Blended finance for scaling up climate and nature investments

Report of the One Planet Lab

November 2021
About the One Planet Lab

The One Planet Lab brings together influential people from business, finance, international institutions and academic communities, known for their engagement and innovative proposals for the ecological transition. It was officially launched on 26 September 2018, in New York City at the second One Planet Summit. Through its diversity, it structures a strategic reflection that aims to feed the One Planet Summit’s momentum by suggesting new objectives and new levers of action. Four personalities are leading the Lab and acting as guarantors: Bertrand Badré (Blue like an Orange Sustainable Capital), Paul Polman (Unilever Foundation) Nick Stern (London School of Economics) and Sylvie Goulard (Banque de France). The One Planet Lab establishes one-year work programmes selecting a small number of subjects around the four main themes of the One Planet Summit – climate, biodiversity, oceans and finance – and sets up working groups to formulate and implement recommendations.

Acknowledgements

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Disclaimer

This report and its recommendations are the sole responsibility of its author and while they are the result of the collective reflection of the One Planet Lab as a whole, they may not represent the individual views of the Lab members nor the official positions of the institutions they represent.

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Summary for leaders

Blended finance for scaling up climate and nature investments

1. The need to act

The climate crisis and biodiversity loss demand urgent action. The world needs investment into a greener capital stock, as well as better policies and innovation. This report, which builds on experience and has been consulted with a broad range of stakeholders, focuses on mobilising private finance for investments.

Focus: The main emphasis in this report is on financing sustainable infrastructure, which will require the lion’s share of additional climate and nature-related investments, but many of the conclusions also apply more broadly and references are made to other sectors. Furthermore, the report is mainly concerned with emerging markets and developing countries. Nevertheless, the argument and principles can extend to advanced countries as well, especially when it comes to frontier technologies and business models.

2. Private finance for the public good

Stepping up requires partnership, since the financing gap far exceeds the capacity of the public or the private sector alone. The chart to the right, by the Climate Policy Initiative, shows the huge and urgent step up in financing that is needed globally. Under a stretch scenario, private funds will have to account by 2025 for US$430 billion of the $780 billion in additional annual financing in developing countries alone (excluding China). At the same time, budgets and official climate finance will remain critical for investment in areas that can only be tackled through public channels. The world must scale up by linking public and private initiatives and working in a joined-up manner, harnessing private finance as an agent for the global public good.
3. Address obstacles and create country platforms

If set against the needs, the mobilisation of private finance today is far too low and will have to increase many times over. Climate and nature finance are being held back:

a) ‘upstream’ by weak and unstable policies and regulation, which shrink the space for private investment;
b) ‘midstream’ by scarcity of well-prepared, bankable projects;
c) and ‘downstream’ by a lack of financial channels connecting deep sources of funds with investments.

There needs to be action at all three levels for private finance to grow. In view of the accelerated timeline it is crucial to give common overall direction to these efforts at the country level. Country/ Sector mobilisation platforms as proposed at the Venice G20 could provide a focal point for consultation and coordination, combining development of Long-Term Strategies and NDCs; translating these into shared action and engaging the private sector; and support on the policy and institutional level to tackle upstream constraints. As underlined by the UN-affiliated Global Investors for Sustainable Development Alliance (GISD), these efforts should be backed by leading governments, including through the governance of Development Finance Institutions (DFIs) and Multilateral Development Banks (MDBs) who must set ambitious targets for mobilisation.

4. Blended finance can unlock risky investments

Investments can be too risky for private finance, especially when they are at the ‘frontier’ geographically, in terms of technologies or business models. This is a problem in poorer countries, in areas where there is little experience, such as adaptation finance or biodiversity, but also in more established climate projects when country and other risks are below investment grade. Markets can fail to produce socially desirable outcomes in these cases. Blended finance, which combines concessional public funds with commercial funds, can be a powerful means of rebalancing risks and enabling investment. There is by now a track record of successful blending operations, and this report provides illustrations.

5. Governance can ensure value for money

Despite its potential, development partner commitments to blended finance remain limited at around 2% of official development assistance (ODA) and US$10–15 billion of project volumes annually. Strong governance frameworks around decision-making and reporting would help ensure that blended finance achieves value for public money, providing comfort to donors. Testing blended finance proposals against benchmarks for impact and additionality is especially critical, as are better data and transparency around blended finance.

6. Tackle the public–private culture gap

Underpinning any public action to mobilise private finance there must be understanding and accountability: mutual understanding of each other’s goals, abilities and constraints, and accountability to build trust. Bridging the culture gap will require education, initiatives that bring the parties together – and humility. A co-benefit of blended finance is the blending of knowledge and skills, which can contribute powerfully to addressing challenges that today often straddle the public and the private.
7. Aim for both impact and volume

The impact and additionality of blended finance will tend to be particularly high at the geographical and technology frontier. But the potential for larger volumes and meaningful contributions to closing the global climate and nature financing gaps is much greater ‘inside the frontier’, where country and other risks are less extreme but still hold back private involvement. Blended finance can be justified in both situations as long as effective governance is in place. For impact and scale, there is a need to design and resource strategies for both impact at the frontier, and volume inside it. The balance in frontier investments should be towards project development and preparation first – including through local financial intermediaries – and enabling finance second. Inside the frontier, the balance should be towards opening up access to deeper sources of finance, in both the domestic and international capital markets.

8. Scale up with portfolio approaches

Most blended finance projects are developed individually. But fragmentation is costly, process-heavy, creates assets that are too small for institutional investors and does not invite rapid replication or scaling. To deliver climate investments with the necessary pace and urgency it is necessary to move from individually tailored to portfolio-level approaches.

a) For project development this means replicating rather than innovating, delegating, de-fragmenting project preparation support and simplifying and standardising policies and documentation. There are successful schemes that achieve these aims by building local partnerships especially with national development banks, commercial banks and developers, or offering ‘full-package’ solutions such as for solar energy.

b) For mobilising finance downstream it means standardising, aggregating, and creating asset classes and electronic funding platforms. Market scale can be achieved through structured blended finance vehicles, sustainable bond markets, and the creation of a sustainable infrastructure asset class. It will be crucial to tap local as well as international capital markets not least to mitigate currency risk.
9. Increase mobilisation ratios

Mobilisation ratios for blended finance, i.e. ‘private bang for the public buck’, are often low. There can be good reasons for this, and one must beware of simplistic approaches. But higher mobilisation can be achieved by:

a) Selecting the blending instrument that most directly addresses the underlying obstacles.

b) Systematically enforcing additionality and proportionality in the use of blended finance. This requires a methodology and governance that subjects blended finance requests to strict additionality tests and that ensures a balance in the risks borne by each party in a transaction.

Risk-oriented blending instruments such as guarantees and first-loss structures would have significant potential to mobilise private funds and are underutilised. For instance, a 20% first-loss tranche in a recently launched blended finance vehicle (BlackRock CFP) will enable at least $400m of institutional investor money that would not have been invested in developing country climate infrastructure.

10. Build on successful models and initiatives

There has been much experimentation and innovation in the blended finance area in recent years. There are promising existing initiatives, including under the auspices of the One Planet Summit, some of which are presented in this report. Development Finance Institutions (DFIs) can play an important connecting role by working across and addressing challenges at different levels: upstream, at pipeline generation, and financially. Given the urgency to act and scale up private finance for climate and nature, the priority now must be to move forward, back key initiatives that meet governance, strategy and design conditions, and give them scale many times over.
1. Background: Private funding for global climate and nature goals

a) The investment challenge

Annual investment into sustainable capital stocks must increase rapidly to achieve globally agreed targets. For a Paris Agreement-aligned decarbonisation path that is consistent with development goals, emerging markets and developing economies (EMDEs) excluding China will require additional annual finance above recent levels of US$0.8 trillion by 2025 and $1.9 trillion by 2030.¹ The share of upper-middle-income countries is estimated to be 50% of the total, lower-middle-income countries 45% and low-income countries 5%. To enable this investment, there is a need for a drastic increase in sustainable finance.

Table 1.1: Investment needs consistent with a path to net-zero (selected areas)
Emerging markets and developing countries (excluding China)

<table>
<thead>
<tr>
<th></th>
<th>Gross spending 2019</th>
<th>Spending target 2025</th>
<th>Spending target 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$bn</td>
<td>% GDP</td>
<td>US$bn</td>
</tr>
<tr>
<td>Sustainable infrastructure</td>
<td>730</td>
<td>3.5%</td>
<td>1160</td>
</tr>
<tr>
<td>Agriculture, food, land use, nature</td>
<td>150</td>
<td>0.7%</td>
<td>355</td>
</tr>
<tr>
<td>Adaptation and resilience</td>
<td>35</td>
<td>0.2%</td>
<td>180</td>
</tr>
<tr>
<td>Total</td>
<td>915</td>
<td>4.4%</td>
<td>1695</td>
</tr>
</tbody>
</table>

Source: Brookings Institution, LSE Grantham Research Institute and Rockefeller Foundation, 2021

In all cases, investment needs far exceed current financing capacity, including fiscal headroom. Under a stretch scenario considering different financing sources, private funds would need to account for around $430 billion of the $780 billion in incremental financing (see Figure 1.1). At the same time, ODA will remain critical for investment in areas that can only be tackled through public channels, and commitments to climate finance will have to be met in order to progress global climate talks. There is no ‘public option’ or ‘private option’ – both are needed if the world is to have a decent chance of meeting the Paris temperature goals.

It is therefore imperative for the public and private sectors to join forces for the ecological transition. The private sector has in recent years established a variety of coalitions committed to climate finance. At the same time, there is a concerted push for greater private capital mobilisation on the part of international financial institutions and governments. This offers the chance to scale up by linking public and private initiatives and working in a joined-up manner, and for harnessing private finance as an agent for the global public good.
b) Country and sector patterns

Private investment can help to scale up climate and nature solutions in both advanced and developing countries. Investment profiles differ according to sector and technology. Established technologies (e.g., wind, solar) in well-functioning markets are increasingly attracting private investment. 91% of EMDE private clean energy finance went to the top 10 recipient countries. Renewable energy generation is the recipient of 60% of global energy transition finance and two-thirds of institutional investments. In the more mature markets, private utilities and developers have overtaken public sponsors as sources of finance, and official sources represent only a small proportion. Sustainable and green bond issuance has been growing quickly in recent years, so far mostly in high-income countries but with some middle-income countries now tapping the markets as well.

**Box 1.1.** Renewable energy describes the ideal-type development path. For example, in Mexico initial engagement of the Inter-American Development Bank and the International Finance Corporation with Climate Investment Funds laid the policy groundwork, followed by demonstration projects with technical assistance support, capable players entering the market, and eventually large-scale private mobilisation. There have been similar patterns in Brazil, India, Egypt and elsewhere. DFIs/multilateral development banks can claim that these are catalytic success stories.
On the other hand, challenges remain to attract private investment into most countries outside a core group, especially lower-income countries, as well as into other sectors — including urban infrastructure and buildings, adaptation and resilience, the transformation and decommissioning of existing assets under just transition initiatives, food and land use, biodiversity and nature-related investments. To take an example, of the c. $820 million annual total REDD+ forest funding (average, 2010–18), only an estimated 10% was from private finance via voluntary carbon markets. This reflects, among other things, the lack of valuation of natural capital and in this and other areas the difficulty of defining commercial business models.

