BLENDED FINANCE TASKFORCE

BETTER FINANCE BETTER WORLD

CONSULTATION PAPER OF THE BLENDED FINANCE TASKFORCE

In partnership with the Business & Sustainable Development Commission and SYSTEMIQ

The Taskforce has written *Better Finance, Better World* with secretariat support provided by SYSTEMIQ, and is guided by its Steering Committee. The Taskforce is grateful for the input of numerous special advisors and support from independent contractors including Climate Policy Initiative, Convergence and KOIS Invest. Steering Committee members of the Blended Finance Taskforce act in their personal capacity and support the general thrust of the arguments, findings and recommendations made in this report (but should not be taken to agree with every word or number). The institutions with which they are affiliated have not been asked to formally endorse the report. Readers may reproduce material for their own publications, as long as they are not sold commercially and are given appropriate attribution.

Business & Sustainable Development Commission
(Blended Finance Taskforce)
c/o SYSTEMIQ
69 Carter Lane
London EC4V 5EQ
United Kingdom

www.businesscommission.org

Cover photo: Fotolia RAW / Adobe Stock

CONTENTS

THE BLENDED FINANCE TASKFORCE

The Blended Finance Taskforce was launched in 2017 as an initiative of the Business & Sustainable Development Commission (BSDC). The Taskforce was set up to look at how "blended finance" – the use of development funds to mobilise additional private finance for investment in the UN Sustainable Development Goals (SDGs) – can be deployed more effectively.

Bringing together leaders from finance, business, development and policy, the Taskforce's aims are twofold: (1) to lay out the economic opportunity inherent in the use of blended finance, particularly for sustainable infrastructure in emerging markets; and (2) develop an action plan to drive the system-change required to rapidly scale the blended finance market, in order to deliver this opportunity. In doing so, the Taskforce intentionally applies a "private sector" lens to identify how blended finance can make the SDGs more "investable" for commercial players.

The Taskforce works with a number of other blended finance initiatives including those of the leading multilateral development banks and bilateral development finance institutions, the Organisation for Economic Co-operation and Development (OECD), the World Economic Forum (WEF), the Sustainable Development Investment Partnership (SDIP) and the New Climate Economy (NCE). By largely offering a private sector perspective, the Taskforce seeks to bring different insights to the existing body of work on blended finance, which mainly speaks to the donor, development and/or policy-maker community.

Co-chaired by Lord Mark Malloch-Brown and Jeremy Oppenheim, with support from Senior Advisor, John E. Morton, the Taskforce builds on recommendations made in the BSDC's flagship report, *Better Business, Better World* (http://report.businesscommission.org/). The Taskforce is also generously supported by the Norwegian Ministry of Climate and Environment and the Rockefeller Foundation, as well as several Commissioners of the BSDC.

The Taskforce has written *Better Finance, Better World* with secretariat support provided by SYSTEMIQ, and is guided by its Steering Committee (see list in **Annex 1**). It benefits from the input of numerous special advisors (including Climate Policy Initiative, Convergence, Tideline and KOIS Invest). Members of the Blended Finance Taskforce act in their personal capacity and support the general thrust of the arguments, findings and recommendations made in this report (but should not be taken to agree with every word or number). The institutions with which they are affiliated have not been asked to formally endorse the report.

Consultation paper

It will take a coordinated leadership agenda involving numerous players across the financial system in order to create an environment in which the use and effectiveness of blended finance can rapidly scale. For that reason, this version of *Better Finance, Better World* is initially being offered as a consultation paper, in order to engage with key stakeholders before finalising the concrete action plan. The Taskforce would welcome your feedback and input on developing this action plan. We will be accepting comments until **16 March 2018**, with the final version of *Better Finance, Better World* to be published at the World Bank / IMF Spring Meetings in late April 2018. Please email katherine.stodulka@systemiq.earth and catharina.dyvik@systemiq.earth with written comments or to arrange a time to discuss your feedback over the phone or in person.

Highlights

Momentum is building in the $50+ billion blended finance market. The market could double in the next few years as investors look to take advantage of risk mitigation tools and more development capital is made available for blending. To achieve this growth, we need to mainstream blended finance with more multi-billion dollar vehicles.

As institutional investors chase returns in a low-interest rate environment, they have a window of opportunity to use blended finance to de-risk investment in emerging markets infrastructure, where infra equity has performed well relative to other asset classes and infra debt has seen historically low default rates.

MDBs/DFIs play a central role in scaling up the blended finance market. They need to increase mobilisation ratios significantly: for every dollar, they mobilise less than $1 of private capital; DFIs are only marginally better. MDBs also need to increase their share of private sector activities. Setting ambitious targets will improve how the development banks do business.

Strong pipelines can be developed and private investment will flow if developing countries get policy and institutional mechanisms right. Developing countries should develop blended finance institutions which can link policies to sectoral strategies, investment plans and sustainability standards.

Scaling up the blended finance market can increase the global rate of growth, deliver the Sustainable Development Goals (including on climate) and strengthen long-term returns for savers. For this to happen, leaders across the whole investment system will need to take collective action.

EXECUTIVE SUMMARY

Key takeaways

1. Momentum is building around the $50+ billion blended finance market.

The last 5 years has seen the blended finance market double in size, driven largely by investment in clean energy. The market could double again in the next 3-4 years as providers of concessional and other forms of development capital earmark more money to be used for blending, and as private investors look to take advantage of this risk cushion. To make this happen, we need to see a dramatic scale-up in the size of blended finance vehicles, moving from many fragmented $100 million funds, to a growing number of vehicles, each with $1-10 billion of capital. In parallel, the market will still require innovative, more bespoke funds to ensure small-scale and higher-risk, frontier projects are served.

2. There is a window of opportunity for private institutional investors.

Compared to other asset classes, infrastructure equity and debt funds have delivered strong long-term returns globally. In general, infrastructure tends to provide portfolio diversification benefits, and historical default rates show lower credit losses than comparable corporate issuers. Investors have an unprecedented opportunity to increase their portfolio exposure to this asset class while benefiting from significant downside protection provided through blended finance.

3. The MDBs and DFIs will be critical to scaling the blended finance market and can do so by setting ambitious targets to mobilise external private finance.

The MDBs currently have private capital mobilisation ratios of less than 1:1 (private to public) across their whole portfolios; this ratio needs to increase significantly, and would need to more than double over the next decade to get anywhere close to the trillion dollar financing target. Achieving higher ratios will require the MDBs to sharply increase their share of private sector activities which currently accounts for only around 30% of MDB activities. They also need to ramp up the mobilisation ratios of the private sector arms from less than 2:1 to closer to 4:1 (or more). The bilateral DFIs also need to commit to higher mobilisation ratios. Increasing these targets will likely shift portfolios more toward infrastructure investment and toward more stable middle-income countries. But it could also free up additional development capital for frontier, low-income countries and high additionality projects. Setting targets should also change how the development banks do business and engage with the private sector, leading to product standardisation and asset pooling across the MDBs/DFIs.

4. Developing countries which generate high quality infrastructure assets will not be short of financing.

Many middle-income countries are already tapping into international capital markets at historically low rates. As blended finance models begin to scale alongside other mechanisms such as green bonds and One Belt, One Road (OBOR) funds, capital will not be the constraint. Instead, performance differentiation over the next decade is more likely between those developing countries that get policy and institutional mechanisms right, versus those that are slower to adapt. Developing countries that prioritise sound policies and institutional capacity can build stable project pipelines, particularly using blended finance institutions which can link these policies to sectoral strategies, investment plans and sustainability standards.

5. There is a major opportunity for the world to increase its underlying rate of growth, deliver the Sustainable Development Goals (including climate) and strengthen long-term returns for savers.

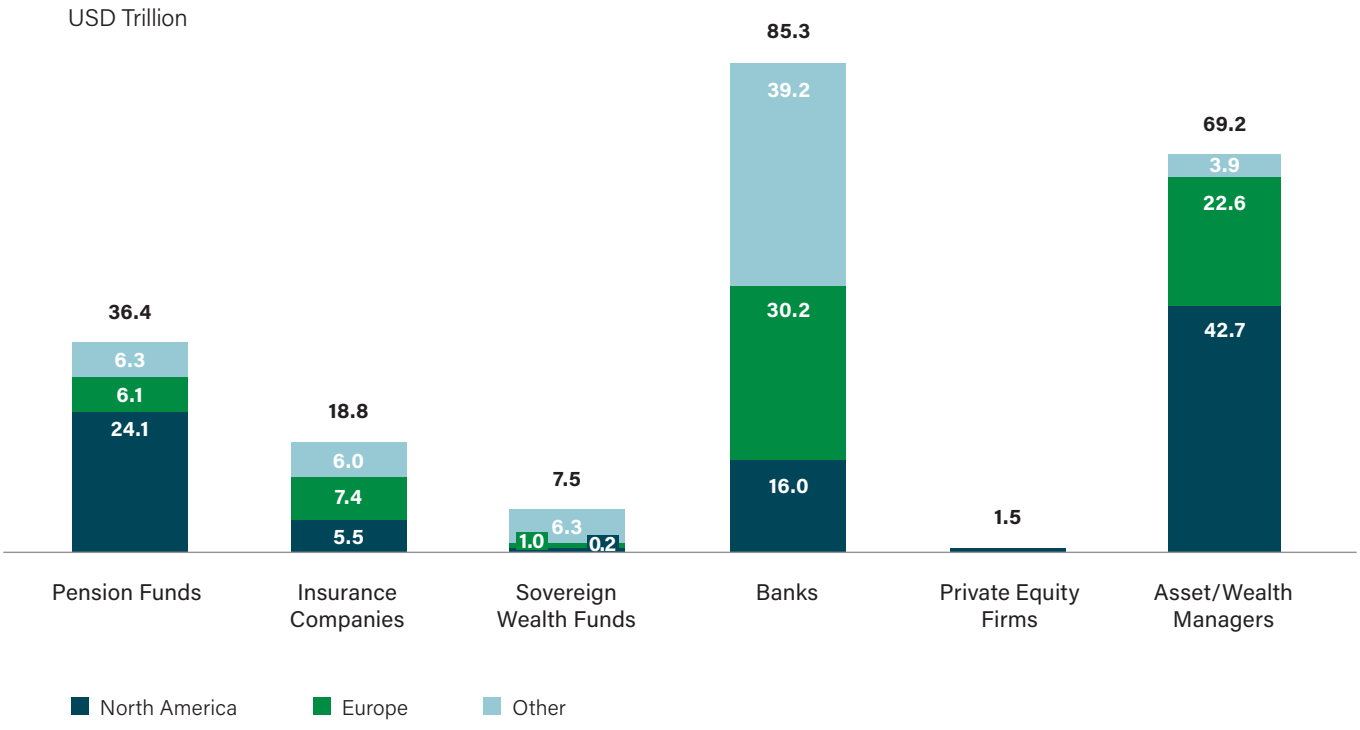
Scaling up blended finance could be the game-changer which makes it possible to capture this prize. The Taskforce calls for leadership across the entire investment system in order to make this happen including: (i) the providers of capital (including institutional investors, foundations and developed countries), (ii) intermediaries who blend capital (both public and private); and (iii) developing countries.

Better finance, blended finance

2017 saw improved growth across most of the world economy; and earnings expectations in emerging markets almost doubled.[1] At the same time, interest rates remained at near-historic lows and the total investments in negative yielding sovereign bonds reached almost $10 trillion – capital that could be invested more productively elsewhere. This was also the year of "sustainable finance" – where discussions about how to make our financial sector "greener", more sustainable and more responsible grew exponentially – as a matter of good conscience, but also of good business.

In principle, this combination should provide institutional investors, who represent over $200 trillion AUM (see **Exhibit 1**),[2] with strong incentives to invest in infrastructure – an asset class that has a track-record of delivering long-term returns of between 5-10% a year for many years – and which is critical to delivering the UN Sustainable Development Goals.

EXHIBIT 1 | Estimated AUM of top institutional investors across segments[3]



There is no shortage of investment capital looking for long-term, stable returns for which sustainable infrastructure could be an attractive asset class. The growth of the green bond market from $7 billion in 2012 to an estimated $295 billion outstanding at the start of 2018[4] shows appetite among investors for this kind of product. But today, institutional investors remain largely on the sidelines when it comes to infrastructure investments. Relatively few have direct exposure to alternative assets. Even fewer to these assets in developing countries. Indeed, infrastructure accounts for less than 1% of pension fund assets, a number which needs to increase to about 3-4% by 2030 to deliver on the SDGs.

