate-related investments and blended finance structures.”

Figure 35: Most frequent philanthropic investors in climate blended finance deals by number of commitments, 2017-2022



¹⁰ Program-related investments (PRIs) are a type of financial instrument specific to US-based private foundations that are explicitly invested to further the impact mandate of the entity, with all potential financial returns or value appreciation considered ancillary. Under the Internal Revenue Code) of the US Tax Code, private charities and foundations are subject to excise taxes if underlying investments jeopardize the carrying out of any of its core mandates. Such investments are termed imprudent investments. PRIs enable foundations to circumvent the prudence standards and deploy investments that may be considered imprudent (invested at a below-market rate, invested in high-risk opportunities).

VOICES FROM THE FIELD:

Interview with Stefanie Fairholme, Managing Director, Head of Investments, GEAPP

How are you funded and how is the mandate of GEAPP different from your founding organizations?

We were established by three philanthropic founders: IKEA Foundation, The Rockefeller Foundation, and the Bezos Earth Fund, which together committed up to \$1.5 billion in grant capital to advance a shared mission of expanding clean energy access for a billion people, averting 4 billion gigatons of future CO2 emissions, and enabling 150 million sustainable jobs and livelihoods. This is philanthropy coming together at scale. What sets us apart is our focus on implementation. We provide country-level support to seven foundation countries, focus scalable solutions on an additional 13 countries and reach 80+ countries through our wider Alliance. The seven foundation countries – Democratic Republic of Congo (DRC), Ethiopia, India, Indonesia, Nigeria, South Africa and Vietnam – have been prioritized based on the scale of potential impact and existing government commitments to clean energy. So our operation model is different, we work closely with local governments, regulators, and policy-makers, to support the enabling environment to unlock big capital flows, in addition to making investments through blended finance. What we've learned is that the work on the enabling side is essential. This aspect of our work is highly bespoke, country specific, and resource intensive.

What types of blended finance support does GEAPP offer?

Firstly, we provide grants to support the enabling environment. We also provide grants for viability gap financing, for example, grants that go into the capital stack and are used to make a tariff affordable, sometimes these are recoverable and sometimes not. We have concessional financial instruments including

direct and intermediated equity. We are not typically a direct guarantor but believe that guarantees can be highly effective in our markets so seek to support guarantee platforms. Our capital allocation is organized around countries and technologies and sectors, rather than financial instruments.

What does your portfolio look like?

GEAPP was set up to drive transformational change across energy systems in emerging economies and we only pursue projects consistent with our charitable mission. The quantum and urgency of this change require systemic overhauls, commercial turnarounds and new mindsets translated to practical solutions that can be scaled to make a meaningful and lasting difference on the ground.

We focus on three areas:

- 1 distributed renewable energy (DRE)
- 2 green grids, and
- 3 the green economy.

Projects in these areas are delivered by GEAPP teams across Africa, Asia and Latin America, underpinned by a robust monitoring, evaluation and learning framework that allows smart, fast action.

Beyond the enabling work we support in our portfolio, we have a set of direct investments, in line with our global strategy. This could be, for example, testing innovative business models in battery storage or making equity investments in emerging DRE developers, such as Nuru in the DRC.

When addressing the question of scale, we think about how we best use platform approaches; this enables us to back credible in-market teams at a larger scale, which unlocks significantly more capital and is particularly important to crowd in the private sector.

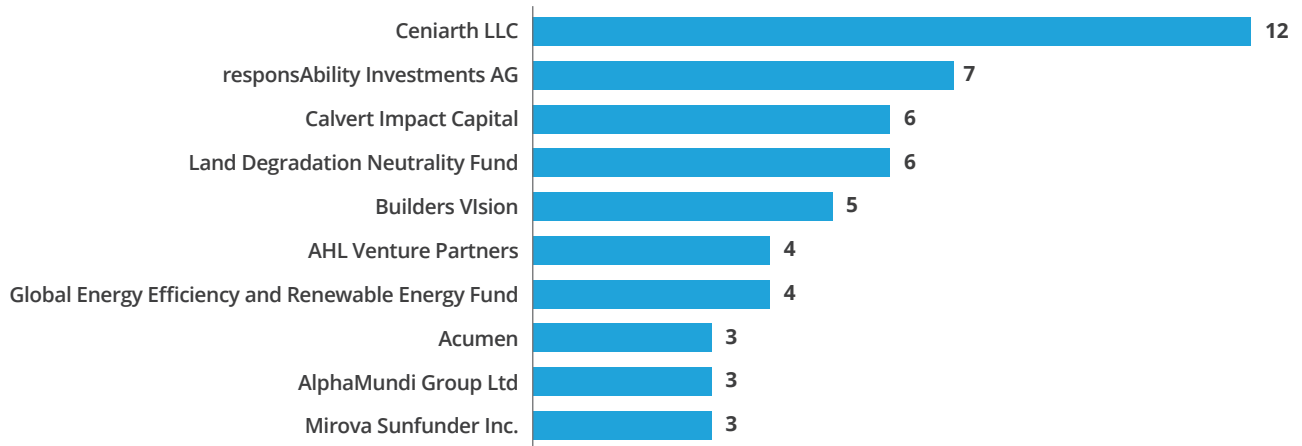


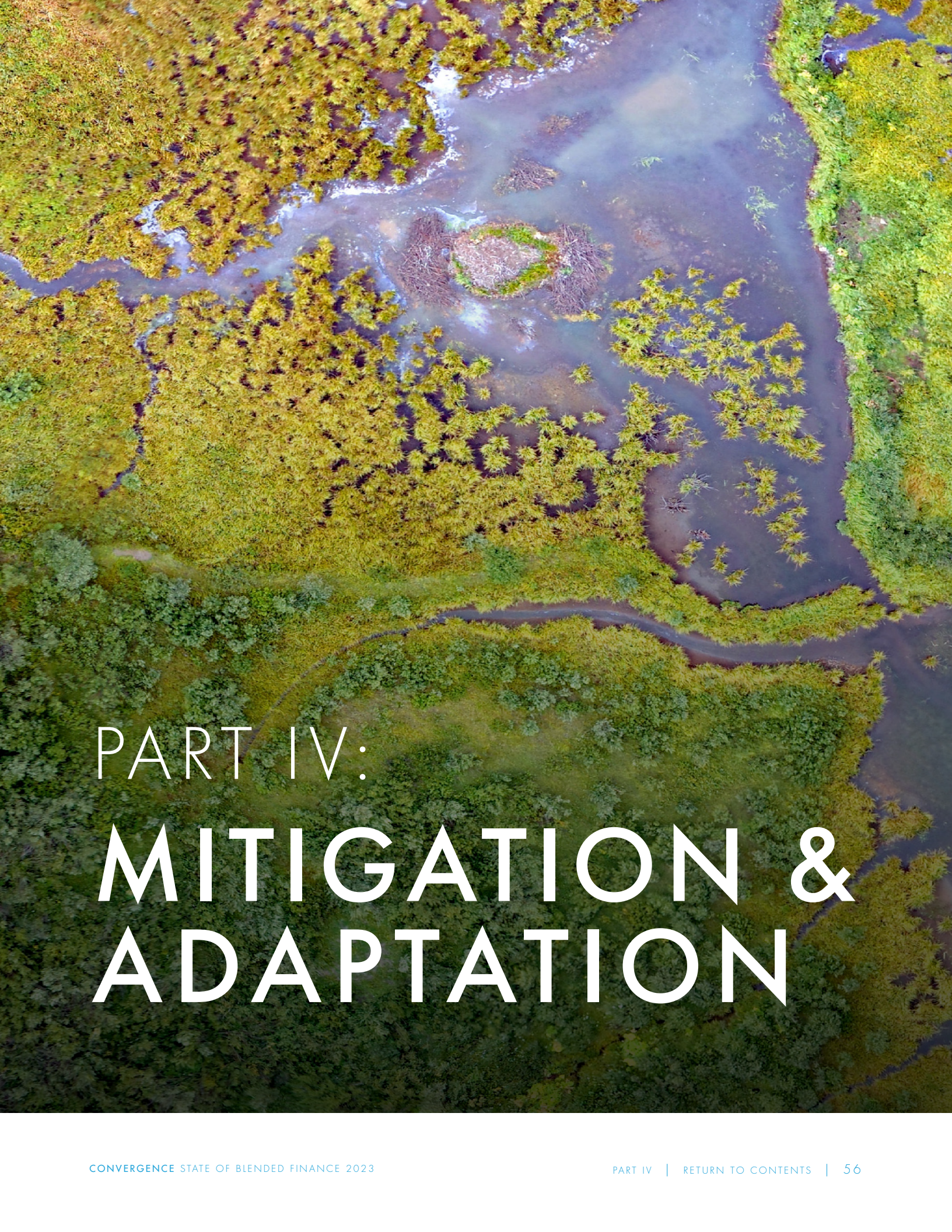
IMPACT INVESTORS

Compared to other investor groups, impact investors constitute a relatively minor portion of investments in climate blended finance deals. These investors fulfill a dual role as fund managers and providers of both concessional and commercial capital for blended finance transactions. The leading investors in the impact investment sphere include CeniARTH LLC, responsAbility Investments AG, Calvert Impact Capital and the Land Degradation Neutrality Fund. We are also witnessing the emergence of family offices as ecosystem building and early-stage funders of climate blended finance deals. For instance, [RS Group Asia](#), a mid-sized family office based in Hong Kong which

is dedicated to investing for a better world launched, in partnership with Convergence, the Asia Natural Capital Design Funding Window in 2019. At the time of launch, the window was the first of its kind focusing on NbS in Asia and over its lifespan it has been able to [develop a robust and diverse pipeline of solutions](#) protecting some of the most important natural assets in the region. As pointed out in a recent [PwC report](#), investing for a positive impact resonates with the culture and mission of family offices. It is clear that getting involved in blended finance is a crucial avenue for family offices to align their investments with values, amplify impact, and achieve sustainable returns.

Figure 36: Most frequent impact investors in climate blended finance deals by number of commitments, 2017-2022



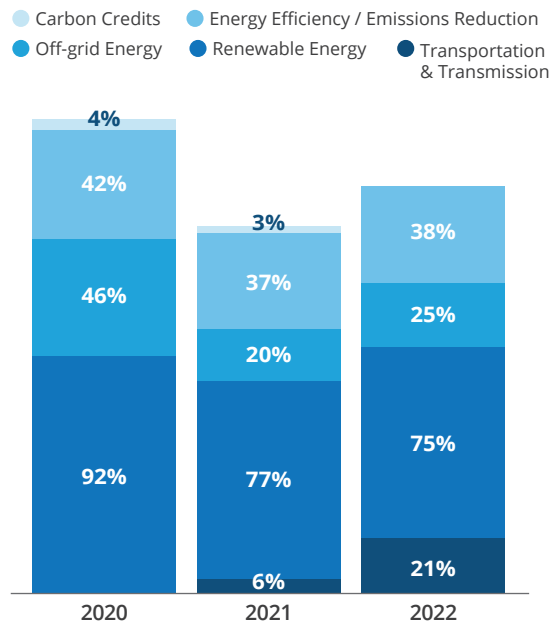


PART IV:
**MITIGATION &
ADAPTATION**

PART IV: MITIGATION & ADAPTATION

MITIGATION BLENDED FINANCE

Figure 37: Mitigation sub-sectors; proportion of annual mitigation blended finance deals, 2020-2022¹¹

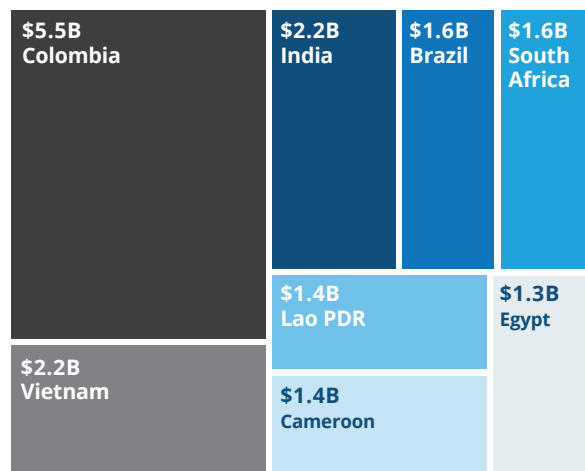


Since 2017, nearly half (48%, 99 transactions) of mitigation blended finance transactions have targeted SSA, followed by emerging Asia (East Asia and the Pacific and South Asia, 50 transactions), Latin American and the Caribbean (42), Middle East and North Africa (10) and Eastern Europe (7). Kenya (15 transactions), India (14), Vietnam (10), Brazil (9) and Nigeria (9) are the most frequently targeted countries over that timespan. Notably, looking at total financing volume by country, from 2017-2022 Colombia (8 transactions) received the largest sum of mitigation blended finance, totalling \$5.6 billion, followed by India (\$4.4 billion and Brazil (\$3 billion). By comparison, Kenya's 15 transactions amounted to \$1.3 billion in total deal value. Convergence observed that mitigation transactions

in Kenya are primarily direct company financing deals or smaller fund structures, such as multiple funding rounds secured by energy-tech company [Bboxx](#) or CrossBoundary's pioneering off-grid energy fund [CrossBoundary Energy 1](#). In fact, this is a trend widely observed across SSA. Conversely, transactions in Colombia, Brazil and Vietnam are primarily projects (6, 6 and 7 deals respectively).

Renewable energy asset development is the core sector of mitigation blended finance. Since 2017, renewable energy transactions have accounted for 82% of mitigation blended finance deal count on average per year. Since 2020, blended finance has delivered \$9.9 billion to renewable energy asset development, with a median transaction size of \$66 million. Nearly all the mitigation blended financing to Colombia from 2017-2022 was directed towards renewable energy asset development (\$5.4 billion of \$5.6 billion), with similar patterns found in India, Vietnam and Brazil.

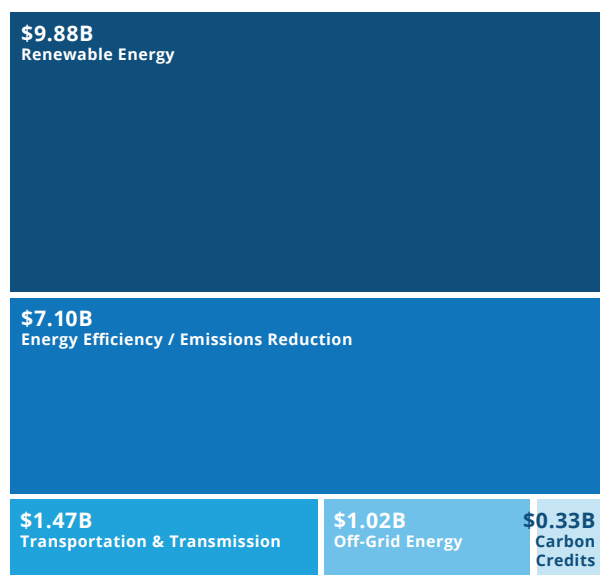
Figure 38: Aggregate renewable energy transaction volume by country (top 8), 2017-2022



11 Bars sum to more than 100% given transactions can target multiple sub-sectors.

Convergence observes significant growth in activity in the off-grid renewable energy sector, specifically off-grid solar photovoltaic (PV) systems in recent years – 30% of mitigation blended finance deals between 2020-2022 targeted the sector vs. 14% between 2017-2019. This is in part a result of the continued decline in component costs for solar PV alongside economies of scale in production as demand rises. This has unlocked financial feasibility to launch off-grid projects in high-risk jurisdictions. For example, the GCF backed a \$45 million, 6.3 MW solar [microgrid project in Haiti](#), installing 22 solar PV systems with battery storage. The project received concessional support from GCF and the World Bank (via the Scaling Up Renewable Energy Program, SREP) to mobilize commercial investment from US DFC, foundations and corporates.