The conditions will need to be established for private finance to scale up very significantly in a much broader range of countries and sectors. Creating the conditions for greater investment in low-carbon solutions will accelerate progress towards market tipping points, when they can become competitive with high-carbon alternatives on key dimensions (e.g. cost, convenience, social acceptability). Once solutions pass market tipping points, they can rapidly scale to become mass market, attracting further (private) investment as they do so.

We focus largely on the emerging markets and developing countries in this report. There is of course a similar challenge in advanced countries in terms of investment needs and financing gaps. The approaches and solutions discussed here largely apply as well, including when it comes to blended finance in high-risk frontier areas such as agro-ecology, thermal building renovation and electric vehicle (EV) infrastructure. These points have been argued forcefully elsewhere.4
2. The broader mobilisation challenge

Blended finance is part of the effort to mobilise private capital for climate and nature. It is helpful to consider the broader challenge first before turning to the specifics of blended finance.

a) Tackling constraints to mobilisation

We have data on the mobilisation of private finance for climate and nature by multilateral development banks (MDBs) and development finance institutions (DFIs). MDB/DFIs have been important sources of EMDE climate finance, with about US$35bn annually on their own account in 2020. Around $6.5bn of the total went to enable private sector projects. Private direct and indirect mobilisation is reported at $10bn. Together, MDB/DFI finance represented 31% of public finance for climate finance, and 25% of all flows, public and private, to non-OECD countries. However, if set against the investment needs and financing gaps discussed above, it is clear that mobilisation will have to increase many times over. As the Climate Policy Initiative has put it, “there is a need for a tectonic shift beyond ‘climate finance as usual’”.

This will require tackling the constraints that have been holding back both projects and finance:

1. **Lack of markets upstream**: Impediments range from macroeconomic factors and shortcomings in sector policy and regulation, to contract enforcement, governance, and public sector management, all underpinned by often weak institutional capacity. The Climate Finance Leadership Coalition (CFLI) has laid out expectations for the sector investment framework from a private climate investment perspective. The pattern of EMDE clean energy finance shows a strong correlation with its index of policy strength.

2. **Lack of projects**: Bottlenecks exist in project preparation and development, i.e. getting projects to investment-readiness at scale, especially for sustainable infrastructure. This is despite the considerable attention that this area has received at least since the 2012 G20 and the setting up of many donor-supported project preparation facilities. Availability of risk capital for project development is as much of a constraint as technical expertise.

3. **Lack of mobilisation tools**: An atomised financing landscape offers only limited access to institutional investors, largely due to risk factors and the absence of transparent, sizeable and liquid asset classes. Institutional investors might potentially offer scale, but they also require scale.

Action is required on each of these constraints if sustainable finance is to be scaled up rapidly. A focus on finance alone would end up simply creating competition for scarce assets. Policy reforms on their own could remain stranded without an investment response. Table 2.1 summarises the different levels of engagement.

Over the years there have been initiatives at all these levels by MDBs/DFIs, governments, donors and market coalitions. Efforts remain largely fragmented, which is process-heavy and does not invite rapid replication or scaling. However, recent coalitions and initiatives have been broadened and strengthened, and are beginning to connect and span the public, the private and the MDBs. Private sector-led initiatives include the Global Investors for Sustainable Development Alliance (GiSD), FAST-Infra, the Climate Finance Leadership Initiative (CFLI) and most recently the Glasgow Financial Alliance for Net Zero Emissions.
Table 2.1: Delivering sustainable investments

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Tools</th>
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<tbody>
<tr>
<td>Generate</td>
<td>Planning, policy lending, institution-building</td>
</tr>
<tr>
<td>Create markets (upstream country, sector, system)</td>
<td>Technical assistance, capacity-building, early-stage finance</td>
</tr>
<tr>
<td>Create projects (midstream develop, prepare, implement)</td>
<td>Debt/equity/guarantees, syndication, co-investment, blended finance</td>
</tr>
<tr>
<td>Finance</td>
<td>Asset class (principles, standards, taxonomy), market infrastructure, blending, refinancing</td>
</tr>
<tr>
<td>Mobilise (direct, platform)</td>
<td></td>
</tr>
<tr>
<td>Catalyse (market)</td>
<td></td>
</tr>
</tbody>
</table>

(GFANZ). These initiatives share a common goal of alignment with the Paris climate goals and increasing the flow of investment and climate finance to developing countries. There are also initiatives to mobilise and strengthen coordination among development banks, including the MDB Infrastructure Cooperation Platform, the MDB climate leaders’ group, the International Development Finance Club (IDFC) and the Finance in Common Initiative that seeks to bring together all public development banks.

There is a need to integrate these efforts and act on three dimensions under the common banner of shifting from a transactional to a more structured approach, from individually tailored to aggregate solutions, and from disparate to linked-up efforts via partnerships.

b) Strategic integration – country platforms, LTS and upstream support

Given the accelerated timeline it is crucial to give common overall direction to climate investment and finance efforts at the country level. Country/sector mobilisation platforms as proposed at the Venice G20 could provide a focal point for consultation and coordination. At the core must be:

- An urgent, concerted ‘big push’ to develop Long Term Strategies (LTS) and nationally determined contributions (NDCs), designed to achieve net-zero targets and provide a common frame for support from development partners and the private sector.
- Translating these into shared action and engaging the private sector in a structured manner through the proposed platforms.
- With MDBs/DFIs and other parties, stepping-up support on the policy and institutional level to tackle upstream constraints and “create markets” based on improved diagnostics and capacity-building.

Long-term strategies and NDCs, if widely consulted and agreed among public and private stakeholders, would anchor expectations and form a basis for policy and institutional changes, project development plans and financing programmes. They would also help to pinpoint and address possible inconsistencies in climate policy frameworks, e.g. where public support for green solutions is made more difficult by subsidies for fossil fuels. Such strategies would need to be broken down further into key sectors, systems and paths.
c) Project development partnerships

The second dimension, project preparation and development, is the most complex to scale up. While upstream the key ingredients are political will, focus and coordination, and for finance it is to connect markets, in project development and preparation the main bottleneck is capacity. Delivering sustainable infrastructure and other climate investments at much higher levels will require both adequate funding and institutional capacity. Entities such as the Global Infrastructure Facility (GIF) could give coordination and impetus to this agenda, including developing programmatic approaches with MDBs, national development banks and private sector initiatives in its membership.

Stepped up project development and preparation also needs risk-sharing models and greater availability of risk capital. Equity finance at the development stage is often the biggest constraint. There has been successful innovation in this area. Partnerships might extend to helping create and taking shares in dedicated companies (Globeleq, CDC Gridworks, Danish Water Investment Development Company), early-stage project support through funds (Climate Investor One), or facilities such as IFC InfraVentures. Ideas that have worked need to be replicated and grown.

d) Asset aggregation – channelling institutional capital at scale

The third dimension is to create intermediation channels for tapping institutional investor funds at much greater scale with the help of funding platforms and capital market frameworks. These efforts are generally still nascent; they would complement ‘push-side’ regulatory and voluntary approaches such as GFANZ that aim to shift the structure of financial portfolios towards climate alignment. To channel capital markets and institutional investors into climate finance, there is a need to address issues of size, risk and complexity. On their own, typical climate assets are too small for market finance. Risk might need to be buffered to become investment-grade. And assets need to be standard and transparent from a legal, financial and an environmental, social and governance (ESG) angle. The GISD has laid out several action points around standards and regulation to help overcome fragmentation and shift incentives. Local capital markets should be an integral part of climate finance strategies by (sub-) sovereigns, corporates or financial institutions.

Cutting across the mobilisation challenge is the need for the public and private sectors to work together for common objectives and with mutual respect. The public–private ‘culture gap’ can stand in the way of genuine efforts to collaborate and to creating conditions for each other’s success. It will take education, a spirit of humility – no one controls the solutions on their own – and a deepening of public–private initiatives such as the One Planet Labs, GISD, CFLI and country mobilisation platforms to make progress on this front. And it will be crucial to ensure proper accountability and transparency (see Section 3c).
3. De-risking climate and nature investments with blended concessional finance

a) Evolution of blended finance

Blended finance may play a role at various points of the investment cycle described above, enabling project development as well as the mobilisation of finance for climate and other projects aligned with the Sustainable Development Goals (SDGs) where private solutions alone would not proceed.

Unfortunately, there are different definitions of blended finance that do not fully match, which has contributed to confusing the debate and the numbers (see Box 3.1). We will not resolve this debate here but assume that blended finance would typically involve an element of concessionality (i.e. terms softer than or unavailable in the market), and that its purpose is to mobilise additional funding for private projects. It is also plausible to include technical assistance grants aimed at supporting project development and bankability in this concept of blended finance.

Box 3.1. Definitions of blended finance

The Addis Ababa Action Agenda (AAAA) defines blended finance simply as combining concessional public finance with non-concessional private finance. According to the OECD’s Development Assistance Committee (DAC), blended finance is the strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries. Under this definition, development finance can be both concessional and market-based, and mobilised finance can be public or private, as long as its purpose is commercial.

The DFIs’ joint definition of concessional blended finance is the combination of concessional finance from donors or third parties alongside DFIs’ normal own account finance and/or commercial finance from other investors, to develop private sector markets, address the SDGs, and mobilise private resources. This is closer to the AAAA definition but assumes that the DFIs’ own account finance is necessarily market-based and excludes, for instance, project-related technical assistance grants.

Blending as an explicit mobilisation tool in development finance has a relatively short history, but its use is growing. The Convergence database identifies a cumulative total of only 111 blended finance transactions with capital committed of US$32 billion up until 2009, growing rapidly to 659 transactions and cumulative capital of $132 billion in 2020 (though volumes declined sharply in 2020). The dollar amounts reflect the commercial funding mobilised, including from DFIs, as well as the concessional. ODA for blended finance and private sector instruments increased nearly 50% in 2019, to $3.2 billion – a step up but still a very small share at less than 2% of total ODA. The DFIs report using $1.4 billion of concessional funding in 2019 for a total project volume of $10.4 billion. Climate finance comprised the largest share of blended concessional finance volumes with well over half of the total in all country income groups.

ODA reforms by the OECD DAC (2017) and the development of the new Total Official Support for Sustainable Development (TOSSD) metric are likely to incentivise increased investment of...
ODA in blended-finance approaches, as donors will be able to report significant amounts of private finance mobilised in TOSSD.

Taking into account the period to project completion, which tends to be six to seven years or more, full-cycle experience with blended finance transactions remains relatively scarce. Nevertheless, given the high potential associated with blended finance as a tool to help meet SDG and climate targets there are a range of prominent initiatives establishing guidelines, drawing lessons and designing promising approaches.

Reports setting out the case and considering the broader architecture for private mobilisation and blending include, in particular, the United Nations/Interagency Task Force on Financing for Development14, Climate Finance Leadership Coalition (CFLI)15, Tri Hita Karana/OECD16, Convergence/DFID17, and Climate Policy Initiative (CPI)/Blended Finance Task Force18. The DFI Working Group on Blended Concessional Finance19 and the OECD DAC20 have established important guidelines for the governance and implementation of blended finance. Blended finance design innovations are being generated by the Green Climate Fund (GCF), the Climate Investment Funds (CIF), the DFIs and numerous public–private initiatives, such as the Global Innovation Lab for Climate Finance21. Data are being collected, in particular, by the OECD, the DFIs and Convergence, though there is general agreement that transparency and reporting, especially at project level, remain inadequate and make analyses of the impact and efficiency of blended finance very difficult.