Even within developed economies where returns have generally been strong, private investors still perceive infrastructure as a hard asset class. It is illiquid. Regulatory frameworks limit the potential for institutional investors to play. The business models often involve substantial counterpart risk. FX hedges are expensive and typically only available over a relatively short time-frame. Infrastructure remains a sector which is prone to corruption. Institutional weaknesses and missing markets act as barriers to matching large-scale capital with sustainable investment opportunities. And international private capital will only participate at scale if complemented by sizeable amounts of domestic private capital. All this compounds to limit capital flows, especially cross-border into emerging markets. But these risks are often as much *perceived risks*, as they are real.

Actual figures on infrastructure performance tell a more compelling story of competitive risk-adjusted returns for more experienced investors, particularly in a low-interest rate environment. Compared to other asset classes, infrastructure equity and debt funds have provided strong long-term returns globally. For example, 70% of institutional investors report historical performance on their overall asset allocation to infrastructure (both funds and direct equity investment) between 12% and 17%.[5] In developing countries, the evidence is less comprehensive. However, returns appear on average to be 200-600 basis points above those in developed markets, albeit with higher variation in outcomes. In general, infrastructure tends to provide portfolio diversification benefits, and historical default rates show lower credit losses than comparable corporate issuers.[6] Of course, even if the aggregate performance related to infrastructure investing is reasonable, the devil is in the detail and investors, without deep experience in the asset class, are understandably cautious. But with momentum building around "blended finance" – which sees governments increasingly willing to provide a significant risk cushion for SDG-related investments – there is an opportunity for a much wider set of investors to start participating in traditionally more challenging asset classes like emerging markets infrastructure. The rest of this report will explain what blended finance actually means, how investors can use it to improve the risk/return profile of investments, why the market needs to scale up rapidly, and how it can be done.

What is blended finance

Recognising that there are competing, but largely complementary definitions of what constitutes "blended finance", the Taskforce adopts the definition set out in **Exhibit 2** – being the use of development capital (from public sources like government aid or development banks, or philanthropic sources like foundations) to de-risk SDG-related investments (into things like sustainable infrastructure, healthcare, education and sustainable land use) in order to attract commercial capital from private investors who would otherwise not have participated. In other words, it "blends" capital which has a development mandate with capital which does not, in a way which makes the SDGs more "investable".

EXHIBIT 2 | Blended finance definition[7]

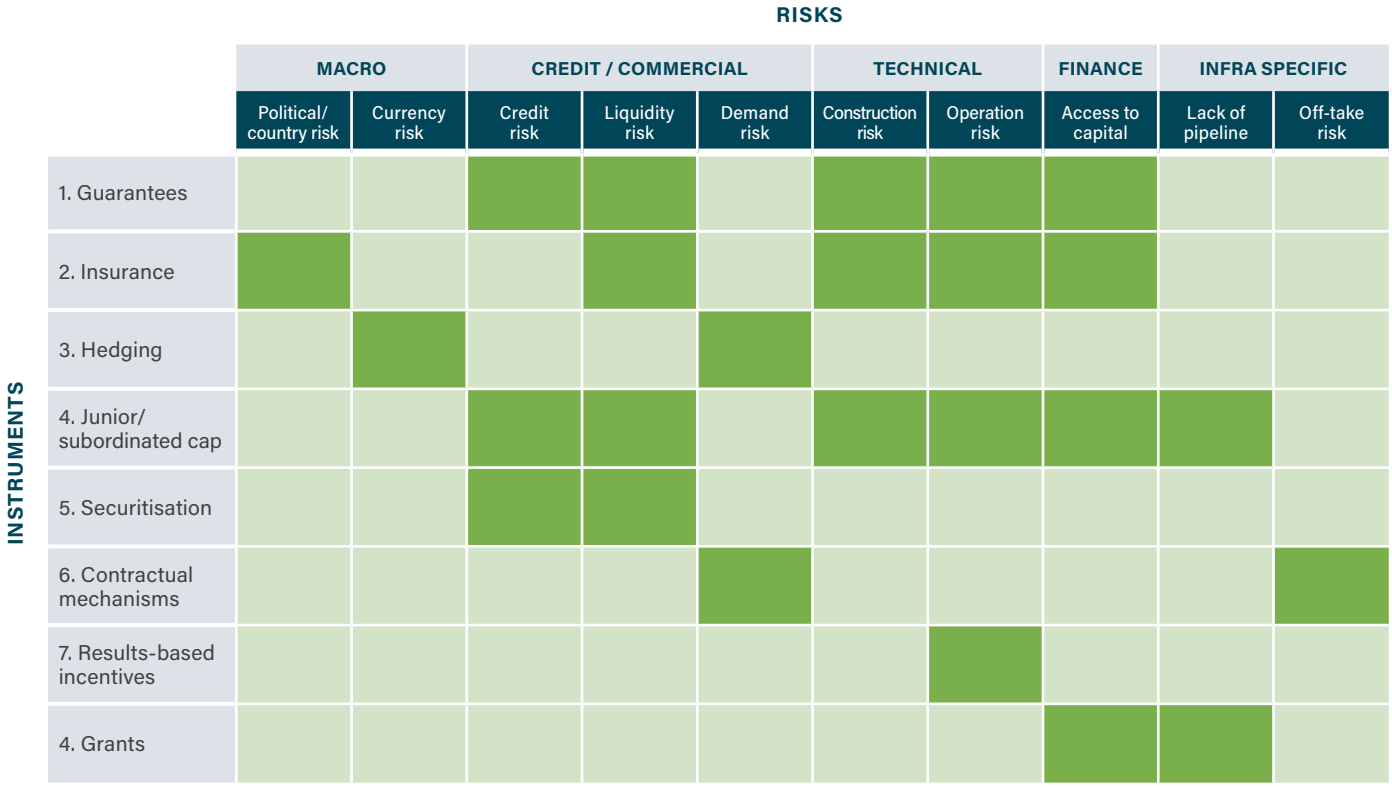
WHAT IS BLENDED FINANCE?

*"Blended finance is the strategic use of public or philanthropic **development capital** for the mobilisation of additional external private **commercial finance** for SDG-related investments."*

PUBLIC OR PHILANTHROPIC DEVELOPMENT CAPITAL	EXTERNAL PRIVATE COMMERCIAL FINANCE
Capital with some objective other than maximising returns – includes but is not limited to concessional capital	*Capital whose primary objective is maximising commercial returns*
Concessional ODA from donor countries ▪ Total annual ODA flow $143 billion 2016 ▪ Total estimated available concessional facilities for blended finance around $20 billion today	**Commercial investment by asset owners (e.g. pension funds, insurers, SWFs), asset managers, project developers and endowments** ▪ Total overall AUM estimated at $200 trillion ▪ Total AUM "alternatives" estimated at $6 trillion
Concessional or commercial funds MDBs and DFIs ▪ Total annual flow MDB and DFI activity around $220 billion 2016	**Investment by impact funds at or close to market rate** ▪ Total AUM $114 billion ▪ Total annual commitments $22 billion in 2016 (84% of total at or closer to market rate)
Philanthropic funds from foundations ▪ Total AUM around $1 trillion	
Investment by impact funds below market rate ▪ Total annual commitments around $1-2 billion 2016 (16% of total estimated below market rate, closer to capital preservation)	

The use of blended finance vehicles and instruments like guarantees, technical assistance grants, currency hedging and risk insurance are gaining traction with private investors, who can use a small amount of development capital to mitigate against a range of risks (shown in **Exhibit 3**). This may be enough to "tip the scales", enabling investment in new asset classes like infrastructure debt or equity in emerging markets.

EXHIBIT 3 | Instruments and risks

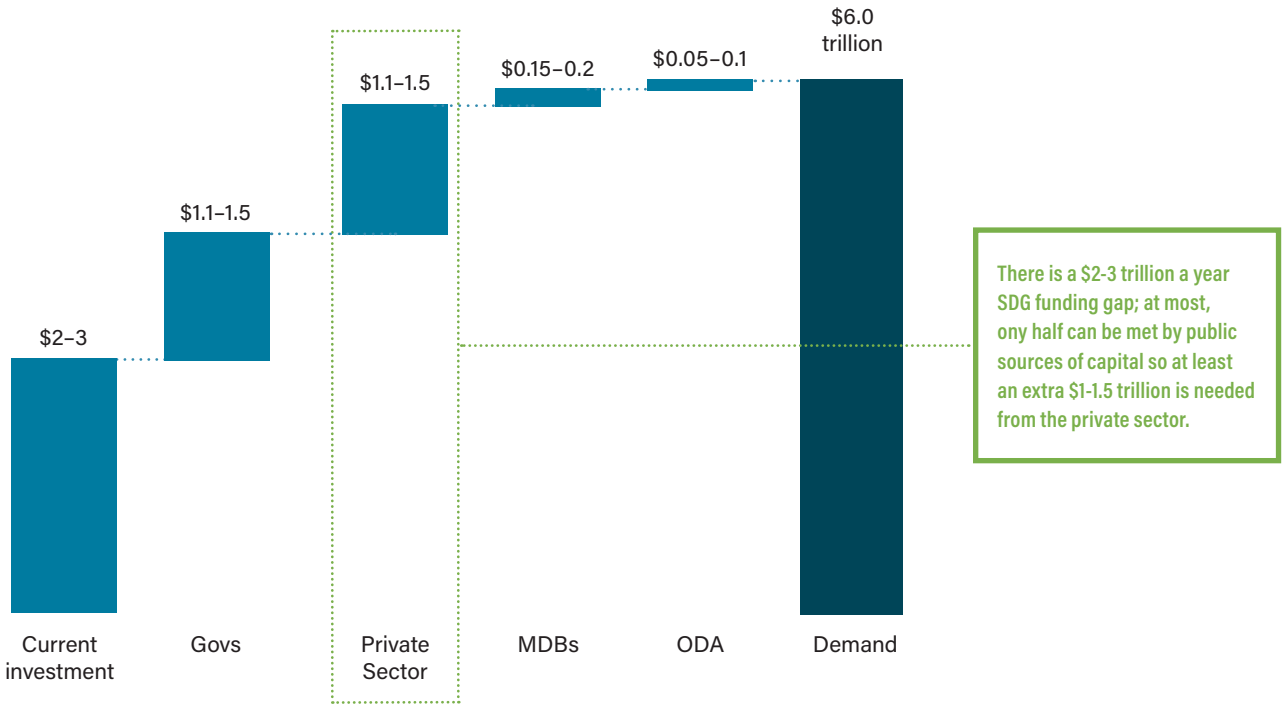


Where is blended finance needed

The bulk of blended finance will mainly be needed to make sustainable economic infrastructure (cleaner, more climate resilient energy, roads, water, buildings etc.), sustainable land use and social infrastructure (health, education) in developing countries more "investable". Over the next 15 years, the UN estimates that we need a total investment of at least $90-100 trillion (around $6 trillion a year)[8] to achieve the SDGs, with the lion's share of this investment needed for sustainable infrastructure in the global South. Of the ~$6 trillion needed each year, the current SDG-funding gap is between $2-3 trillion a year. Development capital in the form of aid and public funds can, at most, cover half of this gap. But by de-risking some of these investments, blended finance can allow the private sector to participate, potentially capturing over $1 trillion in additional annual investment potential.[9]

EXHIBIT 4 | There is over $1 trillion of additional annual investment potential for the private sector[9]

USD$ trillion, constant 2010 dollars



Getting to the "trillions" needed to fund sustainable infrastructure might seem daunting. And in truth it is a steep hill to climb. But it is not impossible, especially when put in context with broader global economic activity.[10] The global economy, as measured by gross world product, was almost ten times these amounts in 2016 (approximately $75 trillion).[11] The world economy should generate between $300-400 trillion of gross savings over the next 15 years, which needs to attract real, long-term risk-adjusted returns of at least 3-4% for investors. And investing in the SDGs is also expected to help further grow the global economy – the Business & Sustainable Development Commission estimates that the SDGs will help generate at least an additional $12 trillion in market opportunities[12] as governments and companies increase investments in energy, cities, food & agriculture and health & well-being. Drilling down further into these numbers, in 2016, banks helped their clients raise $7 trillion in the global debt capital markets[13] and another $655 billion in the global equity capital markets.[14] These figures don't include bank lending, which contributed an additional $2+ trillion in commercial and industrial loans outstanding for US banks alone.[15] In emerging markets, banks hold assets estimated at more than $50 trillion,[16] which means banks in developing countries also have the potential to make a very large difference in sustainable development.