Figure 39: Aggregate financing to mitigation blended finance sub-sectors, 2020-2022

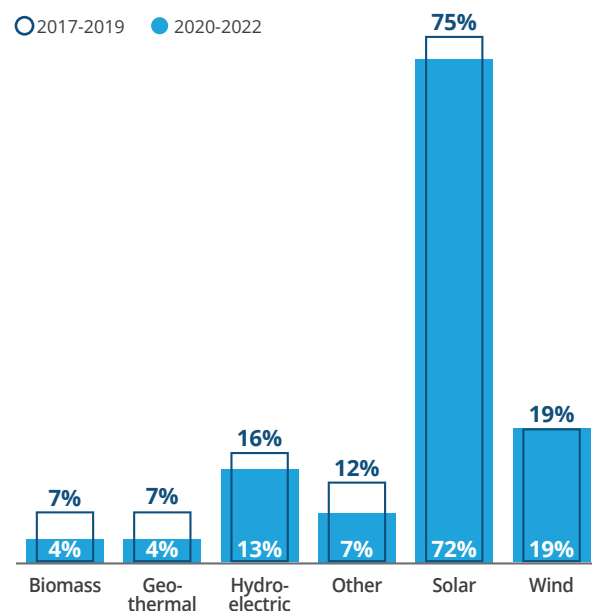


Among renewable energy technologies, the bulk of blended finance activity is centered around building solar PV capacity – from 2017-2019 to 2020-2022 the share of solar PV projects as a proportion of all renewable energy deals only slightly declined from 75% to 72%. Comparatively, Convergence observes a decline in the frequency of blended finance for

biomass, geothermal and hydroelectric projects over that timespan. The use of blended finance is increasingly infrequent for hydroelectric asset development for a number of reasons;

- 1 the negative consequences for biodiversity due to altered river patterns and flooding are becoming mainstream considerations for investors;
- 2 climate change is destabilizing water sources, leading to prolonged droughts or flooding that can greatly impact the viability of utility scale hydro plants;
- 3 growing pressures on fresh water supplies due to population expansion, urbanization and climate change is elevating the economic and political risk of constructing new hydroelectric dams; and
- 4 the macroeconomic environment has presented significant fundraising challenges to project developers, especially in the last year – total blended capital delivered to hydroelectric power projects fell by over 60% in 2022 from 2021 totals.

Figure 40: Breakdown of renewable energy technologies financed through blended finance; proportion of all renewable energy deals, 2017-2022¹²



¹² "Other" encompasses transactions targeting clean energy transitioning (i.e., fossil fuel to lower emission liquid petroleum gas to hybrid gas-renewable energy) but which are yet to incorporate a renewable energy source, and other technologies (hydrogen, carbon capture, tidal).

VOICES FROM THE FIELD:

Interview with Cecilia Tam, Acting Head of Energy Investment Unit at the IEA

In the [Scaling Up Private Financing For Clean Energy In Emerging And Developing Economies](#), the IEA and IFC ran an analysis estimating the amount of concessional financing required to support the \$1.2-1.6 trillion of annual investment necessary in EMDEs to reach net zero emissions by 2050 (NZE) Scenario goals. Tam shared their analysis with us below:

Can you walk us through the underlying assumptions for your exercise?

The starting point for our analysis was the IEA's net zero emissions (NZE) Scenario and the investment needs for that scenario across 7 regions (India, the Middle East, Europe and Eurasia, Latin America, Association of Southeast Asian Nations (ASEAN), Africa, and other Asia) and 4 sub-sectors (low-emission power generation, grids and storage, energy efficiency and end uses, and low-emission fuels and carbon capture, utilization and storage (CCUS)). We also provided IFC with our estimates on sources of private finance for the different sectors and regions. IFC then estimated the share of blended finance needed to mobilize this level of private capital, based on historical IFC experience and expected technological and market developments.

To do this, we made assumptions of how much financing was already being provided by the market, to help us estimate how much money would be needed to get to the amount required for the 2030 and 2035 timeframe. We assumed that in earlier periods and in technologies that were not very mature, for example like green hydrogen and CCUS, much more support would be required. But as technologies mature, we would need less concessional debt or equity, and move more towards guarantees. Similarly, in many middle-income countries such as India, commercial scale renewable energy projects are viable without support. We also took into consideration how much financing was available from local banks, and what their capital spending limits were.

What were your findings?

Based on these assumptions, we found that \$83 billion of concessional finance would be needed annually to mobilize private sources of finance in the NZE Scenario until 2030, increasing to \$101 billion per year in 2031-2035. We need to do a more detailed follow-up analysis, to work with other DFIs, and to build up this analysis at the regional and sub-sectoral levels. What's missing from this analysis is the amount of blended finance needed to support public state-owned enterprises, that cannot access commercial finance and are significant investors in clean energy in emerging and developing economies. The \$80-100 billion in concessional funding does not represent the total support required for the clean energy transition and we plan to undertake additional analysis to estimate this remaining gap.

How should concessional capital most efficiently be deployed to achieve the NZE Scenario?

There are a lot of differences in leverage ratios reported by multilaterals and those reported by the private sector. Unfortunately, achieved leverage ratios need to be more consistent and much higher. There's not that much public money out there, so we need it to work more effectively at leveraging higher multiples of private capital. I don't see a situation where we are going to get 15 times more public money, so the focus needs to be on how to realize higher leverage ratios. Our analysis needs to help guide donor funds, so that the funds and facilities they're setting up are targeting the right priorities and reaching the right countries.

When determining levels of concessionality, it is important to understand what the biggest market gaps are, and what would allow you to access more capital for the energy transition. For example, is it longer tenders, supporting developers to structure better projects, or improving off-taker risk? The best use of concessional capital also depends on whether you're trying to attract local private money

or international money. In a rising interest rate environment, emerging and developing economies risk losing out, so we need to find a way to make returns more attractive than in less risky markets. There is a lot of domestic capital, and we're not accessing nearly enough of this capital for the climate transition.

BOX 1

Forecasted blended finance totals for the NZE Scenario (2026-2035)

Convergence performed an adapted analysis of the IEA's investigation into the levels of concessional financing required to mobilize adequate commercial investment into clean energy in emerging markets to achieve the NZE Scenario. The exercise applied Convergence's own leverage ratios to the IEA and IFC's estimated requisite investment totals for the renewable energy and energy efficiency sub-sectors¹³.

According to Convergence's database, every dollar of concessional capital invested into the renewable energy sector mobilizes, on average

\$5.4 in commercial capital. Additionally, every concessional dollar provided to energy efficiency transactions mobilizes, on average, **\$5.9** in commercial capital. Comparatively, this translates into greater totals of concessional capital to mobilize the necessary commercial investment under the Convergence scenario.

Convergence's historical data suggests that to meet the NZE Scenario targets in the energy sector by 2035, a total of \$529 billion in concessional financing will be needed to mobilize \$2,414 billion in commercial investment (Table 1).

Table 1: Concessional capital requirements for the partial NZE Scenario according to Convergence data. Derived from [IEA - IFC analysis](#), 2026-2035.

USD billions Totals denote time periods: (2026-2030 and 2031-2035) Includes all emerging markets (excl. China)			
Energy sub-sector	Total annual clean energy investment required	Total commercial investment required	Concessional capital required to mobilize commercial investment
Totals	IEA - IFC / Convergence: 1255 , 1688	IEA - IFC ¹⁴ : 697 , 957 Convergence: 1029 , 1385	IEA - IFC: 73 , 89 Convergence: 226 , 303
Renewable energy (incl. transmission, storage)	836 , 1079	IEA - IFC: 360 , 464 Convergence: 681 , 879	IEA - IFC: 44 , 53 Convergence: 155 , 200
Energy Efficiency & end uses	416 , 609	IEA - IFC: 337 , 493 Convergence: 348 , 506	IEA - IFC: 29 , 36 Convergence: 71 , 103

¹³ Convergence defines leverage ratios as the amount of commercial capital mobilized by each dollar of concessional capital, where commercial capital includes capital deployed by private, public, and philanthropic investors.

¹⁴ IEA / IFC figures for "commercial investment required" only includes commercial capital from private sector sources and excludes public sector commitments on commercial terms.

Mainstream mitigation finance is synonymous with reducing and ultimately phasing out fossil fuel-based power generation, replacing thermal sources with renewable alternatives. While the decarbonization transition is being applied across sectors, impacting different aspects of the industry, commercial systems and, even day-to-day household activities, the vast majority of capital, both in developed and emerging economies, is allocated to one sector; [utility scale power generation](#). However, Convergence is seeing growing applications of blended finance for emissions reduction in other key sectors, including transmission and transportation (electric vehicles, EVs.), shipping and trade. For example, [VinFast](#), Vietnam's first domestic car manufacturer, secured blended capital to develop the country's first fully-electric public bus fleet and construct Vietnam's first national EV charging network. The transportation sector accounts for almost 20% of Vietnam's annual GHG emissions output. Led by ADB, the company secured \$135 million in debt, including participation from Export Finance Australia and responsAbility and concessional capital from the Clean Technology Fund and the Australia Climate Finance Partnership to improve the financial feasibility of the project. Strong domestic policy and regulatory frameworks for EV

“...blended finance can be utilized to address remaining economic risks to **attract the private sector capital** necessary to build out domestic industries.”

adoption, including incentive plans to make EVs. competitive in the short term and robust public commitments to constructing the necessary charging infrastructure, are undoubtedly critical first steps to enable industry feasibility. Some emerging markets have already made significant strides here, with [Cabo Verde, Costa Rica and Sri Lanka](#) committing to completely phasing out combustion engines over the next 10-30 years. In conjunction with enabling policy and regulatory environments, blended finance can be utilized to address remaining economic risks to attract the private sector capital necessary to build out domestic industries.

MITIGATION BLENDED FINANCE INVESTORS

All investor classes allocate the bulk of their investments to mitigation blended finance transactions – since 2017, 55% of all climate blended finance commitments are destined for pure mitigation transactions. In recent years, commercial investors and DFIs / MDBs accounted for about two-thirds of all commitments to mitigation blended finance, with commercial investors increasing their share to 34% from 28% in 2017-2019. We also observe greater participation from development agencies (22% in 2017-2019 to 26% in 2020-2022), signaling greater availability of concessional resources in the market (the number of concessional investments from development agencies increased by 15%, and their share all of concessional investment to mitigation increased from 59% to 68% from 2017-2019 to 2020-2022). This positive trend could be

in part linked to the rise in private sector investor participation in recent years.

Breaking down the commercial investor class reveals that corporates and financial institutions jointly provide the lion's share of investment to mitigation transactions, accounting for 44% and 33%,

Figure 41: Proportion of commitments to mitigation blended finance transactions by investor type, 2020-2022

- Commercial Investor
- Development Agency
- DFI / MDB
- Foundation / NGO
- Impact Investor

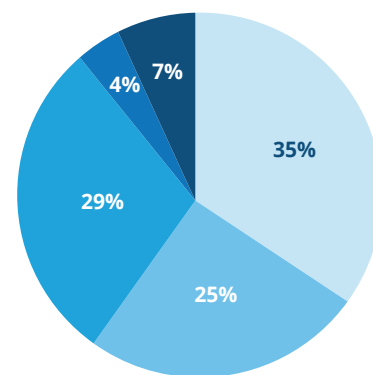
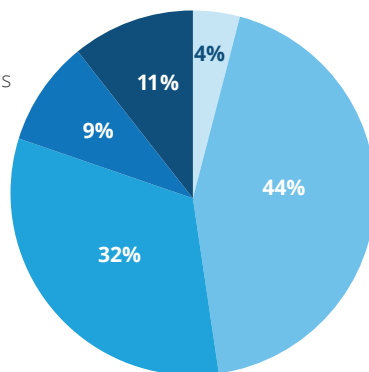


Figure 42: Proportion of commitments from private sector investors to mitigation blended finance transactions, 2020-2022

- Asset Manager
- Corporate
- Financial Institution
- Institutional Investor
- Private Equity / Venture Capital Firm



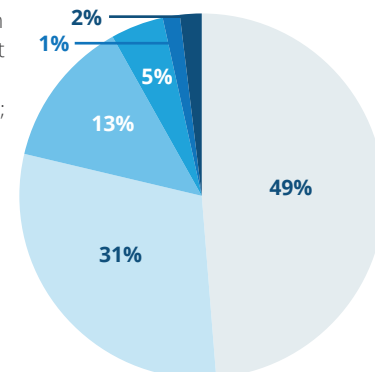
respectively (2017-2022). This is tied to the recent expansion in the number of greenfield projects and project finance transactions in the last year, with commercial banks acting as an important source of project finance debt (construction and refinancing) and the corporate class comprised mainly of project developers providing shareholder equity and / or loans. Nearly all (95%) of the commitments from private sector investors to mitigation blended finance projects since 2017 have been provided by commercial banks or project developers.

Institutional investor exposure to mitigation blended finance remains comparatively low, remaining around 9% of all mitigation commitments between 2017-2022. Greater use of blended bonds / note structures can help entice this critical investor class. Emerging market debt [outperformed most developed fixed income markets](#) towards the end of 2022 and into 2023, given the rapid response to inflationary pressures made by emerging market governments. Stabilized credit risk combined with high yields on corporate issuances will drive investor appetite and blended finance can provide additional risk mitigation protection to improve underlying project feasibility. Convergence’s HDD highlights some key successes in using fixed income instruments to entice institutional investors to

“Greater use of **blended bonds / note structures** can help entice this critical investor class.”

