STATE OF BLENDED FINANCE

2022 CLIMATE EDITION

CONVERGENCE
BLENDING GLOBAL FINANCE

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LETTER FROM THE CEO

In this edition of our annual State of Blended Finance Report, we decided to pivot and focus on climate, rather than the state of the entire blended finance market as in previous years.

The reasons for this are manifold and discussed in more detail in the report, but essentially the point of blended finance is to solve for very large problems, and we recognize that climate change is the ultimate universal problem. In the same vein, if we do not confront the spectre of climate change, none of the other Sustainable Development Goals stand a chance of being achieved. In fact, we may go backward.

As public discourse concerning development and climate finance has intensified, the word 'urgent' has lost its power. So let me just tell you this: at a time when the rhetoric around mobilizing private capital for climate action has been mounting, we have seen blended finance flows towards climate decline. It's a startling finding at a time when every tool should be in use. It's a stark reminder that we must go from talk to action.

At Convergence, we are not climate change or climate finance experts; many people and organizations know the technical aspects of both better than we do. But we are blended finance experts, and our focus is to bend the arc of capital so that it starts flowing at scale into places that need it most. Until capital is flowing readily into all aspects of this universal challenge, we have a contribution to make in sharing how blended finance can help foster action and a role to play in providing the evidence that will inform climate financing decisions.

Our hope is that we are at a tipping point and that the real-world data and opportunities presented in this report can act as a catalyst to get us to where we desperately need to be. We do not have the luxury of time as this is an all-of-the-above moment. To solve for this challenge and ensure that we can put everyone on a path to a more sustainable and resilient future, we will need everyone's contributions and all approaches at the ready. Blended finance should be one of the tools we reach for to accelerate our response to this challenge.

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 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 greenhouse gas 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 greenhouse gases 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.

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 greenhouse gas 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 greenhouse gases 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.

GREENHOUSE GASES (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 gases (synthetic).

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 greenhouse gas 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 1.5°C. 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 gases emitted into the atmosphere is equal to the amount of greenhouse gases 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.

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 will feature a thematic focus, for the first time, on blended finance for climate. This theme was chosen for a couple of reasons. Firstly, climate change is a central focus of the blended finance market and a major development issue: two-thirds of blended finance commitments over the past three years and 33% of Official Development Assistance (ODA) in 2020 targeted climate-related investments. Secondly, and closely linked, the topic of climate finance is a core priority for private investors, as purported by their ESG strategies and increasingly through commitments to achieving a Net Zero transition. Therefore, climate-aligned Sustainable Development Goals (SDGs) will continue to be a focus of private investors compared to other SDGs.

This momentum behind "purpose" investments, such as ESG investing, sustainable finance, and impact investing, has further increased private sector interest in investment assets aligned with climate. However, private investors evince a low appetite for investments in developing countries and frontier markets. As private investors continue to grapple with how best to invest in climate opportunities, particularly within developing countries, blended finance becomes increasingly apposite.

For blended finance to respond to the deluge of interest generated by the momentum around climate and play a key role in capital direction setting, two things must occur. First, increasing the supply of concessional capital is necessary to structure right-sized and more inclusive climate blended finance transactions. Second, knowledge around climate blended finance deals – mitigation and adaptation alike – must expand to deliver the evidence base for climate blended finance decision-making moving forward.

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 reviews recent downturns in sustainable investment and points at 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 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 mitigation-adaptation blended finance.

They are further broken down across vehicle type, geographic region and country, country income level, end beneficiaries, 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. The disparity between mitigation and adaptation blended finance is further explored through key stakeholder interviews with experts in the field.

PARTS V & **VI** highlight key challenges and recommendations on the respective role climate blended finance can play in mobilizing private capital to bridge the SDG and climate funding gaps.

Key findings from this year's report include:

- Climate change has consistently been a thematic focus of the blended finance market; since 2011, climate-oriented transactions have accounted for 50% of deals launched annually (on average). These deals received over two-thirds of aggregate annual financing, notching an annual aggregate deal value of just under $7 billion.
- At the same time, Convergence has witnessed a decline in aggregate financing levels in the climate blended finance market in recent years – between 2019-2021, $14 billion was invested into climate blended finance transactions, compared to $36.5 billion between 2016-2018. The proportion of annual climate blended finance flows relative to the overall level of financing to the blended finance market declined from 74% between 2016-2018 to 61% between 2019-2021.
- The large majority of climate blended finance occurs in the climate mitigation space. Over the last decade, about 50% of the annual climate deal count captured by Convergence is exclusively focused on mitigation. Historically, that represents more than $58 billion in total mitigation finance, at an average of $4.66 billion in annual deal value since 2016. Blended mitigation deals also consistently represent the largest transactions in climate blended finance – the historical median deal size of mitigation deals is $92.7 million, vs. $78.85 million for adaptation deals and $65 million for hybrid deals.
- Adaptation continues to be an underdeveloped area within blended finance for climate compared to mitigation transactions, both in terms of deal flow and deal value. Only 14% of blended climate transactions to date have had a pure adaptation focus, while of the $108 billion in aggregate financing that has been mobilized for blended climate transactions to date, only $6.9 billion has been mobilized for transactions purely focused on adaptation. In the last three years, however, there has been a noticeable uptick in adaptation finance; investments into adaptation are 72% higher between 2019-2021 compared to 2016-2018.
- No investor category has demonstrated a significant uptick in commitments when comparing activity in 2016-2018 to 2019-2021. In fact, commercial financial institutions and corporates demonstrated a significant decrease in their aggregate financing levels and number of investments into climate blended finance from 2019-2021, compared to 2016-2018.
- On the other hand, we see some positive growth from institutional investors into climate blended finance (increasing from 18% of private commitments in 2016-2018 to 25% of private commitments in 2019-2021), including a major increase from private equity investors and venture capitalists (increasing from 4% of blended climate commitments in 2016-2018 to 17% of commitments from 2019-2021.

CHALLENGES

This report identifies several key challenges to increasing blended climate transactions and mobilizing private sector capital for climate:

1. **The lack of strategic coordination and unguided implementation of high level capital mobilization** plans has impacted the ability to deliver on funding targets. The public sector's use of concessional capital to catalyze the private sector for development and climate finance has been neither efficient nor effective. Deployment is not strategic, is too small, too inflexible, and too fragmented. As a result, funds are not awarded to the best global proposals, and the overall allocation process has not successfully applied lessons learned from the hundreds of blended finance transactions implemented to date to achieve scale mobilization.
2. **Low levels of participation from investors domiciled in developing markets** is a continued barrier to scaling climate blended finance. Navigating risk in developing markets becomes increasingly complicated without meaningful representation from stakeholders in local investment landscapes.
3. **Managing development trade-offs between climate blended finance and blended finance** for other development finance goals will not be straightforward and will require clear, coherent signaling of climate and development agendas.
4. **Siloes between the climate mitigation, adaptation, and conservation finance** investment communities have led to a lack of coordination around taxonomy, impact measurement, and management. They have further prevented key learnings from being shared.
5. **Low levels of investor education and expertise** within climate finance contribute to low levels of private investment toward climate goals.
6. **Lack of available climate data and transparency** in the market.

RECOMMENDATIONS

This report identifies several key recommendations to increase blended climate transactions and mobilize private sector capital for climate:

1. High-level plans must translate into action to deliver private sector investment
2. Donor involvement should track Nationally Determined Contribution (NDC) priorities
3. Development agencies should be definitive about their climate agenda
4. Adaptation investment must be prioritized, expanded, and accelerated
5. Investors should stay ahead of regulatory shifts and actively integrate climate expertise into investment processes
6. All market participants should aim for transparency and shared learning

INTRODUCTION

The scale-up of the investment required to achieve the Sustainable Development Goals (SDGs) by 2030 remains critical. The gap between official development flows, including philanthropic commitments, and the funding necessary to achieve the SDGs is at $2.5 trillion and growing. The Organization for Economic Cooperation and Development (OECD) reports that the total amount of Official Development Assistance (ODA) contributed by members in 2021 was $178.9 billion, a record high. Yet, the development finance system only mobilizes around $40 billion in private capital annually, a mere 1% of the total investment needed.

The shortfall in financing for the SDGs has been exacerbated by the onset of the COVID-19 pandemic, rising geopolitical risks with the military conflict in Ukraine, and related macroeconomic shocks. These factors have had a massive impact on the economies of developing countries, which have seen a reversal of development progress after several years of positive growth. The pandemic and economic crisis have not only seriously hindered the progress of the SDGs but have also significantly impacted global climate goals.

Zeroing in on climate-related elements of the SDGs, current global conditions highlight the financing system's inability to fund climate action fully. Presently, annual global climate finance stands at about $630 billion, compared to recent estimates of $3-$6 trillion required annually to achieve the Paris Agreement's temperature and adaptation goals up to 2050. With the global economic downturn disproportionately impacting low-income and emerging economies, the OECD's latest Global Outlook on Financing for Sustainable Development projects an additional financing shortfall of nearly $2 trillion. As we inch closer to target deadlines for the SDGs and climate goals, the need to mobilize private sector capital has never been more urgent. SDG and climate financing require increased private capital to bridge the multi-trillion dollar funding gap. To that end, blended finance is a critically important approach for such capital mobilization.

The decision to produce a climate-themed State of Blended Finance Report is not altogether surprising. In 2021 Convergence and the UK's Foreign, Commonwealth & Development Office jointly published the Blended Finance for Climate Report exploring the successes and gaps in mobilizing private capital for climate solutions. Building from the insights and feedback of that report, and after analyzing the 759 transactions in our historical deals database, we observed that blended finance and climate continue to be inextricably linked as nearly half of all blended finance transactions are climate related.

Climate blended finance additionally promotes and helps measure the achievement of other SDGs. For example, climate-related blended finance projects naturally intersect with several SDGs, such as gender equality (SDG5), clean water (SDG6), affordable and clean energy (SDG7), sustainable cities (SDG11), life below water (SDG14), and life on land (SDG15). In attending to global development funding goals, the alignment of SDGs with climate is a natural one that is equally reflected in the blended finance market.

Further, SDG and climate synergies have been apparent throughout global sustainable development convenings. For example, the COP26 Climate Finance Delivery Plan and G20 Sustainable Finance Roadmap, both published in 2021, identify mobilizing private investment as critical to achieving the goals of the Paris Agreement and 2030 Agenda. Additionally, in 2021, several prominent private investor groups, including the Net-Zero Asset Owners Alliance (NZAOA), the Global Investors for Sustainable

> "...the need to mobilize private sector capital has never been more urgent."

Development Alliance, and the Investor Leadership Network (representing over 110 investors and over $50 trillion in assets under management) signaled strong interest in investing in SDG and climate finance. All three investor groups have also written detailed, informative reports on how public and private funding can combine more effectively to boost sustainable finance significantly. COP26 also saw a pioneering initiative called the Glasgow Financial Alliance for Net Zero (GFANZ), aimed at ensuring that private firms, too, are part of the global transition to greater sustainability.

A high level of perceived risk prevents developing markets from accessing the vast amounts of capital held by the private sector and thereby magnifies the importance of blended finance. Scaling current volumes of climate and development finance will require blended finance to de-risk transactions and crowd-in capital to meet the urgent need for SDG and climate financing. Therefore, the report focuses on identifying blended finance solutions and opportunities that can mobilize more private sector investment into developing countries to achieve the SDGs and the Paris Climate Agreement 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 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 impact, or a blend of both). The main investment barriers for private investors addressed by blended finance are (i) high perceived and real risk and (ii) 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:

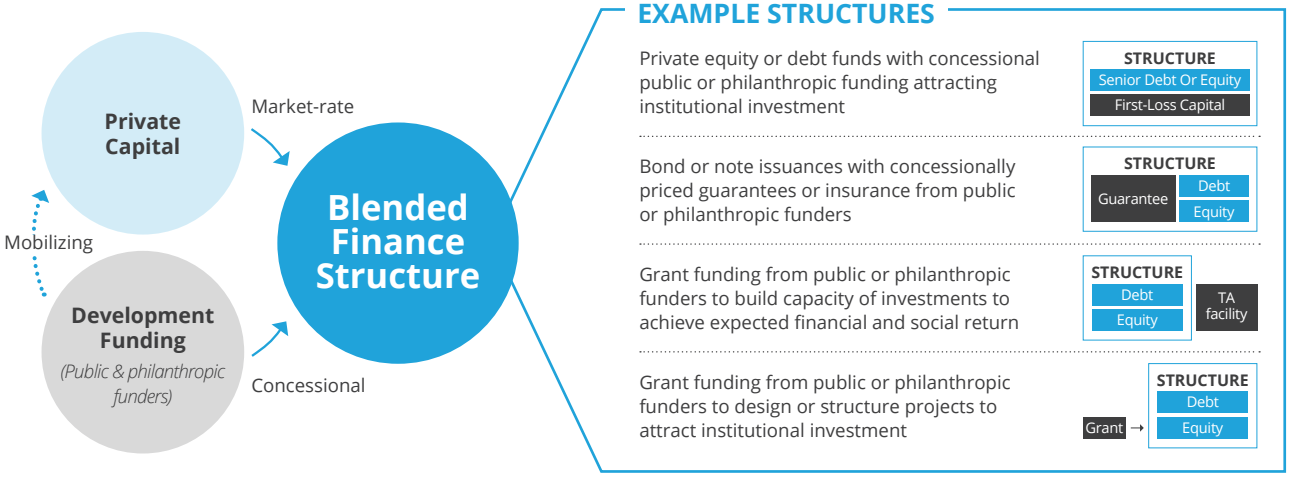
i. Public or philanthropic investors provide funds on below-market terms within the capital structure to lower the overall cost of capital or to provide an additional layer of protection to private investors

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 technical assistance 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 or design stage grants)

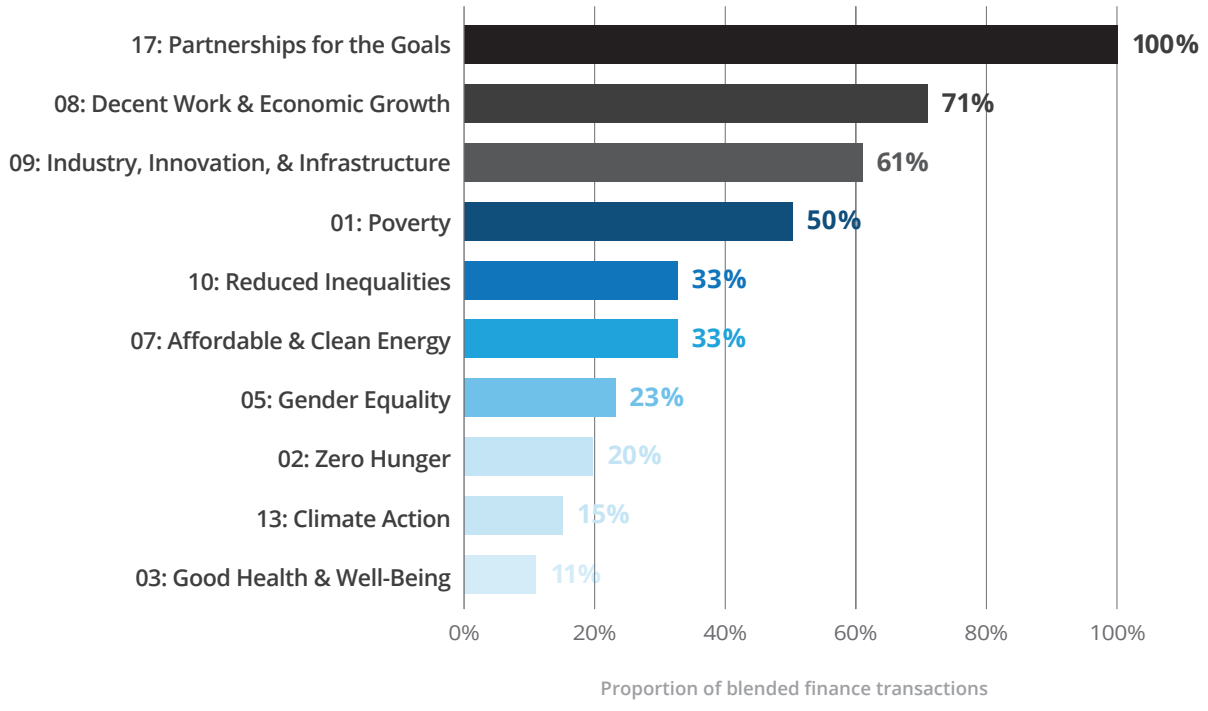
Figure 1: Typical Blended Finance Mechanics and Structures



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 (i) de-risking the investment or (ii) 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, technical assistance 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 only address a subset of SDG targets that are investable. According to 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).

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 2022 edition provides an updated analysis of the blended finance market and, for the first time, has a thematic focus: climate. The report is based on Convergence's continuous data and intelligence collection efforts, as well as input from Convergence's 160 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 September 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 technical assistance 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 1: MARKET OVERVIEW

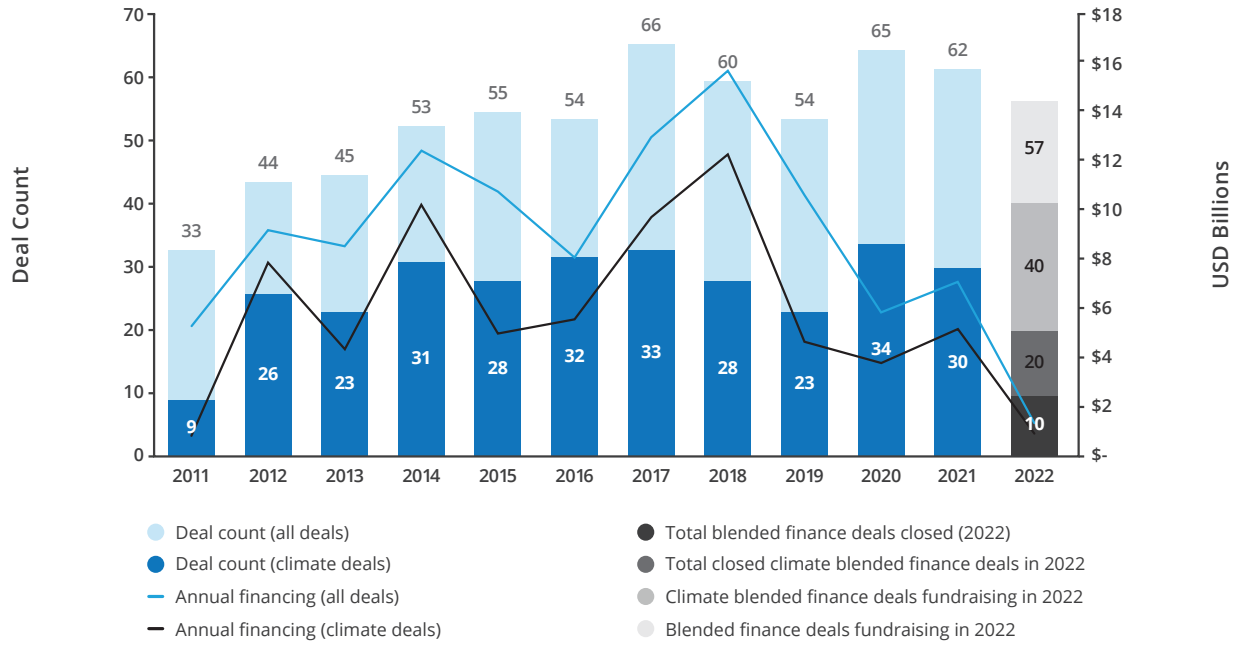
PART I:
MARKET OVERVIEW

OVERALL BLENDED FINANCE MARKET

The State of Blended Finance 2022 focuses on climate blended finance[1] – blended finance transactions that intend to produce outcomes to combat and / or respond to the effects of climate change. This report draws on Convergence's Historical Deals Database (HDD), comprised of 759 blended finance transactions (359 of which are climate-focused) with an aggregate value of $170 billion across all transactions ($108 billion climate-focused). Over the last decade, the blended finance market has comprised 56 deals per year on average, amounting to $10.7 billion in annual financing (Figure 3). Overall, Convergence has captured more than 5600 financial commitments into blended finance deals from nearly 1550 unique investors. Initial figures for 2022 stand at 20 blended transactions, including 10 climate deals, for total transaction values of $1.4 billion and $965 million respectively. A closer look at the broader market of blended finance across a range of data dimensions can be found on Convergence's website.

> "Over the last decade, the blended finance market has comprised 56 deals per year on average, amounting to $10.7 billion in annual financing."

Figure 3: Overall blended climate finance market relative to the overall market (2011 – September 2022)



1 Transactions were considered climate-focused based on their alignment to select SDGs: SDG 7 (Clean Energy), SDG 11 (Sustainable Cities), SDG 13 (Climate Action), SDG 14 (Life Below Water) and SDG 15 (Life on Land). 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.

A LOOK BACK AT LAST YEAR'S REPORT

The previous edition of the State of Blended Finance centered on the multidimensional consequences of the COVID-19 pandemic on blended finance flows to emerging markets in 2020. The volume of blended investment fell by 50% compared to 2019 levels. Blended finance activity was primarily oriented around smaller transactions, as cross-border investment into greenfield projects slumped. Convergence has observed a slight rebound in blended capital flows to emerging markets in 2021 ($7.1 billion in annual financing) and steady deal origination (62 deals reached financial close). The industry and trade sectors have bounced backed markedly, coinciding with efforts to restart the manufacturing and export industries that are essential to many emerging market economies – deal count in these sectors grew from 6% of all transactions in 2020 to 15% in 2021. However, investment activity in the energy sector declined over the last year, falling to 29% of transactions in 2021 from 37% in 2020. As mentioned in last year's report, the dearth of foreign direct investment (FDI) into greenfield projects in emerging markets is expected to be more prolonged than in advanced economies. The theme will be explored in greater detail later in this report.

Private equity and venture capital markets have endured the economic challenges of the pandemic in many emerging markets, particularly in Sub-Saharan Africa (SSA) and South Asia. This is evident in the sustained frequency of direct blended investment into private enterprises and corporates in 2021. Overall, SSA remained the most frequently targeted region for blended finance in 2021, comprising 45% of deals, slightly up from 2021 (43%), while Latin America and the Caribbean (LAC) continues to develop a blended finance track record, hosting 25% of transactions in 2021.

The return of private sector capital to emerging economies will depend on how deal sponsors, political entities, multilateral institutions, and domestic and international investors navigate the new range of current economic challenges. This new financial environment is explored below.

CLIMATE AS A KEY COMPONENT OF THE BLENDED FINANCE MARKET

Climate change has consistently been a thematic focus of the blended finance market; since 2011, climate-oriented transactions have accounted for 50% of deals launched per year (on average). These deals received more than two-thirds of aggregate annual financing, notching an annual aggregate deal value of just under $7 billion. The median deal size of climate transactions is $80 million, exceeding the overall market median size of $55 million. Two correlative factors contribute to the close alignment of climate and blended finance. First the momentum of purpose investing and climate finance has driven an increased demand in the application of blended finance. And second, blended transactions with integrated climate outcomes generate noticeable appetite from blended finance actors.

This is proof of:

i. the general recognition among investors of the importance of and urgency for private sector capital mobilization to support climate interventions in emerging markets, and

ii. the capacity of such transactions to create the appropriate financial instruments that meet the expectations of key private sector investors, such as the institutional investor class.