The discussion that follows builds on these reports and initiatives, as well as on consultations with public and private stakeholders (see list in Appendix 1). Though definitions and data can be wide apart, there was a striking degree of convergence on both the diagnostic of the situation and on key recommendations.

![Figure 3.1. Blended finance: transaction count and project value, 2010-2020](chart.png)

b) Purpose, conditions and limitations

Rationale for blended finance
Recent blended finance initiatives were triggered by the SDG process and the common ambition to urgently scale up private finance for climate and nature. The strength of blending is that it can mobilise funds by helping to match risk-adjusted returns to investor requirements. On economic principles, this can be justified if markets fail to align risk-adjusted returns with social preferences.

There might be a variety of reasons for market failure, but the most relevant when it comes to blending for climate and nature projects are excessive risks that would be absent or could be mitigated in well-functioning markets. Excessive risk can make the risk-return profile of a climate or nature investment financially unattractive; as a result, finance might be unavailable, or available only on terms that are not commercially viable (tenors too short, interest rates too high, expensive collateral). The high cost of preparing and operating projects in low-income environments or developing new business models, such as in adaptation or nature finance, can also skew risk-adjusted returns downward compared with more established markets. As for innovation, there can be an economic case for blended finance if the broader economic benefits of such early movers are considered to be large.

Table 3.1 provides examples of investment risks that might provide a plausible economic rationale for blending. Some forms of blending can help reduce or eliminate risks, but mostly blending reallocates risk to (public) parties that are in a better position to shoulder it. It may be economically justified to address these risks and rebalance the risk-return profile of the transaction for private investors and financiers through public concessional finance if:

- the public donor has a greater risk appetite than the commercial market for any given return expectation (perhaps because the public donor applies a lower discount rate to take account of the interests of future generations);
• unusually high risks are associated with early movers in a market, for instance around market size or government regulation, but their investments pave the way for future lower-risk entrants (the risk premium then corresponds to an information externality that the public donor is willing to assume); or

• the public donor is willing to incur a loss to ‘pay’ for the risks associated with a complex climate project, as long as the social returns (climate or economic development) make that worthwhile.

The global public interest in all these situations is to accelerate climate and nature investments, reflecting the urgency of the climate and biodiversity crises. Blended finance can therefore be an economically sound tool of public policy to enable critical investments to go ahead. Like any tool of public policy, it will have to meet standards of effectiveness and efficiency.22

### Table 3.1 Risk rationale for blended finance

<table>
<thead>
<tr>
<th>Policy risk</th>
<th>Examples</th>
<th>Blended finance (BF) rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unclear regulation</td>
<td>BF might compensate for lack of information absent regulatory track record</td>
</tr>
<tr>
<td>Project risk</td>
<td>Skills/capacity</td>
<td>Technical assistance to compensate for lack of local talent</td>
</tr>
<tr>
<td>Business risk</td>
<td>First mover</td>
<td>Taking risk and creating market knowledge for future market entrants goes unrewarded. BF can compensate.</td>
</tr>
<tr>
<td>Counterparty risk</td>
<td>Weak off-take agreement</td>
<td>Government failure. BF can mitigate this risk (e.g. guarantees) but should seek alignment of government interest.</td>
</tr>
<tr>
<td>Tenor risk</td>
<td>Market finance too short term</td>
<td>Underdeveloped local capital markets. BF can be designed to lengthen terms or mitigate refinancing risk.</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>Thin debt or equity markets</td>
<td>Underdeveloped emerging markets or green asset markets. BF can be designed to limit downside.</td>
</tr>
<tr>
<td>Market risk</td>
<td>Currency volatility</td>
<td>No currency hedging available. BF can step in as swap counterparty.</td>
</tr>
</tbody>
</table>

### Effectiveness

The hopes and the doubts around blended finance tend to focus on its effectiveness. Blended finance would be judged to be effective if it leads to the deployment of significant amounts of incremental finance for investments achieving climate and nature goals. Thus, effectiveness is a function of impact and additionality. Impact is the concrete change achieved in terms of climate mitigation, adaptation, resilience, biodiversity and nature...
services. Additionality relates to the role that blending plays in enabling this impact. If an investment has no prospect of making much of a positive impact, there is no justification for deploying public funds to support it. Nor is there a case for blending if the concessionality that comes with blending is unnecessary for the investment to go ahead soundly and achieve impact.

In an imperfect world, impact and additionality can be matters of judgement and expectation. Neither can be conclusively measured and both are subject to uncertainty, especially ex ante when the investment and blending decisions are taken. But judgement can be guided and expectations narrowed through well-designed results frameworks and plausibility tests. It is crucial for the credibility of blended finance and the perceived legitimacy of the use of public funds that its use is tied to such frameworks.

A straightforward impact framework for climate and other impacts, from Mirova, is shown in Figure 3.2. Otherwise, three types of measurement framework can be distinguished among impact investors that have subscribed to the Operating Principles for Impact Management: impact targets, impact ratings and impact monetisation. As it stands today, impact across investors and funds can be difficult to compare; indicators and methodologies differ, and even when using the same indicator, it is unclear what a particular level of achievement is ‘worth’ in, say, rich and poor countries or new and established technologies. To support donor choice and accountability, donors should press for blended finance facilities and funds to go further in harmonising measurement systems.

Figure 3.2 Mirova’s indicators for measuring impact

Additionality is even harder to get right and is often questioned. The broad definition of additionality employed by the DFIs distinguishes financial and non-financial (developmental) additionality, where the former establishes whether a project would have attracted appropriate finance at all, and the latter whether a purely commercially financed project would have the same development benefits. Proof of additionality requires knowledge of a counterfactual. This can be difficult to establish for an individual transaction or a fund, and even more so for multilayer structures (fund investee companies, funds of funds). At the same time, some macro-level studies have found strong evidence of MDB financial additionality.

Though difficult, additionality is a crucial condition that must be at least plausibly confirmed in blended finance transactions. A systematic additionality framework was commissioned by the G7 Finance Ministers and adopted by the MDBs in 2018. The framework includes a range of indicators against which additionality can be benchmarked. Such additionality ‘tests’ should be strictly required for blended finance transactions.

Blended finance administered via DFIs has the advantage of leveraging existing frameworks for impact and additionality but raises a particular issue since the DFIs are themselves mandated to be additional in their operations – blended finance needs to be ‘double additional’. To prevent concessional donor finance from simply substituting for DFI risk-taking or subsidising costs, DFIs should establish benchmarks for risk, cost and return that are ambitious but compatible with financial sustainability and monitor these at arms-length.

Efficiency
The fact that certain investments can be effectively enabled by blended finance does not necessarily imply that there should be blended finance, nor does it determine the amounts required. There are four points which will be addressed only briefly here:

- **Subsidiarity**: One issue that will need to be carefully weighed, especially in a project-level transaction, is whether blended finance is actually the most appropriate instrument to tackle the problem at hand. Take project risk that is due to an unstable or incomplete regulatory environment, or counterparty risk in an off-take agreement – perhaps the most prominent risks when it comes to clean energy projects in developing countries. Direct government action to fix the problem, combined perhaps with external policy support and guarantees, would be the most efficient way to tackle this risk. It is only if this option is unavailable or beyond the timeframe of an urgent project that risk mitigation through a blended finance package should be considered.

- **Complementarity**: A related point is that blended finance must be understood as a tool of the broader mobilisation effort, including the need to act at all three levels identified in Section 2: upstream, project development and financial channels. Blending at the point of asset finance, for instance, cannot make up for a lack of bankable projects or for fundamentally wrong-headed policies. Scaling up mobilisation of private finance will in many countries and sectors need to be a strategic effort that looks at the whole project cycle, and blended finance is only one part of that strategy. Subsidising finance in the absence of more pipeline would, as mentioned previously, only increase competition for the few projects that are viable.

- **Sustainability**: When used at project level, blending influences the financing terms. That makes it particularly suitable for addressing concerns around capital
investment. For climate and nature projects, there is also frequently reference to externalities, which can result in unattractive risk-adjusted returns since the value of saved greenhouse gas emissions is not priced into project revenue streams. However, financing terms are typically not the best way to tackle permanent shortfalls to operating revenues, which should be addressed through carbon pricing or offsets, or direct fiscal subsidies. The DFI Principles for Concessional Finance rightly emphasise the need for commercial sustainability of a project beyond the presence of blended finance.

- **Proportionality**: There needs to be careful consideration of the balance between the desired impact of blending and the cost of the concessional element, taking into account the development (climate and nature) priority, the size of mobilisation achieved and the additionality of public funding. A proportional use of funds (also referred to as ‘minimal concessionality’) would prevent the waste of public money and creating unnecessary windfalls for private parties. This point is taken up in Section 4c below.

The effectiveness and efficiency conditions create a space in the universe of climate and nature investments where blended finance can play a powerful and economically justified role in enabling projects that would otherwise not happen. Convergence helpfully refers to projects that can reasonably be enabled through blending as ‘bankable’ (if the key constraint is a shallow finance pool) or ‘near bankable’ (if there are fixable constraints at project level), and those that cannot as ‘unbankable’ (when the project is fundamentally non-viable). Market failure creates a window for blended finance in the wedge between financing for which concessional money is not sufficiently additional and where projects are simply not bankable. Supporting projects that do not need it, or indeed forcing unbankable projects over the finish line with lots of subsidies, is certainly not unheard of but is neither a sound use of public money nor sustainable.
c) Governance to ensure public value for money

Blended finance holds great potential as a tool of the ecological transition if it is focused on impact, is genuinely additional and ensures an efficient use of public funds. These conditions do not emerge spontaneously. Public partners are still new to dealing with private financial players; they remain under-informed and concerned about the value and proper use of blended finance, and sometimes suspect that there might be unjustifiable windfalls for private parties. At the same time, the private sector, and indeed the DFIs, have little experience and patience in dealing with ODA accountability and the requirements of a public-policy-driven approach to investing. This ‘culture gap’ has slowed down the deployment of blended finance despite the need and the urgency.

Balanced risk-sharing between public and private sectors is one important consideration in addressing these concerns (see Box 3.2). Two further crucial measures to reduce the culture gap are proper governance mechanisms and transparency. Well-designed governance should provide assurances on the use of funds, while allowing for flexible and market-driven investing and keeping bureaucracy light. Transparency and data at a reasonable level of granularity are absolutely fundamental to assessing the effectiveness and efficiency of blended finance, but are sorely and unnecessarily lacking. Development partners should insist on both as a condition for scaling up blended finance.

Box 3.2. Public–private risk-sharing: balance for partnership

Canfin and Zaouati (2018) address the question of risk-sharing in the implementation of blended finance in a way that echoes the DFI blended finance principles, but recognising that it cannot be separated from the question of trust between the public and private sectors in this little-tested field. They argue that risk-sharing formulae need to be effective, realistic and fair.

Blended finance will only mobilise private funds if the distribution of risks is asymmetric – the public sector must bear the brunt of the risk. However, to prevent moral hazard the private sector needs to share in the risk as well. And to be seen as fair, the public sector should receive a return on its risk, even if typically not along a commercial risk-return schedule. Risk-sharing is a condition for partnership, a ‘confidence pact’ between public and private actors engaged in blended finance, the progressive definition of shared or even common methods and methodologies, as well as systems of controls and appropriate safeguards.