Figure 43: Breakdown of financial instrument types to mitigation blended finance deals; proportion of all investments, 2017-2022

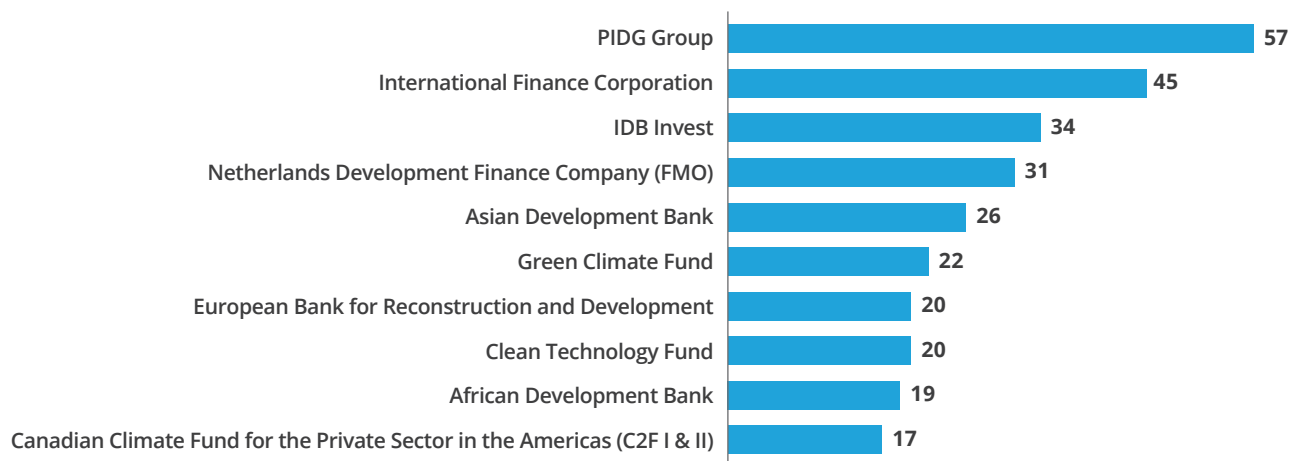
- Debt
- Equity
- Grant
- Guarantee
- Insurance
- Mezzanine



mitigation financing, including the [La Jacinta and Natelu Yarnel A / B bonds](#) structured by IDB Invest to refinance two solar PV projects in Uruguay.

Since 2017, mitigation blended finance interventions have been mainly financed through debt; 49% of investments into mitigation transactions vs. 31% equity. This is closely tied to the prominence of project finance transactions for renewable energy asset development. Moreover, Convergence has noted a marked drop-off in activity among private equity funds operating in the mitigation space. In 2022, Convergence only captured a single mitigation-focused private equity fund closure. In contrast, over the five years prior, an average of 11 mitigation private equity funds were closing annually. As mentioned earlier, inflationary pressures and an over allocation to equity for most private investor classes due to interest rate increases have presented significant challenges to fund managers and slowed private equity and venture capital expansion in places like SSA and Latin America. [Convergence has previously highlighted](#) the importance of increased equity participation in emerging markets, particularly from the DFIs and MDBs, given mounting sovereign debt pressures for many developing economies and currency instability. Together with a greater supply of risk-bearing capital from development agencies, specifically through the capitalization of first-loss tranches in private equity funds, DFIs / MDBs must increasingly take on more risk when investing through intermediaries, more often participating in junior and mezzanine tranches. Doing so will plug key financing gaps for fund managers and bring risk-adjusted returns in line with the requirements of private (senior) investors, ultimately bringing more mitigation funds to market.

Figure 44: Most frequent investors in mitigation blended finance transactions by number of investments, 2017-2022



As observed in last year’s report, the most frequent investors in mitigation blended finance are DFIs / MDBs and multilateral donor funds / organizations (PIDG, GCF). While these investors have catalytic and mobilization mandates to some degree, the majority of their commitments are disbursed on commercial terms (exceptions being CTF and some PIDG subsidiary companies) and primarily through senior debt. Nearly all are also heavily oriented towards the renewable energy sector and are able to operate substantial loan portfolios due to balance sheet headroom underpinned by AAA credit ratings¹⁵.

Some of these large-scale investors have begun to allocate pooled donor funds alongside their own account financing to niche areas of mitigation blended finance. For example, EBRD’s operations in Ukraine prior to the invasion by Russia increasingly

incorporated energy efficiency outcomes into interventions focused on other development outcomes, such as job creation or industry expansion. To do so, EBRD administered concessional funding from the [Finance and Technology Transfer Centre for Climate Change](#) (FINTECC). This EU-funded grant pool provides Eastern European investees with TA, and policy and investment support to improve energy efficiency. Despite the persistence of war, Ukraine has begun looking toward reconstruction efforts. Facilities like FINTECC are critical to incorporating mitigation considerations into reconstruction plans and ensuring these opportunities are adequately prepared to receive commercial funding. Likewise, such donor funded pools also demonstrate how DFIs and MDBs can be involved in project pipeline development, even in high-risk, fragile or low-income scenarios.

ADAPTATION BLENDED FINANCE

Adaptation blended finance continues to be under-represented when looking at overall climate blended finance deal count and volume. Since 2013, only 15% of deals have had a pure adaptation focus. This equates to \$7.5 billion in total financing, compared to \$64.2 billion for pure mitigation and \$18.5 billion

for hybrid transactions. Most of the financing for adaptation transactions came from the public sector (58%), while private investors committed a total of \$2.9 billion.

A trend seen globally in climate finance has been an increase in the amount of adaptation finance

¹⁵ The PIDG group’s two primary subsidiary organizations, the Emerging Africa Infrastructure Fund and GuarantCo, are both rated AA-. The Green Climate Fund is not rated.

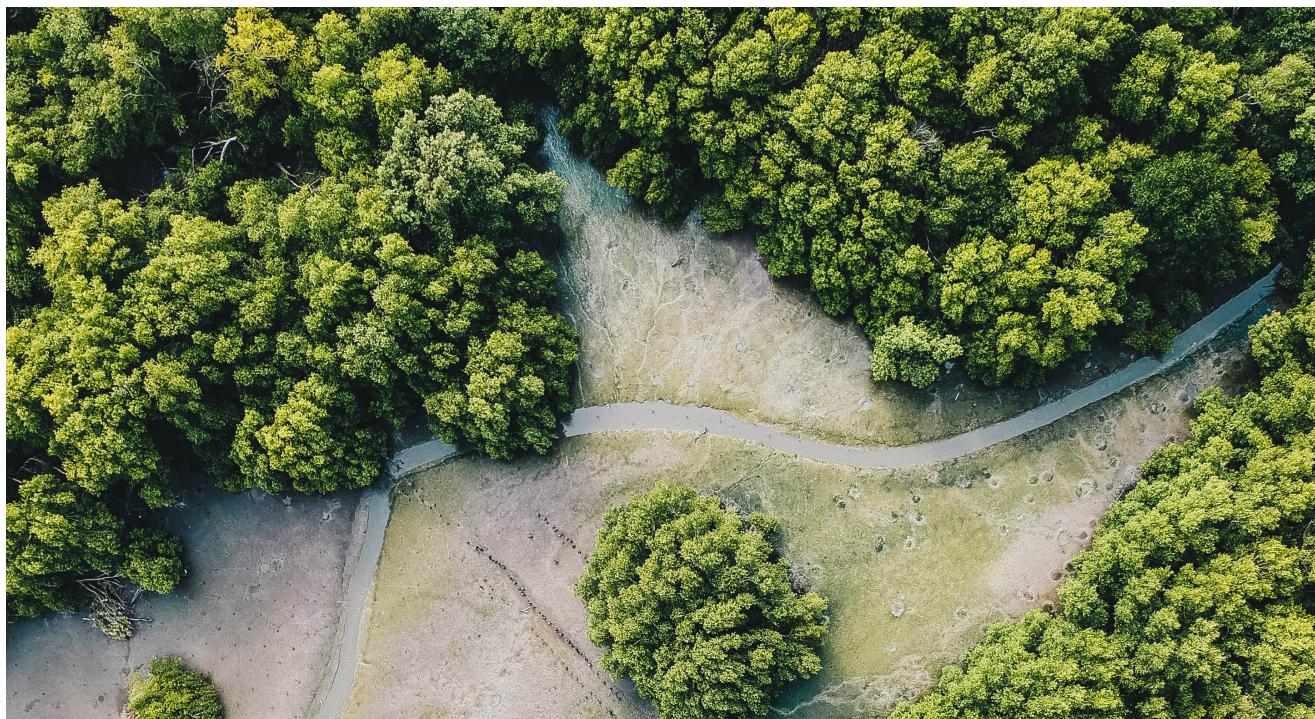
“One of the challenges related to increasing adaptation financing is the **lack of bankable adaptation projects.**”

committed by investors annually. From 2017-2018 to 2019-2020, [UNFCCC found](#) that adaptation finance increased by 65%, from an annual average of \$30 billion to \$49 billion, driven mainly by financing from bilateral and multilateral DFIs. CPI, however, [notes that](#) national and subnational development banks are falling behind in their commitments to adaptation-focused strategies. While these banks make up 37 of the 70 entities in CPI’s dataset (53%), only one national development bank, the National Bank for Agriculture and Rural Development of India, has made commitments specific to climate adaptation finance. Meanwhile the commitment from commercial investors to adaptation financing continues to lag; there is a need for an increase in the participation of the private sector in adaptation investment. This is particularly evident in Africa, where the [private sector contributes less than 3% of adaptation finance](#).

[The Global Center for Adaptation reports](#) only ten countries in Africa receive more than half of the continent’s adaptation finance while the bottom ten countries receive less than 1%. Furthermore, the report shows that of 160 updated NDCs, just 62 mention adaptation finance needs. This implies actual adaptation funding requirements may exceed current estimates.

[The UNEP Adaptation Gap Report](#) for 2022 estimates adaptation costs for developing countries will increase to \$160–340 billion annually by 2030 and \$315–565 billion by 2050. Further, a recent [analysis by the IPCC](#) suggests similar ranges for adaptation costs between \$127 billion and \$295 billion per year for developing countries by 2030 and 2050, respectively. This means projected costs are 5–7 times higher than the \$49 billion of global adaptation flows in 2019-2020.

One of the challenges related to increasing adaptation financing is the lack of bankable adaptation projects. According to Jay Koh of Lightsmith Group, a prerequisite to building a portfolio of bankable projects is ensuring adequate data to make informed decisions regarding investment opportunities. There is an existing data gap that impacts the ability of investors to measure the risks associated with a certain transaction. For example, the [Lima Adaptation Knowledge Initiative](#)



[\(LIMA\) found](#) that there is a lack of available data on water-related hazards (e.g. drought, landslide, debris flow, flooding, glacier lake outburst flood) and a lack of information on climate change impacts on the water resources. Not only is data lacking, but there are also few standardized metrics with which to measure adaptation outcomes. During the [2023 San Giorgio CPI meetings](#), it was suggested that creating these metrics may aid in risk management and opportunity assessment for investors.

Challenges with data collection impact more than the availability of bankable projects. Since COP16, developing countries have begun to develop and implement NAPs. NAPs are intended to identify medium- and long-term adaptation needs and develop strategies to address them. While many LDCs have developed their plans over the past decade, there is an ongoing challenge with their ability to finance them. [One of the main barriers to their implementation](#) is the lack of data collection capabilities.

“Technical assistance can play a key role in addressing data knowledge gaps.”

TA can play a key role in addressing data knowledge gaps. Regarding NAPs, the Least Developed Countries Expert Group (LEG) is currently providing TA to support their development. Concessional investors could supplement this by investing in TA solutions. For example, the [International Institute for Environment and Development](#) suggests increasing investments in data collection and management infrastructure, such as meteorological stations and training for local experts in data collection, analysis and interpretation. A second challenge to the development and implementation of NAPs is the lack of regional

coordination that allows for knowledge sharing and efficiency gains. As Morgan Richmond, Senior Analyst at CPI noted,

“One of the greatest challenges in understanding the scale of adaptation investment needs comes from the disparity in National Adaptation Plans. Different countries consider different sectors and capture different levels of cost and need. One component that is often missing is regional-level adaptation needs. For example, if each country around Lake Victoria has a different national adaptation plan and the plans don’t speak to each other, there is a risk of approaching the same resource in different ways. We need more regional level coordination.”

Despite these challenges and others, the use of blended finance in adaptation transactions is becoming more mainstream, with large global funds such as the [Adaptation Fund](#) setting goals to support projects that leverage concessional financing. In 2021, the Adaptation Fund and its partners issued [a joint statement](#) with an explicit goal of using its capacity to scale up and blend finance. The Fund had previous experience investing in projects with a core objective of using blended finance. This includes [a project in Mozambique](#) that invests in ecological infrastructure networks. A key intended impact of the project is to increase blended finance and women/youth entrepreneurship opportunities in climate-resilient water supply, fisheries, and coastal protection.

Boosting strategic planning, adaptation priority programs, and institutions is now vital for most African countries. One joint effort to scale adaptation across the continent is the [Africa Adaptation Acceleration Program \(AAP\)](#), an initiative of the African Development Bank and Global Center on Adaptation aiming to mobilize \$25 billion over five years to accelerate climate adaptation action in Africa. Through country compacts, it provides country-led roadmaps outlining adaptation priorities, financing needs, and strategies to mobilize finance for implementing climate adaptation and translating NDCs into executable projects.

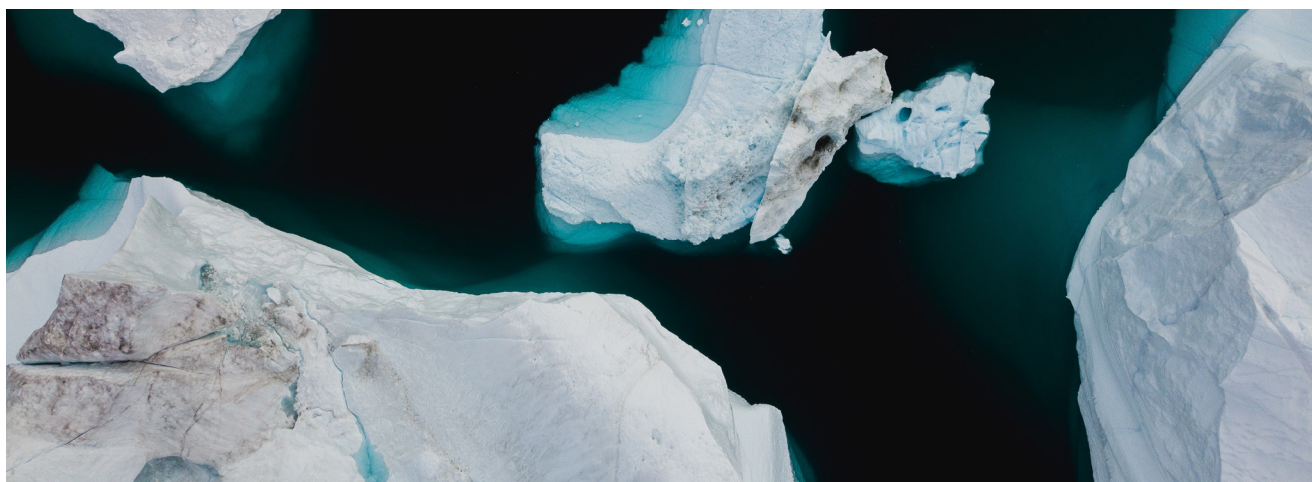
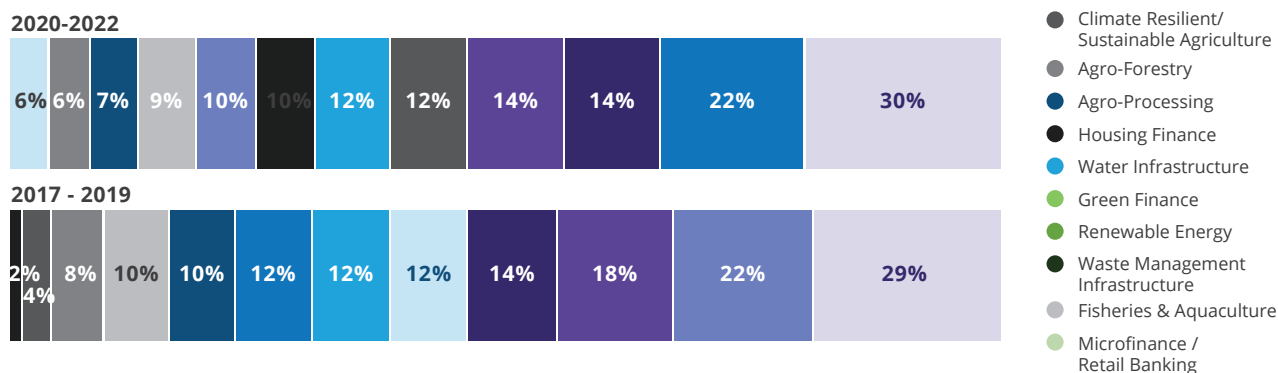
Overall, there are other methods, complementary to blended finance structures, to increase the attractiveness of adaptation financing to investors. The [Global Adaptation & Resilience Investment Working Group \(GARI\) suggests](#) five ways to increase private investment into adaptation blended finance transactions. Beyond developing metrics and standards, GARI also suggests pricing climate risk into investments; creating a practical framework, potentially through a macro view looking at a long-term vision by key sectors; incorporating resilience into net zero initiatives and goals; and focusing on social impact, environmental justice and inclusive equity in investments.