BROAD CLIMATE DATA

However, as recent climate research has uniformly underscored, the climate finance gap persists. Current estimates place the global annual investment required to meet the climate goals set out by the Paris Agreement at $5 trillion, with at least $1.6 trillion required per year in developing countries alone. In the lead-up to the 26th Committee of the Parties (COP 26), the OECD announced that developed countries had mobilized only $83.3 billion to developing nations, falling short of their commitment to mobilize $100 billion annually by 2020. Similarly, in their Global Landscape of Climate Finance 2021 report, the Climate Policy Initiative (CPI) found that less than 25% of all climate finance was invested outside the developed markets of Western Europe, North America, and China, leaving most emerging markets reliant on domestic public capital sources to fund climate interventions. With most public institution balance sheets preoccupied with relief and response for the COVID-19 pandemic in the last two years, climate interventions remain underfunded.

BROAD CHALLENGES

Although developed countries have been providing large-scale financial support to respond to the COVID-19 pandemic, both domestically and abroad through aid, developing countries have been far more constrained, experiencing difficulties in financing their own efforts. According to the UN Financing for Sustainable Development Report, the pandemic has exacerbated the differentiated abilities of countries to respond to the crisis and invest in climate action and the SDGs. This issue contributes to what is known as "the great finance divide" – the condition where developing countries are faced with higher borrowing costs and reduced access to international finance markets – which, if left unchecked, could undermine the achievement of the SDGs and climate objectives.

The global response to the COVID-19 pandemic also necessitated an unprecedented reorientation of cross-border public resources towards relief programs and vaccine rollout, using ODA funds that may have otherwise been employed for climate initiatives and private capital mobilization. According to the OECD, only $1.1 billion of ODA was allocated to private sector instruments in 2021, compared to $1.3 billion in 2020 despite total ODA levels reaching a historic high of $178.9 billion. This shift contributed to lower levels of climate blended financing by reducing the amount of catalytic funding available in the market. It also highlights the importance of private sector resources in the financing equation. Private sector capital can stabilize and sustain development activity when public sector resources are diverted due to exogenous factors.

"...The global response to the COVID-19 pandemic also necessitated an unprecedented reorientation of cross-border public resources towards relief programs and vaccine rollout, using ODA funds that may have otherwise been employed for climate initiatives and private capital mobilization."

THE MACROECONOMIC IMPACT ON CLIMATE BLENDED FINANCE

The blended finance market faces a series of global macroeconomic challenges. First, interest rate hikes implemented in many advanced economies to combat high inflation is fuelling capital flight away from emerging markets. Developing economies may experience a liquidity crisis as investors pull out of riskier markets to earn comparable returns in more stable investment environments and domestic short-term debt and credit markets become financially unfeasible. This trend was already underway towards the end of 2021 – according to the World Investment Report 2022, the return of FDI to pre-pandemic levels was far greater in developed economies than their developing counterparts, despite the former experiencing a larger drop in 2020. Interest rate risk is compounded by increasing foreign exchange (FX) volatility and risk as the US dollar appreciates. The result is more expensive debt service on hard currency loans, increasing credit risk, and exacerbating perceived investment risk. Elevated credit risk is also magnified by ending debt moratoriums granted in 2020 by many key public sector investors like Development Finance Institutions (DFIs) and Multilateral Development Banks (MDBs). The impact could be significant in the climate blended finance market, where Convergence sees 49% of commitments deployed as debt instruments. To overcome borrower credit concerns, blended finance transactions may necessitate a richer mix of concessional capital to suitably attract private sector investment.

> "...the return of FDI to pre-pandemic levels was far greater in developed economies than their developing counterparts..."

EXOGENOUS SHOCKS

The invasion of Ukraine by Russia likewise presents a host of challenges to emerging markets. The war has exacerbated supply blockages and has fuelled inflationary pressures that will lead to a further drying up of cross-border climate investment through blended finance as catalytic and ODA capital pivots to other urgent humanitarian needs, such as food security. Domestic funding for climate interventions will also likely be diverted to bolster essential services at home. Certain emerging economies, such as Brazil and South Africa, have benefitted from the increased price of commodities, specifically food prices. However, the similar appreciation of extractive prices, such as coal, Brent crude oil, lithium and fertilizer, is leading to more investment in environmentally hazardous projects, including in developing countries. The effects could stifle the momentum of renewable energy additions to emerging market energy matrices.

DOWNTRENDS IN BLENDED FINANCE & CLIMATE

Convergence has witnessed a decline in aggregate financing levels in the climate blended finance market in recent years, with the exception of adaptation blended finance – between 2019-2021, $13.8 billion was invested into blended climate transactions, compared to $36.5 billion between 2016-2018. This is partially a product of the anomalous decline in the entire blended finance market in 2020 because of the COVID-19 pandemic. However, comparing investment into climate blended finance transactions vs. investment into non-climate oriented blended finance deals from 2016-2018 to 2019-2021 reveals that blended climate deals, in particular, received lower levels of funding in recent years despite comprising a consistent share of the deal count. The proportion of annual climate blended finance flows relative to the overall level of financing to the blended finance market declined from 74% between 2016-2018 to 61% between 2019-2021, indicative of the diminishing use of blended finance for climate deals in emerging markets. Convergence surveyed its membership as a part of the research process for this year's report to gain further insight into the current state of climate blended finance activities in developing countries, including what factors may have contributed to the recent decline in financing volume to climate blended finance. Survey findings showed that a lack of bankable investment opportunities with appropriate risk-adjusted returns as the leading barrier to more systematic participation in climate blended finance deals, identified by 65% of respondents. Other notable challenges were: the lack of a coherent and standardized taxonomy on low carbon and green investing (31% of responses), the lack of tools to measure and report climate impact (27% of responses), and liquidity constraints in emerging markets (27% of responses).

"Convergence has witnessed a decline in aggregate financing levels in the climate blended finance market in recent years, with the exception of adaptation blended finance – between 2019-2021, $13.8 billion was invested into blended climate transactions, compared to $36.5 billion between 2016-2018.

In the context of these challenges, blended finance should present a promising means to increase investment flows to climate-related projects in emerging markets. Blended finance inherently seeks to increase the volume and frequency of investment of the private sector in development activities, easing the impact of changing public sector priorities to maintain the availability of capital to project sponsors. It also can mitigate credit and FX risk through the strategic use of concessional funds to boost liquidity and investment appeal in less favourable investment environments. For example, currency risk considerations are paramount for cross-border investors in emerging markets who often require repayment in hard currencies. Hedging instruments increase capital costs for borrowers, including those receiving concessional investment. Strategic use of blended finance can help reduce the impact of hedging costs, as noted by Muhammed Sayed Climate Change Specialist,and Harold Magole, Climate Finance Specialist at The Development Bank of South Africa (DBSA):

> *"If donor partners can take on currency risk at the institutional level, and provide us funding in local currency, then DBSA can ensure that the full benefit of our blended finance facilities are passed onto end borrowers".*

In the current macroeconomic environment, these tools could prove vital in keeping borrowing costs affordable.

PART II: CLIMATE DATA TRENDS

PART II:
CLIMATE DATA TRENDS

CLIMATE MITIGATION V. CLIMATE ADAPTATION V. HYBRID

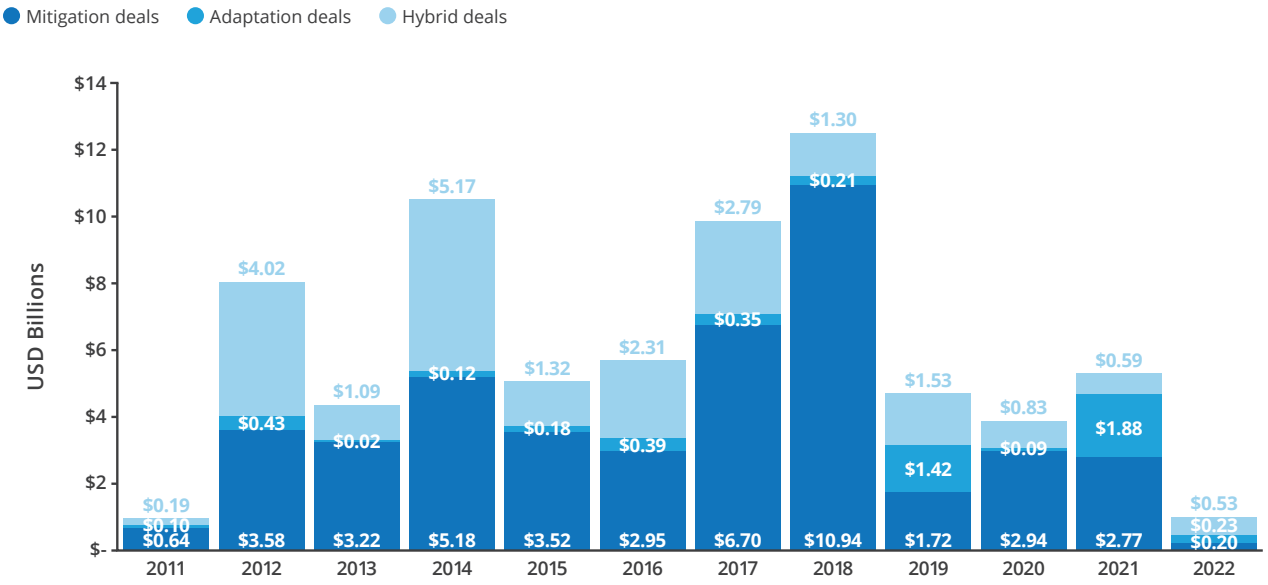
This report will explore climate blended finance through three lenses;

i. mitigation blended finance;
ii. adaptation blended finance;
iii. hybrid mitigation-adaptation blended finance.

Mitigation blended finance deals consist of efforts aimed at limiting the effects of climate change by reducing the emittance of CO_2 and other greenhouse gases (GHGs) from human-made sources into the atmosphere or enhancing the removal of GHGs from the atmosphere through carbon "sinks"[2]. Adaptation transactions involve adjusting to the already apparent or expected consequences of climate change, such as sea-level rise, more frequent and extreme weather events, and changing crop growing seasons. Hybrid climate finance refers to cross-cutting transactions aiming to produce both climate mitigation and adaptation outcomes. Hybrid transactions could also relate to sectors that address both mitigation and adaptation, such as forest restoration work. Forest restoration work has the potential to provide benefits for climate change mitigation through carbon sequestration and adaptation benefits through biodiversity preservation.

In line with the broader climate finance market, the majority of climate blended finance transactions and aggregate climate blended financing volume occurred in the mitigation space (Figure 4). Over the last decade, about 50% of the annual climate deal count captured by Convergence is exclusively focused on mitigation. Historically, that represents more than $58 billion in

Figure 4: Aggregate annual financing flows to mitigation blended finance, adaptation blended finance and hybrid blended finance deals



2 Carbon sinks are anything that removes more carbon from the atmosphere than it releases. The process by which carbon sinks remove carbon chemicals (CO_2) from the atmosphere is called "carbon sequestration". Biological carbon sinks include oceans, mangrove forests, and soil, and absorb carbon particles through natural processes like photosynthesis. Artificial carbon sinks are human created sites such as landfills, or technological processes such as direct air capture of CO_2.

total mitigation finance, at an average of $4.7 billion in annual volume since 2016. Blended mitigation deals also consistently represent the largest transactions in climate blended finance – the historical median deal size of mitigation deals is $92.7 million, vs. $78.9 million for adaptation deals and $65 million for hybrid deals. However, the volume of financing to mitigation blended finance transactions precipitously dropped in the past three years – total deal value shrunk in 2019-2021 by 63% from 2016-2018. As will be examined later in the report, various factors have historically influenced investor appetite for mitigation transactions, including investment ticket sizes large enough to meet institutional investor requirements, clear underlying revenue streams easily understood by investors, and familiar project finance investment structures. The report will also delve into some of the primary reasons behind the recent observed drop in mitigation blended financing flows.

Adaptation blended finance comprises a small portion of the climate blended finance market, totaling just $6.8 billion historically. On average, only three deals per year have been recorded over the past ten years, with an average aggregate volume totaling just over $470 million. Notable factors influencing the dearth of adaptation blended finance flows relative to mitigation blended finance include:

i. the common perception that adaptation projects have less viable or unproven business cases, which make them more so the domain of the public sector, and

ii. the mobilization mandates of key blended finance practitioners such DFIs and MDBs are more geared towards private sector mitigation projects rather than adaptation transactions which are more likely to intersect with their public sector operations,

In the last three years, however, there has been a noticeable uptick in adaptation finance; the volume of investment into adaptation was 72% higher between 2019-2021 compared to 2016-2018. The OECD highlights a similar trend in the broader climate finance market. This jump in financing comes even as annual deal count has remained roughly the same since 2016. Convergence has witnessed adaptation finance deals begin to evolve from the domain of niche innovative deal structures financed by subject-matter specialists to

"...there has been a noticeable uptick in adaptation finance; the volume of investment into adaptation was 72% higher between 2019-2021 compared to 2016-2018."

scaled instruments that meet the risk-adjusted returns expectations of large private sector investors. One example is Climate Investor Two (CI2), an $820 million follow-on fund from Climate Investor One, managed by Climate Fund Managers. CI2 employs the same multi-sub-fund structure used by its predecessor to provide whole-of-life-financing to adaptation-focused projects in the water, sanitation, and oceanic infrastructure sectors. The fund has attracted investments from European asset managers and pension funds, and with a target size of $1 billion, could become one of the largest blended funds to date. Scaled, replicable structures like CI2 are urgently needed, as projected annual adaptation costs will reach up to $330 billion in developing countries by 2030.

Hybrid or cross-cutting blended finance comprises about nine transactions annually, for a total of $1.9 billion in average aggregate annual financing (2011 – 2021). Overall, the total value of hybrid transactions is $26.6 billion, however the total annual investment into hybrid deals has been in decline in recent years, dropping by 54% from 2016-2018 to 2019-2021. Hybrid transactions span a diversity of sectors including infrastructure, housing and real estate, and agriculture. Agriculture-based transactions are often well-positioned to produce dual mitigation-adaptation benefits – over 60% of climate-related agriculture transactions are cross-cutting and over 30% of hybrid transactions target the agriculture sector. Nature conservation / preservation outcomes (adaptation) are a common consideration in agriculture, and frequently yield mitigation benefits as well. For example, Ejido Verde

SAPI de CV, a Mexico-based resin production company, received a financing package from IDB Invest and the Global Environment Facility (GEF) to reforest degraded agricultural lands with an indigenous resin tree. Not only does the project protect native biodiversity, but at maturity the trees will capture over 23 thousand tons of carbon dioxide equivalent (CO_2eq).

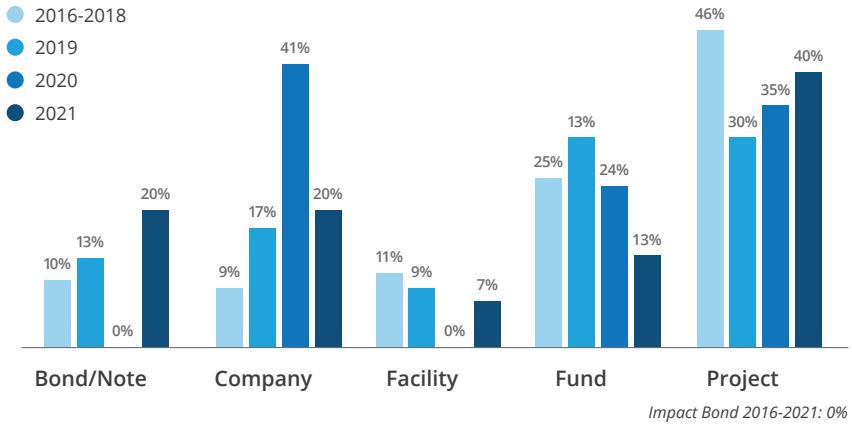
As in past years, this report includes analysis of Convergence's pipeline of actively fundraising blended finance transactions. Of the 71 deals included in last year's fundraising dataset, 12% successfully reached final or an interim financial close in the last 12 months. This is compared to a 20% close rate in 2020 recorded in last year's report. While marginal, the slight decline could be an indicator of macroeconomic pressures and shifts in development finance mandates due to the COVID-19 pandemic. Convergence is currently tracking 57 fundraising transactions, with a combined value of $3.7 billion. Approximately 70% of these deals are climate focused. Just under 50% target mitigation outcomes, while nearly 20% are exclusively focused on adaptation finance. These fundraising transactions will be explored throughout the report.

VEHICLES

Convergence's database identifies five primary blended transaction types;

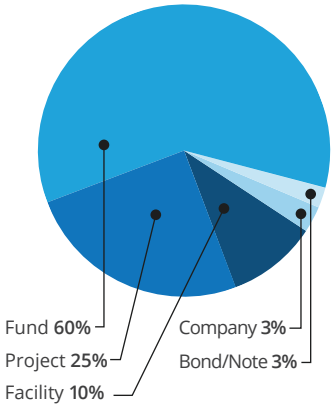
1. Bonds / notes (including privately placed securities and public issuances)
2. Blended companies (i.e., businesses as the direct recipients of both market-rate and below-market-rate investment)
3. Facilities[3]
4. Funds (i.e., limited partnership debt and private equity funds, as well as funds-of-funds)
5. Projects

Figure 5: Proportion of climate blended finance transactions by vehicle type, 2016-2021



Impact Bond 2016-2021: 0%

Figure 6: Proportion of fundraising transactions by vehicle type



Since 2016, projects have been a mainstay transaction structure in climate blended finance according to Convergence's Historical Deals Database (Figure 5). Although, the number of climate-aligned project structures declined between 2019-2021 compared to 2016-2018 (31 projects vs 42 projects), the last three years have seen blended finance projects become increasingly aligned to climate goals – 73% of blended projects were climate-aligned between 2016-2018, which increased to 85% in 2019-2021. In terms of climate blended financing flows, projects have consistently mobilized more capital than any other transaction type in recent years – $5.21 billion since

3 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.

2019, averaging 39% of total climate blended financing per year. Again, the driver of these trends is mitigation blended finance, and particularly renewable energy asset creation. About 88% of financing invested into blended climate projects went to the renewable energy sector. However, the size of renewable energy-focused projects has been declining, with the median size of such projects down by about 50% to $65.65 million in 2019-2021.

> "About **88%** of financing invested into blended climate projects went to **the renewable energy sector**."

This phenomenon may, in part, be a product of the reduced need for risk mitigation in larger renewable energy deals. Large, utility-scale renewable energy assets have seen significant capital cost reductions and have become a familiar asset class, allowing them to raise capital from institutional investors and other mainstream lenders. Successive successful transactions improve institutional investor comfort levels, lessening the demand for risk-bearing capital. Larger-scale renewable energy projects in the blended finance market also often occur in countries with sovereign credit ratings at or near investment grade, like Chile (A) and Brazil (BBB-), a minimum requirement for many mainstream private sector investors. Smaller renewable energy projects present additional risks, including lower expected return, higher counter party credit risk and remote locations where the assets are being constructed, necessitating the inclusion of blended finance tools to bring the projects in line with market risk expectations.

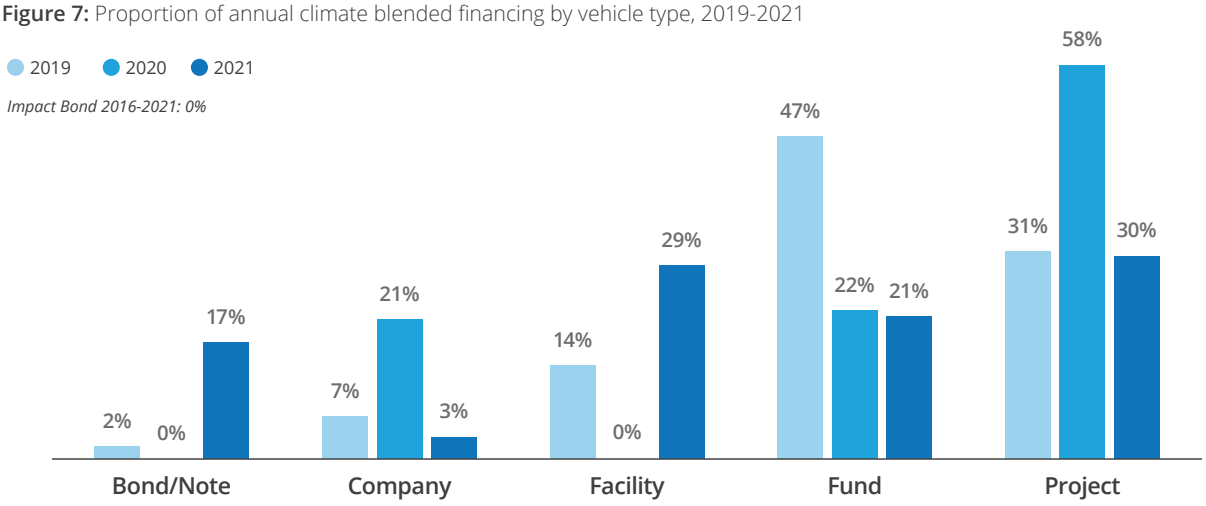
Between 2019-2021, Convergence found that over 36% of blended renewable energy projects were in Least-Developed Countries (LDCs), with credit ratings ranging from speculative grade (BB and lower, Fitch) to no rating at all. Blended finance becomes crucial to credit-enhancing the borrower in these contexts. For example, the Urbasolar Solar Project, a 30MW solar field in Burkina Faso, with a project cost of $42 million, required multiple risk-bearing financial instruments to achieve financial close. The project developer secured $34 million in construction phase debt from the Emerging Africa Infrastructure Fund (EAIF) on concessional terms to improve the project's creditworthiness and ensure bankability. The borrower also received additional downside risk coverage in the form of political risk insurance from the Multilateral Investment Guarantee Agency (MIGA). The concessionally priced insurance product received support from the International Development Association's (IDA) Private Sector Window.

Relative to their prevalence in the overall blended finance market, funds comprise a smaller share of climate blended finance structures, accounting for 25% of climate-focused vehicles in 2019-2021. Their proportion of annual climate financing has also been in decline in recent years – attracting 21% of all climate capital in 2021, down from 47% in 2019. However, Convergence does not expect this to be a long-term trend. Approximately 60% of fundraising climate deals tracked by Convergence are funds (Figure 6). Funds are also a critical vehicle to bring scale to climate blended finance, as noted by Tanya Kothari, Regional Manager for India at the Shell Foundation, a UK registered charity:

> *"One challenge in emerging markets is that although there are projects that offer potential for GHG reduction, the deal sizes are much smaller when compared to the European and US markets. We typically see a lot of decentralized or smaller companies creating climate impact. So there needs to be some aggregation for investors who are looking to deploy larger ticket sizes."*

Likewise, funds have been gaining traction in adaptation finance in recent years, mobilizing more capital to the sub-sector than any other vehicle type ($1.8 billion since 2019). For example, the Agri3 Fund, an $80 million structured debt fund jointly created by United Nations Environment Programme (UNEP), Rabobank and the IDH Sustainable Trade Initiative, combines first-loss capital and a $15 million technical assistance sidecar facility with the aim of delivering $1 billion of investment to interventions preventing deforestation and promoting sustainable land practices among farmers in Asia and Latin America.