Blended finance in action

We have already seen blended finance at work in a number of projects and funds which have attracted billions of dollars of additional institutional investment in the four key SDG-investment systems of (1) food and land use; (2) cities; (3) energy and materials; and (4) health and wellbeing. According to the Business & Sustainable Development Commission,[17] achieving the SDGs in these four economic systems could be worth an estimated $12 trillion by 2030 in business savings and revenue. Some examples of blending in each of these systems appear in **Exhibit 5**; these examples will be discussed in more detail in the following chapters.

EXHIBIT 5 | Examples of blended finance in key SDG-investment systems

FOOD AND AGRICULTURE	CITIES	ENERGY AND MATERIALS	HEALTH AND WELL-BEING
&Green Fund: concessional funds from Norway to support sustainable intensification of agricultural production and business models that reduce deforestation in tropical areas **Terra Bella Fund:** USAID technical assistance and first-loss provisions for sustainable land use projects	**Affordable housing** and mortgages in Honduras using OPIC loans for low income families to overcome lack of safe housing and limited financing for local development **Housing microfinance** funds with concessional long-term loans to local financial institutions e.g. by the World Bank	**Climate Investor One:** technical assistance, first loss capital, subordinate equity and guarantees in a multi-stage renewable energy fund **Laos hydro project:** MIGA political risk insurance for development, construction, and operation of a trans-basin power plant	**Global Health Investment Fund:** first-loss guarantee from Gates Foundation and SIDA for a low-income country fund that seeks to eradicate preventable diseases **Elazig Greenfield Hospital Bond:** MIGA political risk insurance coupled with EBRD liquidity facility enabled credit rating of bond issuance above Turkey's sovereign ceiling

Blending could be a game-changer, providing investors with the opportunity to increase their portfolio exposure to an asset class like infrastructure (which has strong fundamentals but high perceived risks), while benefiting from significant downside protection. The ability to mobilise large pools of long-term capital from investors who are quick to spot this opportunity means that blending, done well, is one of the best solutions to turn billions of ODA aid money into trillions of investment capital for the SDGs.

A lot is already happening to crowd private institutional investors into deals which support the SDGs. This is led by the main "blenders" of capital: (a) the multilateral development banks (MDBs) including the European Bank of Reconstruction and Development (EBRD), the African Development Bank (AfDB), the Inter-American Development Bank (IADB), and the World Bank's private sector arm, the International Finance Corporation (IFC); and (b) the bilateral development finance institutions including the UK's CDC, the Netherlands' FMO and the US' Overseas Private Investment Corporation (OPIC).

One example is IFC's Managed Co-Lending Portfolio Program for Infrastructure (MCCP Infra), a major infrastructure debt syndication programme which enables third-party investors to participate passively in IFC's future stream of senior infrastructure loans. With a target size of $5 billion, MCPP Infra has, to date, secured $1.5 billion from three institutional investors (Allianz, AXA and Eastspring), who have committed $500 million each on the back of a first-loss tranche of up to 10% of the portfolio that is supported by guarantees from the Swedish International Development Cooperation Agency (SIDA). Focused more on equity, the IFC's Asset Management Company (AMC) is an active fund management vehicle which has successfully mobilised billions of dollars due to its "private sector-focused" way of engaging with investors, having raised $10 billion across 13 funds that invest in IFC transactions in developing countries.

The EBRD has been successful in developing innovative credit-enhancement mechanisms, pledging to provide an €89 million interim liquidity facility to support the €288 million euro-denominated Elazig hospital bond in Turkey. Combined with political-risk insurance from the World Bank's Multilateral Investment Guarantee Agency (MIGA), this enabled Moody's to assign a rating of Baa2 to the bond, above the current rating of Turkey, enabling participation by a larger pool of investors and mobilising new sources of funding.

At the project level, the IADB has been a leader in providing anchor investment into renewable energy projects like the Ventosa Wind Farm, providing liquidity to the project and having a strong market demonstration effect for the wind sector in Mexico in the years that followed. Kenya's €620 million Lake Turkana wind power project also benefits from significant of "blending", with a partial risk guarantee from the AfDB to address the political and construction risk associated with completion of the transmission infrastructure required to deliver electricity from the wind farm and connect it to the national grid.[18] Despite its challenges, Lake Turkana represents the largest single private-sector investment in Kenya and, at up to 310.25 MW is set to be the biggest wind farm on the entire African continent.

It is clear that momentum is building in the blended finance market. Put this against the backdrop of strong international momentum after the 2015 Paris Agreement, and achieving the "billions to trillions" agenda looks more realistic:

1. The Nationally Determined Contributions (NDCs) which all countries submit as part of the Paris Agreement provide indicative 15-20 year investment plans with supporting low-carbon policy frameworks.

2. The Task Force on Climate-related Financial Disclosures (TCFD) is creating much stronger transparency expectations around asset allocation for investors, in a way that should strengthen capital provision towards sustainable infrastructure.

3. The MDBs are, together with the DFIs working to strengthen their catalytic role "as a system" in crowding in long-term private finance.

4. The OECD's Development Assistance Committee (DAC) is progressing in the way it collects and reports data around concessional capital flows in ways that should encourage greater use of international public finance instruments that crowd in private capital.

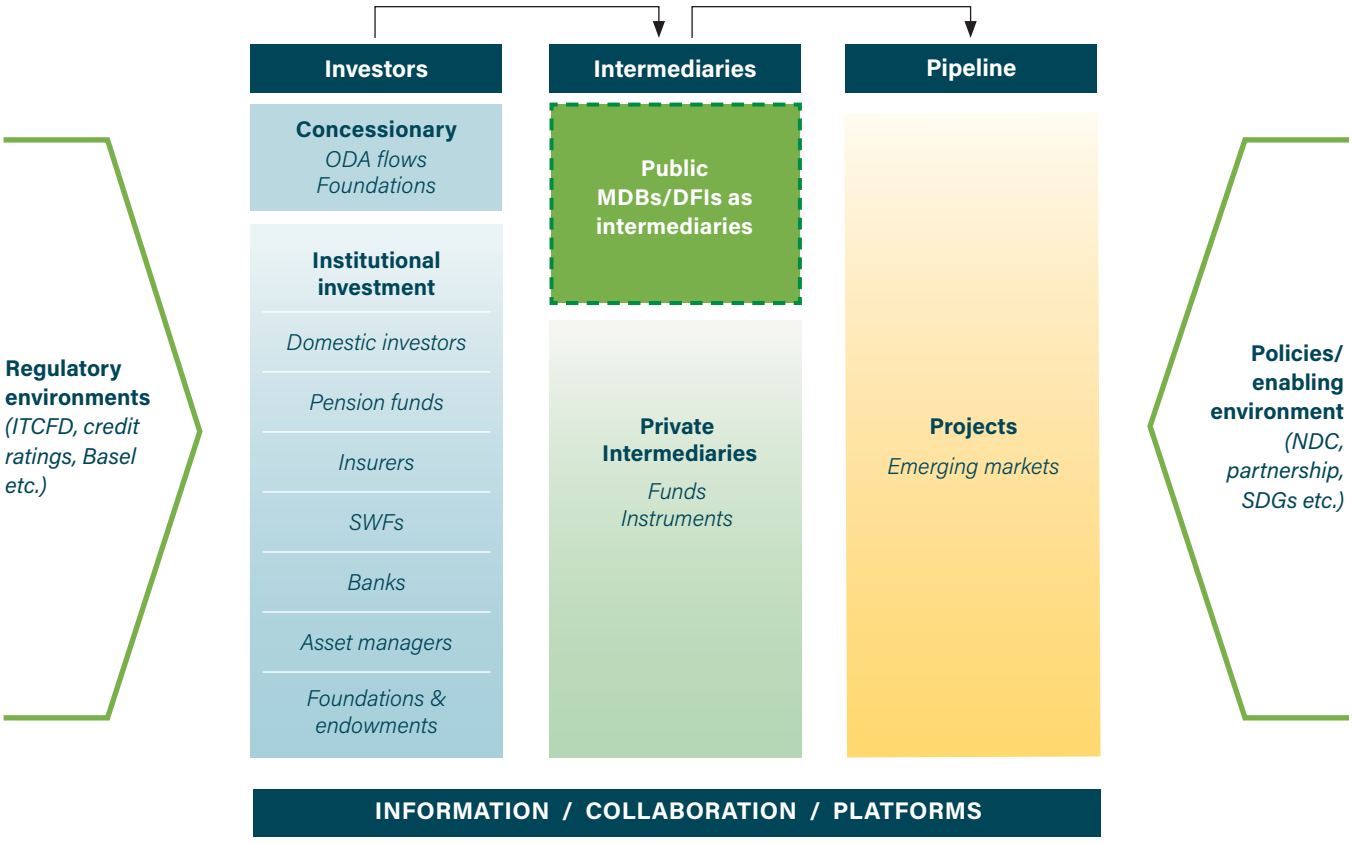
5. Convening platforms like the Sustainable Development Investment Partnership (SDIP), CPI's "Climate Finance Lab" and Convergence are working to connect, educate, and support investors to execute blended finance transactions that increase private sector investment in emerging markets. Finally, as Chair of the G20 in 2018, Argentina has decided to focus its leadership on driving private investment into infrastructure. The enabling context for the "billions to trillions" agenda is getting stronger, as is momentum around tools like blended finance, which can make it a reality.

Why the blended finance market is not set up to scale

Despite this good momentum, the financial system is not set up to allow the blended finance market to rapidly scale. The system is made up of three key parts (see **Exhibit 6**):

1. **Investors:** who represent the effective availability of large-scale, long-term capital (demand).
2. **Intermediaries:** who are the "blenders" of capital (both through instruments and vehicles).
3. **Pipeline:** which comprises the projects which are investible within acceptable regulatory frameworks (supply).

EXHIBIT 6 | Mobilising investment for the SDGs requires a working blended finance ecosystem which has enough large-scale, long-term capital, catalytic intermediaries and a solid pipeline of bankable projects



Within each part of this system lies one or more significant barriers which prevent the blended finance market from scaling. Investors perceive infrastructure and other SDG-related assets as too difficult; the development banks, as the main blenders of capital, are not achieving high enough mobilisation so don't crowd in as much private capital as they should for every dollar, and there is a lack of quality infrastructure assets driven by a lack of the right policy and institutional mechanisms to attract long-term capital. In other words, against what is an improving macroeconomic context, the financial system is still not set up to meet the scale of the infrastructure opportunity and the development challenge.

The Taskforce acknowledges that no amount of blended finance will compensate for a poor enabling environment and a structurally weak economy. Private capital will rarely flow at meaningful scale where corruption, political instability, weak legal systems, currency volatility and complex or unpredictable government decision-making processes prevail. Host governments (both developing and developed) therefore have a primary obligation to improve local investment conditions, build institutional capacity, strengthen policies and regulatory frameworks and support transparent market infrastructure.

But even if enabling environments were adequate, today, the capital investment system is not working optimally. On the demand side, investors do not know about much of the concessionary capital available to de-risk investments or find it hard to access. They are also accustomed to provide shorter-term mandates to their asset managers, due to a mix of agency/monitoring, regulatory and capability factors. Further, available concessional risk capital is often not provided in a way which can be used easily or effectively by the private sector. Instruments are bespoke, projects are not packaged to be at investible scale and transaction costs are high. Information from MDBs/DFIs does not flow freely enough, so ratings agencies and private investors are not equipped to price risk easily. Finally, financial regulations often create barriers to investing in emerging markets and alternative asset classes like infrastructure.

Within the intermediation system, public and philanthropic capital is not being used catalytically enough. Most ODA flows are grant-based and foundations also disburse most of their money as grants. Most MDBs and DFIs operate with low mobilisation ratios and have few incentives to focus on improving them. In fact, the MDBs currently mobilise less than $1 of private capital for $1 of MDB capital across their whole portfolios; this ratio needs to increase significantly; possibly more than doubling over the next decade. Of course, measuring private capital mobilisation ratios of the MDBs and DFIs can be more of an art than a science – the data is scarce and the exact numbers depend on a lot of assumptions. However, the important thing is not the precise starting point but its order of magnitude and the scale and direction of the change required – and there is no doubt that mobilisation ratios have to go up to even get close to the trillion dollar target. Achieving higher ratios will require the MDBs to sharply increase their share of private sector activities which currently accounts for only around 30% of MDB activities. They also need to ramp up the mobilisation ratios of the *private sector arms* from less than 2:1 to closer to 4:1 (or more). The bilateral DFIs also need to commit to higher mobilisation ratios. Low mobilisation ratios of the MDBs and DFIs is compounded by the fact that there are not enough private intermediaries who can blend capital in non-traditional sectors and geographies. Private asset managers have limited incentives and capabilities to engage and are typically short-term focused (reinforced by the mandates which the asset owners specify).