Part of incorporating adaptation in a wider range of investment themes is broadening the perception of what adaptation financing means. In all climate investments captured by the Convergence database, hybrid investments represent under one-third of total

climate financing. Currently, adaptation and hybrid transactions are largely focused on agriculture. Figure 45 shows how the main sub-sectors in adaptation financing include: agricultural inputs and farm productivity (30% in 2020-2022); agro-processing (22%); agroforestry (14%); and climate resilient / sustainable agriculture (14%).

There are opportunities to consider adaptation in other investment cross-sections, such as non-energy related infrastructure projects. Part of considering adaptation financing within other investments is having a broader definition of the term “adaptation”. Historically, a lack of clear definitions and methodologies delineating what climate adaptation is has resulted in the adaptation market being viewed as a siloed sector. Later in this report, we will review the changes to adaptation taxonomy that are beginning to address some practical challenges that arise when the definition is not standardized.

Figure 45: Proportion of adaptation & hybrid blended finance transactions by sub-sector, 2017-2019 vs. 2020-2022¹⁶



¹⁶ Bars do not sum to 100% given that blended finance transactions can target multiple sub-sectors.

VOICES FROM THE FIELD:

Interview with Jay Koh, Managing Director and Co-Founder,
The LightSmith Group

What was the motivation for starting an adaptation focused private equity fund?

Back in 2015-16, we started developing a theory on how to invest for commercial returns in adaptation. The strategy is referred to as CRAFT - the Climate Resilience and Adaptation Finance and Technology Transfer Facility, and that's how the fund was incubated initially. CRAFT is considered to be the first dedicated private equity fund anywhere focused on adaptation and climate resilience, and it is designed to catalyze all three sides of that equation to drive adaptation finance: sources of capital, uses of capital and the development of the ecosystem.

What are the goals of the fund?

The first goal is to mobilize capital. There is perceived risk of first-time strategies, there is substantial perceived risk in developing countries, and there is perceived first-time investment manager risk. To address the potential or perceived risk of the strategy, we set up a blended finance structure that crowds in capital by providing a risk-mitigating junior equity layer.

Second, CRAFT demonstrates that you can find companies that are in the market that support adaptation and climate resilience today. To do this, we first set out to define and then execute a strategy of investing in companies that help to either analyze how climate risk plays out over the economy, or help to manage physically or financially those risks and impacts increased by climate change.

How does CRAFT leverage blended finance?

The CRAFT fund is a \$185 million global growth equity fund. It was designed to be a blended finance instrument with four-compartments. There's a junior

and senior layer of the fund and a parallel investor that does not participate in the junior and senior structure. There's also a second junior investor for certain geographies, which is the UN's Green Climate Fund itself. CRAFT is a global fund, so it invests half its capital in companies domiciled in developing countries, and half its capital in companies domiciled in developed countries. CRAFT also has transfer mechanisms between developed countries into developing countries within the fund on a commercial basis. Separate from the CRAFT fund, there is an aligned TA grant facility. The TA facility is designed to accelerate deployment of technologies from the fund into the poorest countries.

CRAFT is also the first commercial fund to have an impact measurement system that measures for the first time the impact of investments on adaptation.

What are some methods of increasing bankable projects in adaptation financing?

CRAFT invests in two types of adaptation technologies and solutions. One is climate resilience intelligence, and the other is climate resilience solutions. You have to solve two problems to create bankable projects: a data and analytics problem, and a products and services problem. You need analytics to see how climate change risk may affect water, agriculture, transportation, buildings, and healthcare. And you need products and services that address and manage those climate-enhanced risks at scale. If you have both climate resilience intelligence and solutions, then you can start to make large scale climate resilience projects happen. That's the intuition behind the CRAFT fund's strategy; you need to build massive capacity in climate resilience.

How do you see the fund evolving over time?

On the uses of capital, we're going to clearly prove you can generate commercial returns, and then increasingly prove that at scale. The target is exactly what you should get from commercially-oriented growth equity and private equity funds. The demand for these technologies and solutions is just exploding; these solutions are no longer a nice-to-have, they're an absolute must.

Secondly on the sources of capital, to mobilize the first fund for climate resilience adaptation required overcoming a lot of perceived risk. How much

blending you need to mobilize capital will continue to be a question of what the perceived risk of the strategy is to investors and what the perceived risk of those markets are right now.

Lastly the TA facility has proven to be extremely important and useful because it dramatically accelerates the deployment of these technologies and pilots them in these developing countries. I see no way that's not going to continue to be an important feature going forward. You really want to create a mechanism to rapidly deploy climate resilience technology into the most vulnerable countries, and blending is absolutely important for those kinds of strategies.

NATURE-BASED SOLUTIONS

Nature-based solutions (NbS) harness the power of nature to boost natural ecosystems, biodiversity, and human well-being to address major societal issues, including climate change. NbS examples include restoring ecosystems, such as drained peatlands, improving agricultural management practices, and protecting landscapes to limit deforestation. NbS can contain elements of mitigation, such as how restoring drained peatlands increases CO2 absorption from the atmosphere by creating a carbon sink.

As with other climate change solutions, NbS are chronically underfunded. The UNEP [State of Finance for Nature report](#) found that while finance flows to NbS are currently worth \$154 billion annually, flows would need to more than double by 2025 to \$384 billion and more than triple to \$484 billion by 2030 to keep climate change below a 1.5 degree C increase, halt biodiversity loss and achieve land degradation neutrality. Moreover, private sector investment in NbS must increase by several orders of magnitude in the coming years from the current \$26 billion per year, which represents only 17 per cent of total NbS investment.

A growing source of funding for NbS is the voluntary carbon market. The [value of the global voluntary carbon](#) market reached over \$1 billion for the first time in 2021. By 2030, that market could be worth between \$5-\$30 billion, with an estimated two-thirds of this channeled into NbS. While there remain challenges associated with the use of voluntary carbon credits, if investments are made with due diligence, high quality NbS credits can support reducing and removing CO2 emissions, protecting and restoring nature, and ensuring communities both benefit from and are active participants in the projects.

In recent years, the [World Resources Institute has refined its guidance](#) on the use of voluntary NbS carbon credits. The guiding principles behind their use include: credits must ensure environmental integrity and represent NbS that respect the rights and livelihoods of Indigenous and local communities while safeguarding biodiversity; an organization should be on a mitigation pathway aligned with limiting warming to 1.5 degrees C; and its use of NbS credits must supplement, not reduce, the pace of emissions reductions in its own operations and value chain.

BNDES is already considering the importance of using carbon credits for Brazil's forested land, and how the carbon credit structure can be partnered with other blended finance archetypes to further de-risk a transaction. As one respondent noted:

“We need some kind of guarantee fund for forestry in Brazil. The land has limited value, so the value will be in the carbon credits that will be created if the forests are recovered and maintained. Most of the companies active in this space are also relatively new. It'll be very important to have a fund that can provide guarantees for these kinds of projects, to help boost investment in forests in Brazil and Brazil comply with its NDCs.”

While the voluntary carbon market represents one potential growing source of funding, NbS continue to face other challenges. For example, while data collection and measurement strategies are challenges faced in climate finance overall, especially adaptation financing, as previously noted, the [GCF found](#) that the conceptual framework for measuring and understanding biodiversity-related financial risks is even less advanced compared with progress made in climate finance. [UNEP notes](#) not only are the benefits often difficult to quantify and value, but also NbS are often implemented in combination with other interventions, leading to further complications in distinguishing its impacts.

Other challenges that hinder investment into NbS include the limited awareness, understanding and agreement around NbS; difficulties regarding the coordination and cooperation across administrative levels, governmental structures, and jurisdictional boundaries; disincentives motivated by a tragedy of the commons, whereby investors are not compensated for externalities brought about from the NbS; and time lags and spatial variability in outcomes that can mean the success of any given transaction is difficult to agree upon.

NbS can span several sectors, including forestry and agriculture. As Charles Karangwa, Global Head of Nature-based Solutions at IUCN, noted:

“We see huge opportunities in regenerative and sustainable agriculture. When you look at where the supply chain for food is going, in the coming years the market will change such that food produced with high impact on the



environment will be criticized in the market system. The private sector needs to align to that change in market demand and start investing in regenerative farming and food production systems. Supporting sustainable food supply chains touches all the productive sectors, from water systems to how our electricity is produced.”

There is a growing need to focus NbS funding on marine solutions. [According to UNEP](#), investment in marine ecosystems accounts for only 9% of total investment in NbS, which is low given the importance of oceans in climate mitigation and supporting adaptation. Current annual investment in marine protected areas is \$980 million, whereas terrestrial protected areas receive almost \$23 billion. UNEP further found that the annual finance gap to increase marine protected areas to 30% by 2030 is \$8–\$11 billion.

Innovative financing solutions for the blue economy, however, are becoming more mainstream. For example, the [Belize blue bond](#) is part of the Nature Conservancy’s (TNC) Blue Bonds for Conservation program, an initiative designed to help developing countries protect their marine resources by assisting them in buying back and restructuring sovereign debt. Proceeds from a TNC-issued blue bond enabled Belize to repurchase its outstanding Eurobond debt at a discount. Savings from the restructuring will be earmarked for coastal conservation activities.

“Only 13% of investors’ financial commitments to climate blended finance transactions went to deals with a pure adaptation focus.”

Debt-for-nature swaps, however, will continue to require de-risking to get higher credit ratings, lower interest rates, and optimize the savings realizable by sovereigns. One commercial investor noted,

“Guarantees and political risk insurance have been the two main de-risking tools we’ve seen most often, but the challenge we have now is a shortage in the number of providers; the market is very dependent on the NGO community to bear the balance of guarantee provision, over and above what MDBs are providing. We need to dramatically increase the facilities and the solutions that are available to us.”

Commercial banks have been the primary debt provider for NbS, leaving opportunities for an increase in the use of equity. The commercial investor, however, has not seen this occur in the market:

“That kind of patient equity capital role is critical; and even before that, a real challenge for us in financing NbS is that everything is at the feasibility stage, and the quantum in terms of the funding required at that stage is too small for us to be looking at it. There’s a real gap in the market where a number of these projects are falling into a valley of death. Whether that’s solved through grant capital or more angel VC funding is yet to be seen. But ultimately, for us looking to deploy debt finance into NbS projects, we’re surprised by the lack of projects that are available to us.”

Finally, water infrastructure transactions, which increase the climate resilience of water systems through new, replaced, retrofitted, or upgraded infrastructure, while another key climate adaptation sub-sector, has been decreasing in transaction count. Accounting for 12% of blended adaptation and hybrid transactions in 2017-2019 and just 6% from 2020-2022, water infrastructure transactions range from built infrastructure assets to NbS, like restoring wetlands and other ecosystems to recharge groundwater levels and mitigate flood risk. An innovative example of blended finance in water infrastructure is the [Global Fund for Coral Reefs](#)

(GFCR), an equity investment vehicle exclusively targeting SDG14 (Life Below Water) and improved adaptive resilience of coral reefs. GFCR comprises two sub-funds:

- 1 a \$125 million grant window aimed at developing the fund’s pipeline through TA, project development funding and

- 2 proof of concept grants; and a \$500 million blended investment window which will deploy long-term equity financing.

The Fund targets 20-30 control positions in companies, projects and platforms, with eligible investees operating in sustainable ocean production, ecotourism, or sustainable blue economy infrastructure sectors.

ADAPTATION BLENDED FINANCE INVESTORS

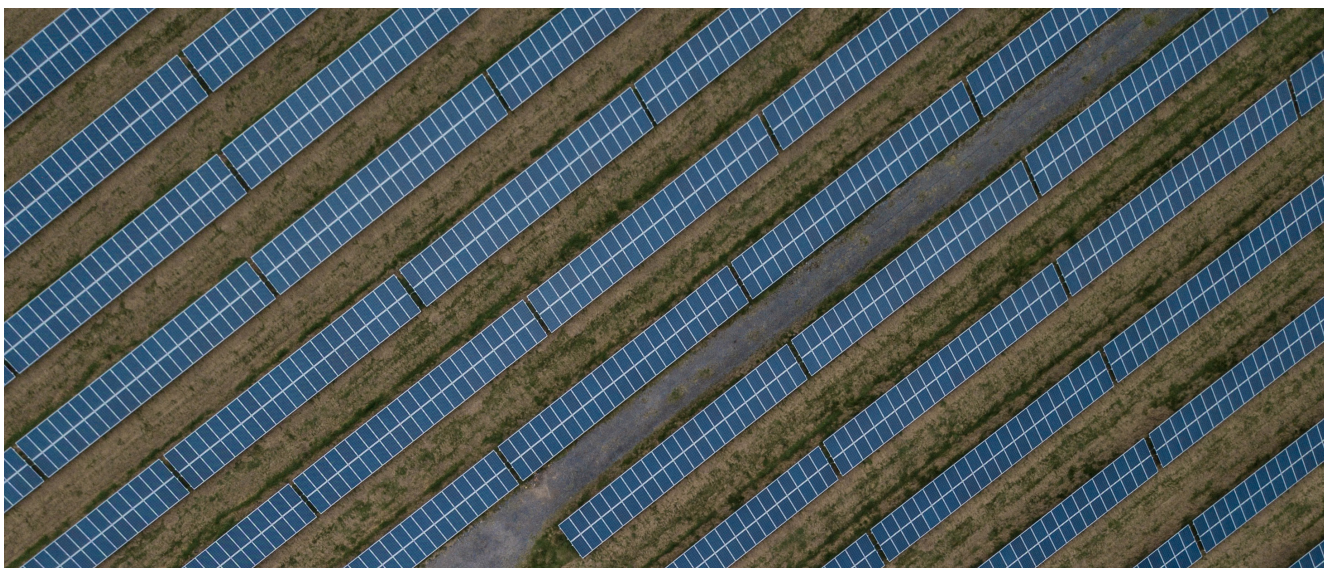
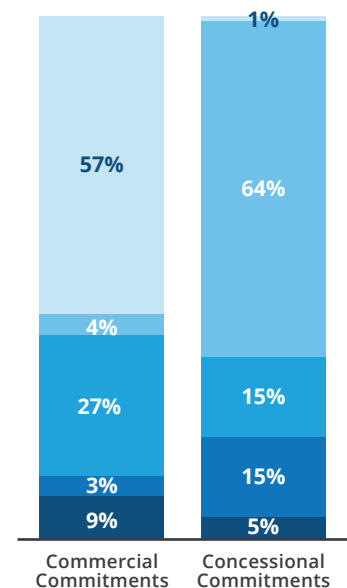
Between 2020-2022, only 13% of investors’ financial commitments to climate blended finance transactions went to deals with a pure adaptation focus, while 29% of commitments went to deals with a hybrid mitigation-adaptation focus. Development agencies and multi-donor funds were the main providers of concessional financing to adaptation and mitigation-adaptation transactions, accounting for 64% of concessional commitments by deal count in 2020-2022. MDBs and DFIs will also have an important role to play in financing adaptation finance. While the number of MDBs with publicly announced targets for adaptation remain limited, there are signs of progress. For example, [the World Bank Group recently announced](#) that it will make adaptation and resilience a key priority of its 2025 climate change targets, and will elevate it to equal footing with climate mitigation.