Figure 7: Proportion of annual climate blended financing by vehicle type, 2019-2021



Blended climate-linked bonds / notes have attracted noticeable interest in recent years[4]. In 2019, they comprised 10% of climate blended transactions and attracted just 2% of climate blended finance. Comparatively, by 2021, bonds / notes accounted for 17% of blended climate deals and over 17% of the associated capital flows (Figure 7). In fact, all blended bonds / notes launched in 2021 were climate oriented (six transactions). This trend is in line with the global green bond market. According to the Climate Bond Initiative, the volume of financing to green bonds worldwide reached a high of $150 billion in Q3 of 2021. As Fiona Bayat-Renoux, Chief of the Green Climate Finance Unit at UNCDF, notes:

> *"Green bonds issuances still overwhelmingly come from developed markets. However, green bonds are an important financing instrument for developing countries given their potential to unlock additional sources of capital and diversify the investor base. We see a need for more credit enhancement mechanisms – notably guarantees - to improve the credit quality and lower the borrowing costs for green bond issuances from developing countries".*

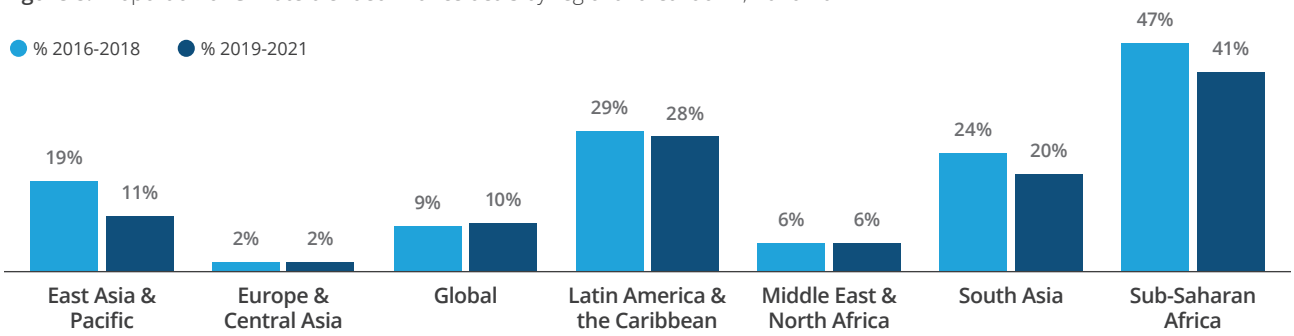
It is important to note as well that despite the sustained uptake in climate-linked bonds in recent years, the sensitivity of fixed-income capital markets to rising interest rates will likely drive a downturn in the broader bond market, at least in the short-term. It is unlikely that the application of blended finance could effectively arrest a decline of this kind.

While climate-linked bonds / notes were still the vehicle type that raised the least private sector capital for climate blended finance between 2019-2021, the ticket size of the issuances has been gradually increasing. The median debt issuance grew by 22% to $64 million in 2019-2021, with the bulk of the financing directed towards adaptation and hybrid outcomes. A notable example is the Belize Blue Bond for Conservation, which received early-stage project preparation support from Convergence. The $364 million bond, designed by The Nature Conservancy and NatureVest, and arranged and placed by Credit Suisse in 2021, was used to refinance Belize's outstanding Eurobond debt. Savings on the debt conversion will fund marine conservation efforts. Most climate-linked fixed-income products, however, do not meet the size threshold of public capital markets (typically $250 million or more), and as a result, operate in the private placement market. Convergence sees much of this activity targeting the green building finance space, such as the ACORN I and ACORN II issuances, and the CRRH-UMEOA local currency bond, issued by West African Mortgage provider Caisse Régionale de Refinancement Hypothécaire.

4 A "green bond" typically refers to fixed-income debt securities certified by a verification agency, such as the Climate Bonds Initiative. Certification ensures adherence to standards and taxonomy dictating the use of bond proceeds, including sector eligibility and the share of proceeds that must be directed to climate investments. For example, CBI requires 95% of bond proceeds be invested in climate opportunities. Convergence uses the term "climate-linked bonds / notes" to refer to blended fixed-income debt securities rather than "green bond" given that not all bonds / notes are aligned to agency definitions.

REGIONS & COUNTRIES

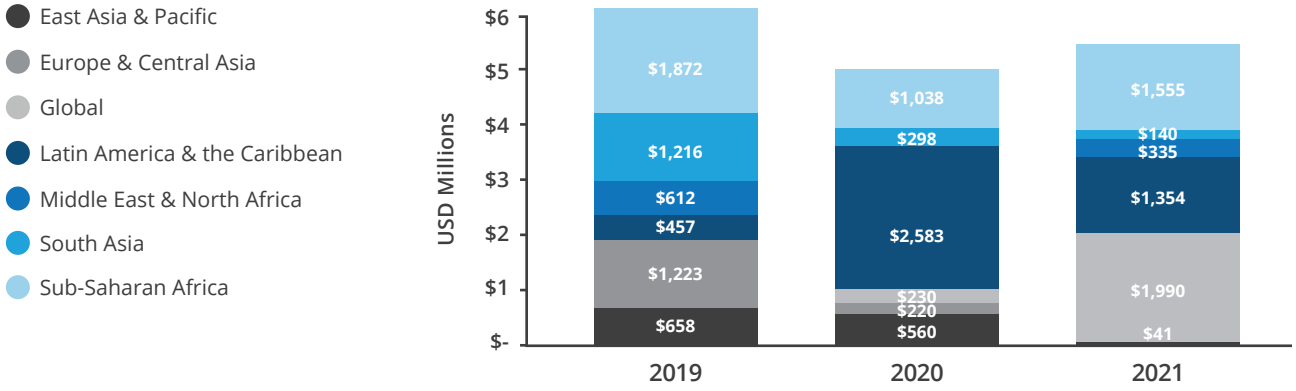
Figure 8: Proportion of Climate blended finance deals by regional breakdown, 2016-2021



As stated earlier, most climate finance has targeted developed markets in Western Europe and North America, except for China. Part of this phenomenon is because historically, many of the highest CO_2 emitting countries were in the developed world, meaning these markets also produced the greatest opportunity for emissions reductions needed to fulfill their NDCs. At the same time, this trend is changing; a report by CGD found that 63% of annual emissions are produced by developing countries, notably India and China, evidencing one dangerous side effect of the welcome economic growth experienced in these markets. Where blended finance should play a role is in supporting low and middle-income countries to take low-carbon pathways to development, as this too will be important for the achievement of global climate targets.

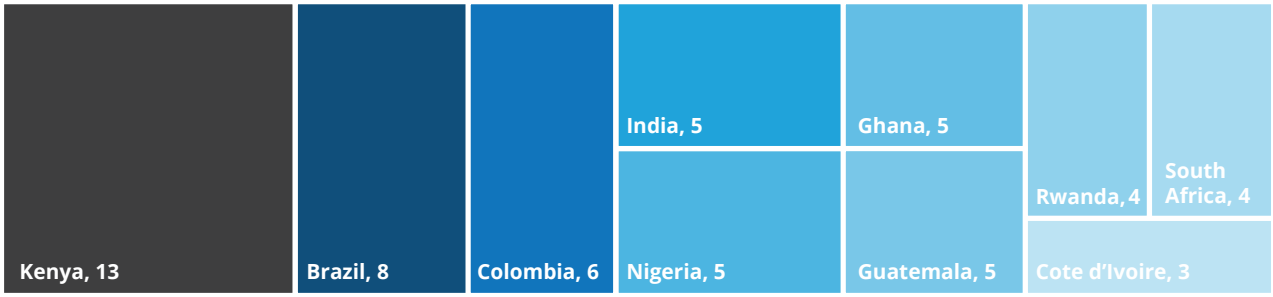
Where climate blended finance has concentrated has been Sub-Saharan Africa (SSA, 41% of transactions between 2019-2021), mirroring overarching blended finance trends (Figure 8). This is followed by Latin American and the Caribbean, which accounts for 28% of climate blended finance deals. Overall, our analysis reveals the geographic spread of climate finance in the blended finance market has not changed significantly over time, with a consistent proportion of deals distributed per region from 2016-2018, and 2019-2021. The most notable changes have been a decrease in climate blended finance in East Asia and the Pacific. This includes a proportional decrease, from 19% of climate blended finance deals, to 11%, as well as an absolute decline of 50%: while 20 blended climate deals targeted the region between 2016-2018, only 10 deals did between 2019-2021. This trend is similarly captured on Convergence's fundraising platform; just 10% of climate transactions seeking blended capital are focused on East Asia and the Pacific.

Figure 9: Volume of climate blended finance by region, 2019-2021



Volumes of blended finance flows across regions mirror transaction distribution. Overall, aggregate blended finance flows towards climate have remained consistent from 2019 through 2021. The largest volumes of financing have flowed to transactions with a global focus ($5 billion), then SSA ($4.5 billion), followed by LatAm ($4.4 billion). Meanwhile, we have seen the lowest volumes of financing flow towards transactions in East Asia and Pacific ($1.3 billion), Middle East and North Africa ($960 million), Europe and Central Asia ($220 million). Blended financing trends towards East Asia and Pacific depart from findings from CPI's Global Landscape report, which finds that most climate finance flowed towards East Asia and the Pacific, accounting for 46% of global flows. The disparity in findings can be attributed to strong domestic spending in China, which is not captured in our database[5].

Figure 10: Number of climate blended finance transactions by country recipient, 2019-2021

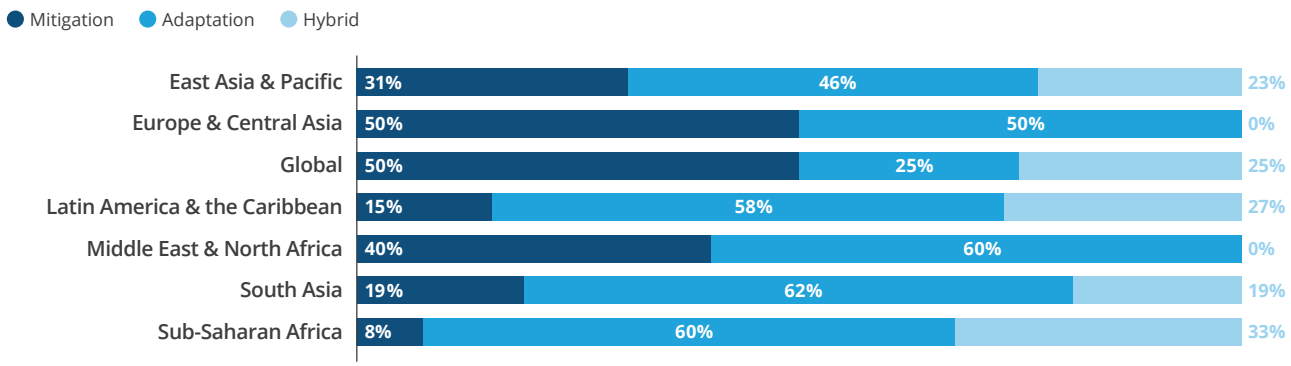


The most frequently targeted countries by climate blended finance transactions over the past three years have been: Kenya (13 transactions), Brazil (8), Colombia (6), India (5), and Nigeria (5). While many of these countries (i.e., Kenya, India, Nigeria, Ghana, South Africa, Cote d'Ivoire, and Brazil) are the most frequently targeted countries in the overall blended finance market, notable standouts include Colombia (6 transactions), Rwanda (4 transactions), and Guatemala (4 transactions).

From an aggregate financing lens, the largest financing flows between 2019-2021 have targeted Brazil ($2.5 billion). Brazil has been the recipient of a number of large-scale transactions launched since 2019, including: LD Cellulose ($1.2 billion), a wood pulp plant in Brazil that will produce cellulose fibre, and Mercon Coffee Facility I ($450 million) and II ($500 million), a Rabobank-led revolving credit facility for Mercon Coffee Group, to improve efficiencies across its supply chains in Latin America and Southeast Asia, with support from IFC and FMO's concessional MASSIF Fund.

5 Note public spending levels are not captured in Convergence's HDD unless there is evidence of participation from private investors.

Figure 11: Proportion of climate blended finance transactions across regions by climate sub-theme, 2019 – 2021



Unsurprisingly, climate mitigation activities are the primary climate focus across all regions (Figure 11), apart from transactions with a global focus (50% adaptation vs. 25% mitigation and 25% hybrid). Although global transactions represent a small number of climate transactions overall, these transactions – mostly funds – may be better equipped to integrate multiple sectors within their portfolio. Examples of funds with an adaptation or hybrid focus include Climate Investor Two (CI2), the Climate Resilience and Adaptation Finance and Technology Transfer Facility, Global Fund for Coral Reefs, and InsuResilience Fund. The regions where there has been a stronger adaptation focus include East Asia and Pacific (31%), Europe and Central Asia (50%), and Middle East and North Africa (40%).

INCOME LEVELS

The largest proportion of climate blended finance transactions target middle-income countries. While lower-middle income countries tend to appear in our data with the greatest frequency, representing 60% of transactions in 2021 vs. 23% of transactions in upper-middle income countries, aggregate financing volumes are relatively outsized for upper-middle income countries: lower-middle income countries received just a mere $500 million more in financing than lower-middle income countries($1.6 billion vs. $1.1 billion). This financing trend is further explained when considering average deal sizes across income levels; upper-middle income countries had an average deal size of $184 million from 2019-2021, while lower-middle income countries had an average deal size of $101 million.

Figure 12: Proportion of climate blended finance transactions by country income level, 2019-2021

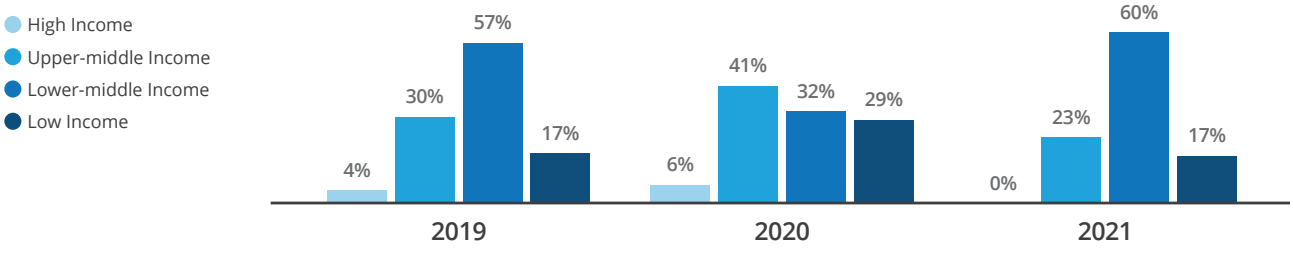
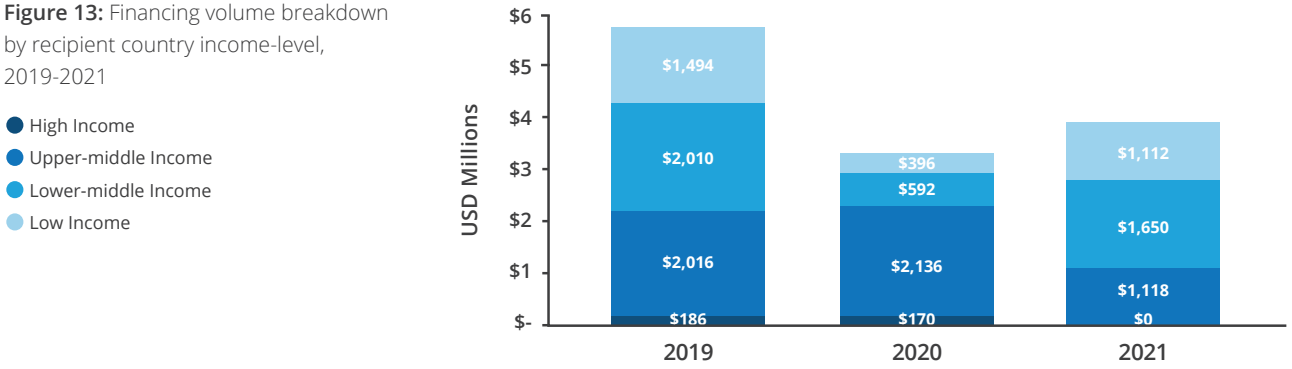


Figure 13: Financing volume breakdown by recipient country income-level, 2019-2021

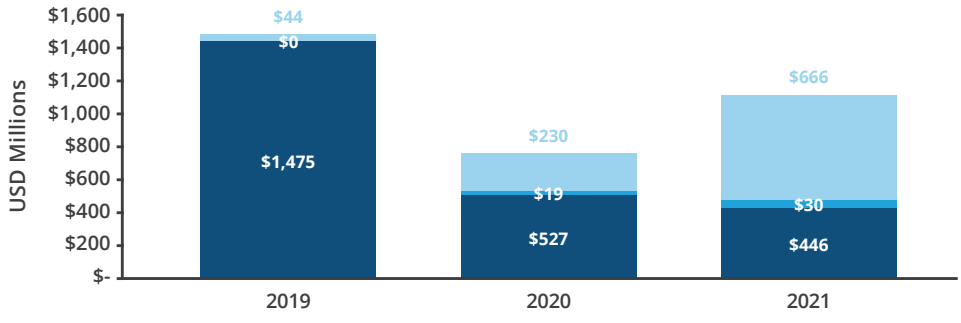


LDCs carry the greatest burden of climate change, yet have contributed least towards greenhouse gas emissions. As reported by UNCTAD, in 2019, LDCs were estimated to account for just 1.1% of total world CO_2 emissions, and 9% of emissions taken in per-capita terms. Convergence's data finds that LDCs have received just over a quarter of total financing (27%) between 2019-2021. The bulk of this financing has targeted mitigation activities, although this share of financing dropped in 2020, and 2021, reflecting the overall decrease in climate blended finance in the market. Examples of mitigation initiatives in LDCs include the BUILD Fund, developed in partnership with the United Nations Capital Development Fund (UNCDF). In 2021, the BUILD Fund made its inaugural investment, providing a $500,000 working capital facility to Mwezi Ltd, a last-mile solar energy solutions distributor targeting rural Kenya. This investment will enable Mwezi to expand to neighbouring LDCs including Uganda, Ethiopia, and Rwanda. The need for greater adaptation financing in LDCs is particularly urgent; LDCs lack critical financing to support climate-resilient measures and infrastructure and rely extensively for income on ocean-based sectors, particularly in Small Island Developing States (SIDS).

According to OECD data, while the volume of private finance for climate action in LDCs is increasing over time, it still accounts for only 7% of all private finance mobilized. Of all private finance in LDCs, only 37% targeted climate action, amounting to $1.6 billion (on average in 2018-2019). Convergence captured around $1.5 billion in climate blended finance towards LDCs in 2019, suggesting that much of private finance was channeled using blended mechanisms.

Taken together, the above data illustrates a central tension in blended finance, and development finance more broadly. Climate finance, particularly from a mitigation perspective, offers the greatest emissions reductions potential in countries that are developed or industrializing rapidly, including China and India. This is evidenced by the high financing levels directed towards middle and upper-middle income countries. On the other hand, LDCs suffer the greatest burden of climate change, yet receive little financing. The trade-off between blended finance for climate vs. other development goals, including poverty alleviation, should therefore be weighed carefully, to ensure that blended climate mandates include an outsized focus on LDCs. Financing for climate adaptation in LDCs is particularly urgent. While many LDCs are already experiencing the impact of climate change, including sea-level rise, desertification, fires, floods and droughts, only a small fraction of climate blended finance in LDCs is channeled towards adaptation.

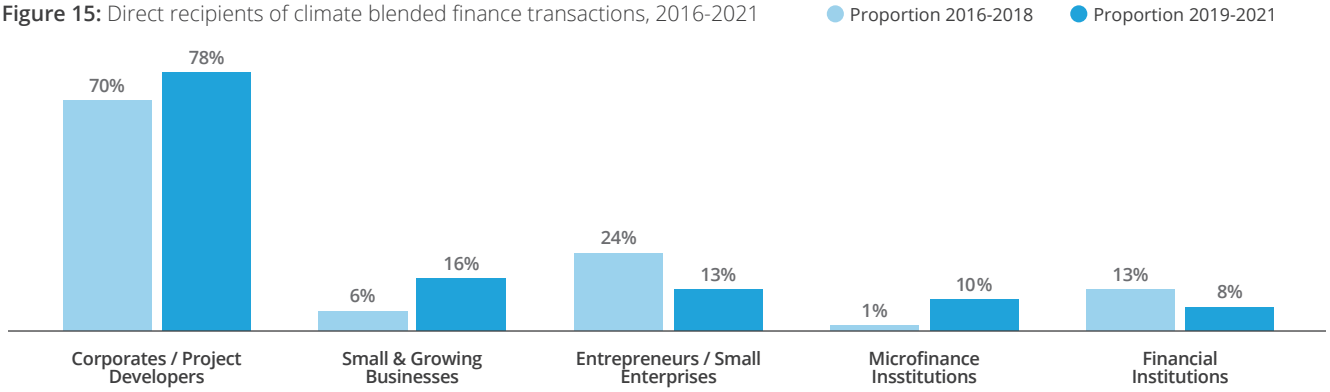
Figure 14: LDC financing volume, 2019-2021



RECIPIENTS

Since 2016, corporates and project developers have been the most frequent direct recipient of blended climate financing, targeted by 70% of climate transactions between 2016-2018, and an even greater share, 78%, between 2019-2021 (Figure 15). Historically, this trend has been dictated by the sustained activity of renewable energy projects in the blended finance market, with project developers receiving blended debt financing packages for project construction. However, as mentioned previously, with fewer renewable energy projects occurring in climate blended finance in recent years, Convergence observes a greater diversity in the sectors in which these corporate recipients operate, such as agriculture, conservation finance, and the blue economy.

Figure 15: Direct recipients of climate blended finance transactions, 2016-2021



Cumulatively, blended climate transactions directly targeting start-up (entrepreneurs and small- and medium-sized businesses (SMEs) and growth-stage businesses (small and growing businesses (SGBs)), has remained flat since 2016 at roughly 30% of climate blended finance deals. However, since 2019, the focus of climate blended finance has transitioned towards SGBs, or larger companies with more established business models and revenue streams. This shift is evident in mitigation blended finance, where growth stage companies in the off-grid sector are attracting private sector interest. For example, BBOXX, a manufacturer and installer of modular off-grid solar systems, has raised nearly $200 million in debt and equity capital, including a $15 million local currency loan in 2021, backed by a concessional partial credit guarantee from GuarantCo. The growth in adaptation finance in recent years is also increasing the prevalence of SGB beneficiaries. Larger investment vehicles have become more commonplace in adaptation blended finance and enable adaptation financiers to meet the higher capital needs of larger borrowers and more expansive projects. The Global Fund for Coral Reefs, a recently launched a $500 million blended fund ($625 million with the inclusion of a $125 million grant window), will have the capital necessary to finance

i. scaled projects improving the resilience of coral reefs and;
ii. established businesses operating in blue economy infrastructure.

Similarly, AXA Group's alternative investments business AXA IM Alts, recently announced a €500 million reforestation commitment towards a larger €1.5 billion nature based solution strategy. The launch of the new natural capital strategy will focus on emerging markets and finance biodiversity preservation to fight against the deterioration of vulnerable and high value natural habitats.

While the distribution and intensity of climate impacts vary by geography and demographic, climate blended finance transactions often target the broader population. Since 2016, the general population was most identified as the key ultimate beneficiary of impact, reaching a high of 68% of transactions between 2019-2021 (Figure 16). This can largely be explained by the prominence of mitigation deals in the market, and particularly renewable energy projects, which construe generalized benefits in the form of avoided emissions of CO_2 that would otherwise be released through fossil fuel fired generation.