Critically, although momentum is building, the market is still very niche. We will not get to $1 trillion of private capitalised per year through small, bespoke $100-200m blended funds. What we need is to move from a world of $100 million "exotic" or first-time funds to a world where a series of $1-10 billion mainstream blended funds account for at least 80% of the market. By 2020, we need up to 50 of these larger scale blended funds to be launched and for the number to keep on scaling from there. We will only get close to $1 trillion of additional private capital into sustainable infrastructure per year by the mid-2020s in a world with 100 of these much larger funds, operating with a relatively standardised set of products and performance metrics. And on the rough assumption that between 10-20% of the capital stack will need to be concessional or development capital, that also implies a very large shift in resource allocation by the MDBs, DFIs and ODA providers.

On the supply side, private investment in sustainable infrastructure is limited by a lack of local institutional capacity to drive project development and deal-flow. There are few countries that have infrastructure development agencies which can coordinate across policy, planning and project development. Lots of de-risking still happens at the project level, rather than higher up in the system and with very low ratios. Technical assistance is also heavily project-based, rather than applied to a broader sectoral strategy. And there is often a big translation gap between the engineering and finance perspectives on smart project design and implementation. But with a growing blended finance market and governments willing to provide a risk cushion for emerging markets activities, developing countries who can shift to a more coordinated approach to pipeline development and generate quality infrastructure assets should not be short of financing.

Tackling just one part of the system – adopting a piecemeal approach – will not do the job. It will not turn the billions of ODA aid flows into trillions of investment flows. What we need is a comprehensive, coordinated plan of attack. And it is one where "blended finance" can play an outsized role in catalysing the required shift across all three parts of the system.

Leadership in the blended finance ecosystem

Blended finance can only "change the game" if leadership comes from each part of the system according to the following 6 actions:

a) Long-term capital

1. **Institutional investors** who want to take advantage of the downside protection offered by blended finance to increase their portfolio exposure to new asset classes like emerging markets infrastructure can: (i) mandate and incentivise their asset managers to start participating in infrastructure deals which can be de-risked through blended finance instruments; (ii) rigorously adopt the TCFD and communicate to their trustees that investing in sustainable infrastructure is in line with their fiduciary responsibilities and meets the standards of the fiduciary requirements of a pension fund or insurer; and (iii) engage with regulators to ensure regulatory frameworks don't pose barriers to investing in emerging markets infrastructure or participating in blended deals. We would expect that the pension funds of the MDBs, the UN, other public sector agencies and progressive corporates would be the ones leading the charge on this agenda.

2. **Foundations** can play a vital role in the change programme. While they represent only around $1 trillion assets under management, they can have an outsized impact by coordinating their endowment, programme-related and grant-making strategies. We call upon the leading foundations to help scale existing facilities and seed a next generation of blended finance vehicles that will be best in class, tackling the tougher SDG-related opportunities and more difficult geographies (national or sub-national) for which the revenue streams are uncertain and risks are too high for (unprotected) commercial market participants. They should also seek to progressively improve mobilisation ratios (which would, of course, typically be lower than those of the MDBs and DFIs, given that they would be playing in the hardest territory for blending). They can also look to pool resources with other foundations to give their investments greater impact.

3. **Developed countries** should set their own blending targets for their ODA. They need to channel ODA in more catalytic instruments and vehicles (including those established by developing countries for sustainable investment). If the main ODA providers were to target e.g. a doubling or tripling of their current mobilisation ratios (currently significantly less than 0.5) by 2025, then this would go a long way to scaling up the market and driving private capital into sustainable infrastructure. They also need to be active shareholders and require the MDBs and DFIs also to set stretch targets.

b) Intermediation

4. **MDBs/DFIs** need to be centre-stage in getting the value-chain to work. They are indispensable actors in strengthening the supply of investible projects, reducing absolute risk, correcting for imperfections in the intermediation market, standardising the key set of blending instruments and shifting investors' risk perceptions. Working together, they can be catalysts for change, but will need shareholder support to evolve their own business models, product portfolios and balance sheet strategies. In order to scale up the blended finance market, the MDBs and DFIs need to double (or more) their private capital mobilisation ratios. They will need to increase the relative share of their private sector activities, build stronger private sector-related capabilities and ensure deeper integration of public and private operations. MDBs and DFIs should also consider ways to build out their portfolios, based on technical rather than geographic specialisation, helping to create scale/standardisation and lower transaction costs. In addition, as the largest investors in developing market infrastructure, they should also make information about the financial performance of their portfolios publicly available so that credit rating agencies and investors can better price risk. Setting targets, prioritising private sector activities, changing internal incentive structures and sharing information will signal to private investors that MDBs and DFIs are seeking long-term partnerships that will drive product standardisation including asset pooling while resulting in further streamlined processes and procedures. It should also stimulate the development of the market for private intermediaries as MDBs and DFIs will need to use portions of their capital to crowd in new blending capacity to achieve higher mobilisation targets.

5. **Private asset managers / project developers** need to accelerate their entry into this market. They should work alongside the MDBs/DFIs to put together ambitious multi-billion dollar blended funds that would potentially allow for multi-country, diversified portfolios to emerge in the key sustainable energy, transport, urban, land-use and health sectors. These large-scale funds, working together with a number of MDBs/DFIs, would have the additional benefit of helping to drive product standardisation. They should work with (i) the providers of concessional capital to build effective, low-cost, common systems for impact measurement that would be most relevant for their institutional investors; and (ii) the credit rating agencies around risk metrics. In doing so, the private sector asset managers will drive the creation of the market infrastructure (information, ratings, legal, documentation, awards, fee norms etc.) that will bring this market to scale.

c) Project pipeline

6. **Developing countries** need to prioritise strong enabling environment, good policies and a supportive regulatory regime which allows local institutional capital to invest in infrastructure. Beyond that, they can best take advantage of this institutional innovation by creating their own blended finance vehicles that will bring in private capital, support the development of high quality assets, be sufficiently independent to drive operational performance and have enough connection with the government to allow it to develop a track record of asset origination.

Call to action

Blended finance provides a transformational opportunity for the world economy. It has the potential to substantially grow investment in sustainable infrastructure, helping to deliver the SDGs, improve the quality of growth in the world economy and drive up long-term returns for savers. In principle, the deployment of $100 billion (being roughly 25% of annual ODA flows, foundation grant activity and MDB / DFI activity) through blended vehicles that have 3:1 ratios at the fund level would create $400 billion of investible fund capital per year. With further leveraging at the project level (e.g. 3X), this could close the financing gap.

Blended finance initiatives need to progress through three distinct stages of concept design, followed by commercialisation, followed by scale. Each stage is important in its own right but the last stage is crucial if we are to narrow the SDG funding gap. This is all doable in principle and we have seen practical but one-off examples where this is already working. The challenge and opportunity is now to take these ones-offs to scale to achieve the benefits of blended finance (**see Exhibit 7**).

EXHIBIT 7 | Benefits of blending

REAL ECONOMY	
Design	Links TA with follow-on financing; project preparation linked to policy
Construction	Creates incentives for lean procurement and transparency
Operation	Rewards performance on the basis of specified outputs
FINANCIAL ECONOMY	
Market	Improves risk/return profile (mitigates political, FX risk etc.)
Capital flows	Provides liquidity; increases access to finance
Assets	Aggregates projects for diversification and scale
POLICY	
SDG delivery	Creates high quality assets aligned with Global Goals & NDCs
Institutions	Bridges between public and private sector; drives capacity building

What this will take is decisive action by a small number of critical actors. If 30 key players in the system were willing to show real leadership – governments of a few ambitious developed and developing countries, a dozen key institutional investors, 3-4 foundations, half-a-dozen major private asset managers and of course the main MDBs and DFIs – we could kick-start change in what is today a weak system for sustainable infrastructure finance. There is no "new technology" which requires a decade in the lab. Nor is there a mystery on key enabling factors. What we need now is some old-fashioned, purposeful leadership brought together in a coordinated plan which comes together to change the system (see **Exhibit 8**).

EXHIBIT 8 | Leadership agenda and call to action

LONG-TERM CAPITAL

1. **Institutional investors** should mandate asset managers to invest in emerging markets sustainable infra; embrace TCFD; and use blended finance to support SDG-investments in line with their fiduciary duty.
2. **Foundations** should coordinate their endowment, programme-related and grant-making strategies in support of blending.
3. **Developed countries** should set mobilisation targets for ODA and do the same for their MDBs and DFIs.

INTERMEDIATION

4. **MDBs and DFIs** should target higher private capital mobilisation. This will drive changes to incentive structures, product standardisation, asset pooling, private sector skill building etc. **MDBs** need to increase the relative share of their private sector activities. **MDBs and DFIs** should share information on historical performance of blended finance vehicles.
5. **Private asset managers / project developers** to accelerate entry into the market.

PROJECT PIPELINE

6. **Developing countries** should prioritise strong enabling environments with good policies, supportive regulatory regimes and government capacity for infrastructure investment especially for domestic institutional investors.

   Developing countries could create blended finance vehicles with the capacity to develop high quality assets for investment.

Photo credit: tamifreed / Adobe Stock

CHAPTER 1 – EXPLAINING BLENDED FINANCE

Key takeaways

- Momentum is building around the $50+ billion blended finance market.
- Using public or philanthropic capital, blended finance can de-risk asset classes like sustainable infrastructure in emerging markets, to make it more investable for the private sector. Blended finance instruments have also been critical to crowd in private capital to health, education, housing, financial inclusion, water, conservation and other key markets with strong social and environmental benefits.
- Effective blended finance instruments address specific private sector risks and include instruments such as guarantees, insurance, FX hedging, subordinate debt or equity, and grants for technical assistance (TA).
- More than 50 blended finance funds and facilities have been launched since 2014, with at least 40% of them in clean energy or energy efficiency. Many blended vehicles cover more than one region, but the majority tend to focus on Africa, followed by Asia and Latin America.
- On a fund or project level, blended finance structures typically mobilise $3 of commercial finance for every $1 of concessional capital (as compared to the aggregate mobilisation by MDBs on an institutional level which is less than 1:1). For blended finance vehicles, mobilisation ratios can even be more than 5:1 in mature sectors like clean energy in middle income countries, and less than 1:1 in early-stage sectors like sustainable land use. But ratios, even within the same sector, often vary widely.

- Expected returns on blended finance vehicles and facilities generally fluctuate between 10-20% for institutional investors (depending on risk allocation).
- The last 5 years has seen the blended finance market double in size, driven largely by clean energy. The market could double again in the next 3-4 years as providers of development capital earmark more money for blended finance and private investors look to take advantage of the risk cushion.
- To make this happen, we need to see a dramatic scale-up in the size of blended finance vehicles, moving from many fragmented $100 million funds, to a growing number of funds with $5+ billion of capital. In parallel, the market will still require innovative, more bespoke funds to ensure small-scale and higher-risk, frontier projects are served.

What is blended finance

"Blended finance" has become something of a buzz word in recent years. It has been referenced in everything from *ImpactAlpha* to the *Economist* as one of the best ways to attract the $6 trillion a year needed to achieve the Sustainable Development Goals (SDGs). Yet in spite of its growing recognition, blended finance is still a term which causes confusion, and which most people struggle to define.