With each blended transaction mobilizing financing from at least one private sector investor, commercial investors have provided financing to the bulk (57%)

of commercially priced commitments by deal count to blended adaptation and mitigation-adaptation transactions from 2020-2022. There is a greater need, however, for private sector investors to fund adaptation transactions.

Figure 46: Proportion of commitments to adaptation blended finance & hybrid blended finance transactions, 2020-2022

- Commercial Investor
- Development Agency
- DFI / MDB
- Foundation / NGO
- Impact Investor





PART V:
COUNTRY-
LEVEL
PLATFORMS
IN CLIMATE
BLENDED
FINANCE

PART V: COUNTRY-LEVEL PLATFORMS IN CLIMATE BLENDED FINANCE

The world is facing a crucial moment in its pursuit of sustainable development and a fair transition to clean energy. The looming challenges of climate change and environmental issues have shown how interconnected nations are, highlighting the urgent need for global cooperation. However, this path towards sustainability is full of obstacles, especially for developing countries. Despite progress in financing climate-related projects in wealthier nations, ensuring that the world's most vulnerable countries equally receive vital financial resources remains a distant goal.

A reconfiguration of how money flows for climate-related projects is needed to ensure fairness and justice in the energy transition. This is where country-led national financing plans become crucial. These strategies act as central platforms, bringing together various sources of funding for development and climate-related goals, all tailored to a nation's

specific needs. By empowering individual countries to take charge of their journey toward a sustainable, low-carbon economy while effectively securing the necessary financial resources, country-level platforms become significant for climate blended finance.

With the increasing urgency of scaling climate financing to enable developing markets to achieve their net zero commitments, radical changes to the international finance architecture have recently been [proposed](#). The creation of country-level mechanisms that can foster collaboration and a shared focus between governments, leverage and connect private finance with NDC-aligned projects, and coordinate and channel TA, has been [identified](#) as critical to mobilizing climate blended finance at scale. The JETPs are one example of country-level platforms in climate blended finance.

UNPACKING JETPs

JETPs are financing mechanisms that [aim](#) to help coal-dependent emerging economies transition towards renewable energy sources while supporting communities affected by the move away from coal production and consumption by investing in social initiatives such as alternative job creation and training. JETPs are multilateral funding agreements [supported](#) by donor countries within the International Partners Group (IPG) composed of the European Union, the UK, the US, Japan, Germany, France, Italy, Canada, Denmark, and Norway, who [provide](#) the concessional

capital needed to de-risk investment in the energy transition. The first JETP launched at COP26, focusing on South Africa. JETPs have since been launched in Indonesia and Vietnam, while a Senegalese JETP was also [announced](#) in 2023.

Convergence interviewed a selection of stakeholders on the challenges and opportunities facing JETPs. Insights from these conversations are summarized below. The full interviews are available in the Appendix of this report.

HOW SIMILAR IS THE JETP MODEL TO BLENDED FINANCE?

Jonathan Phillips, Director of the James E. Rogers Energy Access Project at Duke University, notes that JETPs with a bottom-up, social safety net component (e.g., job training for coal workers) can be seen as a more purposeful form of blended finance. Blended transactions aren't typically tied to a government's reform agenda but are driven instead by individual fund managers, who often have more accountability than a JETP's secretariat, given that they have monitorable track records that can help inspire confidence and raise capital. While investors also generally look to avoid politics, JETPs are inherently political, offering concessional finance to help distill political priorities to sectors and populations most in need of support. Blended finance and JETPs both lack easy models of efficiency and replicability, however, with steep learning curves for both.

John Murton, Senior Sustainability Advisor at Standard Chartered Bank, notes that we should distinguish between blended finance at the project level and the program-level. Within a blended finance program (like a JETP), many projects can be funded on a completely commercial basis but still fall within the JETP umbrella. Within such frameworks, donors agree to leave the funding of commercially viable projects (e.g., renewables) to the private sector, so that concessional capital can be directed to projects that will be hard to finance purely commercially e.g., coal phase-outs; retraining of workers; expanding the grid to cope with the variability of renewables, etc.

WHAT CHALLENGES HAS THE JETP MODEL FACED?

Jackson Ewing, Director of Energy and Climate Policy at the Nicholas Institute of Energy, Environment & Sustainability, Duke University, observes that the JETPs suffer from increasing incoherence between the different sources of public finance. The varied agendas, approaches, and conditions different donors place on their financing has led to a difficult set of conditions to be met by the JETP country's government, affecting its ability to effectively galvanize private sector financing as desired.

Phillips observes that while tracking how donors' concessional dollars are ultimately allocated can be difficult in a typical blended transaction, particularly at the fund level, it's even harder to do with JETPs since you're essentially dealing with less accountable fund managers. Therefore, there are practical challenges in terms of where the money deployed to a JETP sits and how it gets allocated, which is at odds with donors' need for clear deliverables and transparency. JETPs are also more open-ended and dependent on regulatory reform than typical blended transactions, so there's more uncertainty and deploying capital can take longer, which also makes it harder for participants in the agreement.

One JETP stakeholder notes that the headline monetary figures pledged to JETPs are not collective, fungible, or flexible pools of capital. With each pledge representing different mixes of finance, JETP countries must work out what finance is being provided from what sources, and the terms and conditions of accessing it, which isn't optimal.

Murton notes that a key constraint with the JETPs is the project pipeline, which in some cases is too narrow to deliver the goals of the JETP: there's only a trickle of projects coming through the pipeline because of the historical regulatory environment. In order to deliver the goals of the JETP, the MDBs and concessional finance may need to support the development of a larger pipeline of projects, with the private sector financing what's coming out the other end. Delivering at scale will be the challenge: the temptation of putting too much concessional capital into individual projects that could be funded by private capital must be avoided.

HOW CAN THE JETP MODEL BE IMPROVED?

Ewing suggests that the model could be inverted. Investment plans more explicitly designed to attract energy transition finance could be developed from the ground up in collaboration with potential financing countries beyond the G7 and private sector operators. Rather than high-level agreements on capital deployment preceding the creation of investment plans, the latter are created first and integrated within the recipient country's broader energy-mix goals. This can be supported by TA from a range of actors, modeling different energy systems and build outs and their price and emissions implications, with adequate training on climate finance being provided by governments, civil society organizations, and academic institutions.

Rizky Fauzianto, Manager for Southeast Asia, Global South Program, Rocky Mountain Institute (RMI), notes that with greater transparency over how much of what types of financing will be provided and how it will be provided to recipient countries, the latter can better estimate emissions targets and provide more detailed, ambition-aligned investment plans. Also, an early stated goal of the JETP process was to create a single consortium or point of contact from the donor side to support effective discussions and planning with recipient countries. At present, however, recipient governments must discuss potential priority projects with each donor. Finally, a common set of data, models, and corresponding technical analysis with full transparency on assumptions and inputs is critical to setting targets and aligning on just transition pathways.

KEY RECOMMENDATIONS FOR JETPs

With renewable energy generation and decarbonization being central to the climate transition, climate blended finance practitioners should look to support JETPs. However, JETPs face a multitude of challenges, as explored above. Convergence proposes the following action items to address these challenges:

1 JETP DONORS SHOULD SPEAK WITH A SINGLE VOICE.

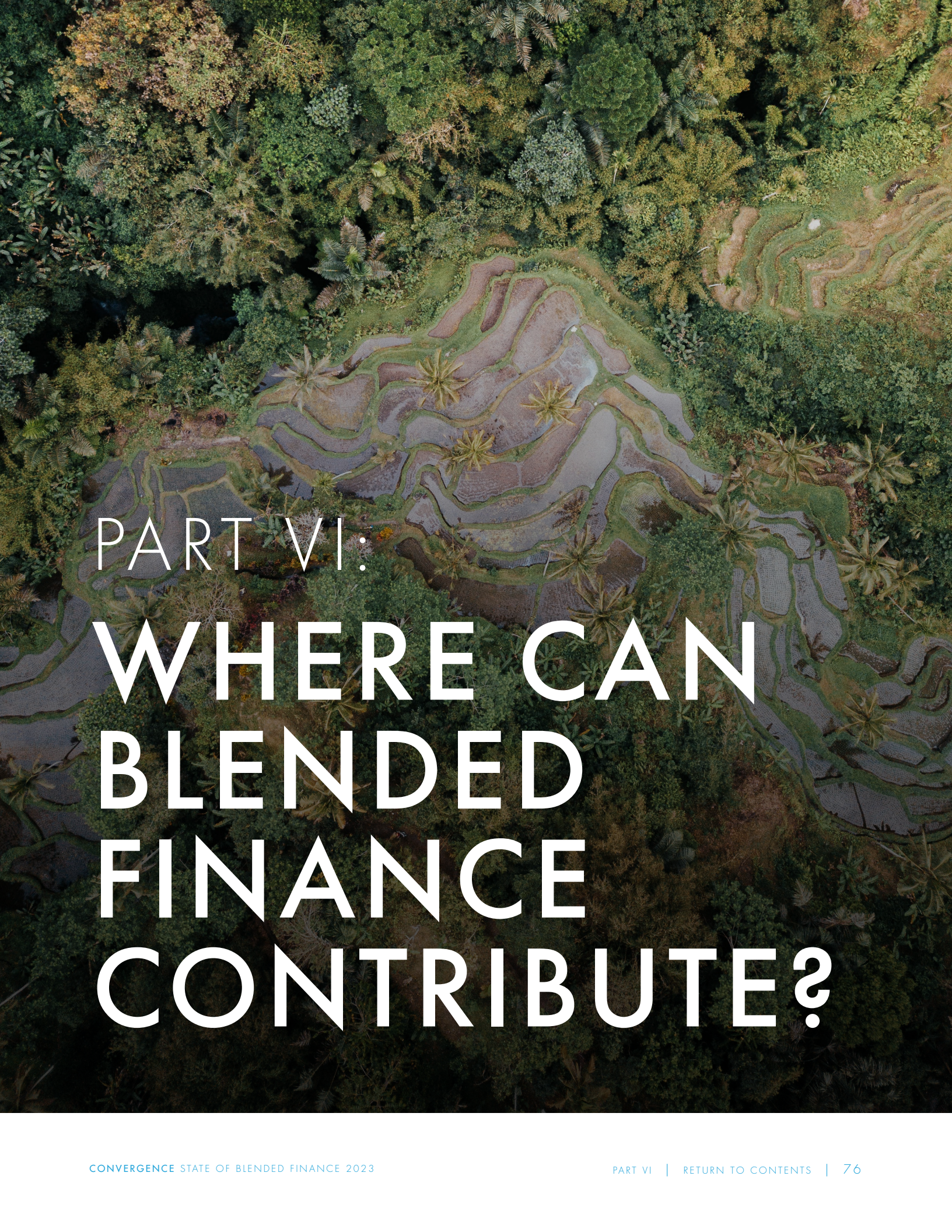
The time and resource-intensiveness of JETP governments navigating competing donor agendas should be addressed by donors forming a single point of contact with which JETP governments can interact. JETPs' efficiency would also be enhanced if donors

stated exactly how much financing they can provide and in what forms from the outset. Donors should also consider committing to collective investment vehicles that can reflect and balance different donor priorities and commit financing coherently.

2 JETP DONORS & COUNTRIES SHOULD BETTER DELINEATE PRIORITY AREAS FOR CONCESSIONAL AND PRIVATE SECTOR FINANCE.

Donors and JETP countries should identify what is and isn't financeable by the private sector as early as possible, direct concessional resources solely to areas currently unfinanceable by the private sector alone, and develop pipelines of bankable projects for the private sector to invest in. Donors and JETP countries should also consider developing energy transition investment plans outlining different funding options,

funding needs, and reform proposals as a first step, which can then be marketed to potential financing partners. Donors and philanthropic organizations should also support JETP countries with TA to help develop their investment plans and to help produce the technical modeling that should precede the creation of JETP targets.



PART VI:

WHERE CAN BLENDED FINANCE CONTRIBUTE?

PART VI: WHERE CAN BLENDED FINANCE CONTRIBUTE?

The State of Blended Finance 2022 [identified](#) several key challenges to achieving scale within climate blended finance, such as coordinating and implementing high-level capital mobilization plans, managing development trade-offs, and low levels of

participation from investors domiciled in developing markets. While these challenges and others persist, this year's report focuses on where blended finance can directly contribute.

1 Establishing a common taxonomy for adaptation finance

At its core, blended finance is a tool that solves for market failures. With respect to climate finance flows, one failure is the generation of positive and negative externalities in investment activity. For example, blended finance can price externalities such as biodiversity and resilience. To that end, adaptation becomes an immediate area where blended finance can contribute.

Adaptation finance remains underrepresented in the blended finance market, in line with overarching market findings. The investment barriers facing adaptation have been well-documented. One fundamental issue underlying many of these barriers is the lack of a clear taxonomy stating the parameters of what climate adaptation constitutes.

As shared by Koh of The Lightsmith Group,

“Adaptation needs to be seen as a broad and expansive category. The conceptualization of climate adaptation must be changed first; this in turn will be reflected in the pipeline of solutions that address the issue.”

At present, adaptation and physical risk disclosures have not been widely integrated within robust regulatory bodies such as the Task

Force on Climate-related Financial Disclosures (TCFD). As shared by Kennedy of Standard Chartered,

“Adaptation finance lacks a comprehensive reference guide; that is, a set of rules and guidelines like there is with the green bond principles or the social bond principles. Investors really like when things are structured in a way that they can understand and that's acceptable to them and their end investors.”

Moreover, with these risks being undervalued within investment opportunities, adaptation will continue to be seen as a “cost additive”.

As shared by Koh:

“There are very clear situations where resilience is not cost-additive, such as water efficiency – just like energy efficiency, water efficiency saves money and increases resilience. The assumption that everything that's adaptation or climate resilience has no business model or costs more money is an illusion.”