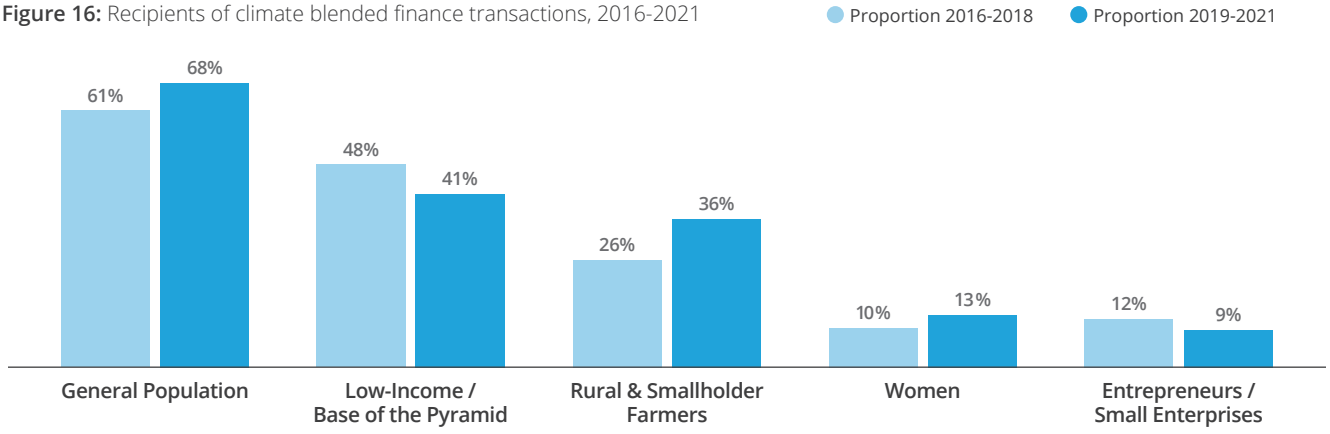
Climate blended finance transactions are also increasingly targeting smallholder farmers and rural populations – 36% of climate deals served rural communities and smallholder farmers, up from 26% in 2016-2018. This points to the increased share of agriculture-focused adaptation and hybrid transactions in climate blended finance in recent years. According to TechnoServe, smallholder farmers face many of the most immediate threats of climate change, including higher and more volatile temperatures that jeopardize crop yields, exposure to extreme weather events, and new plant and animal diseases and pests. This vulnerability leaves farmers and rural communities as the most in need of adaptation interventions.

While Convergence saw some progress towards the more systematic incorporation of gender considerations in climate blended finance transactions, the increase was marginal – 10% of deals targeted women in 2016-2018, which grew to 13% in 2019-2021. There is growing recognition that the effects of climate change are gendered, and interact differently depending on ethnicity, age, race, and class. According to GenderSmart, companies and deal sponsors that fail to incorporate a gender lens into transaction design limit the quality and quantity of their hiring pools, miss out on a large consumer group and risk falling behind peers as fiduciary duties evolve to reflect new investing priorities that include gender-aware impact.

> "...**36%** of climate deals served rural communities and smallholder farmers, up from **26%** in 2016-2018."

Doing so may be challenging in transactions with sweeping development outcomes, as is the case in many mitigation blended finance deals. IDB Invest's engagement in the development of Uruguay's solar market presents one blended finance approach for the inclusion of gender outcomes in renewable energy asset creation, particularly as they relate to the barriers faced by women in the construction and infrastructure sectors. As part of their financing of the Casablanca Giacote solar PV plant, IDB Invest and The Canadian Climate Fund for the Private Sector in the Americas (C2F) integrated a gender-based performance incentive aimed at boosting the proportion of women in semi- and high-skilled positions during the power plant's construction. Achieving the pre-defined targets would lead to interest rate reductions on the concessional C2F tranche for the borrower. The borrower went on to meet the labour targets, leading to an average women labour force participation rate of 17% with over 68% of labour hours performed in higher-skilled positions.

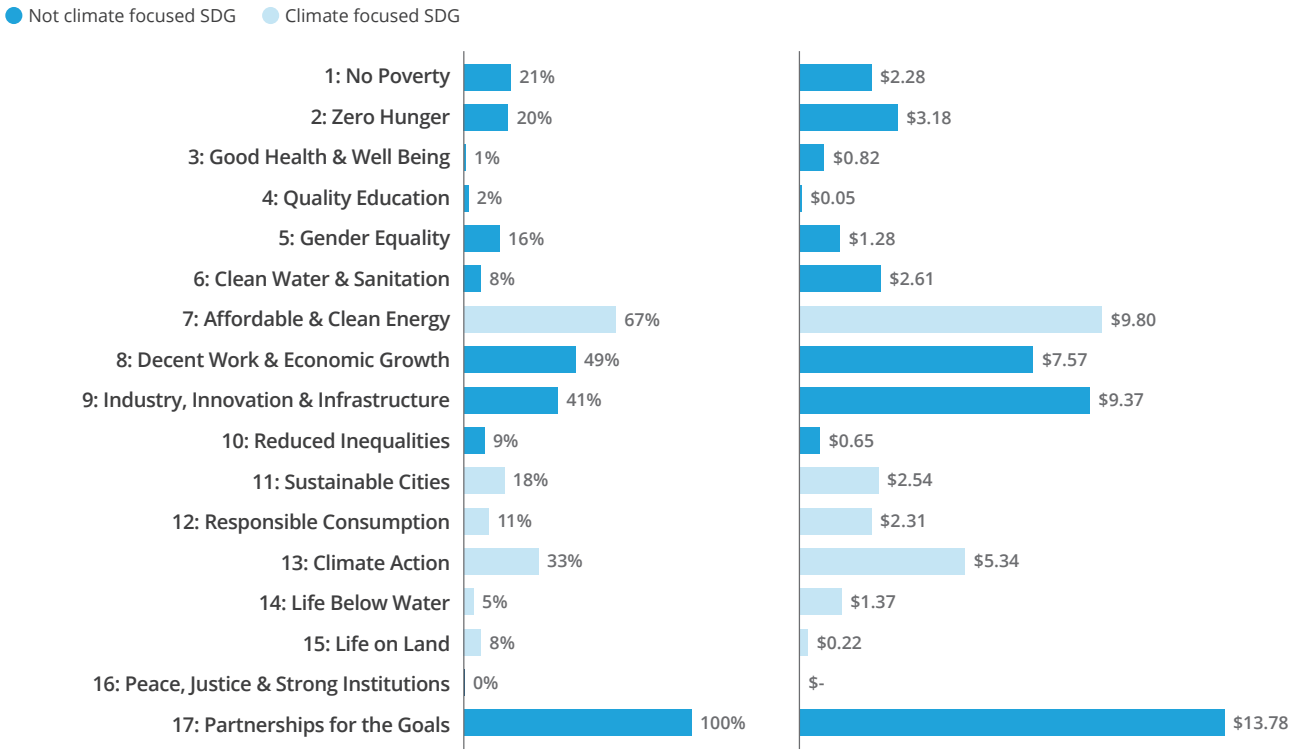
Figure 16: Recipients of climate blended finance transactions, 2016-2021



SDG ALIGNMENT

Blended finance mobilizes private investors into underlying activities with cash flows from which they can ultimately expect to be remunerated, and as such, is suitable as a structuring approach only for those SDGs that can generate commercial revenues. The public sector continues to provide almost all adaptation financing, within the mitigation space, renewable energy attracts higher shares of private finance. This is due to its commercial viability and higher competitiveness – renewables-based electricity is now the cheapest power option in most regions and thus often is the default option for capacity additions in the power sector. Unsurprisingly, two thirds (67%) of climate blended finance transactions launched between 2019 and 2021 have targeted SDG 7 (Affordable & Clean Energy). Meanwhile, financial services (which tracks economic growth and job creation) and infrastructure (both energy and nonenergy) also continue to feature prominently within climate blended finance, with SDGs 8 (Decent Work & Economic Growth) and 9 (Industry, Innovation, and Infrastructure) accounting for 49% and 41% of climate blended finance transactions between 2019 and 2021 by deal count, respectively. Naturally, SDGs 7, 8, and 9 account for the bulk of aggregate financing amongst climate transactions launched between 2019 and 2021.

Figure 17: SDG alignment, proportion of climate blended finance transactions by SDG (2019-2021) and Total financing ($billions) mobilized towards the SDGs by climate blended finance transactions (2019-2021)



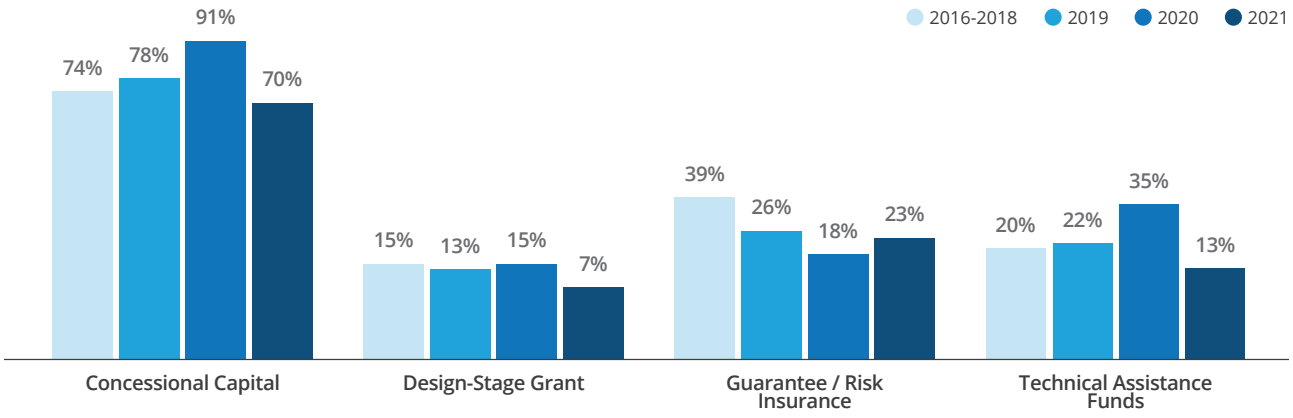
Interestingly, while a quarter (25%) of all blended transactions launched between 2019 and 2021 targeted SDG 5 (Gender Equality), only 16% of climate blended finance transactions did so, suggesting that the gender-climate nexus remains an emergent area in which the development community and investors are still attempting to define and chart the best route forward. Indeed, Convergence's fundraising data shows that of the climate blended finance transactions currently seeking blended capital, 78% are not gender aware (i.e., provide no evidence that gender-related factors have been considered), with only 13% being gender aware (i.e., incorporate a gender lens in some form), and 10% being gender-intentional (i.e., have a comprehensive focus on gender and the empowerment of women or girls). Similarly, amongst climate transactions launched between 2019 and 2021, 82% were not gender aware; 16% were gender aware, and only 2% had an intentional gender lens for impact.

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 technical assistance facility, used to finance pre-investment (business design), post-investment (personnel training), and cost-of-investment (legal structuring fees) activities to improve the bankability of a transaction.

Figure 18: Proportion of Climate blended finance transactions by blending archetype (2019-2021)



Over the past few years, concessional debt and equity (70% of transactions in 2021) have consistently been the most dominant approach to climate blended finance, much like the overall blended market. Concessional debt and equity have most frequently been structured in the form of first-loss grants (20% of concessional investments), subordinate debt (14% of concessional investments), and first-loss equity (14% of concessional investments). Technical assistance grants have also been a commonly used blending approach, with 35% of climate transactions tapping TA funds alongside their blended finance structure in 2020, and 13% in 2021. Examples of TA include the Green Bond Technical Assistance Program, an IFC-managed program to create a market for green bonds in developing countries, in partnership with Sida, the Swedish development agency. In 2021, USAID provided technical assistance via its Green Invest Asia program to Forest Carbon Indonesia, a company which restores tropical wetland forests to reduce greenhouse gas emissions, with a focus on Indonesia due to its high concentration of the world's peat and mangrove wetlands. USAID Green Invest Asia provides technical support to businesses and investors with the aim of catalyzing $400 million of investments into sustainable agriculture and forestry models. Concessional guarantees and risk insurance have been used in climate transactions at similar rates to the overall market, supporting 23% of transactions in 2021. In 2021, the company BBOXX received a KES 1.6 billion ($15 million) local currency loan from SBM Bank Kenya, which was partially guaranteed by GuarantCo, to grow its off-grid solar home system and essential appliance inventory.

Lastly, design-stage grants have played a small role in blended finance to date but can provide crucial support

when developing new models to test feasibility and develop proof of concept. Speaking to the importance of design funding, Bayat-Renoux at UNCDF shares:

> *"Project preparation funding is extremely important to bring climate pipeline projects to a level of maturity that meet investors' risk-return profile and can reach financial close. Indeed, a **2020 report by McKinsey** found that 80% of infrastructure projects in Africa don't get past the feasibility/planning stage, because they lack access to the financial resources and capacity required to complete the required feasibility and business planning analysis."*

Convergence has hosted multiple design-funding windows focused on climate, including the Asia Natural Capital Window, funded by the RS Group, the Indo-Pacific Design Funding Window, funded by the Australian Government, and the Gender-Responsive Climate Finance Window, funded by the Government of Canada. In 2021, Convergence awarded design grants for a feasibility study to Basel Agency for Sustainable Energy (BASE) to develop a remittance-based financing vehicle that aims to advance sustainable micro-infrastructure development and climate resilience and adaptation action in the Pacific Islands. Also in 2021, Convergence awarded a feasibility grant to Conservation International for the design of the Restoration Insurance Service Company (RISCO), a novel approach aiming to raise blended finance to fund mangrove restoration and conservation activities across Southeast Asia.

Debt accounts for an average of 36% of investments into climate related transactions between 2019-2021, with greatest deployment towards mitigation sectors (43%) followed by adaptation (36%). Debt is most used in project finance (62% of debt investments into climate blended finance are projects), and to a lesser degree, funds (17% of debt). Around 20% of debt has been deployed on concessional terms. Oxfam warns of the risks associated with the high volume of non-concessional loans in climate finance in its 2020 report, which could lead to rising and unsustainable debt among the world's poorest countries. Considering this issue, debt for climate swap transactions have been one promising type of blended finance transaction to reduce the debt burden on countries, particularly SIDS, and support innovative mechanisms to fund adaptation efforts. Recent examples include NatureVest's Belize Bond, led by the TNC and Government of Belize, which enables Belize to purchase $553 million, quarter of the country's total public debt, from bondholders at a 45% discount through the Blue Loan. The U.S. International Development Finance Corporation (DFC) provided a political risk insurance wrap on the Blue Loan, and Credit Suisse financed the Blue Bonds, which funded the TNC subsidiary to make the Blue Loan. In September 2022, TNC announced its third global debt conversion, this one in the Barbados, marking TNC's third country partnership on a Blue Bonds project.

> "...debt for climate swap transactions have been one promising type of blended finance transaction to reduce the debt burden on countries..."

Meanwhile, an average of 41% of investments into blended climate transactions between 2019-2021 have been equity, in large part due to the concentration of climate funds in the market (67% of equity commitments between 2019-2021 have been to funds). Most of this equity has been commercial, although we do see first-loss equity being deployed through multi-donor funds such as Green Climate Fund (GCF). We have seen greater use of grant funding in the adaptation sector compared to mitigation. Adaptation models are newer and require more time and resources to determine feasibility, develop business models, attract investors, and develop pipeline[6].

6 As an indicative example, Convergence provided a design grant to NatureVest and TNC in 2016 to support the design of a Blue Bond, which ultimately launched as the Belize Blue Bond in 2021.

PART III: INVESTOR TRENDS

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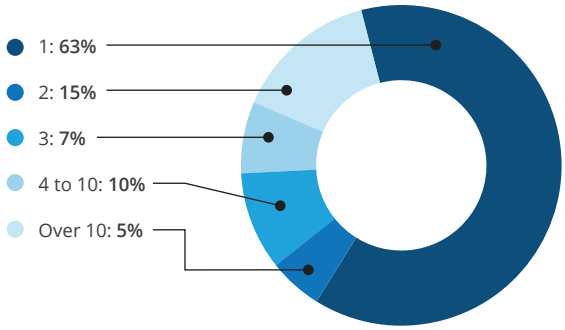
INVESTOR TRENDS

According to Convergence's database, over 2700 investments have been made into blended finance transactions targeting climate outcomes, from over 860 investors. Nearly half of these investments (47%) have been made in 2016 or later. Our analysis further finds that the use of blended finance as a tool when supporting climate outcomes – as with the entire market – has not become routine. Most investors still tend to participate in transactions on a one-off basis. As evidenced by Figure 19, 63% of organizations have made only a single commitment to climate transactions, while 22% have made three or more (and can therefore be classified as "active" blended finance investors).

Figure 19: Investor activity in climate blended finance transactions by number of deals participated in



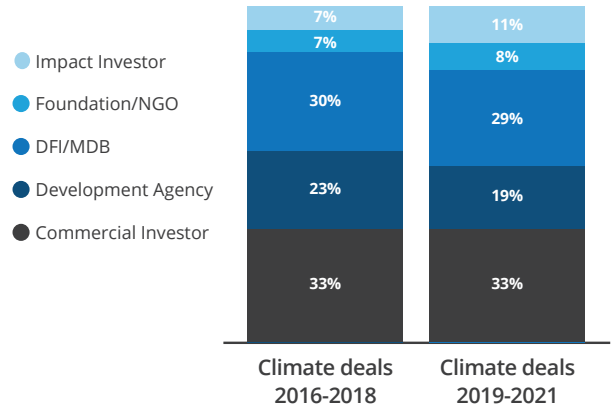
OVERALL LANDSCAPE

When looking at the market overall, the largest proportion of investments into climate blended finance transactions come from commercial investors (providing 33% of commitments between 2019-2021). Given Convergence's definition of blended finance includes attracting at least one commercial investor (further analysis on commercial investors below), every transaction in our dataset meets this test; the high proportion indicates that blended transactions often have more than one commercial investor present. Meanwhile, DFIs / MDBs provide the bulk of commitments coming from the public sector (60% of public commitments are from MDBs and DFIs), with the balance coming from development agencies (40% of public commitments and 19% of all financial commitments). This trend is similarly reflected in CPI's Global Landscape for Climate 2021 report, which finds that DFIs provide most public finance in the climate space generally. Lastly, foundations / NGOs and impact investors provide the remaining balance of climate blended finance commitments (8% and 11% of commitments, respectively).

Despite the smaller proportion of investments coming from foundations (8%), they are an important source of concessional capital, accounting for 15% of concessional commitments. The largest proportion of concessional capital comes from development agencies, accounting for 55% of concessional commitments between 2019-2021.

Our analysis finds that overall, investor commitments to climate in the blended finance market have not substantially changed over the last six years – no investor category has demonstrated a significant uptick in commitments when comparing activity in 2016-2018 to 2019-2021. This contrasts with investor sentiment;

Figure 20: Proportion of commitments to climate blended finance deals by investor type, 2016-2021



Convergence surveyed our members based on their appetite for climate blended finance, finding that 55% of respondents are implementing "significant" climate targets within their investment portfolios. At the same time, 55% of respondents had changed their investment activity "a little" towards climate transactions within the past year, while 18% responded "not at all". These findings echo other climate reports; for example, the OECD finds that between 2018-2019, climate finance dropped by 4% overall.

Another striking finding, as apparent on the league tables below, is the absence of local investors in blended finance initiatives. This is a key barrier to scaling climate blended finance; as shared by Bayat-Renoux at UNCDF:

> *"Unless we strengthen domestic and regional financial systems and players in developing countries, we will not be able to support developing countries to close the climate finance gap".*

Figure 21: Proportion of commitments to each climate blended finance sub-theme by investor class, 2019-2021

All investor groups have predominantly invested in climate mitigation transactions. While adaptation deals remain underrepresented, even amongst public investors, hybrid models with cross-cutting themes are becoming more common as commercial investors, foundations, and impact investors all demonstrate good appetite (~30% of financial commitments) for these models.

One positive approach we have seen is fund managers launching funds that address climate mitigation and then, as the market matures and investors become familiar, launching follow-on funds addressing adaptation. This is exemplified by Climate Fund Managers (CFM); the fund manager first launched Climate Investor One (CI1), focused on climate mitigation through renewable energy projects in 2019, and has since launched Climate Investor Two (CI2), focused on the blue economy.

VOICES FROM THE FIELD:

How Fund Managers Can Mobilize Investors Towards Climate Finance

Interview with Aarish Shariff, Executive, Capital Raising and Business Development, and Johnathan Thurling, Associate, Capital Raising and Business Development, at Climate Fund Managers

What do you see as the role for blended finance when supporting investments into climate?

For climate-based projects, both for mitigation and more so for adaptation, there is not an abundance of commercially viable projects. Without the protection afforded by blended finance structures, commercial investors cannot be compensated for the higher risk they are taking, especially at the development stages of the project. But we see the need for blended finance across the board of project development, even at the refinancing stage, which is at the operational stage where risks are relatively lower. We tested the idea of having a Refinancing Fund that was fully commercial and found that investors still found comfort in having some blended finance component to align their risk / return profile.

How has your approach to deploying blended finance and climate changed over time?

Overall, the basic structure across Climate Investor I (CI1) and Climate Investor II (CI2) has remained the same, since it's been successful among our investors from CI1. We know this because around 60% of investors from CI1 are investing in CI2, which to us demonstrates proof of concept. However, we have made ourselves a little bit more flexible, for example while in CI1 we had a strict equity-only approach, with CI2 we can now also incorporate debt into the structure if it exists in the project structure, for example if the developer already got an approved debt amount. So, we are earning this flexibility with our track record and can create more impact and secure better returns for investors.

How receptive are investors to CI2, which has an adaptation focus, compared to how they were to CI1, which had a mitigation focus?

The challenges we face when fundraising for CI2 are like the same challenges we faced when fundraising for CI1, because at that time, the renewable energy sector was more niche. And now we find that with the adaptation sector; investors are still trying to understand how we can generate a pipeline, and how that pipeline will meet the returns that we are targeting. Long term investments into this sector are still new. Now we hear from a lot of investors asking if they can still invest in CI1, which is closed. Which tells us that now CI1 is mainstream. On the flip side, our donor partners tell us they don't see the need for concessional finance in those structures anymore. So, blended finance really straddles a fine line; it's needed for projects that are almost bankable. It's a stepping-stone to mainstream.

When considering the challenges of mobilizing private capital at scale within climate-related transactions, are you seeing any changes or developments?

We must look at this as two sides of the same coin. On one side, fund managers need to create an even better risk return profile, by creating best-in-the class bankable projects that have a strong value proposition. On the asset owner side, we find investors are much more likely to deploy capital into the climate space, if you have a specific climate focused allocation, for example an ESG or impact strategy. This makes it easier to scale common objectives because your opportunity costs are a lot more attractive.

We have also faced significant challenges at the macro level due to the current macroeconomic

uncertainties. This has made everyone reassess their strategies and reduced the scope of deployment of funds by governments. This could be an opportunity for the private sector to step up, but they are also functioning under uncertainties. How the market behaves in the next 8-12 months will define how climate mitigation or adaptation projects are developed in difficult markets. Added to this, CI2 is more focussed on adaptation and the blue economy, which is a niche sector. Investors are less familiar with sectors such as water and sanitation, as opposed to renewable energy or other mitigation strategies, which makes us believe that maybe adaptation might be 5 years away from going mainstream.

What is your perspective on how we can be better at mobilizing more private capital and attracting more institutional investors into the climate space?