The level of risk-taking in blended finance must also consider the various constraints that weigh on the public sector, be they legislative, regulatory or prudential. For instance, blended finance in the EU must be structured to avoid being classified as state aid in contravention of competition rules. The private sector must develop an understanding and acceptance of these constraints for a real partnership to develop. By the same token, public support should be thought of dynamically, as a contribution to market creation with the duration and where possible the concessionality of the public finance contribution calibrated to end when the market is viable on its own.
Any **governance structure** for blended finance **at the point of individual allocation decisions** should have three key components:

1. **Ex ante**, i.e. pre-investment, review and justification for the use of blended finance based on the principles of effectiveness (impact and additionality) and efficiency (subsidiarity, complementarity, sustainability and proportionality).³⁴

2. Arms-length decision-making on blended finance that is separate from commercial financing decisions and subject to quality rather than volume or profit incentives.

3. **Ex post** – and possibly on a portfolio basis – monitoring and reporting and periodic external evaluation of blended finance investments, assessing both the quality of governance and value for money.

Tight and credible governance along these lines would go a long way towards providing assurances to public partners. The process could be even further strengthened if blended finance were allocated through open access schemes and competitive auction-based mechanisms wherever possible.

**Data and transparency** are needed so that both stakeholders and development partners can assess the value of blended finance. One question facing development partners in allocating ODA to blended finance is how it compares with other potential uses of donor money. **Box 3.3** discusses this issue with reference to the ‘public policy value’ of a tax dollar invested to blend finance for climate and nature projects. In principle, one would want to compare the social returns of these projects with the alternate uses of the public funds that enable them, assuming the funds are indeed additional. Without data (which might be for segments of the portfolio rather than individual projects to protect confidentiality), such a judgement is not possible. These calculations are difficult with data as well, and rely on several assumptions, but even just rough and approximate analyses would be of great value in making the case for blended finance.

**Box 3.3. Assessing the public policy benefits of blending against alternative uses of public money**

- How to measure the ‘public policy value’ of a tax dollar invested in blended concessional finance?
- As for public investments generally, one needs to look at the social rate of return of the investment; in this case, for instance, the cost-effectiveness of CO₂ savings (priced at shadow carbon prices) achieved compared with the counterfactual.
- The whole investment might be financed by public funds or ODA, and would typically be seen as value for public money if the social rate of return exceeded a benchmark.
- For blended finance, in addition, we may be able to attribute a multiplier to the concessional component of the blended finance package.
- If social return exceeds private returns (e.g. based on carbon pricing), and there is significant mobilisation due for example to risk mitigation from a small amount of concessional funding, then the overall return to every concessional tax euro invested can be high.
- Unfortunately, there are no publicly available systematic analyses of this nature for existing blended finance facilities, nor are typically any such analyses conducted when facilities are set up.
Transparency remains woefully inadequate today and is, for example, enforced inconsistently across DFIs by shareholders. It is the subject of one of the core working groups set up under the Tri Hita Karana process; results are reported in Box 3.4. The recommendations should be picked up and followed through with urgency.

**Box 3.4. Tri Hita Karana Working Group on Promoting Transparency**

**Key issues:**

- Agreement that greater transparency in blended finance is needed but there is a debate about how far to go and how to overcome potential risks.
- Potential exists for improvement in all aspects of transparency without undermining competition in the process of delivering better information.
- Project/activity level transparency remains particularly problematic due to legal limitations and market-driven practices.
- Impact data remains limited but is key to building an evidence base, understanding what works and supporting inter-institutional learning.
- Improved input information is needed on instruments, concessionality level, volume/rationale for use of concessional finance, volume of other development finance, additionality, private finance mobilised, investee type and host country sector of intervention.

**Recommendations:**

- Harmonise minimum reporting requirements for all stakeholders, emphasising public availability of information.
- Establish a common blended finance reporting standard that is fit-for-purpose and fit for all actors.
- Enhance access to information on existing blended finance facilities and investments.
d) A mapping of blended finance at and inside the bankability frontier

Since blended finance is designed to tackle bankability risks, demand should be expected to be greatest at the market frontier – whether in terms of geography or technology. Figure 3.3 gives a graphical representation. This section provides illustrations of blended finance facilities and funds broadly classified along the dimensions of this chart (though many cut across dimensions).

Geographical frontier
Geographically, frontier risks are associated with investments in lower-income countries and fragile states, with low-capacity and untested environments, in which institutions are not sufficiently solid to ensure the predictability of government action. At the same time, there is a dearth of market-based risk mitigation tools, including local risk capital. The upshot is that climate and nature investment in low-income countries (LICs) and ‘fragile and conflict’ countries, such as for clean energy, attracts only a tiny fraction of total finance. If blended finance is ‘following the gap’, one would therefore expect to see a disproportionate share of blended finance commitments in low-income and lower-middle-income countries.

The numbers bear this out for DFIs (no comparable information was available for non-DFI managed blended finance). DFIs report that for 2019, of a total $1.39 billion in concessional funds committed to blended finance operations, 24% were committed in LICs and 60% in lower-middle-income countries (LMICs); those levels represent, respectively, 10 times and almost twice the share of these country groups in the combined total of low- and middle-income country GDP. 56% of LIC and 65% of LMIC concessional funds was committed for climate projects.
Box 3.5. International Development Association Private Sector Window (IDA PSW)

As part of the Eighteenth Replenishment of the IDA (IDA18), the World Bank Group (WBG) created a US$2.5 billion IDA-IFC-MIGA* Private Sector Window to catalyse private sector investment in IDA-only countries, with a focus on fragile and conflict-affected states. The facility was replenished under IDA19 at the same funding level, and a further replenishment is under negotiation for IDA20. The IDA PSW provides an opportunity for the IDA to make strategic use of public resources to catalyse private investments in these frontier markets and complements IDA’s existing support for policy and business climate reforms. The IDA PSW is deployed through four facilities addressing different risks, backstopping or blending IFC and MIGA projects. Since inception in 2017 (and as of 30 September 2021), the IDA PSW has committed approximately $1.3 billion in concessional IDA funds for a total project value of $6.1 billion in 63 long-term projects and facilities, and another $0.55 billion in IDA funds for up to $4.9 billion in project volume for three COVID-19 response facilities.

*IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

Technology frontier: sector, business model and financial

A similar logic applies to pioneering technologies, which by their nature do not offer the kinds of foreseeable revenues and familiar market parameters that finance providers prefer. Relatively high risks would be associated with new technologies moving from lab to market, or being transferred to new countries, and include uncertain demand, insufficiently settled regulation and the uncertainties over which technologies will prevail. For climate and nature-related technologies, many of which are tested to maturity in more advanced and leading middle-income countries, their transfer and replication in a growing number of developing countries is one of the most obvious and scalable ways of increasing investment in these sectors. One large-scale structure utilising blended finance for climate innovations is the Green Growth Equity Fund (GGEF), India (see Box 3.6).

The concept of ‘technologies’ here also includes innovative business models and finance platforms. In areas such as climate adaptation and resilience finance, biodiversity and nature-based solutions, there is a financing gap of US$0.35–65 trillion per annum up to 2030, mostly in developing countries. The private sector will need to meet a share of this but there is limited experience with commercially viable business models. The same is true for some areas of climate change mitigation.

Box 3.6. Green Growth Equity Fund (GGEF)

The GGEF is a recently launched initiative aimed at transferring and replicating technologies. The GGEF, anchored by India’s National Investment and Infrastructure Fund (NIIF) and the UK Foreign, Commonwealth and Development Office (FCDO), and managed by EverSource (Mumbai), is a fund-of-funds structure that aims to raise US$900 million from a mix of institutional investors and DFIs, supported by concessional funds in the form of subordinated equity from the GCF (via Dutch development bank FMO). GGEF plans to invest equity capital through sectoral platforms in climate technology growth firms in renewable energy, e-mobility, energy services and resource efficiency projects with strong innovation potential.
The challenge in some of these cases is to change behaviours, and blended finance can take the form of performance incentives (such as step-down pricing). These have been used in residential property and in facilities for small and medium-sized enterprise (SME) energy efficiency – such as the European Bank for Reconstruction and Development’s $100 million Caucasus Sustainable Energy Financing Facility with EU concessional support. In agricultural projects, adaptation and resilience can be ‘embodied’ in development projects, as in the case of the Acumen Resilient Agriculture Fund (see Box 3.7). In the water sector, there are revenue streams that can be leveraged through financial engineering, though this can be politically sensitive. The Dutch-sponsored Water Financing Facility (WFF), which runs a pilot in Kenya, mobilises domestic institutional investments in support of adaptation and mitigation in the water sector.40

Often, however, the payback from adaptation, resilience, biodiversity and nature-based solutions comes in the form of avoided and uncertain future costs, and these can be hard to convert into a private-sector-driven business model. Blended finance funds and facilities in this area tend to be recent and are helping to pioneer new business models. Examples include the Mirova Natural Capital funds (ecosystem conservation and regeneration), Ejido Verde (IDB Invest/GEF: reforestation), the Dutch Fund for Climate and Development (FMO/WWF/Dutch government and others: adaptation through a regenerative landscape approach), and CRAFT Climate Resilience Fund (EIB: tech-enabled services for adaptation and resilience). In the forestry sector, combining funding with revenue from carbon credits and blended finance downside protection against volatile carbon prices is a promising though complex approach; IFC issued a forest bond with such a technique in 2016, with price support from BHP Billiton. Scalability, and whether blended finance and indeed private funding is likely to be the most effective and efficient tool to achieve it, will need to be assessed based on these experiences.

In the financial sector, territory that is familiar to some remains beyond the frontier for others. It is hugely important to engage and support the domestic financial sector in climate and nature finance – this is sometimes forgotten in the mobilisation debate. Local banks are the natural structuring agents and sources of project development funding and connecting operating projects to local institutional investors mitigates currency risk.

In many developing countries local financial sector risk-taking capacity is limited, and blended finance can make a crucial contribution, for example through portfolio risk-sharing schemes for smaller climate assets and resilient farming. An interesting proposal is the $125 million Southern African Climate Adaptation Notes scheme, proposed by GFA Climate & Infrastructure and Renewable by Nature. The scheme aims at tapping the local capital market through securitisation of project development loans with DFI/donor subordination, which would refinance early-stage construction loans by local commercial banks (providing an assured exit route) for water, sanitation, and wastewater treatment projects.

Box 3.7. Acumen Resilient Agriculture Fund (ARAF)

ARAF is a US$56 million adaptation-focused blended finance fund, established in 2020. ARAF invests equity in agricultural service SMEs, providing services to smallholder farmers in several African countries aimed at increasing their resilience to climate shocks. GCF is providing first-loss protection, and FMO and Open Society Foundations (OSF) have invested in the fund.
Inside the frontier

As shown in Figure 3.2, at the other extreme of bankability are mature technologies in investment-grade countries. Of all the finance deployed in support of new clean energy projects in 2019 in developing markets, 91% went to just 10 mostly investment-grade jurisdictions, and some 96% to wind and solar generation.41 These technologies, in these countries, have achieved critical mass, where market knowledge and the financial infrastructure are capable of scaling on their own. Unless there are exceptional circumstances, blending in these situations would seem wasteful and would substitute for, rather than mobilise, private finance. In between these two extremes there can be a variety of situations, such as mature technologies in sub-investment grade countries or the replication of pilot business models in investment-grade countries in which blended finance might be considered, subject to a careful review of the rationale.