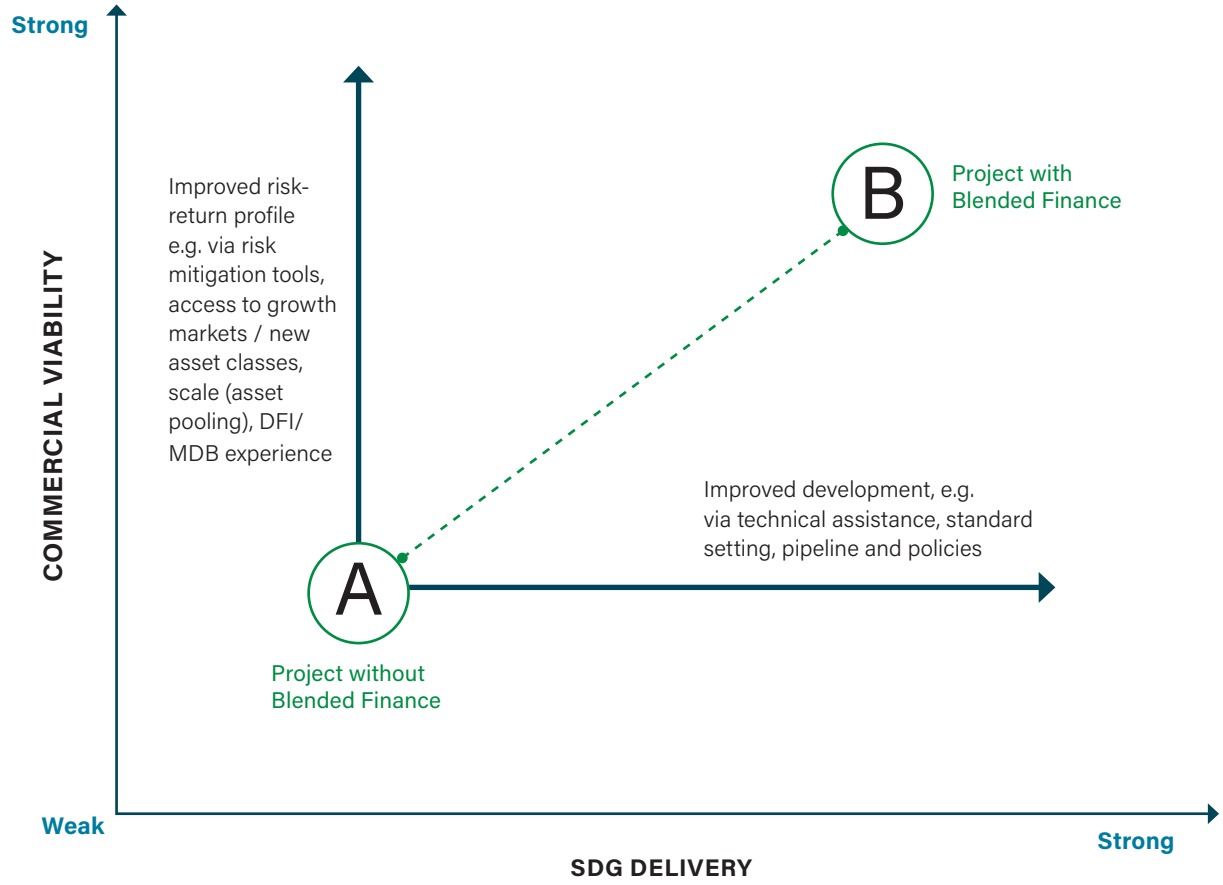
This includes many in the private sector – who are not always aware of the existing blended finance mechanisms which might be available to mitigate particular investment risks. A lack of clarity about blended finance is not that surprising – it must find its place amongst a raft of other relatively recent practices like "climate finance", "impact investing", "ESG screening" and even "green bonds". There is also limited historical reporting on blended finance activities and a lack of standardisation amongst blending instruments, which can add to the confusion. This chapter seeks to explain what blended finance means, to categorise some of the main types of blending, to lay out what the blended finance market currently looks like, and to explain the business case for significantly scaling up the blended finance market.

a) Definition and rationale

Even in industries like clean energy – which has seen costs come down significantly in recent years – risks and barriers, both real and perceived, remain that prevent investment by the private sector, especially in emerging markets. Hence the need to de-risk these investments using "blended finance". Drawing heavily from the OECD's definition, the Taskforce uses "blended finance" as the strategic use of public or philanthropic development capital[19] for the mobilisation of additional private commercial finance[20] for SDG-related investments."

In other words, blended finance uses public or philanthropic money to improve the risk-return profile or commercial viability for a private investor (see **Exhibit 9**), allowing it to invest in places and projects where it wouldn't otherwise go, by mitigating a raft of real or perceived barriers, including political risk, currency volatility, lack of liquidity, weak local financial markets, knowledge gaps about investment opportunities, and challenging investment climates, including poor regulatory and legal frameworks.[21] Blended finance is designed to make development capital much more catalytic, with the aim that one public or philanthropic dollar mobilises multiples more from the private sector.

EXHIBIT 9 | Blended finance improves the commercial viability of SDG-related investments



b) Providers of development capital

Development capital may or may not be concessional. Concessional capital will be provided by the aid agencies of donor countries like Sweden's SIDA or the UK's DFID or private philanthropic foundations like Rockefeller or MacArthur. Aid agencies can put their funds directly into blended finance vehicles or deploy them through intermediaries, including publicly owned multilateral development banks (MDBs) like the EBRD or the IADB, and bilateral development finance institutions (DFIs) like the USA's OPIC or the UK's CDC. On the other hand, the MDBs (which have both public and private sector operations and often have entirely separate private sector arms like the World Bank's IFC) and the bilateral DFIs (which only work with the private sector), often invest on market or near-market terms but with a development mandate. In addition, they play an important intermediary role by deploying concessional funding on behalf of aid agencies (i.e. they manage donor trust funds), by providing credit enhancement instruments such as guarantees or political risk insurance, by generating project pipeline on ground and critically, by working with national governments to improve the enabling environment (policies, regulations, rule of law etc.)

EXHIBIT 10 | Various channels of international development capital[22]

CONCESSIONAL PROVIDERS		COMMERCIAL PROVIDERS	
Foundations (Private)	**Development Agencies (Public)**	**MDBs**	**Bilateral DFIs**
Foundations: Gates Foundation, Rockefeller Foundation, MacArthur etc.	**Bilateral:** DFID (UK), GIZ (Germany), SIDA (Sweden) etc. **Multilateral:** UN, EC etc.	**MDBs:** EIB, EBRD, AfDB, AIIB, ADB etc. **Private Arms (DFIs):** IFC (WB), IDB Invest (IADB) etc.	**DFIs:** CDC, FMO, OPIC, JBIC, Norfund, etc.
Annual Flow: Nearly $70bn (grants)	**Annual Flow:** Above $140bn	**Annual Flow:** Above $200bn (private $40bn)	**Annual Flow:** Above $20bn

As the providers and blenders of development capital, these players – particularly the private sector arms of the MDBs and the bilateral DFIs – are critically important to making blended finance work, as they are largely responsible for developing the blended finance toolkit which can be used to de-risk infrastructure and other SDG-related investments. See **Chapter 3** for a more detailed discussion about the MDBs and DFIs, including the current mobilisation ratios (i.e. how much external private capital is mobilised relative to capital provided by the development bank).

Note that we have chosen not to focus on structures which blend concessionary capital with commercial funds from the MDBs and DFIs (i.e. we are not focusing on examples where Swedish aid agency SIDA provides concessionary capital which then crowds in the Dutch DFI, FMO on commercial terms). Rather, we focus on blended finance structures which seek to mobilise "real" private sector investors. Many existing blended finance structures can end up crowding in commercial capital from the MDBs and DFIs – whilst this is an important part of development finance, the Taskforce takes the position that the blended structures required today need to be far more ambitious to achieve the scale of investment needed. They therefore need to go well beyond those that merely de-risk the development banks.

c) Blended finance and infrastructure

Blended finance has very important applications globally and across a range of SDG-related sectors, including health-care, financial inclusion, education and other types of social infrastructure. However, the Taskforce has chosen to focus primarily on the use of blended finance in **developing countries** to finance **sustainable infrastructure**. This choice is deliberate: sustainable infrastructure incorporates the assets required to build cleaner, more resilient energy, transport, urban and land-use systems. It goes to the heart of all the SDGs, and is responsible for the lion's share of the estimated $6 trillion of investment needed every year to achieve them. It affects billions

of people and presents a golden opportunity to increase the global economy's rate of growth as well as improve returns for investors. At least an additional $1 trillion a year of private sector investment in sustainable infrastructure in emerging markets will be essential.

But at the moment, this private investment is not flowing. Regardless of strong returns on equity and low default rates on debt in emerging markets relative to other asset classes, investors still see emerging markets infrastructure as subject to a raft of hard-to-mitigate downside risks (for more comprehensive discussion on the performance of infrastructure see **Chapter 2** and **Annex 4**). There is excessive political and policy risk, especially once the capital is in the ground. There appears to be a systematic risk that governments retroactively change tariffs (e.g. in the clean power sector) on the basis of pressure to keep energy costs low. In addition, the upfront construction phase can be prone to corrupt practices. The long-term off-take or revenue models are unstable, especially for international investors, who also have significant FX risk. And local and international regulations can also act as a barrier to investing in infrastructure. Most fundamentally, there is a shortage of good projects in which to invest. Even if the aggregate performance related to infrastructure investing is reasonable, the devil is in the detail and investors, without deep experience in the asset class, are understandably cautious.

In sum, whether accurate or not, private investors perceive infrastructure investments as unlikely to deliver great returns and subject to a whole range of hard-to-mitigate downside risks. Investors also have long memories, continuing to cite their favourite example of direct infrastructure investments that turned sour. As a result, mainstream capital sits largely on the sidelines. Most investors have not put pressure on their asset managers to come up with strategies / products that could make relatively illiquid infrastructure assets attractive. And of the top 100 private institutional investors, including SWFs, there are only a few that have more than 1% of their assets directly invested in infrastructure (and even fewer with any significant exposure to cross-border plays).

This is a hard nut to crack. Clearly, one key part of the solution lies in better regulatory and legal regimes which create greater confidence around infrastructure plays. However, this is never likely to be fully convincing (especially since current governments find it hard to bind their successors and infrastructure assets are long-lived). What is needed, in addition, is to reduce the risks that the private sector faces and which they cannot hedge or diversify away through the market. Hence the opportunity for "blended finance" to play a role and reduce the exposure of private investors to various policy, regulatory and country risks.

d) Blended finance at work

The examples in **Exhibit 11** show that the blended finance toolkit includes a range of different instruments like guarantees, insurance, grants (especially for technical assistance) and first loss capital (discussed further in **Exhibit 13**). These instruments respond to different investor risks. With such a range of tools, blending offers the private sector an unprecedented opportunity to participate in new markets and asset classes with a risk cushion to suit the investor. For example, with insurance for political risk, a guarantee for construction risk, or currency hedging for FX risk, an emerging markets infrastructure loan could rapidly start to look more attractive for a private investor.

EXHIBIT 11 | Examples of blending

Solar Power Company Group

The power of blended finance is evident from the story of Wandee Khunchornyakong, a Thai entrepreneur who wanted to build solar farms in Thailand's sunny north-east. The project was a first for the country, so commercial lenders were reluctant to leap into the untested market. However, in 2011, the IFC provided an $8 million commercial loan blended with a $4 million low-interest loan from the Clean Technology Fund (CTF), a $5.8 billion climate investment fund[23] backed by several governments. This gave three local Thai banks the confidence to lend a further $14 million to Wandee's Solar Power Company Group (SPCG). By 2015, SPCG had attracted $800 million worth of investment, with all but the initial loan coming from the private sector. SPCG is now one of Thailand's largest solar firms, reducing CO_2 emissions by almost 200,000 tonnes per year – equivalent to taking more than 40,000 cars off the road. Between 2013 and 2016, SCPG's revenues more than doubled and its profits more than quadrupled.[24]

Africa Agriculture and Trade Investment Fund

The Africa Agriculture and Trade Investment Fund (AATIF), a $146 million fund[25] which invests in sustainable African agriculture, is another example of blending which goes even further to protect private investors – agriculture in Africa is likely to be viewed as more risky than a solar project in Thailand, hence the need for more supportive blended finance mechanisms. The AATIF has three categories of shareholders. The first two, comprising the German Ministry of Development, KfW, a development bank owned by the German government, and Deutsche Bank, which also manages the fund, agree to absorb losses before the third tier—consisting only of private investors—gets hit. That means losses have to exceed 50% of the AATIF's net asset value before investors in the third tranche suffer any harm.