The overarching principle is that the commercial investors need to be brave, and they need a clear mandate of what they want to achieve. While regulations ease up in Europe and the US, with the new landmark climate legislation recently signed into law by President Biden, there is still a challenge of how to get more funding into emerging economies. Investors should be allocating funds specifically dedicated towards a climate strategy and need to consider the additionality from these projects besides just commercial returns.

Convergence wrote a case study on Climate Investor One (CI1), available here.

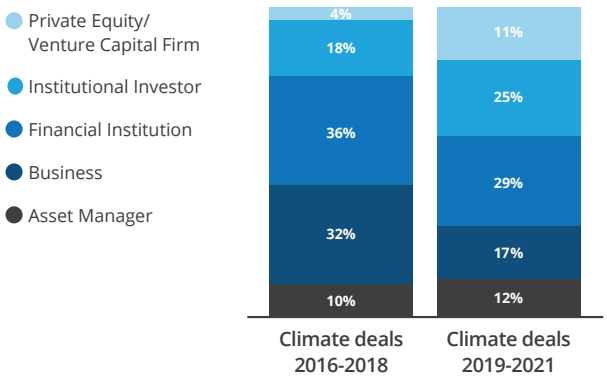
COMMERCIAL INVESTORS

Financing levels from commercial investors have dropped dramatically over the last three years; commercial investors committed $19 billion in capital to climate blended finance deals between 2016-2018, but only $4 billion between 2019-2021. In particular, financial institutions declined by share of commitments, from 36% to 29% over this time period. This contrasts with overall trends in the climate finance market; CPI finds that commercial finance institutions have increased their share of private climate finance from 18% in 2017-2018 to 39% in 2019-2020. Taken together, we hypothesize this could be a positive development, signalling that as commercial banks incorporate climate finance, and particularly clean energy assets, within their portfolios, they require less concessional capital than in previous years. However, there also exist greater opportunities for blended finance going forward to support investors in taking on new risks, for example, through participating at an earlier stage of project development, rather than at the construction financing or refinancing stage. There also exists an important opportunity for more local financial institutions to play a role in climate blended finance.

As shared by Pug Bennet, Chief Investment Officer for Africa GreenCo, an innovative model that aims to transform renewable energy markets in Africa,

"There isn't enough development money to support the financial requirements of the power sector in Africa, and one avenue for more financing is to get the local commercial banks more involved than they have been. There is potential for local financial institutions to do a lot more lending, with support from DFIs. Local banks also provide an important source of local currency for projects."

Figure 22: Proportion of commercial investments into climate blended finance transactions

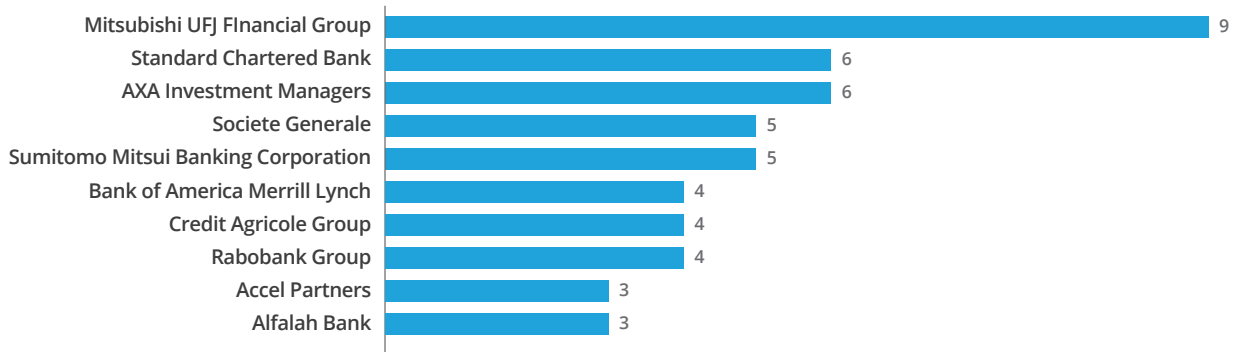


We have also witnessed a decline in the number and share of investments from corporates into climate goals, which contrasts with the announcements from major corporates and multinational corporations about plans to go carbon neutral. One explanation for this trend could be that corporates are choosing to finance blended finance transactions using lines of credit extended via commercial banks and MDBs and DFIs, rather than financing initiatives directly. Indeed, Convergence finds corporates have participated in blended finance using large scale credit facilities funded by financial institutions and MDBs and DFIs, to refinance existing debt and strengthen value chains. For example, Mercon Coffee Group has been the recipient of two facilities, launched in 2019 ($450 million) and 2021 ($500 million), to finance its existing debt and integrate climate change within its activities, with lenders including Rabobank, IFC, and FMO MASSIF. Convergence also finds that fewer renewable energy projects were launched between 2019-2021, resulting in fewer investments from project developers / sponsors. One opportunity through which corporates can address climate goals is by implementing reforms through their supply chains, which can be supported by blended finance (directly and indirectly). One example of indirect support conferred by blended finance is CargoX, a digital marketplace for truckers. The platform connects cargo with empty trips to reduce the emissions impact of the trucking sectors. The platform is funded by venture capital firms as well as IDB Invest, with concessional funding provided by the Clean Technology Fund (CTF).

Meanwhile we see an encouraging increase in activity from institutional investors into climate finance (increasing their share of investments from 18% of private investments between 2016-2018, to 25% between 2019-2021). The increasing interest of institutional investors in climate follows the recent emergence of various Net Zero institutional investor groups, including the NZAOA, which includes pension funds and insurance companies. Institutional investors have also been vocal regarding their needs from concessional capital providers and policymakers in order to scale blended finance, most notably through the NZAOA Scaling Blended Finance Report, published in November 2021. The report recommends potential solutions to scale blended finance, including to increase the pipeline of investable deals, make private investments into funds eligible for ODA, establish ratings methodologies, amongst other points. We also see a growing trend of acquisitions of climate funds by larger PE funds – examples include the acquisition of SunFunder, a specialist in emerging market clean energy and climate investment, by Natixis. Our analysis finds that private equity funds have gained as a share of the activity at the expense of debt funds; when comparing 2016-2018, and 2019-2021, equity funds have increased from 53% to 62%, while debt funds have decreased from 47% to 38%. Blended finance can be a useful tool for private equity investors interested in climate finance; as shared by Kothari at Shell Foundation:

> *"One potential role for blended finance is to help reconcile the time horizon of investments in the climate space with investor preferences. With the way private equity is structured, it does not incentivize investors to have a long timeframe on rewards. Whereas the rewards in climate are the reduction in risks, which is only realized over the longer term – blended finance could play a role here to reduce some of that risk."*

Figure 23: Most frequent commercial investors in climate blended finance by number of commitments, 2016-2021



Despite a stark decline in the amount of financing from commercial banks into climate blended finance from 2016-2021, these institutions still represent frequent players in blended finance, as evidenced by the above league table. Top commercial banks investing in climate using blended finance include MUFG, Standard Chartered, and Société Générale.

This activity is primarily through project finance. Conversely, despite increasing participation from institutional investors between 2016-2018, and 2019-2021, no single organization has yet registered on our league table indicating that repeat commitments by the same institution remain rare.

VOICES FROM THE FIELD:

Opportunities and Challenges for Institutional Investors in Climate Finance

Interview with Leticia Ferreras Astorqui, Portfolio Manager, Development Finance, Allianz Global Investors

Can you comment on AllianzGI's climate-related activity?

Within the Development Finance team, climate is an important focus. We are increasingly incorporating a climate lens assessment across our investments during the due diligence process, especially when it comes to evaluating the climate resiliency of the assets/companies we are financing. With respect to our blended finance activities, climate is the theme of some of our funds where mitigation and adaptation considerations are part of the investment criteria.

Our climate related development finance activities aim to contribute towards both climate mitigation as well as adaptation. To date, most projects in the market have focused on climate mitigation. However, there is an increased focus on adaptation – although the definition of climate adaptation is somewhat fluid and could mean anything from climate resiliency screening to pure-play adaptation projects. As an illustrative example of the former, consider the development of a building that is located close to the water in Bangladesh. It's easier to make a business case for building flood resistant infrastructure, that considers the relevant climate risks in the original capex and costs. It's much harder to structure a bankable project that involves solely building a wall (pure play adaptation project) that shields such building from the sea as a standalone effort.

What are the challenges you see when you're engaging with private investors in regard to blended finance and climate? What is the current state of play?

The concern we see amongst institutional investors considering climate finance in emerging markets is more country-risk oriented rather than climate-oriented. Investors often have experience in climate related technology in OECD countries (e.g., they have invested in renewables), but are sceptical of the regulatory frameworks and macroeconomic situation in emerging markets. While investors are increasingly interested to invest in climate, doing so, at scale in emerging markets comes with a request for de-risking, hence blended finance remains an essential solution to mobilize that capital towards climate in these markets. On the positive side, some alliances such as the NZAOA and the Net Zero Asset Manager Alliance are actively advocating for more investments in climate and also supporting blended finance structures as a way to reduce the credit risk for investors and achieve climate goals even in the riskier jurisdictions.

When it comes to blended finance specifically, the challenges are less "climate specific" and include, among others:

i. the need for first loss capital as a de-risking mechanism, which is scarce and often too narrowly focused to achieve scale,

ii. vehicles are complex, which is often a deterrence for investors that are new to the asset class to dive into the product, and

iii. there is a lack of available public data on the track record for these investments (e.g. especially DFI related data).

Another challenge we face, especially working with some of the smaller DFIs, has been a limited focus on climate during their due diligence on investments. While these institutions have ESG frameworks, they have not yet incorporated climate considerations to the pipeline of investments, and this makes finding climate related projects challenging, which has a direct negative impact on deployment.

A recent development in the climate space, which present both an opportunity and a challenge is the European regulation related to sustainable investments (the EU Taxonomy and Sustainable Finance Disclosures Regulation (SFDR)). While this regulation is still being developed, it is incentivizing investors to consider sustainable investments and encouraging more transparency. On the other hand, it is imposing strict data collection requirements, which is often a challenge to comply with, especially for private markets solutions in emerging markets, where some of that data is not collected. As a result, this can limit the universe of investments we can consider.

What is your perspective on how we can be better at mobilizing more private capital investors into the climate space?

As was discussed in the Scaling Blended Finance report published by the UN-convened NZAOA, the availability of flexible and scalable first loss capital continues to be essential to mobilize private capital at scale. In addition, data transparency is quite important. To mobilize investors into blended finance vehicles, they require data on the performance of this asset class and currently, there is no publicly available data on portfolio performances of DFIs (beyond default history), which are the experienced, long-term investors in these markets. This in turn restricts our ability to obtain credit ratings for blended investment vehicles, which makes it difficult for some investors to consider investing in them.

On the climate side, we find that there is demand from some investors to create strategies that focus on climate and that consider climate risks within the investment process. Expanding this expertise within asset managers and other investors can therefore be a helpful contribution to catalyze more capital to support climate action whether in developed or emerging markets.

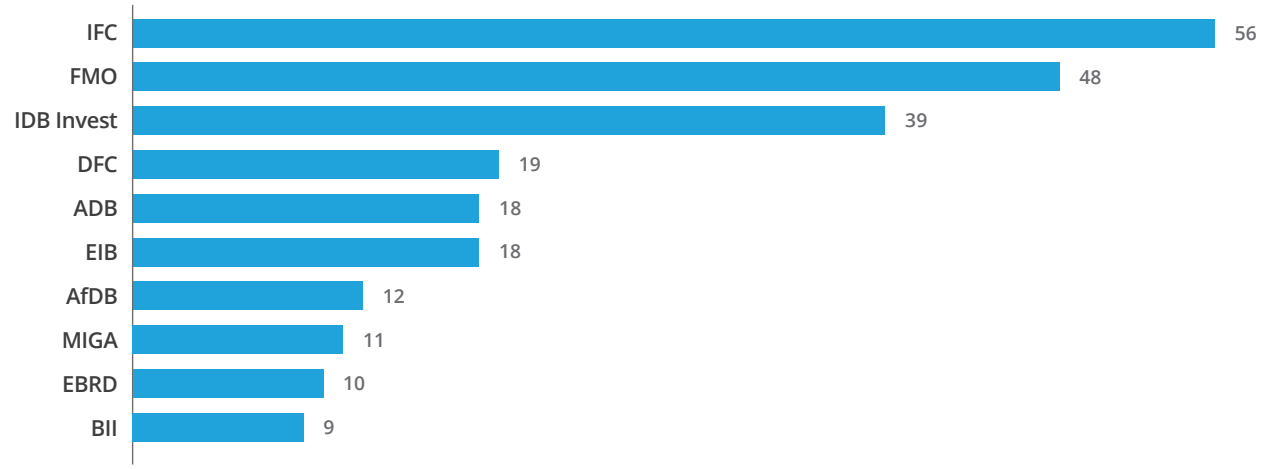
And then finally, there is a push to consider regulatory changes such as risk capital relief when it comes to climate related investments, which can also attract more investors into the space.

MULTILATERAL DEVELOPMENT BANKS (MDBS) / DEVELOPMENT FINANCE INSTITUTIONS (DFIS)

The most active MDBs and DFIs in climate blended finance to date (2016-2021) have been IFC, FMO, IDB Invest, DFC, and the Asian Development Bank (ADB). The prominence of DFIs and MDBs in climate blended finance can be partly attributed to the large number of climate blended finance programs housed at these institutions. Examples include bilateral programs such as IFC-Canada Climate Change Program and IDB's Canadian Fund for the Private Sector in the Americas (C2F), as well as multilateral programs such as the CTF and GCF (discussed in the section below). Recent initiatives include IFC's launch of the MCPP One Planet at COP26, which aims to scale mobilization of private capital into the world's poorest countries. The initiative builds upon the success of the IFC Managed Co-Lending Portfolio Program, which since 2013 has raised more than $10 billion. We also see a growing number of programs targeting adaptation. FMO's Mobilising Finance for Forests (MFF) program, established in partnership with the UK government in 2021, will combat deforestation and unsustainable land use practices. The fund will invest across a mix of investment funds and direct investments in select tropical forest regions in Africa, Asia, and Latin America. A technical assistance facility will support the program's fund manager and direct investees post-investment to scale bankable projects.

We have also observed DFIs structuring innovative projects to tap into growing institutional investor interest. One illustrative example is IDB Invest's approach to developing a solar market in Uruguay (see Convergence's case study here). Instead of bringing in commercial investors through syndicated loans, IDB Invest developed an A / B bond structure that could tap into institutional investors, such as insurance companies and pension funds. In addition to mobilizing institutional investors, raising funds via an A / B bond also supported the Bank's mandate to broaden and deepen the underdeveloped local and international capital markets for infrastructure assets in Latin America, as well as diversify the sources of capital available to Independent Power Producers.

Figure 24: Most frequent DFI / MDB participants in climate blended finance deals by number of commitments, 2016-2021

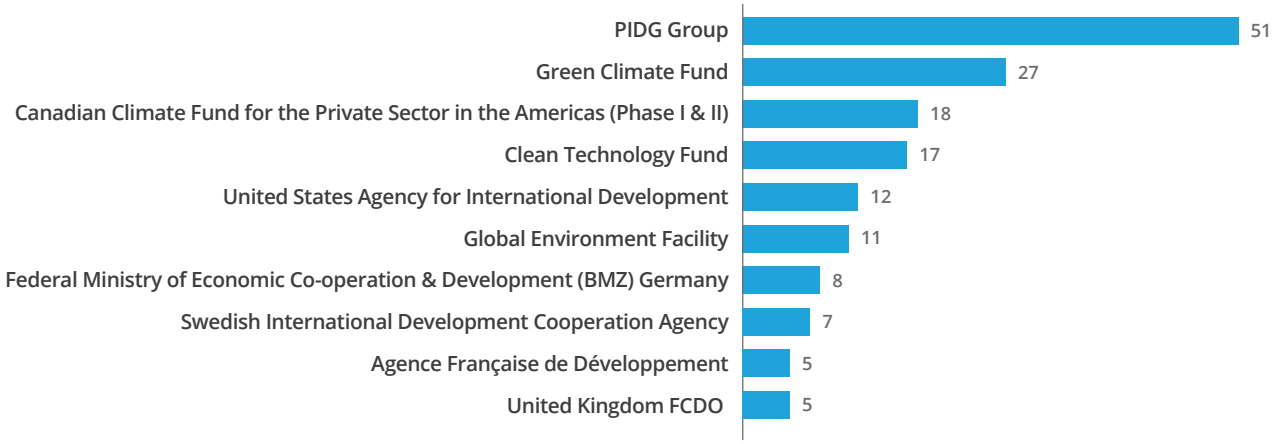


DEVELOPMENT AGENCIES & MULTI-DONOR FUNDS

Development agencies and multi-donor funds play an important role in blended finance transactions as providers of concessional capital. The presence of multi-donor funds is particularly striking, representing almost half (40%) of the top 10 institutions in the league table below: Private Infrastructure Development Group (PIDG), GCF, CTF, and GEF. This indicates that multi-donor funds are an effective way for donor governments to finance climate outcomes and provide an efficient alternative to direct commitments.

Examples of recent climate blended finance transactions with participation from development agencies include the Australian Government (DFAT)-led launch of the Tropical Asia Forest Fund 2 in 2022, a private equity fund targeting investments into forestry and forestry-related companies that exhibit sustainable forestry practices and reduce logging in natural forests. Development agencies have most often supported climate transactions using two instruments: senior debt and first-loss equity. We increasingly see first-loss equity being deployed by development agencies, who are expanding their toolkit of financial instruments beyond grants and debt. Indeed, the GCF, CTF, PIDG, and GEF all can deploy equity financing.

Figure 25: Most frequent development agencies and multi-donor funds in climate blended finance deals by number of commitments, 2016-2021



PHILANTHROPIC ORGANIZATIONS

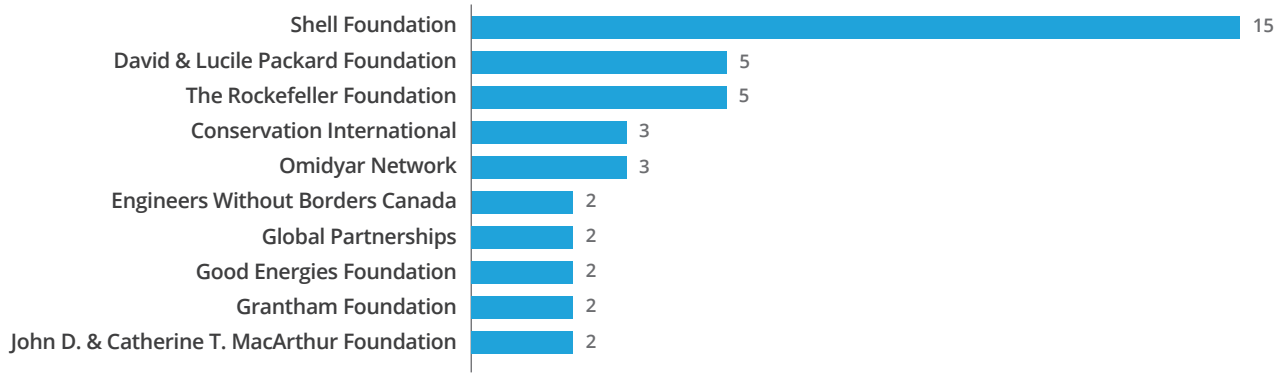
The philanthropic organizations most active in blended finance since 2016 have included the Shell Foundation, Packard Foundation, and Rockefeller Foundation. This past year, the Rockefeller Foundation led the launch of the Global Energy Alliance for People and Planet (GEAPP) initiative. GEAPP will scale energy transitions in low- and middle- income countries, with an aim of extending clean energy to 1 billion underserved people. GEAPP has received an anchor $1.5 billion in commitments from its anchor partners: Rockefeller Foundation, IKEA Foundation, and the Bezos Earth Fund. GEAPP has additionally received $8 billion from eight MDBs and DFIs: DFC, IFC, British International Investment, EIB, World Bank, AfDB, ADB, and IDB. Meanwhile, the Shell Foundation has historically had a focus on clean energy but has increasingly expanded to include adaptation activities within its portfolio. As shared by Kothari at Shell Foundation,

> *"Our focus at Shell Foundation is on energy access as a means to increase agency, education, employment and health of underserved populations. Our work in agriculture came from recognising the market size of smallholder farmers in Sub-Saharan Africa and India, and the outsized impact that provision of clean energy*

access could deliver, moving beyond simple access to lighting and household appliances to helping increase agricultural incomes via improvements in agricultural productivity, resilience, and profitability. After more than five years working in the Ag/Energy nexus, we've learned that customers are concerned about long-term challenges such as increasing weather risk and degrading soil quality, which can only be solved via long term solutions that build resilience ... and that led us to look more closely at climate adaptation and how to catalyze finance for adaptation".

In April 2022, the Shell Foundation announced a partnership with Nuveen, a global investment manager with over $1.3 trillion of assets, to drive more capital to emerging market climate solutions. The firm expects to invest at least $100 million over the next five years into companies serving climate-vulnerable communities in Africa and Asia. In addition to foundations, NGOs also play an important role, as evidenced by work on blue bonds undertaken by TNC (through NatureVest), Conservation International via RISCO, and WWF.