Several initiatives target investors at scale by mitigating moderate bankability risks, focused on institutional investors. While banks, DFIs and other players have experience taking risk exposures in sub-investment grade countries and sectors, most institutional investors do not. The International Renewable Energy Agency (IRENA)42 reports that institutional investors in 2019 invested only $6 billion globally in renewable energy through funds, plus a fraction directly, compared with total clean energy finance of about $250 billion, according to BloombergNEF.43 This is despite accounting for more than one-third of global financial assets and representing a key potential source for scaling up climate and nature finance.44

Three types of blended mobilisation vehicles have been launched aimed at aggregating and de-risking developing country climate and nature projects in order to meet the requirements of institutional investors: co-lending platforms, structured investment funds and green bond funds. These vehicles would involve public or other impact funds, but not necessarily concessionality. Where they do, concessionality needs to be tested for effectiveness and efficiency, as set out previously; the rationale might be linked to a lack of familiarity and risk-aversion of particular investor groups or especially high and non-diversifiable exposure of the assets to country risks.

Box 3.8 on the next page provides illustrations of each of the three types of vehicle.
Box 3.8 Finance mobilisation platforms

The IFC’s Managed Co-Lending Portfolio Platform (MCCP) is not specifically directed at climate investments but reflects IFC’s overall exposure profile with around one-third of climate investments (and could be tailored specifically to climate and nature). It is a US$10 billion syndications platform leveraging IFC project origination that creates diversified portfolios of emerging market debt investments, allowing investors to increase exposure – or get first-time entry – to this asset class. IFC and donor partners have provided first-loss coverage on some portfolios by taking a junior tranche so that investor exposure reaches a target risk level.

The BlackRock-managed Climate Finance Partnership (CFP), which launched earlier this year under the umbrella of the One Planet Summit, is a $500 million fund with catalytic subordinated equity from development agencies (initially AfD, KFW and JBIC) and philanthropies. CFP aims to offer “narrower standard deviation of outcomes for institutional investors” and an “OECD-like risk-return profile” on climate investments in a range of developing countries.

Emerging market green bonds are another scalable channel for climate finance. The $1.4 billion Amundi Emerging Market Green One fund was formed in 2018 in cooperation with IFC and funding from a range of DFIs and institutional investors to invest in and promote the issuance of green bonds by emerging market financial sector issuers. A separate technical assistance facility assists in the development of the green bond market in target countries. A junior subordinated tranche mitigates the risk of senior shares, enabling risk-averse institutions to invest. The weighted average rating of the initial portfolio of debt securities and instruments is set to be above BB+. A follow-up, open-ended fund launched in 2021 aims to invest in hard currency corporate green bonds with a target fund value of $2 billion.
4. Achieving impact and scale

Despite the potentially much larger ‘market’ for blended finance, the total amounts mobilised via blending strategies remain very modest, with an aggregate project value between US$10 and $15 billion annually. Achieving greater scale as well as impact will require: (1) strategies targeting each of these objectives rather than conflating them, (2) moving from tailored project solutions to portfolio and market-level approaches, and (3) raising the mobilisation ratio, i.e. the ratio between private funds mobilised and the amount of concessional finance invested.

a) Blended finance strategies

The discussion about blended finance plays out at two somewhat distinct levels. At one level, it turns around a strategy of enabling private sector pioneers in high-risk or low-income environments (‘frontier strategy’). At the other, the focus is on mobilising deep pockets of funds to address the financing gap for climate and nature investments (‘mobilisation strategy’). There are overlaps and some approaches seek to combine these strategies. Blended finance can play a potentially important role in both, but the challenges and solutions differ and so should our expectations.

The frontier and mobilisation strategies align with two patterns that have emerged from the analysis in this paper, and indeed from the literature and the interviews we carried out. Frontier strategies achieve high impact but are less likely to mobilise finance at the scale needed to fill global investment gaps. Mobilisation strategies aim to achieve volume. Both strategies reflect important public policy goals.

Table 4.1 Frontier and mobilisation strategies

<table>
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<th>Main focus</th>
<th>Climate and nature opportunity</th>
<th>Challenges for blended finance</th>
<th>Key needs</th>
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<th>Examples</th>
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<tr>
<td>‘Frontier strategies’: Enabling risky or pioneering projects</td>
<td>Frontier countries, sectors and business models</td>
<td>Sustainable infrastructure in low-income countries; many adaptation, resilience and biodiversity projects</td>
<td>Project development and related financing risks; mobilising DFIs, impact investors and specialist funds</td>
<td>Early-stage risk capital and project technical assistance</td>
<td>Impact IDA PSW SREF ElectriFi AgriFi Mirova &amp; Green</td>
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<tr>
<td>‘Mobilisation strategies’: Enabling large amounts of finance</td>
<td>‘Centre ground’: moderate country risk, proven technologies and business models</td>
<td>Sustainable infrastructure in middle-income countries; some adaptation and resilience projects (water, agriculture)</td>
<td>De-risking local and global asset owners and managers; unlocking whole sectors and large projects for private finance</td>
<td>Blended finance cushions for risk-averse investors</td>
<td>Scale Green bond funds BlackRock CFP FAST-Infra</td>
</tr>
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High impact in frontier investments

Successful investments at the frontier, whether geographical or technological, will often score especially highly on impact because development gaps are large. Enabling a megawatt of renewable energy in Mali will count as a relatively bigger achievement than the same in Brazil. And achieving commercial success in a biodiversity project will be a bigger deal than building another renewables plant. At the same time, the pool of qualifying investments at the frontier is smaller. That is because technologies are more experimental and frontier economies themselves are small and risky and projects are lacking.

Frontier strategies tend to require particularly strong complementary support at the project development and preparation stages to achieve a modicum of bankability.

- Project preparation technical assistance (TA) can be a crucial component of these strategies, and indeed there is systematic evidence that TA-supported project finance is more likely to succeed.\textsuperscript{46} DFI-managed blended finance projects are often packaged with TA (e.g. Proparco ARESUF), and privately managed funds and facilities directly access or collaborate with TA providers for project preparation and implementation support (e.g. Mirova Land Degradation Neutrality Strategy working with the LDN Technical Assistance Facility, supported by AFD/GEF). The SRMI is another initiative that places heavy emphasis on early-stage TA (see Box 4.1).

- Project and pipeline development also require a focus on risk capital at the pre-construction and construction stages of projects. There are large gaps in early-stage risk financing in frontier situations, a common refrain in the interviews for this report and in the literature.\textsuperscript{47} To be effective, frontier strategies might employ blended finance to leverage this kind of risk capital. This is a key focus, for instance, of the Climate Investor One (CIO) fund: the first component of CIO is a development fund, which provides loans in the early stages of a project life cycle with no attempt to mobilise private money, given the complexities. The second component, a construction equity fund, meets up to 75% of total construction costs in tandem with the project sponsor. A range of different blended finance instruments may be needed in light of the variety of risks involved.\textsuperscript{48} A cross-cutting proposal is to create a ‘Stretch Fund’, an independently managed fund that would invest in high-risk tranches supporting the exposure of DFIs and other partners in early stage finance for firms and infrastructure, the highest risk project tranches, and local currency products and services.\textsuperscript{49}

Developing projects at the frontier does not happen easily – by definition: it can be costly and time-consuming and can fail despite efforts. In some areas of adaptation, biodiversity or land use, private sector participation may only be viable in very particular segments. Blended finance and technical assistance can address certain risks but it is important to manage expectations, not force the issue, and to select public options when that makes more sense.
**Box 4.1 Sustainable Renewables Risk Mitigation Facility (SRMI)**

The World Bank/GCF Sustainable Renewables Risk Mitigation Facility aims to comprehensively address the different challenges that are limiting the uptake of sustainable, privately financed renewable energy and the associated socioeconomic benefits. SRMI was launched in 2018 for the UN’s COP24 climate conference under the leadership of the World Bank in partnership with the African Development Bank, IRENA and the International Solar Alliance (ISA). In April 2021 the GCF Board approved US$280 million in grant and subordinated loan funding.

SRMI aims to support countries in developing sustainable solar and wind programmes designed to attract private investment and so reduce reliance on public sector financing, while maximising the socioeconomic benefits triggered by the projects deployed. Its integrated approach offers development and climate financing for:

i) technical assistance to help countries develop evidence-based renewables targets, implement a sustainable renewable energy programme, and set up and maintain transparent and competitive procurement processes with transaction advisors;

ii) critical public investments to enable integration of renewable energy, finance solar/wind park infrastructure, and increase access to electricity; and

iii) risk mitigation instruments to cover residual risks perceived by private investors.

Its framework is supporting the creation of jobs and the development of skills, as well as increasing the resilience and enhancing the livelihoods of the local communities around the projects.

**Volume at centre ground**

The most sizable opportunities for mobilisation through blending are found at neither extreme of the bankability spectrum but in the middle space. This is because blended finance is best suited for pushing finance across the line when the distance is not too great. Geographically, near-bankability would tend to be associated with country risk ratings at the edge of or below investment grade.

If we look at a ratings range of BB+ to B-, for example, this covers 66 countries with global GDP and CO2 emissions shares of 36% and 33%, respectively (see Figure 4.1). That compares with 63 countries and GDP/CO2 shares of 4% and 2% in countries with below-speculative ratings (CCC+ and less). We do not have comparable indicators for the relative size of the adaptation, resilience, biodiversity and nature-based solution challenges, many of which are (as discussed) at or beyond the frontier technologically and in terms of business models. The country weights in these cases are almost certainly different from those for CO2 emissions. Nevertheless, the numbers suggest that the financing gap is predominantly in sustainable infrastructure, and here overwhelmingly in the energy sector.  

Mobilisation strategies are focused first and foremost on providing comfort for risk-averse investors. By design, funds or facilities would be large and diversified and built around aggregating individual exposures. Aggregation assumes a ready supply of bankable or near-bankable assets to invest either directly, through feeder funds or through capital market instruments. Mobilisation strategies are more ‘distant’ from the origination of individual projects, placing less emphasis on, and having less capacity for, project-specific support. Instead, the purpose of blended finance in these strategies is to structure and
mitigate non-diversifiable risks for different investor classes. There was a strong consensus in the interviews for this report that the most effective instruments to support mobilisation at scale involve different forms of subordination or insurance, thereby strengthening the risk profile of senior claimants.

**Figure 4.1. Plot of emissions vs. country ratings, 2019**

(USA, China, India and Japan are outside the chart)

- 63 countries, 2% share of CO₂ emissions, country ratings below B-
- 66 countries, 33% share of CO₂ emissions, country ratings BB+ to B-
- 72 countries, 65% share of global CO₂ emissions, country ratings AAA to BBB-

**Combined strategies**

Several organisations and initiatives combine elements of the two strategies. Most importantly, many DFIs are active both in originating and de-risking projects in frontier markets, and aggregating or pooling exposures for institutional investors – for instance through the issuance of green bonds off their balance sheets, or through managed co-lending portfolio strategies. A privately managed approach that addresses needs along the investment cycle in frontier countries and sectors is the Subnational Climate Fund, which aims to be closely involved both in building project pipelines and in distributing exposures to institutional investors (see Box 4.2). Another is Climate Investor One, mentioned earlier.