GuarantCo[26]

In a similar vein, GuarantCo, which is backed by government aid including from the UK, Australia, Switzerland, Sweden and the Netherlands, helps make investments in infrastructure in developing countries bankable by taking on the most challenging risks, providing credit guarantees in local currency that enable projects to raise debt finance. For every dollar it invests it estimates that it has attracted $13.50 in private capital.[27] For example, in 2014 it helped Mobilink, a telecoms firm, expand into remote parts of Pakistan by guaranteeing part of an Islamic bond denominated in Pakistani rupees.

Gates Foundation[28]

The Gates Foundation has also carved out $1.5 billion in programme related investments (PRIs) for below-market loans, equity investments, guarantees and other de-risking tools for private investors in program-related investments. These investments finance solutions to challenges in global health, financial services for the poor, and education. Through its PRIs, the foundation has helped "crowd in" large private investors into blended finance vehicles like the African Agriculture Capital Fund and the $108 million Global Health Investment Fund (GHIF) which has a first-loss guarantee provided by the Gates Foundation and Swedish aid agency SIDA.[29] The GHIF made its tenth investment in early 2018, leading a $10 million financing for Vienna-based Themis Bioscience for the mosquito-borne chikungunya virus.[30]

Types of blended finance

a) Blended finance instruments to address investor risks

There are a number of tools available to the blended finance practitioner which can solve for different investor risks (set out in **Exhibit 12**).

EXHIBIT 12 | Major risks faced by investors

The main blended finance instruments available to address these risks (which are, of course, highly context dependent and must be evaluated at the country level) are set out in **Exhibit 13a**. They include the use of guarantees, insurance, currency hedging, grants (particularly for technical assistance) and subordinate / first loss debt and equity. Each blended finance instrument tends to mobilise a different amount of private capital relative to the public or philanthropic funds used to provide the instrument – making some instruments more catalytic (i.e. with a higher mobilisation ratio) than others.

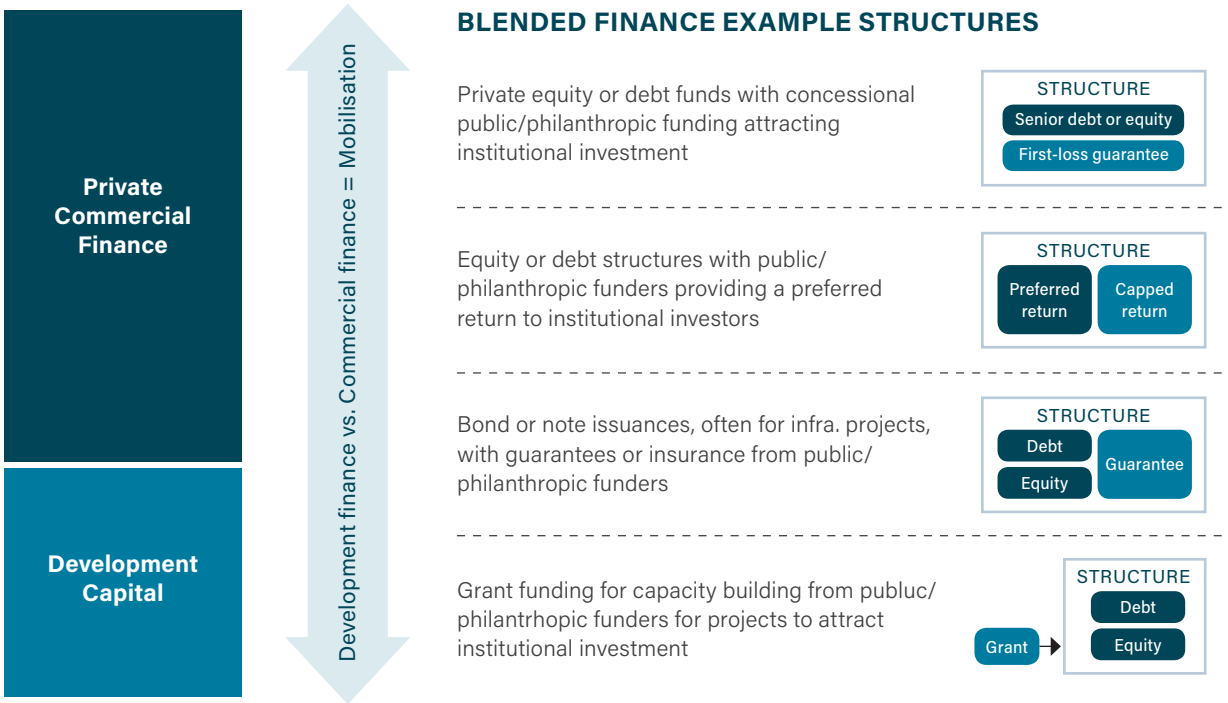
EXHIBIT 13A | Blended finance instrument table

INSTRUMENT	DESCRIPTION	RISKS / BARRIERS MITIGATED	EXAMPLE PROVIDER[31]
1. Guarantee	Provides protection to one party if the other party fails to perform. Guarantees are provided by a third party who "steps into the shoes" of the defaulting party so that the innocent party does not suffer loss. Guarantees are a form of credit enhancement, strengthening the creditworthiness of the investment because of the promise from the guarantor to complete performance in the event of default. As such, guarantees are one of the most catalytic forms of blending. There are many types of guarantees including first loss, partial risk or credit guarantees and trade finance guarantees.	Access to capital; credit / counterparty risk; off-take risk; construction / completion / technical risk; demand risk	GuarantCo Guarantees For Development; USAID FROM THE AMERICAN PEOPLE
2. Insurance	Insurance provides protection by promising to compensate for a specified loss or damage in return for payment of a specified premium. There are many types of insurance; one of the most common is political risk insurance to protect against adverse government actions or war, civil strife, and terrorism. Insurance provides a more stable environment for investments into developing countries. Along with guarantees, they are one of the most catalytic forms of blending.	Political risk; construction risk; operation and output risks; upstream resource-related risks; access to capital	OPIC; MIGA
3. Hedging	Hedging reduces the risk of adverse current price movements in an asset and its associated earning stream. Currency hedging reduces or eliminates exposure to the movement of foreign currencies – addressing one of the key risks for investing in emerging markets.	Currency / Commodity risk	TCX the currency exchange fund
4. Junior / subordinated capital	Subordinated (debt) or junior (equity) protects senior investors by taking first losses on the value of the security i.e. if something goes wrong, the most junior / subordinated tranche will be paid out last. First-loss capital takes a position that will suffer the first economic loss if the assets below it lose value or are foreclosed on (this can also be provided through a grant or guarantee).	Multiple risks including off-take, construction, and reputational risks; access to capital	FMO Entrepreneurial Development Bank; KFW DEG
5. Securitisation	Securitisation refers to the process of transforming a pool of illiquid assets into tradable financial instruments (securities).	Liquidity / time horizon; scale; counterparty / off-take and credit risk	European Investment Bank
6. Results-based incentives (e.g. pay-for-performance schemes)	Instruments that provide incentives and disincentives to achieve desired outcomes or results (tie at least a portion of payments to achievement), including social impact bonds and performance-based contracts. This type of financing is aimed at rewarding innovation and successful implementation of a project with clear climate benefits.	Operation and output risks	IFFIm SUPPORTING GAVI; BILL & MELINDA GATES foundation
7. Contractual mechanisms (e.g. feed-in-tariffs or off-take agreements)	There are various contractual and project finance arrangements to support the development of bankable infrastructure projects including public and private off-taker agreements, subsidies such as feed-in-tariffs, and tax credits. These mechanisms involve an agreement between producers and buyers of a resource to purchase or sell portions of future production. These agreements are to secure financing for a production facility or buy the equipment needed to extract a resource (e.g. power purchase agreements (PPAs) in the energy sector).	Demand risk; financing risk (demonstrate bankable revenue stream)	ofgem; Google
8. Grants (especially for technical assistance)	Capital which is paid in without any expected repayment or compensation over a fixed period of time. It could include money for technical assistance or project preparation to bring a project to bankability. Grants can be critically important for pipeline development, especially in less mature sector and riskier geographies, creating significant (if often hard to measure) crowding in of private capital	Access to capital; high transaction costs; operational risks; lack of bankable pipeline, lack of local intermediaries; lack of capacity	THE ROCKEFELLER FOUNDATION; Sida

Across a sample of more than 30 clean energy blended finance projects, almost half the initiatives made use of direct investment blended finance instruments such as concessional equity (typically to catalyse debt finance), concessional debt (typically subordinated, in order to de-risk senior debt and enhance equity returns), and/or grants (typically for project preparation or capacity building). Despite being some of the most catalytic forms of blending in terms of mobilising private capital, only about 20% used guarantees and insurance mechanisms. These figures are aligned with the Convergence database of nearly 200 blended finance transactions (43% projects involving concessional equity/debt, 49% grant and 8% guarantees).[32]

Although the concept of blended finance might sound foreign to investors, **Exhibit 13b** illustrates how blended finance typically works using some common investment structures. In these structures, institutional investors most commonly invest or participate in equity, loans, or bonds. Transactions which incorporate blended finance into their structures are aligned to many alternative asset classes such as infrastructure, private equity, and illiquid credit (including notes and bonds) that are familiar to institutional investors. In fact, the asset classes relevant to blended finance are estimated to comprise around $6 trillion of alternative investment portfolios globally.[33] To date, most of these investments have been private investments, as opposed to investments in publicly listed equities or bonds.

EXHIBIT 13B | Blended finance structures



b) Blended finance at different levels

Blending can occur at different levels, including directly into a project (e.g. concessionary loans for the SPCG's Thai solar plant), as part of a specific fund (e.g. a first loss tranche within the AATIF for investment in sustainable African agriculture), or as part of a facility (e.g. infrastructure guarantees provided by the GuarantCo facility). Blending can also occur at the market level. For example, traditional public private partnerships (PPPs) could be seen as a type of blending, showing that the concept of blending has been around for a lot longer than the term itself. However, the typical PPP model involves some sort of long-run contractual relationship for services outsourced by the government to the private sector, so not all blending necessarily constitutes a PPP.

The clean energy finance space also has good examples, with carbon credits, feed-in-tariffs and other renewable energy subsidies providing a decade of learning in programmatic blending at the market level. Similarly, despite their unintended contribution to excess (and uninformed) risk-taking in the US mortgage market, Fannie Mae and Freddie Mac are prime demonstration of blending in the US housing market.

EXHIBIT 14 | Blending can occur at different levels

Project level	Public and private capital is blended within a single project or company's financial structure.	**Example:** Elazig Turkey, Lake Turkana Wind Project, &Green, SPCG
Fund level	Public and private investors pool resources to be invested in multiple projects or companies.	**Example:** Climate Investor One (CIO), Danish Climate Investment Fund (KIF), &Green
Fund-of-funds	Funds that in turn invest in other funds.	**Example:** GEEREF I & II. Sarona.
Facility (institutional level)	A long term or permanent institution is set up, or modified, to blend finance, thereby mainstreaming the use of blended finance.	**Example:** IFC Managed Co-Lending Portfolio Program (MCPP), GuarantCo
Market level	Market mechanisms which blend public subsidies to encourage private investment.	**Example:** UK and German FiT schemes, Fannie Mae/Freddie Mac
Project preparation support / intermediaries	Public support for project preparation and intermediaries has also been used as a way to mobilise private investment by addressing specific barriers, especially information gaps.	**Example:** ACEF, Aligned Intermediary, CPI's the Lab

c) Combining blended finance instruments to address multiple risks

Deploying development capital using blended finance – either directly, or via an MDB or DFI, into a blended finance project, fund or facility – has already seen billions of dollars of private capital mobilised in recent years. It is often most catalytic when instruments are combined to address multiple risks at once.

For example, the Kenyan "pay-as-you-go" solar company M-Kopa benefits from currency hedging from TCX, with loans from development finance institutions like CDC, FMO and Norfund to reduce the FX risks of foreign investors and reduce the cost of capital. The $100 million Terra Bella Colombia Fund for sustainable land use combines anchor investments from USAID with a technical assistance facility to bring projects to bankability for investment by the Fund – giving confidence to institutional investors and addressing the need for pipeline. And the combination of $91 million in political risk insurance from MIGA as well as a $50 million partial risk guarantee from the World Bank and a $20 million grant from the International Development Association addressed concerns about political stability and completion risk faced by institutional investors including BNP Paribas, Societé Generale, Standard Chartered, ANZ and Fortis Bank in the $1.2 billion Nam Theun 2 hydro project in Laos.