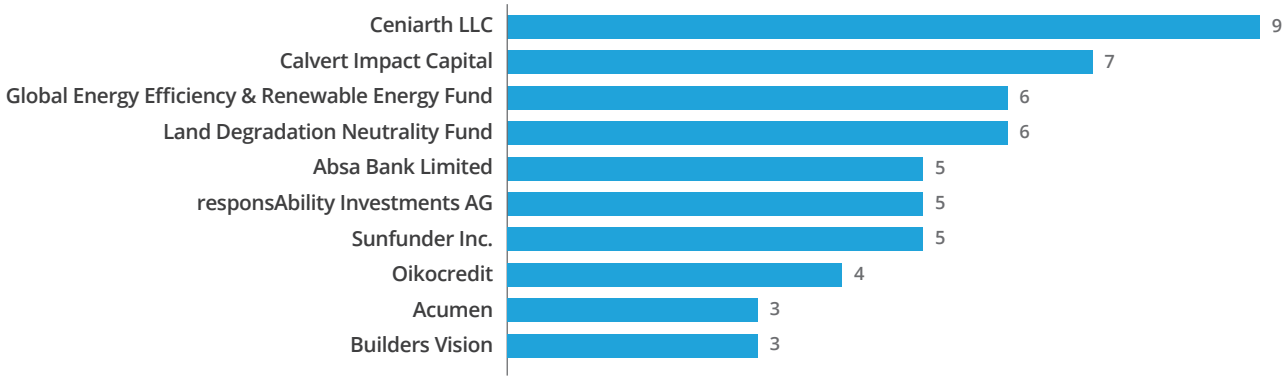
Figure 26: Most frequent philanthropic organizations in climate blended finance by number of commitments, 2016-2021

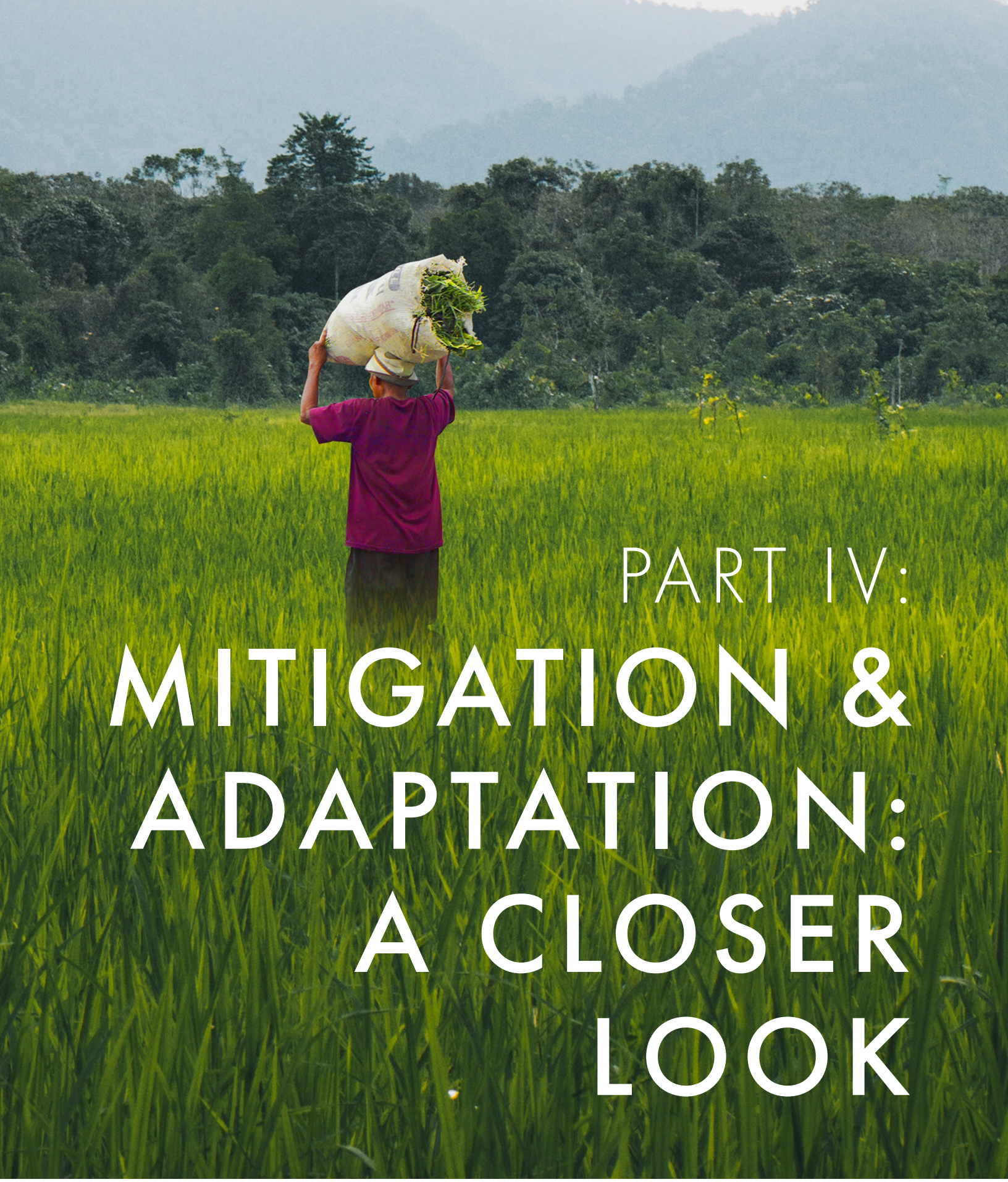


IMPACT INVESTORS

Impact investors represent a small proportion of investments for climate blended finance deals compared to other investor groups. Impact investors play a role as both fund managers and concessional and commercial capital providers to blended finance transactions. Top investors include Ceniarth LCC, Calvert, and funds such as the Global Energy and Renewable Fund and Land Degradation Neutrality Fund.

Figure 27: Most frequent impact investors in climate finance by number of commitments, 2016-2021

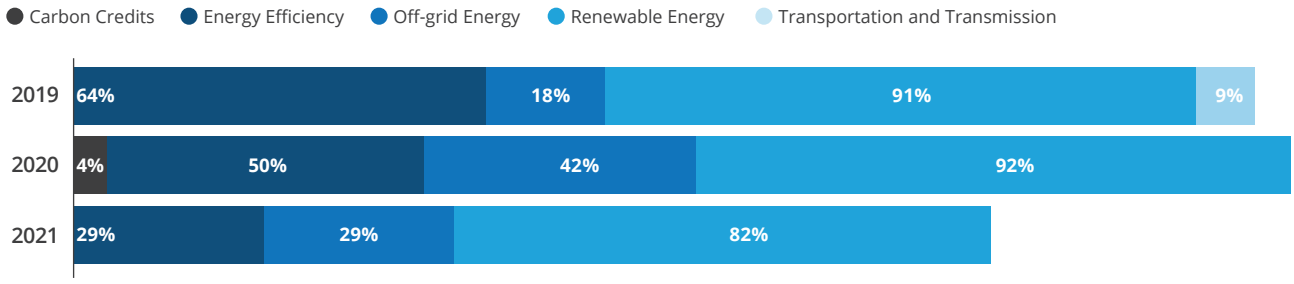




PART IV: MITIGATION & ADAPTATION: A CLOSER LOOK

PART IV:
MITIGATION & ADAPTATION A CLOSER LOOK

Figure 28: Mitigation sub-sectors; proportion of annual mitigation blended finance deals, 2019-2021[7]



MITIGATION BLENDED FINANCE

As mentioned previously, mitigation blended finance has historically comprised the largest subset of climate blended finance, both by annual deal count and aggregate annual financing. Renewable energy asset development has been at the core of the mitigation finance market (Figure 28). Between the years 2019-2021, renewable energy transactions accounted for 88% of mitigation blended finance deals, with a median deal size of $59 million. Several factors underpin the frequency of renewable energy development through blended finance. First, project finance structures are conducive to the inclusion of concessional investment instruments, like concessional loans or concessional guarantees provisioned to commercial loans. Below-market instruments can provide credit enhancement benefits for the borrower by lowering their cost of capital. They also de-risk projects by stretching debt service obligations to align with the long-term projected cash flows, improving project bankability and ultimately attracting private sector investors. Secondly, private sector investors, particularly commercial banks, have significant exposure to project finance in advanced economies. Replicating familiar structures in developing economies elevates market appetite. Finally, the transition away from fossil fuel power generation to renewable energy alternatives is one of the fundamental aspects of climate change mitigation, making it easily marketable and translating into a robust pipeline of investable projects.

Solar photovoltaic (PV) power generation has been the most common renewable energy technology funded by blended finance since 2016 (Figure 29), making up 74% of renewable energy deals. Wind power projects became increasingly common between 2019-2021, accounting for 24% renewable energy transactions, up from 10% between 2016-2018. This is partially a reflection of the downtrend in cost of many renewable energy technologies, including solar PV and wind. According to the International Renewable Energy Agency (IRENA), economies of scale, more efficient supply chains and technology improvements have significantly lowered the production costs of renewable energy components, like solar panels and wind turbine blades. IRENA predicts investment costs (USD/kW) for solar PV and wind power plants to fall by almost 60% and 15% respectively by 2025 from 2015 levels. Convergence's fundraising data mirrors historical trends, with 89% of fundraising climate deals targeting renewable energy assets.

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

Figure 29: Breakdown of renewable energy technology (2016-2021)

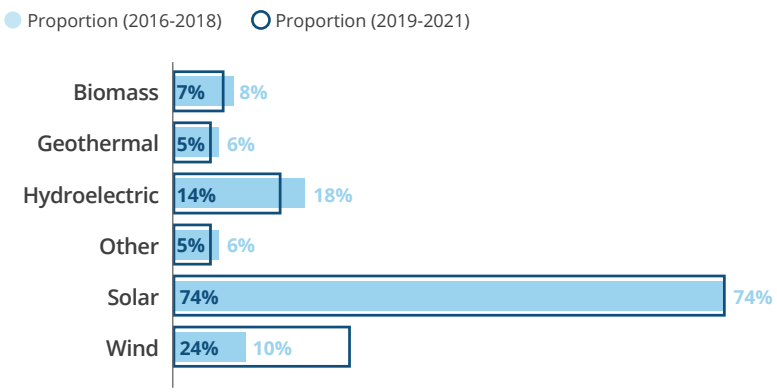
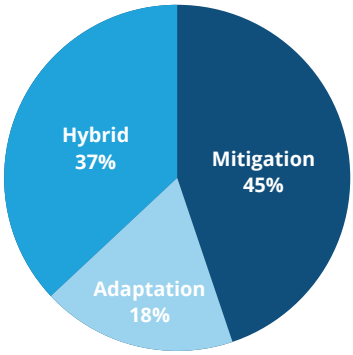


Figure 30: Proportion of fundraising deals by climate finance sub-theme



To date, few mitigation blended finance transactions have generated carbon credits (Figure 28)[8] – only one deal captured by Convergence since 2019 had been certified to issue carbon credits. There is significant untapped potential in this market segment. McKinsey estimates that the demand for voluntary carbon credits will increase 15-fold by 2030 and lead to a period of sustainable growth in the price of credits. Likewise, a recent study by the Data Driven Envirolab found that about 40% of a sub-set of Forbes 2000 companies intended to use carbon offsets as an integral component of their net zero mandates. The NZAOA is one example of the growing corporate practice of institutionalizing net zero targets in investment portfolios. Convened by the UN Environment Programme, NZAOA is a consortium of 74 of the world's leading institutional investors, including Allianz, Old Mutual and Sumitomo Life, with a combined assets under management of $10.6 trillion. Harnessing both the capital base and governance influence of these large-scale investors will be critical to accelerating decarbonization. More systematic production of carbon credits in mitigation blended finance can be an important ingredient in increased mobilization of institutional capital to mitigation efforts. In the absence of a robust market for frontier areas such as green hydrogen credits, concessional players could step forward to support credits via minimum price offtakes or other interventions.

While developed countries are those most in demand for carbon credits, the majority of offset producing countries are developing countries. Industrialized emerging markets like South Africa and China are well positioned to supply carbon credits as they undertake mitigation activities, such as diversifying their energy matrices with renewable energy sources. Conversely, less developed countries have a reduced incentive to undertake mitigation activities given their proportionately lower contribution to GHGs in the atmosphere historically, and the existence of other pressing development challenges, like poverty alleviation. Investment constraints such as political risk and limited transaction origination also affect the feasibility of mitigation projects in more frontier markets. Instead, these less industrialized countries have a higher carbon credit generating potential through adpatation blended finance projects, such as those in the forestry sector[9]. As reported by the State of Carbon Finance 2021, there is great potential for carbon offsets in countries at high risk of deforestation, with 86% of offsets coming from Indonesia, Peru, Brazil, Guatemala, Zimbabwe, and Ethiopia.

8 A carbon credit represents a volume of greenhouse gas 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.

9 As those primarily responsible for most of the GHG emissions globally, entities in developed countries typically function as purchaser of carbon credits to "offset" their ongoing emissions production. Comparatively, developing countries (both historically and currently) create much less CO_2, resulting in a reduced need to acquire offsets. Instead, many developing economies can utilize their robust natural capital bases, such as forests, to generate revenue streams by meeting developed country offset needs through the implementation of carbon credit producing projects.

It is well noted that carbon credits are only one part of wider emission reduction efforts. Offsets must be paired with rather than substitute commitments by investors to effectively cut their own operational emissions. That said, seizing on the growing appetite among public and private investors for carbon credits can:

i. be used to entice first-time investors to emerging market mitigation projects and facilitate an investment track record in sustainable development instruments; and

ii. contribute to an overall increase in capital flows to climate mitigation finance.

VOICES FROM THE FIELD:

Mitigating Risk for Early-Stage Carbon Projects through Blended Finance

Interview with Lauren Ferstandig, Managing Director, NatureVest, at The Nature Conservancy, and Kevin Bender, Senior Director, Sustainable Debt, at The Nature Conservancy

What role do you see for blended finance when supporting investment into climate transactions?

Many climate investments involve carbon offsets for which there's an established market and quantifiable cashflows, improving their investability from a traditional risk-return perspective. But in the carbon space right now there is a supply-demand imbalance with a lack of investment-ready projects despite high demand. If investors are looking for a high volume of carbon projects for investment in the near term, they need to be willing to take on an additional level of risk in bringing forward projects that haven't fully gone through the complete suite of feasibility assessments.

The earlier you provide financing for a project, the more execution risk there is: less visibility on the number or quality of potential offsets, methodology challenges, or local stakeholder alignment. We are nonetheless seeing investor interest in assuming that additional risk or exploring ways to structure around it so that they can start investing in carbon projects, even if they are less mature. We're currently having conversations with potential private sector investors who, despite their core business being commercial, are interested in investing catalytic funds to help develop earlier-stage projects while investing commercial capital into vehicles that back the execution-ready projects gradually coming online.

This is where blended finance comes in: we've been looking at how blended structures can mitigate risk for earlier-stage carbon projects, whether through guarantees or by having different capital tranches. In the near term, there's a really important role for blended finance in both climate mitigation and adaptation projects. This helps move novel projects forward – and achieve climate outcomes that we desperately need– while a deeper pipeline of execution-ready projects can be developed over time. Once that happens, it should reduce the need for blended finance in this space.

What challenges have you faced in terms of structuring transactions and how have you adapted your blended finance approach in response to those challenges?

Historically, most organizations interested in blended finance for climate were public organizations, largely DFIs, with stringent investment criteria, such as specific geographic mandates and other exceptions or requirements. In our experience, we have found that reaching out to DFIs for investment after much of the conservation investment structuring has been completed often results in the investments not meeting the DFIs' specific investment requirements, which is not the most efficient way of fundraising or of getting our transactions executed. Instead, we now often reach out to the DFIs earlier in the process, informing them about our project intentions and requesting their feedback before the structuring phase is completed. This provides us the opportunity to integrate their priorities and requirements in the final structure. We look to take this approach with investors across the spectrum, enabling us to source the catalytic component of blended transactions more efficiently. Fortunately, we are finding a lot of alignment with DFIs in terms of climate initiatives and priorities.

How can we be better at mobilizing more private capital investors into the climate space?

There's been a big pivot towards climate and sustainability amongst private and institutional investors, who recognize both the financial opportunity and the desire of their clients to invest more conscientiously. That said, the market is still developing and many investors are still in the early stages of their journey to understand the best and most effective ways to direct their funds and achieve the greatest impact. Therefore educational initiatives to help investors evaluate the benefits and risks of the impact investment market continue to be incredibly important. At the same time, making initiatives less complicated will also be key to attracting investors.

How would you assess private sector interest in adaptation?

Adaptation projects in particular are often trickier as they often have smaller economies of scale, higher costs and less of a track record that investors can scrutinize, compared with mitigation projects. This often necessitates either investors taking on a meaningfully higher level of risk or the market finding ways to de-risk those transactions through blended finance, building a track record over time that can eventually be transitioned into more commercial structures.

There's a lot of discussion by the private sector about wanting to finance adaptation and invest in newer, more catalytic areas, but, often when push comes to shove most investors aren't truly ready. Therefore, they often need to see some significant blending to meaningfully de-risk projects. Due to the limitations of their mandates, DFIs can also require capital blending for certain, higher-risk projects, even if they deliver on high-priority outcomes related to their mission. Our hope in the near term is that blended capital can play a critical role in helping develop a track record and the necessary financial and impact proof points for these more catalytic sectors, which will enable more traditional private sector investors to support these sectors in the future.

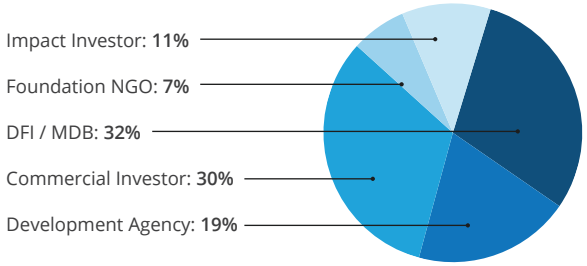
MITIGATION BLENDED FINANCE INVESTORS

Mitigation blended finance is the most common climate sub-theme across each investor class – between 2019-2021, an average of 58% of commitments to climate from each investor type were directed to mitigation transactions. Commercial investors and DFIs / MDBs are the most active participants since 2016, averaging 30% and 32% of mitigation investments respectively (Figure 31). Noticeably, impact investors significantly increased their engagement in mitigation blended finance, increasing from 4% of mitigation investments in 2016-2018 to 11% between 2019-2021. Convergence observes much of this activity to be in diversified renewable energy debt funds and off-grid energy companies.

Among private sector investors, financial institutions, primarily commercial banks, were the main providers of private sector mitigation blended financing, comprising 33% of private sector investments since 2016. Commercial banks are common suppliers of project finance debt to renewable energy projects, given their balance sheet capacity for large lending portfolios and suitable risk mandates that generally allow for senior debt financing to greenfield projects in emerging markets. Between 2019-2021, Convergence observed a new trend toward greater diversity in the mitigation-focused investment mandates of commercial banks in blended finance, beyond direct project finance for renewable energy asset development, including energy-focused funds and fixed income instruments.

Fewer investments from corporates into mitigation activities can be attributed to fewer renewable energy projects launched between 2019-2021 that used blended finance, and therefore fewer equity investments from project developers / sponsors (48% of mitigation

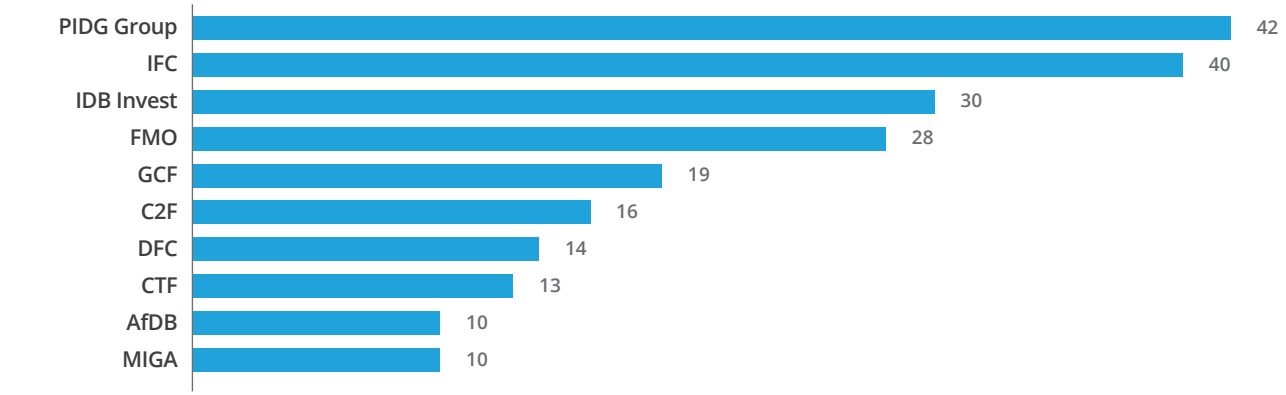
Figure 31: Proportion of commitments to mitigation blended finance transactions, 2019-2021



blended finance deals were renewable energy projects between 2019-2021, compared to 60% in 2016-2018). This underpins the general trend in greenfield project investment in emerging markets, which continued to stagnate in 2021 at its lowest level ever recorded by the WRI following the economic fallout of the pandemic in 2020. Finally, private equity investor activity was up 68% in 2019-2021 from 2016-2018, chiefly a result of the expansion of the off-grid energy start-up ecosystem in recent years. The growth of this market segment, enabled by the deepening venture capital and private equity markets in many developing countries, especially in Sub-Saharan Africa, is also contributing to greater use of equity investment in mitigation blended finance. Between 2019-2021, 49% of mitigation blended finance was deployed through debt instruments and 48% through equity. In the current macroeconomic environment characterized by high inflation and FX risk, equity investment can reduce counterparty credit concerns by limiting the burden of debt service payments.

DFIs / MDBs are also key suppliers of capital to mitigation blended finance. Like commercial banks, these public institutions have the balance sheets necessary for sizeable

Figure 32: Most frequent investors in mitigation blended finance transactions by number of commitments, 2016-2021



direct loan portfolios. However, just around 22% of their mitigation investments to blended finance deals were on concessional terms. Instead, specialized climate donor organizations and government funded capital pools, often administered by DFI and MDB partners, feature as the primary mobilizers of private sector capital to mitigation blended finance deals. For example, PIDG was the leading investor in mitigation blended deals between 2016-2021 (42 commitments), participating through its subsidiary companies with the explicit intent to catalyze private sector investment. Such collective donor funded organizations offer governments an efficient way to channel their scarce ODA dollars into emerging market climate blended finance deals while maximizing their leverage potential.

ADAPTATION BLENDED FINANCE

Adaptation continues to be an underdeveloped area within climate blended finance compared to mitigation transactions, both in terms of deal flow and deal value. Only 14% of blended climate transactions to date have had a pure adaptation focus, while of the $108 billion in aggregate financing that has been mobilized for blended climate transactions to date, only $6.9 billion has been mobilized for transactions purely focused on adaptation (compared to $58.3 billion for those purely focused on mitigation or $45.2 billion for those with a hybrid mitigation-adaptation focus). Of the $6.9 billion mobilized for blended adaptation transactions to date, only $2.5 billion came from the private sector.

These statistics mirror trends seen in the broader ecosystem of climate financing. While the United Nations Environment Program has estimated the annual costs of adaptation in developing countries to reach $155-330 billion by 2030 and $310-555 billion by 2050, only $46 billion (or 7% of total climate finance) was committed to adaptation in 2019-2020, of which only $1 billion came from private sector sources. Emergent adaptation sub-sectors like fisheries and aquaculture are particularly hard hit; while estimates of the funding needed for the oceans range from $175 billion in overall annual funding to a $459 billion annual funding gap posited by the ADB, limited amounts of philanthropy and ODA have been invested in sustainable ocean projects, with one estimate suggesting that only $13 billion has been committed in the past decade. The climate tech landscape tells a similar story. According to PwC, while capital is pouring into climate tech, 97% of the funding is targeting technologies that mitigate climate change. Mobility and transportation (e.g., electric vehicles and low greenhouse gas vehicles) solutions alone raised $58 billion between H2 2020 and H1 2021, representing over two-thirds of the overall funding in the period. In contrast, only 1% of total climate tech funding has supported start-ups focused on adaptation, indicating a clear innovation and funding gap.

Blended adaptation transactions have had a more even geographical split compared to mitigation transactions; from 2019-2021, East Asia and Pacific, Latin America and the Caribbean, South Asia, and Global were each targeted by 18% of blended adaptation transactions, followed by Sub-Saharan Africa at 14%, Middle East and North Africa at 9%, and Europe and Central Asia at 5%. Blended adaptation projects require higher levels of tailoring according to the risks faced in specific geographies and sub-sectors; effective interventions in one area may enhance vulnerabilities in another, while investment sizes can vary depending on whether they target agriculture or nature-based solutions (NBS), or traditional infrastructure.