However, it will tend to be difficult to integrate frontier strategies with large-scale mobilisation in the same vehicle. By design, frontier strategies are highly resource intensive, given the need to assess and address complex early-stage risks and provide hands-on technical support. This resource-intensity puts constraints on their scale and scope.
Box 4.2. Subnational Climate Fund (SnCF)\textsuperscript{51}

The Subnational Climate Fund was launched in 2020 as a blended finance initiative to enable investments in mid-sized, subnational, climate-resilient and low-carbon infrastructure, regenerative agriculture and nature-based solutions in developing countries, including some least developed countries and small island economies. The Fund has four key components:

- An equity investment fund managed by Pegasus Capital Advisors, which will invest in a global portfolio of such mid-sized projects.

- A grant-funded dedicated technical assistance facility managed by the International Union for the Conservation of Nature (IUCN), aimed at identifying suitable projects for the fund to invest in, and to train implementers to ensure project feasibility; the technical assistance facility has a target size of US$28 million (of which $18.5 million is already committed by the GCF).

- The Green Climate Fund (GCF) as an anchor investor and partner with a first-loss tranche of up to $150 million, which is intended to mitigate risk at the fund level, thereby bridging the gap between public and private investors.

- A partnership of consortium members providing expertise along the entire value chain. In addition to Pegasus and IUCN, the Consortium includes BNP Paribas as administrator, custodian and distribution partner; Gold Standard as a leading third-party impact certifier and R20 – Regions for Climate Action supporting capacity-building and project development.

- SnCF expects to invest in up to 30 projects and mobilise between $750 million and a maximum of $5 billion of climate finance in the form of co-investment in projects.

b) Simplify, replicate, standardise and aggregate for scale

The previous section has argued for impact strategies focused on the frontiers, and scaling strategies focused on the ‘middle market’. But blended finance can also be better designed for impact and scale. Based on the growing experience with blending models there is a fair degree of consensus that more blended finance needs to shift from individual investment solutions to portfolio and market-based approaches (see Table 4.2).

Table 4.2. Shifting towards portfolio approaches

<table>
<thead>
<tr>
<th></th>
<th>Project development</th>
<th>Capital mobilisation</th>
<th>Scaling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individually tailored</td>
<td>Target, innovate</td>
<td>Negotiate individually</td>
<td></td>
</tr>
<tr>
<td>Portfolio-level approaches</td>
<td>Delegate, simplify, replicate</td>
<td>Standardise, aggregate</td>
<td></td>
</tr>
</tbody>
</table>
Project development for sustainable infrastructure

At the level of project development, blended finance today tends to be individually tailored to address specific risks, even in smaller projects – e.g. mitigating off-taker, currency, early-mover, or sponsor risks. More broadly, project preparation, including for example legal, procurement or financial documentation, is typically designed and negotiated on a project-by-project basis, with a lack of transparency reflecting the private nature of most transactions. And while technical assistance facilities for project preparation abound – the Overseas Development Institute has counted 150 for clean energy alone and more are found in IFC’s Global Toolbox – this is a highly fragmented landscape with different mandates and requirements, making facilities often hard to access. The result can be project support that is innovative and well-targeted, but the approach is time-consuming and impedes replication and scale, with financial structures that can be hard to assess for investors.

To develop the thousands of well-designed and structured climate and nature projects that will be needed annually if we are to achieve the necessary scale, it will be critical to delegate and to simplify – this is not a task that can be achieved by DFIs alone:

- **Local banking system**: One approach to scaling up is to develop portfolios of projects through intermediaries. A successful example working through local banks is the European Bank for Reconstruction and Development’s Sustainable Energy Financing Facilities (SEFF). These combine significant technical assistance for financial intermediaries with advice for borrowers and, initially, blended finance to address early-mover risks. In principle, this approach can apply to a wide range of sectors and situations, ranging from renewables to adaptation and biodiversity projects.

- **National Development Banks** can play a local partner/intermediary role as well, especially when it comes to larger projects – and in fact already today account for a greater share of clean energy finance than international institutions, to take an example. As noted by the OECD, in many countries the role of NDBs is changing, with a growing focus on the mobilisation of private investment and the development of bankable pipelines. Enhancing their role to support blended finance will require governance, mandates and business models fit for purpose. MDBs/DFIs and climate funds can and should step up their engagement and help build NDB capacity.

- **Developers**: Another approach is for DFIs and other investors to partner with clean energy developers or utilities that bring project development expertise into emerging and frontier markets – and indeed to help create such developers/utilities. Project finance in these cases would still require individual review, but less detailed engagement in pipeline development. For instance, Scatec which acquired the Norfund-owned SN Power in 2020, is an integrated player with 3.5GW renewables capacity in operation in developing countries and 12GW in the pipeline. Globeleq represents a similar approach focused on Africa, and was sponsored originally by CDC and Norfund. Gridworks, owned by CDC, develops both grid and off-grid power in Africa. The European Investment Bank is promoting closer strategic collaboration between large international utilities and developing country governments; a key task is to overcome public–private cultural barriers. As these different approaches expand and mature, they will require less and less blended finance at the project development stage.

- **Packaged assistance**: An alternative path is to assist project developers with templates that are replicable across similar projects and countries, including for
larger transactions. An example is the design of end-to-end standardised packages for utility-scale renewable energy plants, such as the IFC’s Scaling Solar initiative. Scaling Solar aims to make privately funded grid-connected solar projects operational within two years, by providing templates and advice for simple and rapid tendering, competitive financing and insurance, and risk management and credit enhancement. Such an approach could, potentially, unblock project development in entire market segments. Along similar lines, IRENA has developed an ‘Open Solar Contracts’ initiative: see Box 4.3.

Box 4.3. IRENA Open Solar Contracts

Borne out of the need for a simplified and streamlined contractual framework to unlock greater investments in renewable energy, IRENA and the Terrawatt Initiative (TWI) jointly launched Open Solar Contracts, in collaboration with a dozen leading global law firms. The initiative serves to:

- Reduce legal transaction costs and expedite project development and finance timelines
- Establish a well-balanced risk allocation between public and private parties, and reduce the cost of capital
- Enable governments to attract capital by using a market-tested contractual structure
- Set the groundwork for project aggregation and securitisation.

The initiative has also strived to include expertise and experience from many different jurisdictions to ensure that the resulting documentation and risk allocation is universally applicable. The final package contains templates of:

- Power purchase agreement (PPA)
- Implementation agreement
- Operations and maintenance agreement
- Supply agreement
- Installation agreement
- Finance term sheet.
These intermediary and sector-based approaches to scaling up project development and preparation need to be complemented with horizontal approaches. The key priority here is to overcome the patchwork of facilities and move towards flexible, harmonised systems of support. In the infrastructure area, the Global Infrastructure Facility (GIF) was created in 2014 as a G20 initiative precisely to enable collective action and end-to-end advisory services across development partners, in order to build bankable pipelines of infrastructure projects. This includes the disciplined deployment of blended finance where appropriate. The GIF has put forth expansion proposals that could become part of a concerted effort to scale up project development and preparation support.

The ultimate goal, over time, must be to enable local financial sectors and developers – and indeed government agencies⁵⁹ – to identify and prepare climate and nature project pipelines.

**Capital mobilisation**

At the level of (downstream) capital mobilisation, there is a similar challenge to achieve scale through portfolio and market-based solutions, with implications for the design of blended finance interventions. The focus is on institutional investors, both international and domestic, who represent by far the largest untapped source of funds for climate and nature projects. The constraint here is not the availability of potentially willing funds, but how to connect them to investments.

Institutional investors have a history of conservative investment patterns – which is yielding slowly to a quest for diversification and higher returns.⁶⁰ The GFANZ agenda is likely, over time, to reinforce this shift and direct more funds towards climate-conforming investments globally. However, institutional investors, while not a homogeneous group, tend to seek transparency of terms (standardised documentation), liquidity and credit assurances (achieved most easily via listed and rated securities), relatively large ticket sizes (the average renewable energy transaction size increases from US$199 million to $424 million when institutional investors are involved), and they prefer operating assets while avoiding early-stage and construction risk.⁶¹ These conditions are met by few EMDE climate and nature assets directly.

To tap the institutional investment market at scale, there is a need to create portfolios of investment opportunities and set up intermediaries that can aggregate, securitise, diversify, label/certify and if necessary de-risk such assets. Market scale can be achieved through three approaches that are partly complementary.

- **Blended fund structures**: Convergence in consultation with donors, blended finance practitioners and asset owners have described four blended finance structural approaches that would meet donor requirements as well as investor preferences.⁶² These are:

  1. Debt funds with a subordinated donor tranche and mezzanine mid-risk tranche (for DFI and private investors) de-risking a senior low-risk (A to BB) tranche for institutional investors; these funds would invest directly in debt for climate and nature projects in developing countries, including green debt securities.

  2. Tranched equity funds with distribution waterfalls that support returns in the senior tranches up to a target level; these funds would invest equity directly in climate and nature projects in developing countries.
3. Funds of funds that can aggregate (1) and (2) for investors seeking larger ticket sizes.

4. A blended finance vehicle for debt investments directly into large individual projects, with a guarantee mechanism to credit-enhance the debt to an acceptable threshold level.

There is experience with these structures that can be built upon. Structure (1) is broadly aligned with the IFC MCPP model, structure (2) with the BlackRock-managed CFP fund (see Box 3.8), (3) is similar to the design of the India GGEF (Box 3.6), while (4) is the approach taken by MIGA (Box 3.5) or GuarantCo in providing guarantees for large infrastructure projects.

- **Green and sustainability bonds**: The market for EMDE climate and nature assets could grow much faster with the adequate capital market infrastructure in place. Packaging assets into certified and rated green, blue or sustainability-linked bonds increases their transparency and liquidity, enabling institutional investors to purchase them either directly, through diversified bond funds or – where the risk profile is an impediment – through ‘type 1’ blended funds. As noted earlier, themed bond issuance has grown rapidly in recent years including in EMDEs, even though it remains concentrated in a few, relatively larger markets that have the appropriate regulatory framework and capital market infrastructure in place. Supply can be increased through cooperation between policymakers, technical support for capital markets authorities and issuers, and adoption of green frameworks aligned with leading standards.

- **Sustainable infrastructure asset class**: Launched under the auspices of the OnePlanet Summit, the FAST-Infra Initiative is a joint venture established by HSBC, IFC, OECD, GIF, and CPI. FAST-Infra is developing a label for sustainable infrastructure, which it expects to be transformative for the market. This label should focus governments and developers at pre-construction phase on building resilient assets with limited environmental impact; and encourage institutional investors at post-construction phase looking to refinance sustainable infrastructure assets. FAST-Infra is also developing a technology-enabled platform to facilitate information and distribution of loans, something that is cumbersome today. In addition, FAST-Infra is aiming to set up a de-risking platform (‘Open-access MCPP’) for the most difficult market segments, conceived as a warehousing facility for early-stage, marginally bankable projects; once diversified and revenue generating, these would be sold off.

Each of these approaches would give investors access to climate and nature assets in a more standardised and scalable format than is the case today.

It is crucial that these initiatives are directed at domestic capital markets and reaching local investors in the project countries, not only at the international markets. This is often overlooked in the current debate.