The Renewable Energy Scale Up Facility (RESF) is another good example, targeting developing countries that have strong investment environments and significant renewable energy potential in Latin America and the Caribbean, Middle East North Africa, and Southeast Asia. RESF is targeting returns of 12-13% for commercial investors. The fund uses concessional equity to offset construction risk through a preferred repayment and return waterfall structure. Commercial equity investors will receive principal repayment first, followed by concessional equity investors. Then commercial investors will receive returns up to a preferred return threshold of 8%, followed by concessional equity investor returns up to this same threshold. Beyond this threshold all Limited Partners – both commercial and concessional equity investors – will receive 80% of additional returns simultaneously, with the remaining returns going to the fund manager.

There are a range of other ways in which development finance can be used to crowd private capital into SDG-related investments. For example, development agencies have creatively used contractual mechanisms, guaranteeing long-term off-take agreements, to bring down the cost of capital. This approach was most famously used by GAVI (formerly the Global Alliance for Vaccines and Immunisation), which was able to issue bonds in the international capital markets to finance private investment in vaccine facilities, enabling a step-change in child vaccination rates in developing countries. GAVI also uses advance market commitments to subsidise the future purchase of vaccines and, more recently, contraceptive implants. It does so by agreeing to buy a specific (and large) quantity of the product from a pharmaceutical company, in return for a commitment from them to increase production and lower prices. With a long-term fixed-price contract, the consortium of funders pledge to make up any shortfall in demand from buyers. Even with lower prices, higher volumes can drive bigger profits—a classic win-win for both consumers and producers.

Ambitious governments like Norway have also put in place "payment by results" funding mechanisms alongside technical assistance facilities to incentivise project development for REDD+ projects (which aim to reduce emissions from deforestation and forest degradation), where the results are measured in terms of reduced CO_2 emissions. Another example of this type of "pay-for-performance" revenue model is the Livelihoods Fund for Family Farming (L3F), which targets returns of 10-15% and focuses on Africa, Asia and Latin America. L3F presents a sophisticated results-based financial structure for commodity production, where private and public off-takers make payments to the fund only when specific volume-, quality- or impact-related KPIs are met. The L3F was launched by Danone and Mars in 2015, and was joined later by Veolia and Firmenich. The fund enables large corporates to invest directly along their supply chains by providing smallholder

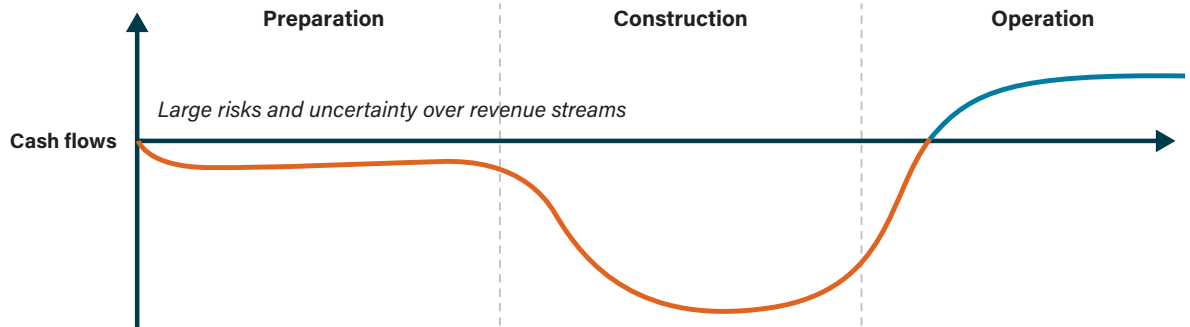
farmers training and equipment to improve their crop productivity while restoring ecosystems because governments and institutions commit to pay for the public good generated by the projects by monetising carbon credits or watershed services. The direct impact of the projects on business operations makes companies more flexible on liquidity requirements and therefore more patient on return. Based on the volume or the quality of production, companies commit to purchase commodities from the trained farmers for 10 years and make payments to the fund for the access the sustainably-sourced materials.

The role of corporates is growing in this space with major tech companies like Google at the forefront of a new off-take market for renewable energy projects. Google has signed more than 20 agreements totalling 2.6 GW of renewable energy – including an 80 MW project in Chile and a solar project in South Africa expected to power roughly 80,000 homes. It has also signed a share purchase agreement to acquire a 12.5% stake in the Kenyan Lake Turkana wind farm which benefits from a blended finance structure.

d) Blended finance to address lifecycle risk

The risk profile of an infrastructure asset changes over its life and blended finance instruments can be combined at specific stages in a project's lifecycle to address those changing risks.

EXHIBIT 15 | Risks and financing considerations across illustrative project lifecycle[34]



	Preparation	Construction	Operation
Description	Developer/government organizes feasibillity studies; models cash flows, finances; organizes contracts with partners	Construction firms build the project to specifications	Separate operating company takes over
Financing milestones	During project preparation and feasibility, the developer seeks capital or public funds	Once project is bankable, the developer will seek equity investors and debt providers	Once construction is complete and in operation, the project can be refinanced to reflect a changed risk profile
Financial instruments	Domestic public funding; Grants: ODA & debt swaps; Philanthropic grants	Private debt instruments (e.g. syndicated bank loans, green bonds); Risk mitigation instruments (e.g. guarantees, insurance, export credits); Government equity and debt, including ODA); Private equity	Debt instruments (e.g. green bonds, corporate bonds, foreign investors in form of securitised instruments); Equity investments, particularly private equity
Main risks	Macroeconomic & political risks; technical risks to project viability; environmental and planning risks	Macroeconomic & political risks; construction risks	Macroeconomic & political risks; demand traffic risks; operating risks; policy risks

A good example of blending to address lifecycle risk is the Climate Investor One (CIO) fund (see **Exhibit 16**) which combines three separate facilities to spread the risk between the development stage, the construction stage, and the operations stage of a project. CIO uses different types of blending within and between each facility to provide an investment exposure which suits the appetite of different commercial investors. For example, the CIO-Development Fund makes use of donor funding for technical assistance and development loans in order to finance the early stages of a project, which are far riskier than when it is operational. The CIO-Construction Equity Fund, which finances the construction stage, makes use of donor funds in a first loss position, plus guarantees to reduce pricing. Lastly, the CIO-Refinancing Fund will benefit from a subordinate debt structure.

EXHIBIT 16 | Climate Investor One structure

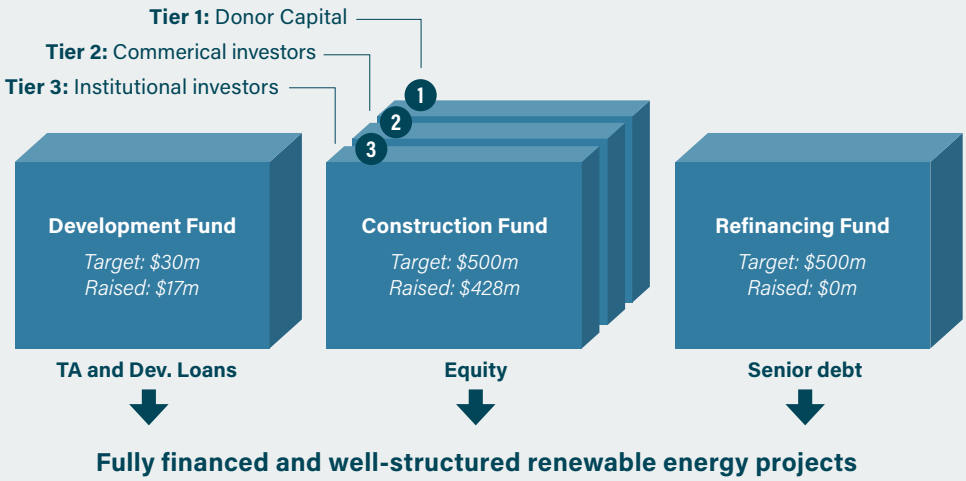
Background: Developed in partnership with Phoenix InfraWorks over the 2015-2017 period, Climate Investor One reached a first close of USD412 million in June 2017 and increased commitment to USD475 million by the end of 2017. Climate Investor One is managed by Climate Fund Managers, a joint venture between FMO and Phoenix InfraWorks and is planned to be the first of a family of blended finance investment vehicles targeting key environmental sectors.

Mandate: CIO focus on renewable energy (solar, wind and run of river hydro) investments in low and middle income countries in Africa, SE Asia and Lain America.

Example projects: CIO Development Fund is currently active in the development of projects in Tanzania, Vietnam, Morocco, Philippines and Nigeria.

Product offering: Climate Investor One comprises three separate facilities (see structure below), acting in series, to provide a whole of life financing solution to projects whilst at the same time creating risk fuses between each project life stage for investors. This means investors who want only brownfield operations risk (and not construction or development risk) would find the CIO Refinancing Fund appealing. Investors seeking the higher return construction stage exposure (but not the riskiest development risk) would find the CIO Construction Equity Fund appealing, and investors seeking maximum impact and most risk would seek the CIO Development Fund exposure.

Capital raising: CIO will continue accepting commitments from investors until June 2019.



Mobilisation of private capital

With so many different instruments and types of blended funds and facilities, it can be difficult to know how much additional private capital is being invested due to the use of public or philanthropic capital. There is a dearth of information about how "catalytic" different blended finance vehicles really are, with estimated mobilisation ratios varying widely. A blended finance vehicle's mobilisation ratio is defined here as:

> *The amount of commercial private financing that has been mobilised by concessionary or development capital through a blended finance structure.*

The Taskforce estimates that if around $100 billion each year (representing roughly a quarter of the current annual ODA, MDB and philanthropic flows) could be deployed through blended vehicles that mobilise $3 of private capital at the fund level for every $1 of development capital, then this could create $400 billion of investible fund capital per year by the early 2020s.[35] With further leveraging at the project level of another $3, this could close the SDG-funding gap. This is all doable in principle and we have seen practical but one-off examples where this is already working. For example, the &Green debt fund – with a targeted size of $400 million and $100 million concessional capital already committed from the Norwegian Government – provides subordinated loans to companies involved in deforestation-free commodity production to compensate for the additional risk perceived in financing sustainable agricultural production. These loans are meant to compensate for the additional risk perceived in financing sustainable agriculture production on tropical forest regions and the fund already has significant commitments from multinational corporates like Unilever. The fund aims for mobilisation ratios of 3:1 at the *fund* level, but is also targeting $1.6 billion of additional private capital at the *project* level to achieve a mobilisation ratio of around 5:1. Similarly, funding through each stage of the project lifecycle offers the opportunity to continuously mobilise capital which can increase the mobilisation ratio. Climate Investor One, for example, is estimated to yield an indirect mobilisation ratio of 9:1 across the three project life stages of development, construction and operations. The real challenge is now to replicate, aggregate, standardise and take these ones-offs cases to scale because, as the following analysis demonstrates, mobilisation ratios often vary widely.

a) Average mobilisation ratios

On a sample of blended finance vehicles, the average mobilisation ratio is around 3:1 (or $1 of concessionary capital crowds in $3 of commercial capital), with often more ambitious targets at the project level averaging around 5:1. On the other hand, vehicles which are targeting the same asset class in low-income countries with less developed regulatory/auction regimes might have mobilisation ratios much closer to 1:1. For new asset classes, where the revenue model is less clear, the mobilisation ratio may be even lower, for example more complex forms of sustainable land use, such as ecosystem restoration concessions, where the revenue streams depend significantly on international carbon markets. In general, blended finance is likely to have a lower mobilisation ratio, crowding in less private capital, the more that it is targeting "high additionality" investments with high social or environmental returns and/or significant unfamiliarity risks (e.g. investing in post-conflict zones).

b) Measuring mobilisation

Measuring mobilisation is also difficult due to differences in methodology and the fact that mobilisation of private capital can occur at the project, fund or facility level. For example, the Africa Clean Energy (ACEF) initiative, a project preparation facility, expects to mobilise 20 times its grant investments, as these small investments fund discrete project development needs that allow the project to reach financial close. However, this mobilisation is indirect and often difficult to attribute to the initiative. A credit line facility such as IFC's China Utility-focused Energy Efficiency Program (CHUEE) may have low *direct* mobilisation, as a borrower may not on-lend additional resources, but may have high *indirect* mobilisation and act as a market catalyst. Attribution in the latter is difficult to establish (IFC measured a 1.9x weighted average direct mobilisation in its portfolio of financial intermediaries lending, while CHUEE cites results of 45-50x indirect mobilisation). Finally, a fund-of-fund such as the EU initiated Global Energy Efficiency and Renewable Energy (GEEREF) which looks to scale up low-risk clean energy infrastructure through equity financing in first-time private equity funds cite only a direct mobilisation of private investment through its preferred return fund structure of 0.5x (e.g., $1 of private investment for every $1 of public investment), but targeted 7x co-investment at the level of its investee funds (both public and private), and finally another targeted 9.5x indirect mobilisation at the project level.[36] While these numbers can provide some indicative understanding of how an initiative mobilises private investment, they are difficult to compare due to differences in methodology.[37]

c) Early-stage market

Nevertheless, the Taskforce believes that there is still significant "inefficiency" in the blended finance market. Our analysis suggests that, even for the more mature assets in better-known countries, the providers of concessional finance target very different mobilisation ratios. Taking simply the blended finance vehicles for clean energy investment in middle-income countries, the mobilisation ratios vary from 2x to 10x. This variation would be even greater if we also were to consider the different degrees of concessionality in the funding arrangements.