To this end, [GARI](#) and others are working to develop metrics and standards that provide a path forward on how physical climate risks should be priced into investments. Meanwhile,

initiatives such as [ASAP \(Adaptation SME Accelerator Project\)](#) have developed a taxonomy to better identify and qualify adaptive technologies and companies, recognizing that climate adaptive solutions span many vehicles.

For example, the [Joint Methodology for Tracking Climate Adaptation Finance](#) is conservative in that only the “project element” of adaptation activities within the overall transaction is reported as adaptation finance. This is to ensure that adaptation finance is not overreported within projects. To properly track adaptation finance, more harmonized guidelines on accounting methodologies are needed.

Additionally, a more expansive definition of adaptation comports with what our data reveals. Convergence data shows that one-third of total climate financing is invested in hybrid solutions. Most strikingly, 45% of institutional investments into climate finance are in hybrid solutions, compared to 35% in mitigation and 20% in adaptation.

Similar sentiments were echoed by Tam at the IEA, who shares:

“There is a need to start looking at the adaptation / energy nexus, because we need to find projects that are commercial and near commercial. It may be difficult to find commercial projects in other sectors, where the revenue streams aren’t necessarily there yet. A better understanding of adaptation investments in the energy sector can help to spur investments in adaptation investments.”

In addition to adaptation, there is a need for more taxonomies that apply to other key themes in climate, such as nature-based solutions and transition finance. IFC’s [Biodiversity Reference Guide](#) provides a structured approach to demystifying what biodiversity finance means to investors. GFANZ is refining its definition of transition finance to guide institutional investors on eligible investments that promote decarbonization. Ultimately, if the broader climate finance community begins to effectively outline a taxonomy for adaptation, concessional players could pay for adaptation benefits that are otherwise not monetizable. Furthermore, MDBs could also disclose and generate more data to support measuring benefits which will help scale blended finance.

2 Mitigating Currency Risk

In developing and emerging economies, currency volatility has often deterred consistent and substantive investment in climate initiatives. This volatility is accentuated by high-interest environments, contributing to an even greater currency risk.

Blended finance can directly address and mitigate these issues in climate and the broader development landscape. By combining public and private capital strategically, blended finance can create a more resilient and risk-mitigated environment for climate adaptation and mitigation transactions in developing economies.

For mitigation projects, like large-scale renewable energy, currency fluctuations can

drastically impact viability, given the need for major upfront investments and long-term returns. Introducing first-loss capital tranches, where public funds absorb currency shocks over the life of the investment, can safeguard private investor capital. Local currency swap facilities, also supported by public capital, shield investments from exchange rate swings. For example, an MDB could offer hedging products and credit enhancements to a solar project facing local currency devaluation and extended payback - reducing perceived risk and ensuring continuity.

Adaptation transactions are oriented towards equipping economies and communities for the realities of a changing climate. These projects

inherently demand more flexible financing models. Public investors can mitigate risk by offering local currency-denominated debt, shielding projects from foreign exchange volatility. For instance, a coastal defense initiative combating rising sea levels could benefit from debt financing in local currency, allowing funding consistency amid external shocks. Grants that fortify local financial institutions' ability to gauge and manage currency risks also breed confidence.

Hybrid mitigation-adaptation transactions need multi-pronged currency risk strategies, given their dual objectives. An agroforestry project blending carbon sequestration with agricultural resilience could thrive with revolving credit

facilities combined with risk-sharing mechanisms that evenly distribute exposure.

The ability of blended finance to address currency risks opens the door for substantially greater engagement from risk-averse private institutional investors in emerging market climate projects. With tailored de-risking structures enabled by public capital participation, perceived threats of currency fluctuations can be minimized to levels that no longer impede investment. This crowds in private finance at a greater scale to fund sizable adaptation infrastructure, renewable energy assets, nature-based solutions, and more.

3 Framing country-level platforms & partnerships

Blended finance can also directly contribute to the framing of large initiatives like JETPs, which represent a massive interlinked set of actions by a multitude of parties. Blended finance is effectively a structuring approach that places parties into specific roles that line up with their mandates. In thinking of a JETP as a meta-blended finance transaction, those leading their design may find a ready language for identifying the requirements and motivations of each of the players and a smoother pathway toward separating actions and expenditures out into those best taken on by national governments, community leaders, regulated and unregulated investors, and international bodies.

A blended finance partnership framing with respect to stakeholder roles and responsibilities can also help mitigate non-financial risks related to political actors, institutions, governance, and regulatory models. With respect to incorporating the conceptual characteristics of blended finance to country-level platforms like JETPs, Phillips of Duke University explains,

"I like the comparison [with blended finance] because it emphasizes how hard this is. There's not an easy handbook explaining how to do JETPs effectively and efficiently, or which

promises that a model that works in one country can be easily replicated in another. JETPs tend to have higher transaction costs as you're usually doing one for the first time or without having a lot of prior experience. This kind of learning curve aligns with the experience of blended finance in general."

Relatedly, Pinko at CPI has a similar application of blended finance to country-level financing platforms in terms of standardizing and categorizing.

"Each country's situation is unique, but there are common principles starting to emerge that can be leveraged to improve these country platforms. There can be some standardization in terms of how the risk sharing approaches and instruments needed in JETP countries are identified, as well as the relevant partners. Early involvement of key stakeholders like labor groups, community groups, and the private sector is widely applicable."

Country-level financing platforms, underpinned by blended finance risk sharing frameworks, can foster the specific alignment of national development priorities, climate policy initiatives, and global financing ambitions as well as the broader outcome of methodizing and categorizing for replication.



4 Optimizing the use of technical assistance

Blended finance plays a pivotal role in advancing climate financing goals through its provision of TA, offering targeted support to various aspects of climate projects. Firstly, it helps mitigate risks inherent in climate initiatives by bolstering the capacity of local stakeholders to identify, assess, and manage risks effectively. For example, in a renewable energy project in a developing country, blended finance partners may provide TA to local authorities, equipping them with the skills and knowledge needed to evaluate environmental risks and ensure compliance with sustainability standards.

TA further extends to building local capacity through targeted training and skills development programs. This investment in human capital ensures the long-term success and sustainability of blended climate initiatives. For instance, in a climate-resilient infrastructure project, TA may enhance the local construction company capacities in eco-friendly building practices and disaster preparedness.

TA also contributes to creating an enabling environment for climate investments by assisting governments in formulating climate-friendly policies and regulatory frameworks. In a developing country aiming to attract private investment in renewable energy, TA partners

may collaborate with the government to design tax incentives for clean energy projects. These policy adjustments help create a favorable investment climate, making it more appealing for private investors to engage.

TA additionally facilitates the establishment of robust monitoring and reporting systems. These systems ensure that climate projects adhere to sustainability standards and transparency requirements. Finally, TA can [help](#) address the data gaps that currently exist in climate risk mitigation models, as well as fund the creation of accessible knowledge products on best practices in structuring climate blended finance transactions. Developing programs and creating information databases that incorporate broad knowledge that can be easily accessed could in turn create a stronger ecosystem for investment. Convergence [found](#) that TA mainly provides support for renewable energy and agriculture transactions, meaning its usefulness in climate blended finance is already being recognized by investors and concessional grant providers.

Overall, optimizing the use of TA in these ways allows blended finance to better leverage concessional capital to strengthen climate financing efforts in a comprehensive manner.

5 Reducing financing costs for firms investing in the climate transition through national green banks

The creation of national green banks (public-purpose finance institutions [dedicated](#) to domestic green investment) can help to address the different challenges [raising](#) the cost of climate project financing for private investors, offering a degree of latitude in [designing](#) and implementing interventions and a focus on cost-effectiveness and performance. National green banks may be created as standalone institutions, or where possible, integrated within DFIs in order to leverage existing infrastructure. For example, the [Climate Financing Facility](#) (CFF) is a specialized lending facility and green bank housed within the Development Bank of Southern Africa (DBSA) designed to increase private investment in climate-related infrastructure projects in the Southern African Development Community. National green banks leverage their local expertise by developing innovative finance and market development solutions, from providing credit enhancements via loan-loss reserves or loan guarantees, to [providing](#) TA, to underwriting and then aggregating small-scale loans that can then be sold to the private sector. As noted by Thierry Watrin, Green Economy Advisor to the Minister of Finance, Rwanda:

“Some local companies in Rwanda providing decarbonized solutions were looking for more concessional financing opportunities. This was one of the inspirations for the creation of Rwanda’s Green Investment Facility, Ireme Invest, which was launched at COP27 by H.E. President Paul Kagame. It provides not only guarantees, which used to be the global orthodox way of financing the private sector, but looks to further lower the cost of financing by a very unique blended finance approach. The feedback from our private sector was that guarantees were necessary but not sufficient to effectively reduce the cost of financing; the Development Bank of Rwanda has also recently launched local currency sustainability-linked bonds, which positions Rwanda as an ideal investment destination for sustainable investments.”

Ireme Invest [consists](#) of a project preparation facility at Rwanda Green Fund, which offers grants to advance projects towards bankability, and a credit facility at the Development Bank of Rwanda, which offers credit guarantees and concessional loans.

6 Managing transition finance for coal decommissioning

Blended finance is a key tool in facilitating transition financing and coal decommissioning imperatives within the EMDEs. These regions often grapple with the dual challenge of rapid industrialization and the need for sustainable, low-carbon development. As the world pivots away from coal and other high-emission energy sources, the phasing out of coal operations in these economies is both an environmental and developmental imperative. However, the prohibitive costs and complexities involved in such a transition necessitate a nuanced financial

approach for market adjustments. Innovative finance mechanisms that can help support the phase-out process, as well as clarity on what constitutes transition finance, are needed.

GFANZ has provided guidelines on managing the phaseout of coal-fired power plants and the role of blended finance in this process. In June 2023, GFANZ’s APAC Network launched a [public consultation](#) on its proposed set of voluntary guidance for financing the early retirement of coal-fired power plants in Asia-Pacific as part of a just net zero transition. The consultation was

targeted at financial institutions with the goal of understanding what incentives are needed in order to increase their participation in managed phase-out transactions. Given that power stations in Asia are relatively young, a rapid phaseout risks stranding assets and will create investment losses for plant owners. As such, blended finance will have an important role to play in re-aligning financial incentives. GFANZ's Consultation names blended finance as a central financial level in enabling coal phaseouts, through the provision of concessional capital from MDBs and DFIs that can be used to refinance assets and reduce the cost of capital.

Finally, the use of carbon credits is one avenue being explored to support the coal transition. For example, MAS and McKinsey have recently launched a [working paper](#) that sets out the incorporation of high-integrity carbon credits as a complementary financing instrument to accelerate and scale the early retirement of coal fired power plants (CFPPs). This involves a few key elements:

- 1 quantifying the economic gap as well as the financing needed for the transaction to be viable;
- 2 leveraging revenue from the sale of high-integrity transition credits generated from retiring a CFPP early;
- 3 having a combination of different undertakings as mitigants against key transaction risks; and
- 4 assessing and implementing measures to ensure a just transition.



An aerial photograph of terraced rice fields. The terraces are filled with lush green rice plants. Some sections of the fields are covered with blue plastic mulch, and others have rows of yellow flowers. A small house with a red roof is visible in the bottom left corner, and a blue barrel is in the bottom right corner. The background shows dense green forest with palm trees.

PART VII: RECOMMENDATIONS

PART VII: RECOMMENDATIONS

How can the donor and investor community address the challenges facing climate blended finance to both identify the appropriate blended finance architectures in developing regions and drive private investments

at scale? Convergence's recommendations as an independent field builder in blended finance are as follows.

1 MDBs & DFIs should integrate climate and private sector mobilization KPIs into their operating models and prioritize data and analytics

As the largest source of public funds into blended finance and the most active investor set, MDBs and DFIs have a critical role to play in scaling blended finance for climate. Convergence [has previously outlined](#) how MDBs and DFIs can increase their private sector mobilization targets for blended finance. Namely, Convergence recommends that MDB and DFI shareholders establish a set of strategic KPIs that would guide MDB/DFI management to prioritize deeper integration with the private capital required to achieve the SDGs and fully embrace a de-risking partnership with donor governments and philanthropic foundations consistent with their existing risk mandates. MDB/DFI financial contributions to this more integrated approach would be through three types of financial commitments:

- 1 Originate and arrange higher amounts of financial assets in strong demand by investors, and distribute them to blended finance vehicles and investors.
- 2 Invest in mezzanine positions in blended finance vehicles aligned with existing MDB/DFI risk mandates, thereby creating more investment assets that meet the fiduciary obligations of private sector investors.

- 3 Originate and arrange financial assets in low demand by investors, but having high financial and developmental additionality, and hold those assets on their balance sheets when they cannot be distributed to blended finance vehicles and investors.

Moreover, additionally instituting measurable KPIs such as the reduction of GHG emissions or the number of communities made resilient to climate induced changes will improve accountability and better align with global climate objectives in allowing these institutions to track contributions to climate financing effectively.

There is a need to rethink data and analytics paradigms and MDBs and DFIs are ideally positioned to spearhead a move towards more forward-looking analytics. These institutions are mandated to ensure that their endorsed projects and initiatives are informed by predictive data that accurately captures the nature of climate risks. To truly drive solutions, these institutions need insights into the interplay between adaptation sub-sectors, such as agriculture, and structural factors like transportation and healthcare. Transitioning from a limited, infrastructure-centric perspective

to a comprehensive approach encompassing entire economies and societies is vital to ensure projects holistically address the dynamic and changing nature of our environment.

As noted by Koh, creating bankable projects in climate adaptation will require two problems being solved: data and analytics on the one hand, and products and services on the other. Analytics is required to establish the intersection between adaptation sub-sectors like agriculture and structural factors like transportation, buildings, and healthcare. That information must then be applied to products and services addressing those challenges at scale. The issue at hand, Koh observes, is the backwards looking nature of existing data:

“We’ve had weather data for a long time, and we have data on supply chains, how they’re affected by weather as well as data on agriculture stress and water scarcity, and so on. The problem is that the data is mostly backward-looking. The complexity of the environment and the risks it presents are going to become increasingly challenging. Thinking about adaptation solely in terms of infrastructure is counterproductive and limiting. Instead, you need to think about the whole economy and all of society and adapt all of that forever to a new set of conditions that will forever be changing. You have to assume the world’s going to change and keep changing forever.”

In that context, development banks need to adjust their data and analytics for the reality of future climate change, Koh observes; creating, for example, hydropower forecast data that adjusts for future drought conditions, and then requiring that this kind of data and analytics is present in the projects that they fund.

In fostering climate projects in low-income nations, collaboration is key. MDBs and DFIs must deepen their partnerships with national

banks to align on local climate plans. By working closely with national banks, MDBs and DFIs can ensure that their strategies are in harmony with local climate needs, leveraging their global perspective and resources to magnify the impact of localized efforts. The IMF underscores the pivotal role of MDBs in green infrastructure projects in less developed economies and highlights that by taking on a larger share of equity finance, adopting a more sizeable risk appetite, and mobilizing additional resources, these institutions can meaningfully advance climate objectives.

The IMF shares the below suggestions on the role of MDBs and DFIs in scaling climate blended finance:

“MDBs and DFIs are crucial to help set up climate projects in low-income countries. They can also help design and implement innovative financial instruments to leverage private investment and provide risk absorption capacity. A larger share of equity finance by these institutions, combined with greater risk appetite and additional resources, would help achieve these objectives.”