First of all, there is domestic capital to be tapped in most middle-income countries – in fact, some three-quarters of climate assets identified by Climate Policy Initiative (CPI) in 2017–18 were financed domestically, mostly privately. The development of climate and nature assets can help to give greater depth to local capital markets, which are often dominated by public debt. In light of country risks, local (and regional) capital is closer to the issues, more committed and often willing to take risks that international players will not.
Secondly, currency risks add considerably to project risk and can be expensive to mitigate through blended finance. Tapping local capital for local currency assets provides a natural hedge.

c) Increase mobilisation ratios

The third approach to achieving greater scale as well as impact, in addition to strategic focus and portfolio solutions, is to focus on the ratio of private mobilisation to the investment of concessional funds. There can be some confusion about these ratios due in part to definitions and in part to the choice of categories.

Figure 4.2 shows data for 2019 for the DFIs, split by country income groups. There are four ratios that contrast sharply. The first column in each block is the share of private finance in the total funding package, private and public. Those numbers range from one quarter in the low-income (LIC) and lower-middle-income (LMIC) countries, to two-fifths in the upper-middle-income (UMIC) group.

The second column shows private mobilisation as a ratio of concessional finance (ODA); that ratio rises from about $1.5 of private funds mobilised per dollar of ODA in LICs, to $5.5 in UMICs. However, including non-concessional DFI funding in the denominator, those ratios decline to 37 cents and 69 cents, respectively, for each dollar of public money invested. The ratio is of course highest, between $4.7 and $12.4, when one includes DFI funding in the amounts mobilised alongside private funds. Other sources, such as the Global Environment Facility, report somewhat higher ratios, $6.3 of private funding per dollar of blended finance, and much less other co-financing.65

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**Figure 4.2. Various mobilisation ratios (%)**

DFI database, 2019

LIC = low-income country; LMIC = lower-middle-income country; UMIC = upper-middle-income country. Priv = private finance; ODA = official development assistance; DFI = development finance institution
If one takes the view that the key objective here was to mobilise private funds, these numbers seem unimpressive, especially in LICs and LMICs. Blended finance in lower-income countries leverages more funding from DFIs than from the private sector. Furthermore, the overall level of investments in International Development Association (IDA) countries may not have grown at all as a result of blended finance. A recent evaluation of the IDA Private Sector Window concludes that this instrument – the largest blended finance facility for IDA eligible countries – has so far enabled a broader scope (more complex sectors and structures) but not a higher scale of International Finance Corporation (IFC) and MIGA commitments in these countries.66

However, it is important to put these results in perspective. Assuming that additionality tests were strictly enforced and no more concessionality was applied than necessary, the low multipliers in LICs and LMICs reflect the difficulty of structuring financing packages and drawing private investors into these markets.67 Even a small amount of private mobilisation may justify a blended finance intervention if there is the desired impact and the alternative would have been fully public funding – and operation – at similar costs. And while DFI mobilisation may be given less weight since the overall development financing volume of DFIs is not affected, mobilising DFIs into climate and nature frontiers (i.e. broader ‘scope’) that they would otherwise have been unable to finance may address crucial development priorities.68

What is more, mobilisation numbers are very hard to interpret and relying on them alone as a guide for funds allocations could cause blending to be misdirected. Simply relating the level of concessional funding to the amount of private or other investments assumes implicitly that those investments would not have happened in the absence of blending. But as noted emphatically in a recent OECD study,69 mobilisation ratios cannot be used as indicators of financial additionality.70 Despite these complications it is possible to raise mobilisation levels and pull much larger amounts of private funding into the ecological transition. In doing so, it will be crucial to let mobilisation follow impact, not the other way around. Any blended finance strategy should be driven by development, climate or nature priorities. Once such a purpose is established blended finance mobilisation can be maximised based on two principles:71

1. **Select the blending instrument that most directly addresses the underlying obstacles.** Choice of less efficient instruments lowers the mobilisation ratio (and increases the risk of a misallocation of public funds).
2. **Systematically enforce additionality and proportionality in the use of blended finance.** This requires a methodology and governance that subjects blended finance requests to strict additionality tests, as described earlier, and that ensures a balance in the risks borne by each party in a transaction. Mobilising the same finance with less concessional funds would of course raise the mobilisation ratio.

There was a strong consensus during consultations that risk-oriented blending instruments such as guarantees and first-loss structures would have a lot of potential to mobilise private funds and were probably underutilised. An OECD/Milken Institute study concludes that guarantees are the most effective leveraging instrument.72 The 20% first-loss tranche in the BlackRock CFP mentioned earlier will enable at least $400m of institutional investor money that would not have been invested in developing country climate infrastructure. The expectation is that the mobilisation ratio of 4 to 1 might rise over time to more like 10 to 1. Nevertheless, today senior concessional loans still account for by far the largest share of blended finance investments. In practice, the correct instrument – the one that leverages funds most efficiently – will depend on the specific risks that need to be addressed. This
point may seem obvious but it is seldom enforced. As a result, for instance, a situation where the key problem is off-taker risk might be addressed with senior debt at a low interest rate, even though that spreads the benefits of blending throughout the life of an asset rather than addressing the consequences of a cash-flow interruption; or a subordinated instrument which mitigates loss-given-default might be used, even though the key problem is high upfront costs.

Table 4.3 illustrates how blended finance instruments could be targeted at specific problems, separating finance gap, project-level risks and finance-level risks for debt and equity holders, and Box 4.4 describes the use of high-leverage junior equity by the GEF. There is an urgent need for better guidance for blended finance practitioners in this area.

Table 4.3. Employing blended finance (BF) instruments that correctly target the obstacles

<table>
<thead>
<tr>
<th>Blending need</th>
<th>Nature of problem</th>
<th>Examples</th>
<th>Efficient BF response</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance gap</td>
<td>Shallow market</td>
<td>Make funding available</td>
<td>Pari passu financing</td>
<td></td>
</tr>
<tr>
<td>Project level risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– debt holders</td>
<td>Probability of default</td>
<td>Upfront cost</td>
<td>Reduce costs</td>
<td>Grant for project preparation or for capital costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lifetime cashflow risks</td>
<td>Improve cashflow</td>
<td>Concessional senior debt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Off-taker risk</td>
<td>Ensure liquidity</td>
<td>Liquidity guarantee facility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loss given default</td>
<td>All or some risks</td>
<td>Distribute loss</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Guarantee/insurance, subordinated debt or equity</td>
</tr>
<tr>
<td>– equity holders</td>
<td>Low risk-adjusted return</td>
<td>Risks from all sources</td>
<td>Leverage returns</td>
<td>Equity with subordination of returns (waterfall)</td>
</tr>
<tr>
<td>Finance level risk</td>
<td>(aggregation vehicle)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– debt holders</td>
<td>Volatility</td>
<td>Country risk</td>
<td>Buffer downside risk</td>
<td>Layered funds, junior tranches (first loss etc.)</td>
</tr>
<tr>
<td>– equity holders</td>
<td>Low risk-adjusted return</td>
<td>Country risk</td>
<td>Leverage returns</td>
<td>Equity with subordination of returns (waterfall)</td>
</tr>
</tbody>
</table>
Box 4.4 Junior equity from the Global Environment Facility (GEF)

Renewable energy

The GEF has provided US$4.5 million to the Africa Renewable Energy Fund (AREF), managed by the African Development Bank (AfDB) in the form of Class A shares with return capped at 4%. $25 million is provided AfDB and other donors. By accepting a capped return, the GEF enables net returns to other investors to increase by 2–3%, which will expand the range of potentially investable projects and reduce the need for enhanced policy incentives to make projects bankable. The equity funding provided by the GEF and other development partners is expected to attract at least $150 million from public, institutional and commercial partners and significant additional private sector finance, primarily debt, for the actual projects, with a pipeline already worth half a billion dollars.

Agro-forestry

The Moringa Agro-forestry Fund for Africa, managed by the AfDB, will promote sustainable land management in production landscapes in Burkina Faso, Côte d’Ivoire, Kenya, Mali, Tanzania, Zambia and DR Congo. The Fund will invest in five or six scalable, replicable agroforestry projects that combine plantation forestry with agricultural elements to capture most of the value chain. The GEF has taken a junior equity position in the fund with an expected return of 6%. GEF’s position helps lower risks for private sector investors who may be reluctant to consider land management projects on purely commercial terms due to, for example, long payback periods, lack no track record and uncertainty over product prices. The project also targets 79,000 hectares to maintain significant biodiversity and associated ecosystems goods and services, and more than 200,000 hectares of production systems under sustainable land and forest management. The project is expected to yield greenhouse gas emissions benefits of 9.5 million tons CO₂-equivalent.
5. **Bottom line**

The climate crisis and biodiversity loss require urgent action. The investments needed to transform global capital stocks in line with the Paris Agreement temperature goals are well in excess of levels today. There is a financing gap that cannot be filled by the public sector alone. To achieve global targets there must be a big increase in private investments for climate and nature, in both advanced and developing countries. Many of these investments are pioneering in terms of their location, their technology or business models, and too risky for some of the largest potential sources of private funding. Blended finance can enable such investments to go forward.

Blended finance has grown in recent years but from a low level. There is both urgency and considerable potential to grow much further – for climate change mitigation and adaptation investments, resilience, biodiversity and nature-based solutions. The expanded use of blended finance will need to be strategic, demonstrate value and meet high standards of governance. Expansion should enable impact at the frontier, but also scale inside the frontier. It should overcome barriers to scale by moving from individually tailored to portfolio approaches, and adjusting the mix of instruments to achieve higher mobilisation ratios. And it needs to be based on the public and private sectors working together and bridging cultural divides.

Our main conclusions and recommendations are presented on the next page.
Conclusions and recommendations

a) Blended finance can play an important role in mobilising crucial private funding for climate and nature projects, as long as three conditions are observed:

- Integrate action on blended finance within a strategic, country-level approach to mobilisation across three levels (upstream, project development/preparation, finance).
- Ensure blended finance meets benchmarks for effectiveness (impact and additionality) and the efficiency of public funds.
- Boost transparency and build a solid governance approach around blended finance in order to provide assurances on public value for money.

b) Expand blended finance along two tracks:

- Enable high-impact investments at the frontier: geographically and in terms of technology, business model (adaptation and resilience, biodiversity) and financial innovation; the balance should be towards project development and preparation first – including through local financial intermediaries – and enabling finance second.
- Enable scale of private mobilisation for climate and nature in sub-investment grade countries and established technologies; the balance in these cases should be towards opening up access to deeper sources of finance, both in the domestic and international capital markets.

c) Address scalability barriers by moving from tailored to portfolio approaches where possible:

- In project preparation and development, this means combining projects, simplifying procedures and replicating successful models – avoid continuous innovation which leads to fragmentation. It will be important to delegate, working through local banks and developers, and to de-fragment project preparation support.
- At the level of capital provision, the clear demands of the market are to standardise, aggregate and create asset classes and electronic funding platforms. Market scale can be achieved through structured blended finance vehicles, sustainable bond markets, and the creation of a sustainable infrastructure asset class. Tap local as well as international capital markets, not least to mitigate currency risk.
- At both levels there are successful existing initiatives, including some launched under the auspices of the One Planet Summit, that build on experience and should be supported and expanded by a large multiple. Development finance institutions can play an effective role by working across and connecting these different levels.

d) Increase mobilisation ratios by choosing instruments that are targeted at the source of the obstacles, and a disciplined approach to additionality and proportionality of blended finance.

e) Invest in data to support markets, and more operational guidance for blended finance practitioners.
## Appendix 1: Consultations