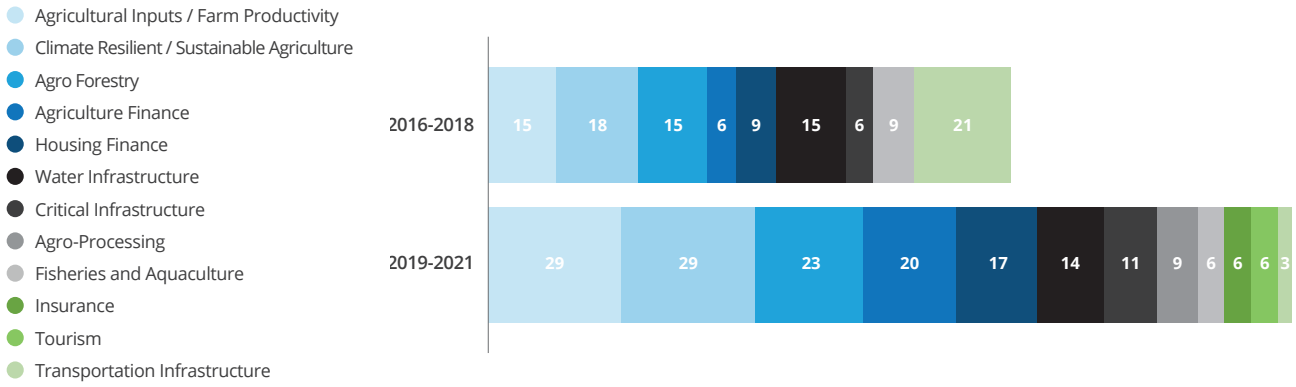
Agriculture has been the major area of activity in adaptation blended finance in recent years. Agriculture, forestry and land use is the second-largest source of greenhouse gas emissions and the main driver of biodiversity loss. Meanwhile, rising climate-related disasters have negatively impacted agricultural production and food availability, with a 1°C increase in average temperatures potentially leading to a 5-10 percent decrease in the yield of major food and cash crop species. Agribusinesses are also under increased pressure to ensure sustainability within their supply chains. Within adaptation blended finance, sub-sectors like agricultural inputs and farm productivity, climate-resilient and sustainable agriculture, and agro-forestry have been particularly prominent. Blended finance can play a critical role here in improving the bankability of projects and reducing transaction costs in a sector

defined by high transaction cost/return ratios and information asymmetries, and loosely structured value chains in which most operators and transactions are small-scale. However, part of the challenge for blended finance going forward will be embedding broader conceptions of resilience and food security within our understanding of climate adaptation, John Scicchitano, President at Pangea Global Ventures, notes:

> *"The typical narrative is that adaptation is lagging because the business case isn't there. However, the underlying question is how are we classifying adaptation? Consider the concept of 'resilience'. Investments in adaptation will build resilience by diversifying household economies, reducing reliance on humanitarian assistance, and increasing coping capacity in response not only to weather shocks like droughts, but also to commodity price shocks, political shocks, and other shocks affecting the availability, accessibility, and usability of food. Such investments are critical in geographies where households rely heavily on rainfed agriculture, which is threatened by temperature and precipitation changes. Blended finance should adopt this more holistic approach to resilience and food security when supporting adaptation projects to scale up private sector financing."*

This touches upon the broader issue of developing effective taxonomies that can direct investors to adaptation solutions currently beyond their radar. Organizations like The Lightsmith Group have noted the problem of companies helping to manage droughts, disease, supply chain disruptions, and other climate impacts often not referring to or recognizing their activities as climate-related. In response, taxonomies like the ASAP Adaptation Solutions Taxonomy, the first peer-reviewed set of definitions and eligibility criteria focused on adaptation solutions offered by private companies, have been developed to help identify companies active in the adaptation space and ultimately scale their solutions. These efforts align with the creation in recent years of climate adaptation accelerators looking to scale up innovative and transformative solutions focused on adaptation, like the Africa Adaptation Acceleration Program (AAAP), launched by the African Development Bank (AfDB) and Global Center on Adaptation in 2021. Part of the AAAP's remit will be to influence the annual $93 billion of infrastructure funding in Africa, such that up to 50% is targeted to enhance the climate resilience of economies and local communities.

Figure 33: Proportion of adaptation & hybrid blended finance transactions by sub-sector, 2016-2018 vs. 2019-2021[10]



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

NATURE-BASED SOLUTIONS

Transactions enhancing climate adaptation within agriculture fall within the broader category of nature-based solutions (NBS), which harness the power of nature to boost natural ecosystems, biodiversity, and human well-being in order to address major societal issues, including climate change. Nature-based solutions straddle the adaptation-mitigation divide; some, like conserving existing wetlands, mainly prevent carbon emissions, while others, like restorative agriculture and regrowing clear-cut forests, actively remove carbon dioxide from the atmosphere, with many solutions both preventing emissions and removing carbon. Examples of blended nature-based adaptation solutions targeting agriculture include Mountain Hazelnuts, which provides hazelnut trees, agricultural inputs, and technical assistance (including training in climate-resilient farming techniques and financial literacy for female smallholders) to rural communities in Bhutan, and then buys all harvested nuts according to a guaranteed price structure and processes them for international export.

Agro-forestry is another critical part of the blended NBS ecosystem. With up to 73% of deforestation in tropical and subtropical countries attributable to agricultural expansion, improved agroforestry practices can have critical climate mitigation as well as adaptation benefits, reducing carbon emissions while also reducing farmers' vulnerability to climate change. Indeed, research has shown that taking up sound agroforestry practices can improve farmers' soil erosion control and increase soil fertility, boost smallholders' wealth and income diversification, and provide them with coping strategies in the face of droughts and floods. One initiative in this space is REDD+, a framework created by the UNFCCC Conference of the Parties to guide activities in the forest sector, with the aim of reducing emissions from deforestation and forest degradation and promoting the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries. The carbon credit market for agro-forestry projects, however, faces various challenges, from regulatory issues and the pricing of carbon credits to the potentially complex sharing of co-benefits between governments, project developers, and local communities. As Martin Belcher, Director, Monitoring, Evaluation and Learning at Partnerships for Forests, notes, financing in the forestry space in general remains limited:

> *"There is not enough investment in forests or sustainable land use. Investors don't properly understand the financial opportunities and the risks and are deterred by the smaller ticket sizes, such that even with rising interest in recent years (including from mainstream institutional investors), we're not seeing a corresponding increase in the number of transactions being completed. Blended finance can help de-risk transactions and build a pipeline of risk-adjusted opportunities for commercial investors in nature. Up to 30% of climate solutions are in nature, but only 3% of total climate funding goes to nature-based solutions; this gap must be addressed at an accelerated speed."*

Other examples of blended nature-based adaptation solutions include transactions within sub-sectors like fisheries and aquaculture, which accounted for only a small proportion (6%) of blended adaptation and hybrid transactions in 2019-22. The blue economy has seen large-scale transactions in recent years, like Mirova's $132 million Sustainable Ocean Fund, which targets marine and coastal projects in fisheries, aquaculture, the circular economy, and marine conservation. However, the sub-sector remains emergent, with early-stage and small to mid-sized enterprises prominent, capital costs relatively higher, and economies of scale in many SIDS relatively limited, which explains the low number of transactions in the field. Encouragingly, there have been recent efforts to improve the investability of projects in the space. For example, in 2020, Convergence's Asia Natural Capital Design Funding Window awarded Blue Finance a proof-of-concept grant to design the Blended Blue Finance Facility (BBFF). The BBFF looks to build the commercial viability of Marine Protected Areas (MPAs) by

aggregating a pipeline of bankable high-impact MPA projects, using concessional, subordinated debt, grant funding, and commercial loans to mitigate risk, catalyze private investors, and ultimately support ecological resilience.

Finally, water infrastructure transactions, which increase the climate resilience of water systems through new, replaced, retrofitted, or upgraded infrastructure, is another key climate adaptation sub-sector. Accounting for 14% of blended adaptation and hybrid transactions in 2019-21, water infrastructure transactions range from built infrastructure assets to NBS, like restoring wetlands and other ecosystems to recharge groundwater levels and mitigate flood risk. For example, the City Climate Finance Gap Fund, which provides technical assistance to municipal governments to help develop finance-ready adaptation projects, has supported nature-based solutions along the Capivari river in Campinas, Brazil, promoting adaptation and reducing flood risks.

Overall, some of the factors restraining scalable investment in blended NBS for climate adaptation include:

i. corporate goals and reporting structures prioritizing near-term, simple, quantifiable project outputs aligning with annual reporting timelines, while NBS may require several years of planning, stakeholder engagement, fundraising, and implementation;

ii. an underdeveloped pipeline of bankable nature-based projects; and

iii. a lack of clarity on how exactly to invest in nature-based projects, with simple, quantifiable outcomes not existing within the complex space of natural systems, and varying views on how to choose priority locations and approaches and measure progress. These are not problems of blended finance per se. Providers of catalytic capital may be able to offer workarounds to cover some of these issues and progress the field; more comprehensive solutions will require the additional combined efforts of governments, regulators, scientists, and investors.

VOICES FROM THE FIELD:

Moving Nature-Based Solutions for Climate Towards Scale

Interview with Lucas Black, Vice-President, Climate Finance at World Wildlife Fund - US

What role do you see for blended finance when supporting investment into climate-related transactions?

Blended finance for nature-based climate mitigation and adaptation is an approach that needs much more attention to de-risking for mobilizing private sector finance and support for innovation that monetizes the interconnected value between nature, people, and climate. It is still a nascent space receiving very little investment, with NBS receiving a very small proportion of total climate financing in general. There aren't enough proven existing blended NBS mitigation or adaptation models, and the space tends to be dominated by private philanthropy, foundations, a few social impact investors and some multilateral finance, with very little private sector activity or mainstream structured finance. Concessional financing and grant support is much more needed in NBS for adaptation, because investment models are less established and revenue streams are less clear, but overall, we're just not seeing the diversity of finance or volume coming into NBS for climate in general.

What challenges do you face?

The existential problem for NBS is that these assets that we're trying to protect and restore are not being properly valued for all the services they provide.

Climate finance, and particularly climate mitigation, is very focused on a single metric - tons of CO_2 emissions prevented – and as a result, investors and donors tend to focus on that benefit while not recognizing and properly valuing all of the possible services benefits that nature provides aside from climate abatement and resilience. Conservation finance has generally been more focused on a variety of biophysical indicators, but outcomes from these indicators are not as easy to measure and combine with climate metrics. We're just not there yet in terms of established, landscape-level metrics for biodiversity and conservation, while metrics for carbon accounting – while still immature for certain types of NbS – are more advanced. Similarly, while there are clear revenue streams in climate mitigation from carbon markets and other sources, revenue streams for biodiversity and conservation are harder to quantify and monetize. We don't have well-developed markets for things like water or biodiversity credits, in contrast to the market for carbon credits, so the learning there is seeing how we can build on what's been done in the mitigation space by adapting similar vehicles in such a way that nature metric outcomes become coequal with climate benefits. The key barrier to increased climate finance for NBS is an insufficient supply of large-scale conservation and restoration projects that readily meet the current demand for credible and quantifiable nature and climate impacts.

A tropical rainforest, for example, provides myriad benefits, from climate benefits such as carbon sequestration and water provisioning, to biodiversity benefits, to sustaining livelihoods, to limiting pandemic risk. But the benefits beyond those pertaining to carbon emissions are not monetized and are not well understood by donors, who traditionally prefer clearer metrics that can easily translate into bankable deals, such that NBS projects are often not correctly priced or fully supported for all of the services they provide. In fact, mispricing in climate is widespread; NBS carbon credits are woefully under-priced relative to the actual cost of developing the underlying projects or the costs of activities or benefit-sharing with local communities, often because the sustainability and maintenance of the ecosystem services have not been properly considered. We need higher quality, and higher priced carbon and other payments for ecosystem services to reflect the actual cost of conservation and restoration on a long-term basis. However, carbon markets – particularly voluntary carbon markets - are just not there at the moment on pricing and quality, and will only get there when benefits for biodiversity and people are properly valued as intrinsic to the sustainability of climate impacts.

Are there any other key issues the markets for climate and conservation face?

We need more funders willing to provide early-stage financing for deal origination, and much greater innovation, but at the moment, it's very vanilla. This is in part because there's a lack of risk appetite. Climate finance in general is too dominated by debt, so we need more guarantees, more equity, and other higher risk instruments. The leverage of MDBs and DFIs are also very low for climate finance; the market needs to develop blended finance for NBS at scale; we need to do a better job of providing case studies and deal examples that showcase what works, what doesn't, and what can be replicated. Some examples are US-based and need to be considered in a developing country context to see whether they are right for replication in a given landscape. It is key that NBS for climate mitigation are designed and implemented in partnership with and to the benefit of local communities and IPLCs, and must build in social and environmental safeguards to provide clear benefits to diverse constituencies.

Ultimately, we need a blended finance market that properly values nature and people alongside climate. Investment models are more established in the non-NBS (climate finance) world, and the challenge is scaling up; for NBS, the focus must be on innovation and thinking more holistically about how to get investors to value benefits beyond just climate.

VOICES FROM THE FIELD:

Catalyzing Private Finance for Adaptation Projects

Interview with Karen Sack, Executive Director at the Ocean Risk and Resilience Action Alliance (ORRAA)

What do you see as a role for blended finance when supporting climate investments?

We're very far behind on climate adaptation. In the ocean and coastal resilience sector, there just aren't many opportunities that are seen by the private sector as profit making. A lot of the investment has been driven by the philanthropic sector, and when we do receive attention from public funders, their focus is on how much private financing their funding can leverage, but we can't provide desired metrics like benefit-cost ratios because it's such a nascent sector. However, the results from our projects so far show that in less than two years, you can develop something that can be sold on the market and leverages private capital. The ocean and coastal resilience sector must continue to show the use case scenarios of where blended finance has been applied to leverage private sector investment and deliver strong outcomes for economic, biodiversity, and resilience value.

Within the blue economy, what unique concerns or challenges do investors have to face?

The biggest issue is ownership rights. With coastal areas in developing countries and SIDS, there's often either disputed ownership, traditional land ownership, or an intersection betweenthe jurisdictions of local, state, and federal authorities, reducing clarity for investors. However, if we prioritize analyzing these scenarios and understanding how to involve different stakeholders, it can lead to stronger stewardship and stronger benefits for local communities. We also need to ensure that local communities have a stake in guaranteeing that any coastal protections are long-lived by mandating that they benefit from any investment proceeds.

What factors will shape private sector activity in the climate space over the next few years?

One of the big questions for our community is how we ensure that offshore energy investments are not just being placed in developed country waters, but also in developing countries and SIDS. ODA and philanthropic investment will be critical to moving the private sector into offshore renewables in developing nations. Guarantees and other blended archetypes will also be critical in de-risking transactions targeting green shipping, from building green shipping corridors to investing in port infrastructure. As a community, we also need to look at blended finance as a lever to combine mitigation and adaptation investments. For example, how do you secure a percentage of an offshore wind installation to pay for the costs of monitoring and enforcing marine protected areas? There's also a huge potential market for blue carbon and biodiversity and resilience credits. Here, blended finance can help complete initial valuations, de-risk projects, and then support technical capacities on the ground in collaboration with local communities. What is key is that these investments have positive biodiversity outcomes and build resilience.

What lessons have you learned from the projects that you've been involved in?

Our investments haven't been big investments (mostly under $100,000 each), but every project that we've invested in now indicates the potential for exponential growth. If we continue to work pilot by pilot, we're not going to get to scale quickly enough to be effective. We need significantly more public finance to crowd in the private finance that we need. However, the slower the investment pipeline is, the less opportunity there is and the riskier the investments will become. That's climate finance writ large and the biggest risk that we face: that it's too little, too late in terms of investment into the space.

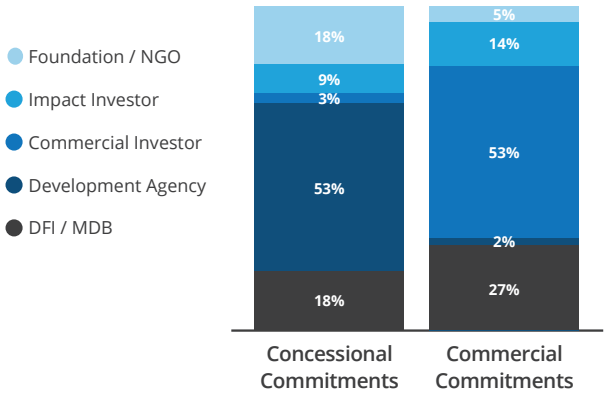
How do you approach replication?

The NGO community and project developers need to reconsider the need to perfectly assess every element of a project before moving onto the next one, and instead draw out general lessons applicable across the space. Every project can't be perfect. We need to pool similar circumstances to aggregate investments and make the financial tools applicable at a larger scale and more quickly, otherwise we might fall into the trap of prioritizing perfection over actual deployment and scaling. To do this, we also need to bring together multiple stakeholders at the same table so that we can deploy the knowledge, experience, and networks of different actors most efficiently. We also need to start deploying solutions at the sovereign level so that we can move the needle quickly and effectively.

ADAPTATION BLENDED FINANCE INVESTORS

Between 2019-2021, only 15% of investors' commitments to climate blended finance transactions went to deals with a pure adaptation focus, while 26% 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 53% of concessional commitments and $1.1 billion in aggregate concessional financing over 2019-2021. With each blended transaction mobilizing financing from at least one private sector investor, commercial investors have provided the bulk (53%) of commercially priced commitments to blended adaptation and mitigation-adaptation transactions over 2019-2021, with investment management companies (40% of commercial investor commitments) and financial institutions (26%) being the most prominent commercial investors in blended adaptation and mitigation-adaptation transactions over this period. However, commercial investors' median investment size ($8.3 million) is lower than that of MDBs / DFIs ($16 million), and the latter account for a slightly higher amount of aggregate financing in the space than commercial investors over 2019-2021 ($2.4 billion vs $2.1 billion). Interestingly, MDBs / DFIs appear to have increased their activity in the blended adaptation and mitigation-adaptation space, accounting for 27% of commercial commitments over 2019-21 compared to 18% from 2016-2018.

Figure 34: Proportion of commitments to adaptation blended finance & hybrid blended finance transactions, 2019-2021



VOICES FROM THE FIELD:

The Role of Insurance to Help Finance Innovation

Op-Ed by Lubomir Varbanov, Head Public Sector Solutions Asia Pacific, Swiss Re

Climate change requires us to invest in adaptation

In 2021, natural catastrophes resulted in global economic losses of $270 billion. This continues a trend (based on 10-year moving averages) of 5-7% growth annually, largely attributable to the increasing frequency and severity of extreme weather events.

Climate change is a driving force here. As well as reducing our emissions and consumption, we also need to invest in adaptation and create more resilient infrastructure, communities, and economies. This means we need to explore and invest in sustainable approaches, incorporate more green components and nature-based solutions into our infrastructure planning, and improve access to services for vulnerable communities.

How Blended Finance Can Help

Climate adaptation and transitioning to a more decarbonised economy requires innovation and catalytic funding to redirect existing finance and scale up nascent ideas to commercial levels. Blended finance is one mechanism that supports sustainable development, by combining catalytic, public, and private capital.

The sequence and allocation of funding in blended, or multi-stakeholder arrangements, is critical:

i. Catalytic funding in the form of grants, government incentives or 'impact investment' enables the development of innovation, pilots, and proof of concepts. This also absorbs the initial risk, or first loss.

ii. Private sector funding creates the appropriate governance and assurances to shift the mindset from experimental to commercial deployment. Ideally the blended model becomes obsolete as full commercial operations are achieved.

As investors' motivations and expectations of returns vary, blended finance models, which recognize certain positive externalities, can help launch projects that are otherwise challenging to get off the ground. For example, investors that manage money for third parties have fiduciary responsibilities to maximize risk-adjusted returns and may be more conservative in their investments. However, when the initial risk (or first loss) is taken by philanthropic grants or government incentives, it reduces the exposure for private investors and allows an initial pilot to proceed and demonstrate proof of concept.

It is also important that blended finance is right-sized and truly used as a catalyzing and transitionary approach – so the dependency on philanthropic funds shouldn't extend for longer than necessary and crowd out commercial sources of capital.

The Role Of Insurance To Support Project Finance

Multi-stakeholder arrangements must allocate risk to the parties best placed to manage it, which includes the transfer of risk to insurers where feasible. Furthermore, insurance helps improve the certainty of returns.

Traditional indemnity-based insurance provides a pay-out after losses have been incurred from a significant weather event, natural catastrophe or other shock. This ensures a project can be restarted/ continued, or compensation provided. Index-based or parametric insurance, on the other hand, is a pre-agreed contract to pay out a defined amount in a specified circumstance. The claim is automatically triggered by reliable and objective indices – such as weather, satellite, and remote sensing data - and hence pay-outs are faster. This type of insurance helps provide funds for emergency response, early intervention, and prompt recovery activities.

Whether indemnity or index-based, knowledge that insurance coverage is in place at the planning and design phase provides peace of mind to lenders and investors.

For public sector actors, having an insurance program in place to manage disasters and shocks frees up capital to support innovation, and incentivize the transition to more decarbonized practices.

Swiss Re works with the public and private sector, development banks, institutions and NGOs to help make the world more resilient. This involves different models of collaboration to facilitate and implement projects with stakeholders that have multiple objectives.

Whether in a blended model, a public sector program or private investment, insurance is an effective mechanism to help manage risk and enable innovation and adaptation – all of which we need to see more of to manage our current trajectory.

VOICES FROM THE FIELD:

Using Remittance Schemes To Fund Climate-Resilient Infrastructure

Interview with Daniel Magallon, Chief Executive Officer at Basel Agency for Sustainable Energy (BASE)

BASE is a Swiss not-for-profit foundation that designs, develops, and implements innovative financing mechanisms and business models to unlock investment in climate change solutions. With support from Convergence, BASE, in partnership with Oxfam in the Pacific, is currently conducting the feasibility of a remittance-based financing mechanism for micro-infrastructure solutions such as roof strappings, solar panels and batteries, water tanks, for enhanced household resiliency in the Pacific Islands.

Can you give us the background for the impetus for developing this financing scheme. Why use remittance financing for climate infrastructure?

The foundation of our work has always been developing financial mechanisms to accelerate investments in climate change. The concept of using remittance schemes to fund climate solutions started ten years ago. We learned that a Mexican cement company (CEMEX) offered building materials to Mexican migrants living in the United States, where they paid for these materials on the U.S. side and received a voucher code that was redeemed for building materials by their relatives in Mexico to be used in home construction. This structure is clever because it (i) enabled money to be spent by migrants with purchasing power capacity that had a strong interest in improving the lives of their families back home, and (ii) it also gave them a bit of control on the end-use of the money they remitted back home.

Since then, we have applied this model across geographies, recognizing that all migrants are interested in supporting infrastructure back home. We became particularly interested in housing after working in Tajikistan and Kyrgyzstan in Central Asia, with migrants working in Russia, where the energy needs are amplified by the tough winters. This led to the idea of replicating this scheme in the Pacific Islands, where housing and adaptation to natural calamities is an urgent issue.

What are the challenges when financing climate infrastructure? What are the financing needs for this sector in the Pacific Islands and why is there a need for innovative financing?

There is a lack of business models, financial instruments, and insurance products focusing on adaptation and resilience building. With this project we are aiming to tap into the $605 billion remittances that are sent annually to low- and middle-income countries, a large part of it going

vulnerable places where adaptation is the main concern. We combined the interests of these migrant populations along with adaptation and financial remittances to design this instrument.

What is the role of blended finance and grant funding when financing climate infrastructure?

We need more risk-taking financing and capital that can be used to enable the market conditions to implement and test the feasibility of the model. There is a lack of funding flowing to adaptation solutions, specially to vulnerable communities. We see blended finance as crucial to bringing together different types of stakeholders to test new business models that take advantage of the remittances and the interest of migrants to improve the quality of life of their families back home. The challenge here is not the lack of money, but rather incentivizing investments in climate resilience and build trust among the different key stakeholders.