For less developed economies, green infrastructure projects will remain a key instrument, and MDBs will naturally play a key and long-standing role in developing such projects. More climate financing resources could be channeled through MDBs to support such projects by increasing their capital base and reconsidering their approaches to risk appetite via partnerships with the private sector supported by governance and management oversight. Ensuring internationally interoperable sustainable finance taxonomies and climate disclosures is essential to avoid fragmentation. Together with other international bodies, the IMF can play an important coordination and facilitation role, especially for countries that got Resilience and Sustainability Facility (RSF) financing arrangements.”

2 Optimize structures to navigate non-financial risks

Climate blended finance transactions in EMDEs continue to face myriad non-financial risks from political volatility, the influence of geopolitical actors, regulatory challenges, policy inconsistencies, and varying degrees of rule of law. While addressing the root causes of country risk would require long term institutional and structural reforms, many of which are underway, that method alone will not deliver the needed level of de-risking quickly enough. Therefore addressing such correlated risks is crucial to harness the potential of blended finance. A strategic approach that interlinks country-led partnership platforms, enhanced policy frameworks, and central bank guidance can transform some of these obstacles into opportunities, leading to improved climate finance outcomes.

One of the prominent non-financial risks faced in emerging markets is political risk, including the potential for abrupt policy shifts, regulatory instability, or the expropriation of assets. Geopolitical actors, particularly in regions with ongoing disputes or strategic competitions, can further compound this risk, potentially deterring private sector involvement further. It's crucial for blended finance structures to continue to incorporate mechanisms that safeguard against these political and geopolitical dynamics. For example MIGA provides political risk insurance and credit enhancement to investors and lenders and has used the IDA Private Sector Window to do so on concessional terms. The presence of such guarantees also serves to fortify country-led partnership platforms, ensuring that all stakeholders have confidence in the stability and sustainability of their investments. Country-led partnership models can themselves prove transformative in mitigating non-financial risks.

By deepening collaboration, such initiatives can address challenges around the intricacies of individual markets, the rule of law, and other country-specific nuances. Creating platforms that allow for transparent dialogue and risk-sharing among stakeholders will enhance the efficacy of blended finance transactions.

Regulatory impediments and policy issues often remain and stifle climate finance objectives. IMF explains that to better mobilize private capital, the market will need to tilt away from the fossil fuel sector, which is hampered by price volatility and supply disruptions. The market will also need to embrace certain policy objectives including more effective carbon pricing, closing the climate-related data gaps and establishing a more developed climate information architecture, improving data disclosures, and incentivizing R&D. Further, certain EMDEs can benefit from the IMF Resilience and Sustainability Trust (RST) financing. This is a financing facility that could play a catalytic role by helping develop a conducive investment climate through reforms that improve the regulatory environment.

Finally, the role of central banks in climate blended finance cannot be understated. They are strategically positioned to amplify the reach and impact of blended finance in emerging markets by identifying and mitigating regulatory and policy impediments. MAS clarifies,

“Central banks can play a role in identifying potential regulatory, market or policy barriers that hamper the scaling up of climate transactions as well as foster increased public-private collaboration to meet the mid-century net zero targets.”

VOICES FROM THE FIELD:

Interview with MAS on How Governments and Regulators Can Support the Net Zero Transition

First, carbon pricing needs to be adopted more widely globally, and it needs to be higher and applied more broadly.

In ASEAN, only 4 out of 10 countries have implemented either a carbon tax or Emission Trading Scheme. However, the right price on carbon sends a powerful signal and is arguably the single most important measure to help decarbonise the economy.

Second, globally recognised, credible and science-based sectoral transition pathways are key in guiding transition plans by financial institutions and their clients, to enable the flow of transition finance.

Although credible science-based sectoral pathways aligned with a 1.5C world are already in place for some sectors e.g., the IEA's NZE 2050 scenario, many sectoral pathways do not adequately consider the regional context. This is important for the pathways to be implementable, as different regions face different socio-economic circumstances. MAS is engaging international sectoral bodies, such as the IEA, to support the development of credible decarbonization pathways for Asia.

Third, having a reliable and interoperable taxonomy

can help allay concerns surrounding potential greenwashing and reputational risks, and in turn improve the credibility of cross-border transition financing flows. The Singapore-Asia and ASEAN taxonomies, which MAS has been involved in the development of, cover not only the green but also the amber categories to cater for the need for significant transition in this part of the world. In addition, MAS will continue to be actively involved in international forums to promote and achieve interoperability across national taxonomies.

Lastly, financial regulators should set clear supervisory expectations for financial institutions to have in place a sound transition planning process and to develop and implement credible transition plans.

For Singapore, MAS has just published draft supervisory guidance on transition planning for financial institutions for public consultation.



3 Incorporate & integrate philanthropic capital

The landscape of climate finance has seen an increasing shift towards utilizing various forms of capital to address the monumental challenges of climate change. While traditional donors have always been at the forefront, integrating philanthropic capital offers a fresh, flexible, and innovation-driven approach to financing climate solutions. Philanthropic institutions, with their capacity for risk-taking and their commitment to creating social impact, have the potential to act as true catalysts, bridging gaps that other forms of capital can't. Between 2017-2022, philanthropic organizations provided 10% of all concessional capital commitments to climate blended finance, indicating there is a large but unrealized opportunity to expand their participation in blended finance. As stated in [Convergence's Action Plan for Climate and SDG Investment Mobilization](#), co-authored with USAID, it is essential that the supply of catalytic capital be increased to achieve sufficient levels of private sector mobilization, of which philanthropic capital represents a critical but underused source. Convergence finds that if deployed strategically, catalytic capital could mobilize \$286 billion in private capital, seven times current levels of mobilization by the entire development and climate finance systems in a typical year, and 14 times the average private direct mobilization reported annually by the MDBs & DFIs.

A testament to the transformative role of philanthropic capital can be observed in initiatives supported by various foundations. For instance, the Good Energies Foundation's early-stage backing of grantees through the SDG Impact Finance Initiative's Innovation Design Funding Window showcases how philanthropic capital can unlock avenues for market acceleration and shape enabling environments. This funding window, backed in part by the UBS Optimus Foundation and the Credit Suisse Foundation, acts as a market signal, spotlighting the innovative finance solutions that can mobilize private capital for sustainable ventures in emerging markets.

Furthermore, the emphasis by recognized philanthropies like the John D. and Catherine T. MacArthur Foundation on climate solutions, or the ground-breaking work in the climate sector by the Wallace Global Fund, exemplify the width and depth of possibilities that philanthropic capital can unearth. These institutions are not only laying the demonstration trail for others, but also embedding climate solutions as a vital part of their philanthropic mandate.

Incorporating mechanisms such as PRIs can also be instrumental in deepening impact. PRIs serve as a bridge, combining the intent of charitable giving with the mechanisms of below-

market investment, thus de-risking ventures and attracting more traditional forms of capital. When combined with incentive-laden tax schemes, like that promoted by MAS to encourage single-family offices to use Singapore as a base to conduct philanthropic activity, the benefits of philanthropic capital become even stronger, offering both social impact and financial returns. Similar localized efforts, like those in Brazil, where philanthropists and impact investors are pushing for tax code amendments, are laying the groundwork for innovative finance strategies.

Lastly, the inception of coalitions like GEAPP, a robust alliance steered by three philanthropies,

and other governmental and financial partners, underscores the collective commitment of varied stakeholders. By pooling resources, expertise, and outreach capabilities, GEAPP can significantly impact the climate finance landscape.

As the world grapples with the urgency of climate change, the nimble, experimental, and impactful nature of philanthropic capital emerges as an example of optimism and opportunity. By aligning with global and local mechanisms, and forging strong collaborations, philanthropic entities can lead the charge, setting new frameworks for mobilizing the private sector through climate blended finance.

4 Empower LDCs & champion bottom-up approaches

The prevailing top-down approach to country finance platforms often prioritizes global climate transition aspirations and overlooks the unique perspectives and expertise present within LDCs themselves. Redirecting the focus towards a more grounded, LDC-centric model can yield robust, sustainable, and community-aligned outcomes that better reflect on-the-ground realities and priorities. Phillips, of Duke University speaks to this directly noting,

“Developing countries must have a similar sense of what a just transition looks like; this must be locally determined through a bottom-up consultative process to get something durable that the private sector feels confident in putting their money into. It can’t be some top-down feasibility study pre-determining which countries and which projects will be funded.”

LDCs possess intimate knowledge of their sectors and communities most vulnerable to climate change impacts. By prioritizing interventions based on this local-based insight, LDCs can develop customized platforms that resonate with local needs. For instance, [SDG Indonesia One](#) provides a roadmap that

tailors sustainability goals to national priorities, leveraging local knowledge to address challenges. Similarly, the [Africa Climate Adaptation Country Compacts](#) is a country-led tool and part of the African Adaptation Acceleration Program that delineates key investment priorities, financing requirements, and strategies to mobilize finance for adaptation. These investment solutions will take a coordinated country-driven approach that connects the priorities of National Adaptation Plans and other national climate strategies with financing from development partners and the private sector. Ultimately, robust climate blended finance adaptation and mitigation initiatives require nuanced understanding of ground-level challenges.

Proactive efforts by LDCs to engage the investment community can also boost pipeline development and attract commercial capital. Showcasing successful initiatives, presenting clear data on returns, and demonstrating government support can serve as potent signals to the broader commercial investment community. For example, Ethiopia has taken

a significant proactive step in onboarding a dedicated blended finance advisor within its Ministry of Finance. This not only indicates the nation's commitment but also serves as a best practice for other LDCs. By having dedicated personnel or teams, LDCs can better prepare, develop, and launch projects, ensuring they are aligned with investor expectations and local needs.

While each LDC faces unique circumstances, universal priority sectors like agriculture, renewable energy, and infrastructure typically require attention. Pinpointing these areas, identifying opportunities in other urgent sectors like sustainable food and clean water, and demonstrating supportive policies and success stories, can position LDCs to best engage with cross-border capital partners.

Bundling country-specific complexities into digestible “packages” can further bridge the gap between top-down conceptual approaches

and bottom-up realities. Partnerships across countries, sub-regions, and regions can create a cascade of knowledge sharing and simplify the investment process. For example, as noted by Ewing, greater South-South cooperation can help to improve the functioning of future JETPs:

“Internationally minded stakeholders could help to bring actors in different developing countries together in the development of their investment plans and roadmaps, facilitating the sharing of learnings.”

Such collaborations can assist in fine-tuning transaction designs, understanding best practices, and launching projects with a higher probability of success. Recognizing LDCs as partners with insider insights, rather than just as recipients, can empower them to spearhead more inclusive climate finance country frameworks rooted in reality, sustainability, and inclusivity.



APPENDIX

A DEEP DIVE ON THE JETPs

Convergence interviewed a selection of stakeholders in the JETP ecosystem. We explored their perspectives on challenges that the JETPs have faced, the opportunities that exist, the extent to which JETP models are

scalable, and what measures the development community can take to better support the energy transition in developing markets¹⁷.

HOW SIMILAR IS THE JETP MODEL TO BLENDED FINANCE? ---

Phillips, Duke University:

There are some slight differences. JETPs that can build local legitimacy by having a grant or social safety net component (e.g., job training for coal workers) that is bottom-up and driven by the host country can be thought of as being a more purposeful and impact-oriented form of blended finance. Blended finance transactions are not typically coupled to broader changes in government policy or a reform agenda, but rather are shaped and driven by individual fund managers, who in some ways have more accountability than the secretariat of a JETP. Fund managers have track records that can be monitored, which can inspire confidence and help in raising different types of capital. A JETP's secretariat, however, may lack the track record and accountability required to gain the trust of the different investors needed for the JETP to work.

The political component is also a key differentiator between a typical blended finance approach and a JETP. In the investing world, we're generally careful about politics and want to avoid it. The whole benefit of a JETP, however, is that it is inherently political; you're dangling some concessional money out there with the hope of it being a driver of a domestic conversation that distills political priorities to the sectors and populations that are in most need of support. You're trying to use this process to build consensus around a set of finite projects identified as being most important to the climate transition.

However, I like the comparison because it emphasizes how hard this is. There's not an easy handbook explaining how to do JETPs effectively and efficiently, or which promises that a model that works in one country can be easily replicated in another. JETPs tend to have higher transaction costs as you're usually doing one for the first time or without having a lot of prior experience. This kind of learning curve aligns with the experience of blended finance in general.

Murton, Standard Chartered:

We should distinguish between blended finance at the project level - where you're putting together a capital stack that meets the required rates of return for commercial lenders by including concessional finance from donors or philanthropy - and blended finance at a program-level. Within a blended finance program - like a JETP - many projects e.g., solar farms may be funded on a completely commercial basis. Nevertheless, they fall beneath the JETP umbrella and their bankability might have been improved by reforms associated with the JETP. Within such frameworks, donors agree to leave funding of commercially viable projects (e.g., renewables) to the private sector, so that concessional capital can be directed to projects that will be hard to finance purely commercially e.g., coal phase-outs; retraining of workers; expanding the grid to cope with the variability of renewables, etc.

¹⁷ Convergence interviewed the following individuals for this deep dive on JETPs: Jackson Ewing, Director of Energy and Climate Policy at the Nicholas Institute of Energy, Environment & Sustainability, Duke University; Rizky Fauzianto, Manager for Southeast Asia, Global South Program, RMI; Claire Healy, Senior Associate, E3G; John Murton, Senior Sustainability Advisor, Standard Chartered Bank; Nicole Pinko, Manager, CPI; and Jonathan Phillips, Director of the James E. Rogers Energy Access Project, Duke University.

WHAT CHALLENGES HAS THE JETP MODEL FACED?

Ewing, Duke University:

There is an increasing incoherence between the different sources of public finance at the foundation of the JETPs. This is the primary complaint of the recipient countries, even at an early stage in a country like Indonesia, where the varied agendas, approaches, and conditionalities placed on the finance provided by different donors have led to a difficult set of conditions that have to be met by the Indonesian authorities. These conditions then must trickle down into their own commercial spaces. In the absence of greater coherence, it might be difficult to see the sort of galvanized funding that they seek to elicit. Of course, that doesn't mean there won't be private sector or philanthropic funding. However, the evidence that JETPs, because of their structures or approaches or goals, will necessarily be more successful at galvanizing true blended finance between the public and private sector hasn't been clear.

Phillips, Duke University:

Tracking how each concessional dollar deployed is ultimately allocated can be difficult for donors in a typical blended transaction, particularly at the fund level, but it's even harder at the JETP level because you're essentially dealing with a less accountable fund manager. MDBs have greater latitude to deploy concessional funds in a way that the fund manager enjoys some flexibility over how the money is spent while maintaining some kind of accountability, but development agencies generally can't do this in the same way. They can't deploy concessional funding to a JETP secretariat without more stringent accountability metrics being in place.