The following is a list of stakeholders consulted during the preparation of this report. We are deeply grateful for their time and engagement.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP26 team</td>
<td>S. Matikainen</td>
<td>Policy Lead</td>
</tr>
<tr>
<td>GCF</td>
<td>B. Bisht</td>
<td>Dep.Dir. External Affairs</td>
</tr>
<tr>
<td></td>
<td>T. Clamp</td>
<td>Director, Priv. Sector Facility</td>
</tr>
<tr>
<td>GIF</td>
<td>Jason Wu</td>
<td></td>
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<tr>
<td>OECD</td>
<td>P. Horrocks</td>
<td>Head, Private Finance Unit</td>
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<tr>
<td><strong>Private/initiatives</strong></td>
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<tr>
<td>FastInfra/HSBC</td>
<td>C. Deseglise</td>
<td>MD Sustainable Finance</td>
</tr>
<tr>
<td></td>
<td>M. Ridley</td>
<td>Senior RI Specialist</td>
</tr>
<tr>
<td>Mirova</td>
<td>P. Zaouati</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>L. Chenevat</td>
<td>SRI Analyst</td>
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<td><strong>DFIs</strong></td>
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<tr>
<td>AFD/Proparco</td>
<td>D. Navizet, AFD</td>
<td>Head, Climate Division</td>
</tr>
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<td></td>
<td>P. Forestier, Proparco</td>
<td>Director, Sustainable Development</td>
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<tr>
<td>CDC</td>
<td>Amal-Lee Amin</td>
<td>Head of Climate</td>
</tr>
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<td>EBRD</td>
<td>H. Boyd-Carpenter</td>
<td>MD Climate</td>
</tr>
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<td></td>
<td>M. Jordan-Tank</td>
<td>Director, Sust. Infrastructure Policy</td>
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<tr>
<td>EDFI</td>
<td>S. Andreasen</td>
<td>CEO</td>
</tr>
<tr>
<td>EIB</td>
<td>C. Kuhn</td>
<td>Dir. Mandate Management Dep.</td>
</tr>
<tr>
<td>IFC</td>
<td>V. Pathak</td>
<td>Dir. Climate Business Dep.</td>
</tr>
<tr>
<td></td>
<td>A. Williams</td>
<td>Dir. Blended Finance Dep.</td>
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<td><strong>NGOs/Think tanks</strong></td>
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<tr>
<td>Brookings Institution</td>
<td>A. Bhattacharya</td>
<td>Senior Fellow</td>
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<tr>
<td>CGD</td>
<td>N. Lee</td>
<td>Co-Director Development Finance</td>
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<td></td>
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<tr>
<td>Convergence</td>
<td>C. Clubb</td>
<td>Managing Director</td>
</tr>
<tr>
<td></td>
<td>S. Gulamani</td>
<td>Associate Director, Client Services</td>
</tr>
<tr>
<td>WWF</td>
<td>M. Mitchell</td>
<td>Senior VP, Climate Change</td>
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</table>
Appendix 2. List of abbreviations

AAAA – Addis Ababa Action Agenda
AfDB – African Development Bank
ARAF – Acumen Resilient Agriculture Fund
AREF – Africa Renewable Energy Fund
BF – blended finance
CFLI – Climate Finance Leadership Coalition
CFP – Climate Finance Partnership
CIO – Climate Investor One
CPI – Climate Policy Initiative
DAC – Development Assistance Committee [of the OECD]
DFI – development finance institution
EMDEs – emerging markets and developing economies
ESG – environmental, social and governance
FCDO – Foreign, Commonwealth and Development Office [of the UK]
GEF – Global Environment Facility
GFANZ – Glasgow Financial Alliance for Net Zero Emissions
GGER – Green Growth Equity Fund
GIF – Global Infrastructure Facility
GISD – Global Investors for Sustainable Development Alliance
IDA PSW – International Development Association Private Sector Window
IDFC – International Development Finance Club
IFC – International Finance Corporation
IPCC – Intergovernmental Panel on Climate Change
IRENA – International Renewable Energy Agency
ISA – International Solar Alliance
IUCN – International Union for the Conservation of Nature
LIC – low-income countries
LMIC – lower-middle-income countries
LSE – London School of Economics and Political Science
LTS – Long Term Strategies
MCP – Managed Co-Lending Portfolio Platform
MDB – multilateral development bank
MIGA – Multilateral Investment Guarantee Agency
NDB – national development bank
NDC – nationally determined contribution
NIIF – National Investment and Infrastructure Fund
ODA – official development assistance
OECD – Organisation for Economic Co-operation and Development
PPA – power purchase agreement
SDG – Sustainable Development Goal
SEFF – Sustainable Energy Financing Facilities
SMEs – small and medium-sized enterprises
SnCF – Subnational Climate Fund
SRMI – Sustainable Renewables Risk Mitigation Facility
TA – technical assistance
TOSSD – Total Official Support for Sustainable Development
TWI – Terrawatt Initiative
UMIC – upper-middle-income country
WFF – Water Financing Facility
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BloombergNEF (2021) Energy Transition Investment Trends, January 2021


Brookings Institution, LSE Grantham Research Institute on Climate Change and the Environment and Rockefeller Foundation (2021) Financing a big push in emerging markets and developing countries for sustainable, resilient, and inclusive recovery and growth, forthcoming, November


Blended finance for scaling up climate and nature investments


Endnotes

1 Brookings Institution, LSE Grantham Research Institute on Climate Change and the Environment and Rockefeller Foundation (2021) Financing a big push in emerging markets and developing countries for sustainable, resilient, and inclusive recovery and growth (forthcoming, November 2021)


3 REDD+ stands for reducing emissions from deforestation and forest degradation.


8 “Creating markets” is a term coined by the International Finance Corporation as part of its IFC3.0 strategy (https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/annual+report-2020/strategy). IFC committed, working together with the rest of the World Bank Group, to actively shaping the conditions under which private investments could flourish.


13 OECD DAC (2020a) Official Development Assistance report 2020


16 Tri Hita Karana (2020), Roadmap for Blended Finance, Summary of Outputs October 2020

17 Convergence for DFID Impact Programme (2020) How to Mobilize Private Investment At Scale in Blended Finance


20 OECD DAC (2020b) Blended Finance Principles Guidance


22 The criteria are reflected in the OECD and DFI blending principles referred to above, which include further criteria that are extensions of these (such as high standards and market-conformity).


24 Signatories include 137 investors with US$420 billion of impact assets under management. https://www.impactprinciples.org/

26 An important harmonisation process is underway between the DFIs and private impact investors, who are working to align the HIPSO and IRIS+ indicator systems in collaboration with the Impact Measurement Project (IMP) and the Global Impact Investing Network (GIN). See https://www.impactprinciples.org/announcement/joint-impact-indicators-jii-announcement

27 E.g., papers published by ODI (Samantha Attridge and Lars Engen, 2019), CGD (Charles Kenny, 2019), and Stamp out Poverty (Sony Kapoor, 2019).


29 Multilateral Development Banks’ Harmonized Framework for Additionality in Private Sector Operations, 10/2018


31 In the only such study available at this point, the World Bank Group’s Independent Evaluation Group (IEG) concludes that the IDA Private Sector Window (PSW) enabled IFC and MIGA to support high-risk projects with clients in markets and sectors beyond what would have been feasible without PSW. IFC credit ratings improved an average of five notches – from Credit Rating 11 to Credit Rating 6 – as a result of using PSW in a project. These reductions allowed a reduction in pricing, reflecting the lower risk to IFC. According to IEG, “the risk reduction documented in the sample represents direct empirical evidence of PSW additionality”. See IEG (2021) The World Bank Group’s Experience with the IDA Private Sector Window: An Early-Stage Assessment.

32 “Minimum concessionality” is one of the DFI Enhanced Principles for Blending in Private Sector Operations referred to earlier.

33 Convergence for DFID Impact Programme (2020) How to Mobilize Private Investment At Scale in Blended Finance

34 This corresponds broadly to the Joint Principles adopted by the DFI community; those need to be enforced.


37 Data on GDP from World Development Indicators database, World Bank.

38 See Table 2 and sources in Stern et al. (2021) Shaping an Equitable, Inclusive and Resilient Recovery, World Economic Forum


45 Data from Convergence and the DFI Blended Concessional Finance Working Group. This assumes, slightly heroically, that the full project value can indeed be attributed to the blended finance component.


47 See e.g. Climate Policy Initiative (CPI) (2018), op. cit.


50 See Table 1.1.


52 ODI (2018) Clean energy project preparation facilities-mapping the global landscape, November 2018

It is worth noting that developers accounted for over half of private clean energy project finance in 2018 globally – following rapid growth – and commercial banks for one quarter. See IRENA (2020b).

SEFFs have disbursed over €2 billion via 80 banks across all economic sectors, for individual projects ranging from less than $1 million to $30–50 million. https://www.ebrd.com/downloads/sector/eecc/sei-seff.pdf

OECD (2020) Blended Finance in the Least Developed Countries 2020


Still, the implementation experience of Scaling Solar, which has been slower than initially hoped, is a reminder of the crucial importance of the broader country and sector enabling environment.

To take an example, Greece created a highly qualified PPP unit some 7–8 years ago; they have so far created 60+ successful PPPs. Communication by EBRD during consultation for this report.


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To take an example, Greece created a highly qualified PPP unit some 7–8 years ago; they have so far created 60+ successful PPPs. Communication by EBRD during consultation for this report.


Over 75% of all direct investments made by institutional investors in renewable energy projects over the 2009 to Q2 2019 period were in secondary-stage transactions, i.e. investments in already operating assets that do not require further funding.

World Bank Group’s Experience with the IDA Private Sector Window: An Early-Stage Assessment

Although the data do not allow disaggregating this result by developing vs. advanced economies, the proportions are likely to apply in developing countries, which account for the majority of climate finance identified by CPI (Climate Policy Initiative).

GEF contrast these numbers favourably with mobilisation leverage from regular operations, which is $0.6 of private funds per $ of GEF Grant. https://www.thegef.org/sites/default/files/publications/Blended_finance_Final_NI_Approved_LR_0_1.pdf

IEG (2021) The World Bank Group’s Experience with the IDA Private Sector Window: An Early-Stage Assessment

Interlocutors were highlighting not only the difficulty of attracting private investors, but also the administrative complexity and time involved in obtaining public funds.

Note that the data in Figure 4.2 do not capture the catalytic effect of blended finance engagements for private market entry. Catalytic market development in the renewables markets is arguably a big success story for DFI-led blended finance operations in middle-income countries. The renewable energy generation markets in countries such as Mexico, Egypt and India received a significant impetus from such operations in their early phases. The catalytic effect is unlikely to be as high in LICs, given constraints in the investment environment.


Very large ratios, e.g. attributing the full project value to a small early-stage project preparation grant, or the full value of downstream feeder funds to risk mitigation in a fund-of-funds, might simply mean that the investments were so attractive to private investors that they did not really need the donor’s contribution. At the same time, blended finance support to hedge currency risks, which can be highly additional by targeting a key impediment to private investment in sub-investment grade countries, would tend to show among the lowest mobilisation ratios.

The second of these principles is captured by the Joint DFI Concessional Finance Principles. The first would be indirectly captured (by the need to minimise concessionality) but is seldom systematically addressed.

OECD and Milken Institute (2018) Guaranteeing the Goals: Adapting Public Sector Guarantees to Unlock Blended Financing for the U.N. Sustainable Development Goals. The study mentions that guarantees account for 45% of all private mobilisation for renewable energy despite representing only 5% of development finance commitments.