Why is gender an important consideration when thinking about climate infrastructure?

We have incorporated the gender focus firstly because many of the recipients of remittances from migrants are women and children, and women also send remittances back home. We therefore want to maximize the benefit and impact on improving the lives of women and children as the ultimate beneficiaries.

We also analyze the dynamics of decision making between those who migrate and those who stay at home. In Haiti, we found that it would be more impactful to engage with women, who have a strong voice in household decision-making while young men are likely to migrate. In contrast, in Tajikistan and Kyrgyzstan, men had most of the decision-making power within the household, which forced us to change the way we approached awareness raising.

PART V: CHALLENGES TO SCALING CLIMATE BLENDED FINANCE

PART V:
CHALLENGES TO SCALING CLIMATE BLENDED FINANCE

The State of Blended Finance 2021 identified four key challenges to achieving scale within blended finance overall:

1. A lack of a private sector mobilization strategy and action plan within the donor community.
2. Low levels of coordinated participation from developing country governments and untapped domestic resources.
3. A lack of transparency on blended finance activity.
4. A lack of financial intermediation in the blended finance market.

This year, building upon this analysis by drawing upon insights gained from our stakeholder interviews and from our HDD, Convergence has identified several key challenges to achieving scale within climate blended finance:

1. Lack of strategic coordination and unguided implementation of high level capital mobilization plans.
2. Low levels of participation from investors domiciled in developing markets.
3. Managing development trade-offs.
4. Siloes between the climate mitigation, adaptation, and conservation finance investment communities.
5. Low levels of investor education and expertise within climate finance.
6. Mismatch between demand for climate data and availability in the market.

1

Lack of strategic coordination and unguided implementation of high level capital mobilization plans

Despite several groups of private investors signaling a strong interest in investing in climate alongside the development community in a more integrated way, pledges made by developed countries and MDBs to scale up climate financing has fallen short of the $100 billion annual goal. Simply put, the status quo has shown a consistent inability to mobilize the private sector effectively. While several collective action plans have correctly identified funding gaps, constructing a coordinated approach to mobilize the private financing required to reach the set-out goals remains a challenge.

The high level of perceived risk in developing regions is a constant barrier to private sector investment. And with a minimal number of tools available to manage this risk, private investors require public sector support to mitigate. Unfortunately, public and private sectors remain largely disconnected and uncoordinated in their operation, crowding out each other's investments rather than reinforcing comparative advantages. Overcoming this dynamic and better aligning public, philanthropic, and private sectors towards greater long term capital flows to climate is complicated. In addition, the lack of investable transactions continues to be an added constraint. However, the $100 billion annual climate funding goal will not be achieved without a concrete, coordinated, and collaborative action agenda to increase the quantity and quality of investments.

2

Low levels of participation from investors domiciled in developing markets

As noted last year, representation from developing country governments and expertise from regional development banks and institutional investors is crucial to scaling blended finance overall: local institutional investors' intimate understanding of local investment landscapes makes them better placed to assume operating risks in developing markets, where they may require lower risk premiums than their international peers; their presence in local development projects can also provide comfort to potential overseas investors; and their ability to invest in local currency can provide financing solutions that are more flexible and sustainable for projects generating local currency revenues.

Within climate finance, whether blended or not, the challenge often lies in structuring initiatives that can work with and fairly compensate the local communities and municipalities in which climate interventions are embedded. As such, the expertise and local knowledge of domestic investors can be invaluable in helping foreign investors navigate between local communities and different levels of government when structuring blended climate transactions.

Moreover, up to 90% or more of the climate investment many developing countries receive originates[11] from foreign sources, suggesting that their NDCs and these international institutions' financing mechanisms should be aligned. However, most climate finance mobilized to developing countries is channeled through bilateral DFIs and MDBs[12] where developed country government shareholders exert more influence, as opposed to multilateral climate funds, such that factors other than NDC needs (e.g., commercial interest, geopolitics) have shaped climate flows to developing countries. Structuring blended climate flows so that developing country interests are incorporated, therefore, remains a challenge.

VOICES FROM THE FIELD:

Boosting Private Sector Financing For Climate in Africa

Interview with Bogolo Kenewendo, Africa Director and Special Advisor, UN Climate Change High-Level Champions

How active are local development actors in supporting climate-focused projects in Africa?

There is currently very little participation from local governments and investors within climate finance projects in Africa. Very little of the total climate-resilient infrastructure needed is being funded. Governments spend 3-5% of their annual GDPs on adaptation and resilience projects, most often from their own pockets, which suggests that they haven't really started thinking about how they can turn to other sources to help finance adaptation and de-risk projects. Governments haven't properly considered how the private sector or other development partners can play a role in building resilience within their economies; progress here has been limited to the larger regional economies like South Africa, Nigeria, and Kenya. We need to start exploring what the most effective climate-focused blended

11 New Frontiers in Climate Finance – Roundtable Concept Note: Duke, James E. Rogers Energy Access Project

12 Ibid

instruments look like, how long governments will be attached to those instruments, and what the other ramifications are for deploying instruments that more intimately involve the private sector.

One indicator that African governments haven't properly considered the possibility of private sector financing for climate action is the NDCs themselves, for which no investment plans that could speak directly to private sector financing have been created. As we review the measures around the Paris Agreement's Enhanced Transparency Framework, which speaks to disclosures on NDCs, we're recommending that investment plans must accompany NDCs so that the private sector can be actively engaged. That is, we must enable the private sector to know exactly where to look for investable climate projects on the continent. The Paris Agreement stated that countries must list climate projects and report annually on their progress in financing climate projects. However, what we're seeing in Africa is governments listing climate projects without providing any of the investor-focused information (e.g., the financing amounts needed or the projects' impacts) needed to properly mobilize the private sector. Aligning investment plan with NDCs can help ensure governments are thinking about private sector mobilization, instead of just waiting to receive pledges of aid.

What will shape private sector activity in the climate space in Africa over the next 3-5 years?

I'm a strong believer in the African Continental Free Trade Area (AfCFTA). If we can operationalize it, it could change the state of play not just in the climate space, but across development in the continent. I'm particularly interested in Phase 2 of the AfCFTA, which deals with protections for domestic and cross-border investors and investments. Aggregation in the continent is the only way that we will ultimately have real growth. Regional projects can mobilize private financing where domestic projects may be too small. A move towards aggregation, helped along by the AfCFTA, could change state of play in building climate projects in Africa of interest to the private sector.

The growth of pan-African financial institutions like Africa Finance Corporation (AFC) and the African Export-Import Bank (Afreximbank) and the confidence their presence confers to the market can also help reduce risk perceptions of investing in Africa, and their success could change how business in the continent going forward including in the climate space. Ensuring that the multi-billion-dollar pledges made at COP are structured to facilitate and catalyze investment (rather than simply as aid) will also help stimulate blended finance and private sector development in the continent. Finally, the performance over the next few years of initiatives like the Just Energy Transition Partnership (JETP), which saw South Africa partner with Germany, France, the US, the UK, and the EU to help support its phaseout of coal-fired power generation by incentivizing clean energy investments, will also shape investor perceptions of the investability and credibility of climate projects on the continent.

Are there any interesting climate-related initiatives that you are currently leading?

We're currently developing the Africa Carbon Markets Initiative (ACMI) alongside Sustainable Energy for All (SEforALL), the United Nations Economic Commission for Africa (UNECA), and other partners, the aim of which will be to catalyze private financing in support of Africa's nature-based assets and infrastructure, whether through the carbon markets or through exchange-traded nature-based commodity products. The ACMI roadmap outlines a path for Africa to produce high-quality carbon and biodiversity credits at scale while providing important co-benefits and ensuring carbon credit value flows to local communities. There are three major programs under the ACMI:

- Formation of an advance market commitment for the purchase of African carbon credits
- Commitment of African governments to the development of country carbon market activation plans
- Launch of a consortium to develop a market leading biodiversity / nature credit

3

Managing development trade-offs between climate blended finance and blended finance for other development finance goals

Two trade-offs pose a challenge to climate blended finance mobilization and scale. The first broader issue of managing the trade-off between blended finance for climate and blended finance for other development finance goals will not be straightforward. While adaptation blended finance might intersect and align more closely with poverty alleviation goals, mitigation blended finance looks profoundly different, particularly because the latter may have more direct and immediate climate impact. In contrast, the former has struggled to attract the same level of private capital participation.

The second, more specific trade-off relates to countries' aggregate blended financing trends. Most financing has been concentrated in middle / upper income countries while LDCs receive the greatest burden of climate effects. How can DFIs and MDBs prioritize poverty alleviation as a central goal and ensure it is being incorporated alongside climate mandates? Is there an inherent balance or incongruence as climate mandates may shift the focus away from LDCs and de-emphasize other development goals? At a minimum, the trade-offs will force some tough decisions with regard to deal making in order to address multiple development objectives.

4

Siloes between the climate mitigation, adaptation, conservation investment communities.

Siloes between the climate mitigation, adaptation, and conservation finance investment communities have prevented the sharing of key learnings, which has prevented emerging areas from leveraging applicable investment models in more established sectors. In addition, the lack of climate diligence and detailed data collection mechanisms to support project pipelines and help produce a more robust evidence base for climate blended finance deals is a notable obstacle. As Karen Sack, Executive Director of the Ocean Risk and Resilience Action Alliance (ORRAA), notes:

> *"Blended finance in the ocean space is very new, but it's been going on in other sectors for ages. However, we all work very much in our siloes. The challenge is figuring out how we can break down those siloes and share technical learnings on how transactions can be structured most effectively. For example, the World Bank's Wildlife Conservation or "Rhino" Bond, which is linked to the increase in the black rhino population in two protected areas in South Africa, would have great applications for marine protected areas (MPAs), as the higher the protection of MPAs, the greater the result is in terms of biomass and the number of species that you can secure. The question is how do we put some of these successful examples in front of our community writ large, and help to break out of our siloes and knit together some of these potential opportunities?"*

As our interview respondents noted, part of the challenge in adaptation and conservation finance, in particular, is that, with revenue streams being relatively unclear and less established, and performance outcomes being harder to track and less agreed upon, the donor and investment communities have prioritized financing climate mitigation projects without considering possible interconnections with adaptation or biodiversity outcomes.

As Tanya Kothari, Regional Manager for India at the Shell Foundation, notes:

> *"One gap we see compared to mitigation investments is that in adaptation there aren't agreed upon adaptation impacts that investors can concretely see or measure or have key performance indicators (KPIs) around. This makes it harder for donors to allocate funding towards adaptation because it's just not clear. Part of our work with the KfW InsuResilience Fund and Fund II, for example, is to act as an impact evaluation partner and establish what kinds of impact evaluations would be of most use to investors."*

Finally, siloes between the climate and conservation communities can also lead to asset mispricing, with carbon credit-generating projects failing to account fully for their negative impacts on nature.

5

Low levels of education and expertise in climate finance contributes to low levels of private investment towards climate goals

A striking observation from this year's State of Blended Finance report is the disparity between investor rhetoric, as evidenced through the multitude of ESG strategies and Net Zero commitments announced over the past couple of years, and commitments we observe to climate blended finance. This report marks a significant decline in financing from financial institutions and corporates compared to the 2016-2018 levels. This mismatch between rhetoric and commitments can be partly attributed to a lack of investors adequately pricing climate risk into their investment decisions, which reflects a greater market failure. As Fiona Bayat-Renoux, Chief of the Green Climate Finance Unit at UNCDF, notes:

> *"One of the core barriers to scaling up climate finance is that externalities and climate risks are not fully priced into investment decision making. Unless we address the market failure here by valuing the positive externality of climate investments and reflecting the full price of negative externalities and climate risk into transactions, it will be "more profitable" to invest in fossil fuels."*

This sentiment is echoed by Carlos Sanchez at CCRI, who in the following Q&A discusses how physical climate risks are not being fully integrated within investment models.

VOICES FROM THE FIELD:

Integrating Physical Climate Risks Within Investment Models

Interview with Carlos Sanchez, Executive Director at the Coalition for Climate Resilient Investment

Launched at the UN Climate Action Summit in 2019 as a private sector-led initiative, the Coalition for Climate Resilient Investment (CCRI) develops and pilots practical tools, solutions, and financial instruments to support a more efficient integration of physical climate risks in investment decision-making.

What challenges have you faced in terms of mobilizing private capital within the climate space?

There is market failure, in terms of the industry not integrating the right analytics on the right time horizon for investors, which prevents us from starting a more thoughtful discussion on financial materiality and a strategic discussion on valuations. That is, how physical risks and climate change really impact cashflow models; not only their impact on loss or damage, but also revenue projections, capital expenditure, cashflow projections, discount rates, and ultimately net present value. This is really a problem, particularly in developing countries, because what we're doing is scaring away capital rather than attracting it. Moreover, market forces like regulation, credit quality, and standards, despite their promising efforts, are not fully integrating these risks, often resulting in inefficient enforcement and reward of good integration practices. Practically, this means that resilience may actually be being penalized. Blended finance will be needed to help address market inefficiencies and provide proof of concept for solutions integrating climate risks into cashflow models effectively.

Can you talk more about the role blended finance can play here?

The problem we face is that having added the additional required capital expenditure to their valuation models after integrating physical climate risks, the resulting changes in net present value do not properly compensate investors, which in turn disincentivizes this course of action for investors. Blended finance can be hugely important in proving the analytical case for integrating physical climate risks in a more systematic way, ultimately helping the market to function more efficiently while also providing greater financial sophistication and innovation. For example, we're currently envisaging a fund termed the 'Catalytic Resilient Capital Fund', which would provide top-ups to investors whose investments' net present values have not properly tracked the integration of physical climate risks within their valuation models. Any asset or any investment that has received a degree of exposure to a physical climate risk should be priced with that in mind; for us, the ideal investment has a minimum score of systemic resilience for a vulnerable community or ecosystem and is also cash flow resilient, with realized returns for private investors matching expectations.

What is your view on the market in the next 3-5 years?

The demand is monumental, but this discussion is not so much about value at risk as it is about valuation risk and opportunity. Market forces realize that there will be a change to the rules of the game to inform better enforcement and better reward of climate-focused valuation practices. We're used to shorter-term insurance products focused on protecting companies from loss and damage from extreme climate events, but for the mid-to-long term, investors need to understand all transmission channels, from physical climate risk data to financial materiality, and feed through all climate risks, both acute and chronic, into their valuation models. Investors want to be positioned for this both from an arbitrage and strategic standpoint when it's explained to them, but there's also strong interest in these solutions from the impact side.

6

Mismatch between demand for climate data and availability in the market

We observe a paradox that exists in the blended climate market. On the one hand, we observe a growing demand for investors to disclose the impact of their investments on climate change to prevent greenwashing and improve the functioning of the market. This includes new regulations such as the Sustainable Finance Disclosures Regulation (SFDR) in Europe, which requires stringent data collection including as it relates to project pipelines and their linkages to climate outcomes. Similarly, MDBs and DFIs such as the GCF require detailed climate vulnerability assessments from prospective investees when awarding funding. Yet, the requirements don't always match the true availability of data available in the market, particularly when linking specific transactions to broad climate outcomes (e.g., how an individual vehicle may contribute to reducing the frequency of droughts). Moreover, different players use different data and climate taxonomies. For example, there exists a lack of agreed upon indicators for climate adaptation, making the standardization and collection of data more difficult.

The information asymmetry in the blended climate market poses an additional challenge. Due to the highly bespoke and tailored nature of adaptation blended finance transactions, and given the high-risk geography and sectors, the lack of standardized data means that many initiatives become irreplicable across regions. Further, interventions in one area may enhance vulnerabilities in another, additionally complicating project structuring. Higher transaction costs and loosely structured, often small-scale value chains make standardizing and scaling increasingly challenging.

PART VI: RECOMMENDATIONS

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What steps can the donor and investor community take to build climate blended finance transactions that scale private financing and achieve climate outcomes more effectively and efficiently? Before setting out our own recommendations, Convergence wishes to recognize and endorse the calls to action spelled out in the NZAOA October 2022 call to policymakers to scale blended finance for climate, the G20 Sustainable Finance Roadmap, the COP27 Guidebook on financing a just transition, and the Action Plan For Climate & SDG Investment Mobilization.[13]

In addition to the aforementioned calls for action, Convergence's recommendations as an independent field builder in blended finance are as follows.

1 High level plans must translate into action to deliver private sector investment

Developed countries should refine the COP 26 Climate Finance Delivery Plan into a strategy and detailed action plan to achieve and surpass their target of $100 billion of climate investment in developing countries. The calls to action we endorsed (above) center on deploying a tangible portion of public sector development finance and climate finance funds to de-risk investment opportunities and bring them within the bounds of investors' fiduciary and regulatory constraints. Within these plans, blended finance must feature strategically to maximize outcomes given the limited supply and suboptimal allocation of current concessional resources.

Concessional development finance and climate finance must be allocated strategically, collaboratively and competitively to the best proposals globally, minimizing concessionality, maximizing additionality and optimizing value-for-money. These scarce critical resources should be allocated to the best proposal through an auction-like process with a clear delineation of actors and mobilization targets. This requires the primary providers, mainly developed countries in the form of OECD DAC members and donors to climate funds (e.g., GCF, GEF, CTF and CIF), to marshal together to award funding more effectively to the best proposals pursuant to clear objectives and terms of reference.

Relatedly, given the immaturity of the climate market, donor funds such as the GCF should provide support to grantees, including through the provision of design funding and technical assistance grants, to help grantees better collect data and demonstrate the robust linkages between individual transactions and greater climate outcomes.

13 The Action Plan for Climate & SDG Investment Mobilization is a report coordinated by Convergence, funded by USAID, and developed in consultation with over 100 public, philanthropic, and private stakeholders, including four private sector investor groups – Net Zero Asset Owners Alliance, the Sustainable Markets Initiative, the Global Investors for Sustainable Development Alliance, and the Investor Leadership Network.

2 Donor involvement should track NDC priorities

When supporting climate-focused transactions, donors must direct concessional financing in a responsive way, giving preference to transactions in which developing country governments and locally domiciled actors have a presence and in which capital is aligned with NDC priority areas. This includes areas where adaptation needs are the greatest, like agriculture, water, and ecosystem preservation. In this way, blended finance can lead the way in integrating local voices within climate finance.

Where low and middle income countries and development partners are co-creating ambitious national platforms along the lines of Just Energy Transition Partnerships, they should draw on blended finance to introduce private sector investment into the larger plan. This could be in the form of technical assistance to identify where private investment could play a role while ensuring that the benefits of a transition are equitably distributed within local communities and municipalities; concessional funding could also be offered directly to investment structures that sit within an overall national plan and would be attractive with some risk and return modulation, thus preserving the bulk of foreign aid and national budgets for elements that hold limited or no appeal to investors.

3 Development agencies should be definitive about their climate agenda

One common complaint from investors is their inability to discern donor agencies' priorities or know with which to engage on investment strategies that could deliver large impacts but require some support – opportunities, in other words, that lend themselves to cooperation in the form of blended finance. This market confusion will worsen with the growing tension of objectives between concessional resources for climate and other goals. A donor's decision to focus on climate may require directing resources toward low and middle income countries, supporting certain sectors, and relying on specific impact metrics, whereas a poverty alleviation focus could lead that donor toward an emphasis on LDCs, a different set of interventions and different metrics.

Those managing catalytic funds who want to use blended finance to enhance their impact need to be open about this dynamic and signal clearly to private sector counterparties where they intend to position themselves. Climate-related action is perhaps uniquely time-sensitive. Clarity will drive speed.

Regardless of where climate change falls within the priorities of an individual donor agency, assessment of climate should be built into all donors' blended finance engagement. Climate change, like gender, has implications for delivering on other SDGs and merits being a core consideration across the board.

4 Adaptation investment must be expanded and accelerated

Filling the adaptation gap will be crucial to scaling climate financing to reach funding goals. Although there has been a recent uptick in adaptation blended finance, compared to mitigation, the disparity continues to be significant. The development of effective taxonomies, in particular, can be immediately impactful. The expansion of adaptation taxonomy can direct investors to adaptation solutions currently beyond their radar. For example, companies helping to manage droughts, disease, supply chain disruptions, and other climate impacts are often not referred to or recognized as climate-related. This expansion of taxonomy not only addresses some of the risks and gaps associated with deal structuring, but will also increase the pool of climate related solutions and bankable projects.

Separately, MDBs could accelerate adaptation blended finance can by activating their entire suite of potential offerings. MDBs currently mobilize private investment mostly for their private sector operations. But many climate adaptation projects in developing countries will require public sector funding in the short term because of the difficulty of creating investible propositions around certain public goods. More could be done to fulfill the MDBs' mandate. For example, MDBs could syndicate sovereign loans for adaptation using an A-Loan/B-Loan approach. MDBs could pool and securitize a series of such loans, supported by subordinated, first-loss capital, to provide investors diversification and credit protection. We do not advocate adding to developing nations' public debt burdens; rather, the point is that where nations do borrow to fund adaptation, MDBs should be looking for openings to get large, mainstream investors familiar with this type of investment and make full use of their development mandate.

5 Investors should stay ahead of regulatory shifts and actively integrate climate expertise into investment processes

Spotting mitigation- and adaptation-related business opportunities and recognizing climate risk need to become core skills within investment houses. This competency should be a part of due diligence processes and portfolio management. As shared by Leticia Ferreras Astorqui, Portfolio Manager, Development Finance, at Allianz Global Investors:

> *"We are seeing a demand for climate experts from investors and it can be a helpful step to incorporate climate considerations into the deployment of all new capital, whether in developed or emerging markets."*

Becoming fluent in climate issues will be necessary for blended finance to become a mainstream climate investment accelerant: investors that can demonstrate the climate case for the use of scarce public and philanthropic funds will be better able to secure catalytic funding for transactions that they cannot take on without such support.

6 All market participants should aim for transparency and shared learning

To address the siloes between the climate mitigation, adaptation, and conservation finance communities, donors and investors should make information sharing a default, not an exception. The climate arena, particularly the blended finance subset of the field, requires the equivalent of open-source software to speed up the pace of development. So much remains to be demonstrated regarding how carbon projects intersect with adaptation and conservation outcomes, to showcase successful investment models that could be taken from one sector to inspire and guide project developers in another, and to encourage adaptation and conservation practitioners to coalesce around agreed-upon impact metrics. A stepped-up commitment to transparency amongst all stakeholders and investors and public and private sector databases to provide front-end and back-end transaction data will be critical.

Since inception in 2016, Convergence has laid down a considerable foundation of knowledge within blended finance. The firm intends to deliver on its own recommendation about "open source" sharing. Where its expertise intersects with climate finance, Convergence will seek ways to collaborate with other actors in this arena. This State of Blended Finance 2022 is one step in this direction.

CONVERGENCE
BLENDING GLOBAL FINANCE

CONVERGENCE is the global network for blended finance. We generate blended finance data, intelligence, and deal flow to increase private sector investment in developing countries.

BLENDED FINANCE uses catalytic capital from public or philanthropic sources to scale up private sector investment in emerging markets to realize the SDGs.

Our **GLOBAL MEMBERSHIP** includes public, private, and philanthropic investors as well as sponsors of transactions and funds. We offer this community a curated, online platform to connect with each other on blended finance transactions in progress, as well as exclusive access to original market intelligence and knowledge products such as case studies, reports, trainings, and webinars. To accelerate advances in the field, Convergence also provides grants for the design of vehicles that could attract private capital to global development at scale.