Consequently, there are real practical challenges in terms of where the money deployed to a JETP sits and how it gets doled out and who's responsible for which ribbon cuttings, and so on. In the broader multilateral context, everyone typically gets invited to the ribbon cutting so to speak, but that hasn't been the JETP model to date. Instead, each JETP has had a different configuration of individual donors committing concessional financing, with donors' need for clear

deliverables and transparency in how the money is spent at odds with how the committed financing has been allocated historically. A typical blended facility can also easily commit to deploying funds, which aligns with how GPs and donors normally operate. JETPs, however, are a little more open-ended and are dependent on regulatory reform and other factors, so there's more uncertainty and deploying capital can take longer, which makes it harder for participants in the agreement as well.

JETP Stakeholder:

While the IPG donor countries pledged headline monetary figures for the Indonesian and Vietnamese JETPs, these were not collective pools of capital; they're not as fungible and flexible as one would ideally like. Each IPG country pledged some money, with each pledge representing a different mix of finance; that is, some was TA, some was grants, some was even guarantees rather than actual lending. What the JETP countries end up having to do is work out what the finance is that's being provided, where it sits (e.g., an MDB, a DFI, or a fund), and the terms and conditions of accessing it. It's not optimal. I don't think there's a world where donor countries suddenly stump up large sums of high-quality, perfectly usable, fungible finance. That's not to say at some point in the future donors might not pool financing into a fund that can then be deployed more systematically, it's just not where we've started from. However, one advantage to this is that if a JETP country does have priorities that it doesn't have the right kind of financing for, other donors and financing partners can be solicited to fill the gap. Also, the JETPs do at least bring together governments, project developers, and private finance, and you can problem solve on what can and cannot be financed.

Ewing, Duke University:

I do recognize the value in bespoke finance packages that are catered to the needs of specific sectors and contexts and that raise the potential for governance reform in recipient countries.

There is real value in putting forward these country-level portfolio packages of finance as a target for recipient countries to chase, as inputs into a system that creates action that wouldn't otherwise exist. That's certainly been the case in South Africa and Indonesia, but the extent to which these approaches will crowd in more private capital than other approaches that have been taken, I'm not sure I see why that would be the case.

JETP Stakeholder:

A lot of the blending we see is public on public blending. If a project is bankable, it's not clear what the benefit of blending public money with other public money is. Our aim is to get the private sector financing things that are commercially bankable. Going forward, public on private blending won't be needed in vanilla renewables, but instead in more complicated dispatchable renewables and in grid. However, it'll take time to generate the project pipeline for this.

Murton, Standard Chartered:

A key constraint with the JETPs is the project pipeline, which in some cases is too narrow to deliver the goals of the JETP: there's only a trickle of projects coming through the pipeline because of the historical regulatory environment. In order to deliver the goals of the JETP we may need the MDBs and concessional finance to support the development of a larger pipeline of projects, with the private sector financing what's coming out the other end. Vietnam, for example, has taken on the net zero 2050 target, which is incredibly bold and ambitious for an emerging economy in Southeast Asia. The implication of that is they're going to need a lot more solar and wind than was previously anticipated. The market, however, hasn't currently got those projects coming through the pipeline, and so that's why concessional finance is needed. Delivering at scale will be the challenge: we must avoid the temptation of putting too much concessional capital into individual projects if they could be funded by private capital.

ARE DONORS LEARNING FROM THE EXPERIENCE OF PRIOR JETPs?

Murton, Standard Chartered:

South Africa's JETP began as a government-to-government affair, but it was realized early on that there was a need to involve the private sector at scale. Donors committed \$8.5 billion of concessional finance, but the investment plan unveiled a year later called for \$97.5 billion of overall investment; a ratio of one-to-ten of concessional to private sector capital. Consequently, when preparing the Indonesia and Vietnam JETPs, host governments worked very closely with GFANZ to ensure that the banks were serious about supporting the financing of their energy transitions.

With the South African JETP, partners quickly identified the need to focus the concessional finance that was available in the places it was most needed. So, rather than use concessional finance to deliver new generation capacity, reforms were made so that investments in new wind and solar could be financed purely commercially. For example, the South African government has been lifting limits on embedded generation, which has led to companies that are consumers of power borrowing to invest

in embedded generation. The JETP's concessional finance is now focusing on the areas where the private sector would find it difficult to finance projects on its own e.g., supporting new industrial development in mining areas.

Ewing, Duke University:

I'm not sure that we saw some of the big structural roadblocks in the South African case and meaningfully addressed them in the Indonesian case. Take the key characteristics of this approach; that is, there's a large announcement of a nice round number of capital deployment announced in a very public manner at a major international convening, which will be followed by much of the work to undergird that agreement in the form of building out investment plans, and trying to do the sorts of government reforms that are called for explicitly in the Indonesian JETP, and so on. This follows many of the same patterns that were established in the South Africa case. As for whether the financing countries are hearing the

complaints from the recipient countries and are heeding them, I think they're absolutely hearing those complaints. We've heard from South Africa and Indonesia quite explicitly that the transaction costs are very high, and that it is quite difficult for them to have any kind of investment certainty when they're dealing with multiple pots of money without a clear hierarchy in terms of risk mitigation, and with different conditionalities and with different financing structures from those different pots of money. In other words, the JETPs are packaged like pools of collective capital, but they're not operating like that.

However, donors have no appetite and potentially no governance flexibility to create what these recipient countries really want. They're not going to pool the money within a single facility and have it be truly collective in that way because they don't see eye to eye exactly on how it should be spent. They view their own constituencies as having some say over how their outbound investment is operated, and that goes from large questions about whether this should be about coal station retirements, to much more tedious questions about what forms must be filled in terms of impact assessments, what procedural arrangements should be in place to ensure there's no graft, and so on.

HOW CAN THE JETP MODEL BE IMPROVED?

Ewing, Duke University:

The model should be inverted. Country-level portfolio investments supporting the energy transition could come from places other than G7 countries. You could have investment plans more explicitly designed to attract energy transition finance being developed from the ground up by potential financing countries and potential private sector operators interested in entering markets previously untouched due to risk concerns or other market barriers. So, rather than the high-level political agreement with a nice round number preceding the creation of an investment plan, the investment plan is created first and is integrated within the recipient country's broader energy-mix goals. The goal is to give discrete, specific, country-level attention to building out a roadmap for an energy transition, with the explicit intention of attracting public and private blended finance. If we bring the countries and companies that can provide that finance along in that process, rather than just dropping the roadmap on their desk when it's done, then you're getting into the realm of more effective dealmaking or at least matchmaking.

This is something that should be supported by TA from a range of actors, working to model different energy systems and build-outs, and their price and emissions implications, with adequate training on climate finance being provided by governments, organizations, academic institutions, and so on. This wouldn't be people from the Global North

swooping in and solving all these problems, but instead bringing some capital to galvanize the effort to build those investment plans. There's a role for philanthropy here, too: working with local consultancies, universities, and think tanks, helping to gain government buy-in for the pursuit of building those roadmaps from an early stage, and doing this in a range of countries with high energy transition potential.

Fauzianto, RMI:

Transparency is key. While timing in negotiations is tricky and good intent isn't in question, one key challenge to the JETP model is a lack of clarity and transparency over how much of what types of financing will be provided and how it will be provided to recipient countries and institutions. With greater transparency, the recipient countries can better estimate emissions targets and provide more detailed, ambition-aligned investment plans. The current lack of transparency results in a lack of confidence or significant adjustments late in the investment planning process. Expectations of what would be offered have not yet lived up to reality. For example, recipient governments have found it difficult to know the exact amount and forms of financing that will be provided by each funding source and must discuss potential priority projects with each donor. An early stated goal of the JETP process was to create a single consortium or point of contact from the donor side to support effective discussions and planning with recipient countries.

There is also an opportunity to improve transparency on the technical analysis and modeling that underpins the creation of JETP targets. A common set of data, models, and corresponding technical analysis with full transparency on assumptions and inputs is critical to setting targets and aligning on just transition pathways. We have seen the power that a common, impartial fact base can have on supporting greater collaboration. It has been a critical component to the JETPs and greater transparency will serve to support deeper collaboration.

Phillips, Duke University:

JETPs thus far have been mitigation-focused, centering on large emitters. However, these are not necessarily the countries that will see huge growth in emissions over the next twenty years. So, the question is whether we can use the JETP construct to get at more than just those top, already high-emitting emerging markets? And if we can, we must start thinking about things besides coal,

because coal retirements aren't necessarily the key transition issue in those markets. JETPs would have to respond to those countries' specific needs. The donor community has conceived JETPs as a mitigation-only framework, but there are countries who need serious investment in agriculture or transport, or there might be sizable opportunities in forestry or places where carbon markets can be quickly scaled. Countries without coal issues need to be able to access the JETP model. Are there ways of bringing in different tools or different types of investors who can access different types of projects beyond a purely power-sector or coal displacement play? If so, this opens a new set of knowledge, capacity, and planning questions that governments and TA providers need to address. Rather than focusing on simply rolling out more JETPs, we should explore how we can open the playbook from a sector perspective and incentivize countries whose investment needs are different but significant.

ARE THERE ANY SIGNS THAT THE JETP MODEL IS EVOLVING? ---

Ewing, Duke University:

Consider Colombia, which has built a roadmap for its energy transition that presents different options, conditionalities, funding needs, avenues of profitability for commercial actors, and ways in which ministries could be reorganized and given different levels of autonomy or mandates to advance. Once this kind of compressive roadmap has been built and integrated within your energy transition plans, you can market it to public and private sector actors around the world, rather than G7 nations just leading with an announcement that they're going to commit \$10 billion in public capital and will look to raise an extra \$10 billion in private capital. While this approach would crowd in capital at a country level, it's still quite bespoke and oriented towards a sector-wide energy transition. In that way, it could still have the outputs we look for from a JETP, but with the model slightly inverted.

One could argue, however, that the kind of model I'm advocating is just business as usual. Building out plans for an energy transition and thinking about how you finance them is not a new idea, and part of the beauty of the JETP is that, while you don't know

how the money's going to come, or if it's going to materialize in the way that it was intended and how the blended characteristics will play out, if at all, it still makes a public financial commitment to supporting the energy transition in a particular country, which has a galvanizing effect of making something real. The risk of what I'm advocating is that it never becomes real. It's just an exercise in planning and coordinating and thinking through new ideas, but it's not guaranteed that it will follow from that that you get the kind of country-level investments that's at the core of JETPs' existence. That's the big risk, that there's not much to it unless it does mirror the JETP model and attract sovereign investment commitments to crowd in private sector capital.

Healy, E3G:

The question is if you remove the IPG from that lead role, who provides that high-level political impetus and leadership? You still need someone reputable outside the system to organize the pieces together, to bring together different donors and the host government and to move the process along.

ARE JETPs SCALABLE?

JETP Stakeholder:

We need to be nimbler across countries to see what's bankable and then, where it isn't, to problem solve specifically for what the issues are, which can be quite labor intensive, with lots of complex stakeholder relationships to manage. We're trying to reach an agreement on how to proceed, which would allow us to then start to scale the solutions, but we're not quite there yet.

Pinko, CPI:

Each country's situation is unique, but there are common principles starting to emerge that can be leveraged to improve these country platforms. There can be some standardization in terms of how the risk-sharing approaches and instruments needed in JETP countries are identified, as well as the relevant partners. Early involvement of key stakeholders like labor groups, community groups, and the private sector is widely applicable. Early formal analysis of where the space is for the private sector versus the public sector to maximize additionality is also universally relevant. For example, in South Africa upgrades to the distribution grid are publicly funded, so we need to examine what project types will be most attractive to the private sector, like financing replacement renewables. It's challenging to discuss standardization because there have only been three JETPs so far, but as each progresses, we can identify similarities and lessons that can be applied elsewhere.

Phillips, Duke University:

Rolling out more JETPs will take a while. They consume a lot of donor bandwidth and some donors have limited appetite to enter a new set of JETPs. I don't think we're close to having high amounts of capital flowing; we need to be patient. For JETPs to really be effective, they need to be coupled with policy change and regulatory reform. However, even in well-functioning governments and legislative bodies, that is not an easy lift and takes time. The extent to which JETPs sufficiently consider all vulnerable industries and populations in their investment plans is also unclear and ultimately must be addressed through the domestic political

process. If the JETP model is going to be rolled out across different countries at scale, a useful exercise would be engaging governments in non-JETP countries like Kenya or Uganda to help determine early-on the key constituencies that need to be supported, how concessional capital would be deployed to support the energy transition if it was made available, what the potential projects would look like, and so on. These are the questions that we really need answers to if the JETP model is to be rolled out at scale.

The JETPs I'm most familiar with aren't easily replicable in other countries. The way that Indonesia, for example, has so much Chinese capital wrapped up in relatively young coal-fired power plants is similar perhaps to a country like Pakistan, but you can't take that sort of model and the same people that worked on that and just take them to another country. There's not a clearly replicable form of agreement amongst the current JETPs. However, once you look beyond the middle-income countries towards the next tier of countries, the more they start to be in similar positions with their populations, existing energy profiles, existing age of assets, fuel mixes, renewable resource endowments, and so on. You could see something working similarly in one country to another, where commercial actors that have been mobilized by concessional capital in one country may enter a market with similar characteristics.

However, we're not really working on those countries yet, but if we're looking to scale the JETP model to 25-30 countries we need to figure out which set of countries are broadly comparable and see what's scalable. However, these countries must have a similar sense of what a just transition looks like; this must be locally determined through a bottom-up consultative process to get something durable that the private sector feels confident in putting their money into. It can't be some top-down feasibility study pre-determining which countries and which projects will be funded. While we've put a lot of money into TA around the NDCs, we're not where we should be yet in terms of being able to define what a just transition means locally. We don't have energy

systems modeling or emissions projections for most developing countries, or the basic data baselines that would support the analysis and forecasting needed to set priorities and make decisions.

At this stage, it makes me uncomfortable talking about replicability, knowing every country in SSA, for example, is so different, and the idea that we need to find some way to deliver scale on the back of the similarities that exist feels somewhat awkward. There may also be a negative in-country reaction to being compared to a neighbor that you don't feel connected with. This is all very fraught and we're still in the early days of it. There's a lot we still must learn about what worked and what didn't, about where expectations were out of line and where new things need to be tried.

Ewing, Duke University:

I share the goal of having more JETPs that are better capitalized and that enjoy lower transaction costs as we learn and as we standardize. To use the language that we're hearing out of Indonesia specifically, they're calling for syndicated finance among the financing countries; whether we could get a limited pool of syndicated finance that's a part of JETPs'

allocations is unclear, but there may be some potential there. However, the appetite amongst some funder countries to finance more JETPs is also uncertain, given the amount of work involved and the fact that they're not paying the desired dividends for the energy transition yet.

A more inverted approach to building out investment plans and then seeking the funding at a portfolio country level could help solve for this by having a simplifying effect, avoiding the long negotiations and uncertainties about what the JETP will be and how it will operate after the commitment has been made by presenting a roadmap and a set of opportunities that you can opt into at varying levels, but which still has some coherence, so it isn't just a collection of projects that would take us back to the more pre-JETP approach altogether.

However, overall, I support the ideas of lowering transaction costs, proving out effective approaches, and using those as models to learn lessons. More South-South cooperation could also be possible here. Internationally minded stakeholders could help to bring actors in different developing countries together in the development of their investment plans and roadmaps, facilitating the sharing of learnings.



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