All of this shows that, whilst the market for blended is highly active, it is still in its early stages. As it matures, these mobilisation ratios will become more consistent, to ensure that each dollar of concessionary or development capital is working as hard as possible to mobilise private investment into sustainable infrastructure and other SDG-related sectors, ideally seeing ratios increase as the amount of concessionality declines in each vehicle as private investors become familiar with new markets and can better price risk without needing special protection.

An example of an initiative that is seeking to increase its mobilisation of private investment over time is again GEEREF. While its first fund directly mobilised $1 of private investment for every $1 of public investment, its successor, GEEREF Next is targeting a 2:1 public to private ratio on fund-of-funds level.[38]

For a discussion about external private mobilisation ratios of the MDBs and DFIs (at the aggregate institutional level rather than at fund or project level for blended finance structures which directly receive donor funds) please see Chapter 3.

State of the market

The $50+ billion blended finance market, while highly active and gaining momentum, is still "early stage" – though it is "late early stage" with the potential to take-off over the next 3 years. There has been a lot of experimentation in recent years, and blended finance vehicles vary in size, use of de-risking tools and mobilisation ratios. Although some of the MDBs and DFIs are developing platforms which try to standardise the investment process, the broader blending market is characterised by a series of idiosyncratic funds ad facilities that are expensive to set up and bespoke in structure. Estimates suggest that at least 40% of the blended finance vehicles and facilities to date are in the energy and climate space with the remainder spread across different sectors including healthcare, agriculture, financial services, education, housing, gender and others.[39]

a) Highly active, but still small scale

Most of the existing blended finance funds are small – less than $200 million with an average size of $100 million. However, this varies greatly; we see funds from $25 million to those which target $1.5 billion. Blended finance facilities managed by the MDBs and DFIs that pool donor funds for major investment programmes are often significantly larger as well such as the Power Africa programme from USAID or the IFC's $2.5 billion IDA country Private Sector Window (PSW).

Initiatives which are less than $100 million in size are likely to limit investor participation, particularly for institutional investors who need larger ticket sizes. But this must be balanced against the fact that blended finance can play a particularly transformative role in enabling small, distributed projects. The challenges of delivering for small projects is quite different from big ones, and this is an issue which will need to be addressed as the market starts to scale up and we see more of the billion dollar funds.

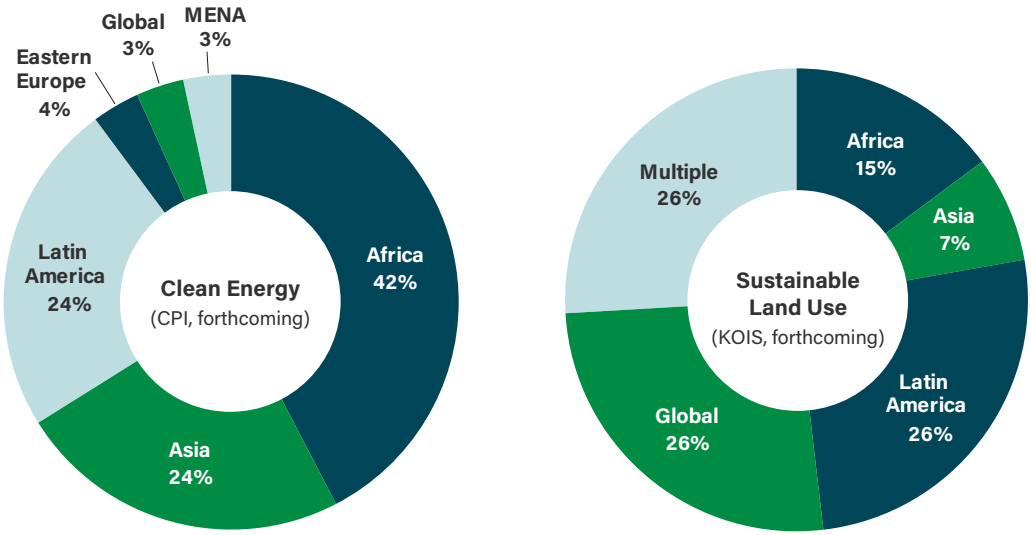
b) Geography influences blending

More than half of blended finance vehicles cover more than one region, but the majority tend to focus on Africa, followed by Asia and Latin America. This is, however, sector specific (see, for example, **Exhibit 17** which shows that blended finance activities for sustainable land use are more focused on Latin America). The types of instruments deployed are also often dependent on the region; for example, far more grants than guarantees were deployed in Sub-Saharan Africa.

c) Make-up of blended finance facilities

A large number of the funds are based on a first loss model in which the provider of concessional capital is willing to take on the first 20-30% of the losses, thereby doing just enough to push up the investment quality of the assets. These funds typically have a ratio of 3:1 in the capital stack, meaning $1 of concessional capital (subordinated donor funds as first loss) crowd in around $3 of commercial capital (not counting for guarantees and, in this case, including DFI financing on commercial terms). However, as discussed earlier, the mobilisation ratios vary greatly across sectors and countries, from as little as 0.2:1 (i.e. 20c of private capital to every dollar of public) through to 20:1 (i.e. $20 of private to every dollar of public).

EXHIBIT 17 | Geographical distribution of blended finance samples for sustainable land use and clean energy in developing countries (excludes US etc.)



These funds will often have a technical assistance "side-car" facility provided up front to support with project pipeline preparation and initial operational costs (0-10% of total financing), and potentially other instruments attached such as loan guarantees or political insurance that can be critical to attract institutional investor participation. Managers of these funds today are often start-ups rather than established financial intermediaries. However, this may start to change as momentum in the market builds. Most are equity plays, but some have debt characteristics or are a combination of the two.

First-loss capital is typically provided by a donor facility managed by an MDB or DFI or directly by government agencies. Or it can come in the form of a guarantee provided by a philanthropic foundation through programme-related investment (PRI) structures like the Global Health Investment Fund with first-loss guarantee provided by the Gates Foundation and Swedish aid agency SIDA.[40] Local currency financing is still limited amongst blended finance funds and facilities.

Based on analysis of the clean energy space, CPI found that risk mitigation instruments such as guarantees and insurance are less frequently offered than direct investment and that there are major gaps in local currency financing, early stage risk financing, and vehicles that aggregate projects, especially small ones.

d) Performance of blended finance

Blended finance offers an unprecedented opportunity for the private sector to earn attractive risk-adjusted returns in a generally low-interest rate environment (see also **Exhibit 19** for the "business case" for using blended finance to invest in the SDGs, with more information on infrastructure

performance in **Chapter 2**). Across one sample of 20 funds, expected returns fluctuated between 10-20% (on average 13%, but this will differ within a vehicle depending on the risk-tranche or seniority of an investor). With the limited data available, it is difficult to lay out the comprehensive return and performance analysis of blended finance – not least because many prime example funds were only established recently so don't yet have a record of performance. The clean energy space is the best place to start – see **Exhibit 18** which looks at a number of layered alternative investment funds like Climate Investor One and the Danish Climate Investment Fund (KIF).

EXHIBIT 18 | Clean energy blended finance examples[41]

INITIATIVE	FOCUS	BLENDED FINANCE STRUCTURE	DIRECT CATALYTIC INVESTMENT (concessional + public)	DIRECT PRIVATE INVESTMENT	EXPECTED RETURNS
Climate Investor One (Construction fund)	All-equity financing of renewable energy project construction in sub-investment grade markets	Three tiers: Tier 1 (20%): first loss Tier 2 (40%): subordinated equity Tier 3 (40%): senior fixed income with credit guarantee	$175m	$300m (with 225 guaranteed)	Tier 1: 2% (inflation) Tier 2: 20% Tier 3: 8%
Catalyst Fund	Fund of funds focusing on strenghtening financial infrastructure for low carbon investment	Public capital invested on a pari passu basis – e.g., as anchor capital seeking demonstration effect	$297m	$120m	20%
Danish Climate Investment Fund (KIF)	Risk capital for climate investments in developing economies; a PPP between Danish government and institutional investors	Equity fund with all losses shared equally; preferred returns for private investors of 6%, catch up to 12%; returns distributed pro-rate above + carried interest to manager	$82.5m	$137.5m	12%
Global Energy Efficiency And Renewable Energy Fund (GEF)	Scale up low-risk clean energy infrastructure through equity financing in first-time private equity funds	Fund of funds with preferred return structure; Returns paid in following sequence: – Principal + 4% paid to B class - Principal paid to A class – Next 6% paid to B class – Remaining distributions paid to A/B pari passu + carried interest to manager	€122m	€100m	20% target for investee funds*

*One LP investor in B shares reports 8% returns over 3 years since inception.
http:www.portlandic.com/pdfs/ENG/PIC2326%20GEEREF%20Fund%20Brief.pdf

We find that blended finance structures to date have provided strong relative value to institutional investors by addressing real and perceived risks in infrastructure projects. These structures include guarantees, subordinated capital, or both to the institutional investor. They typically invest in projects at construction and operational phases of the project lifecycle. Climate Investor One has mobilised private capital at fund level by offering a range of investment options across the project cycle, with several blended finance instruments (including project preparation concessional loans, a guarantee from the Dutch Export Credit Agency covering currency and construction risks, and first-loss equity) supporting the investment options. The Danish Climate Investment Fund (KIF) mobilised 1.7x private capital at the fund level, driven partly by an innovative returns structure offering upside to private investors first through a preferred returns mechanism, and partly by effective coordination and communication between public and private Danish actors helping to bring in large-ticket institutional investors. The expected returns for institutional investors on their risk tranche in these funds is also strong, up to 20% for certain tranches.

However, the data available around performance of blended finance vehicles across the board is limited. More information sharing is needed among providers of concessional finance to get a clearer picture. The MDBs and DFIs should be urged to share information about the returns, losses and default rates on their own portfolios with the public. More information is also needed to limit the risk that the flood of concessional finance being injected into blended finance vehicles does not unintentionally start to crowd out real commercial capital, by artificially driving down financial costs and weakening the need for private investors to do their due diligence and price risk appropriately.

Business case for blended finance

It is not difficult to make the business case for blended finance. There is an estimated multi-trillion dollar annual investment potential for the private sector in sustainable infrastructure globally, and there is strong interest among investors to explore emerging markets which can offer attractive fundamentals for growth[42] and higher yields in today's current low interest rate environment. There are also particular sectors we have looked at (see **Exhibit 19**) which indicate that blended finance has been, and will continue to be, especially catalytic in attracting private investment. This includes clean energy – a sector which has arguably benefitted from "blending" for many years now but where there is still a huge opportunity for blending to tip the scale for almost-viable investments. We have also looked at the sustainable land use sector, which offers one of the most powerful ways to address the SDGs but has so far seen very little in the way of private investment due to inherent challenges, particularly around scale, project bankability, revenue models where the cashflow is delayed and a lack of market mechanisms to monetise returns (e.g. a carbon price for avoided greenhouse gas emissions from preventing deforestation). In this way, blended finance can expand the investable universe for investors.

EXHIBIT 19 | Business case for blended finance: sector deep dives on clean energy and sustainable land use

The Taskforce has looked deeper into two sectors with significant potential for blended finance; (a) clean energy and (b) sustainable land use (see separate deep-dive reports by Climate Policy Initiative and KOIS Invest respectively).

The reports analyse risk and return features of a large number of blended structures in each of these sectors to identify opportunities for various investor groups, focusing mainly on vehicles in developing countries. A short summary of the analyses, which find particularly favourable countries and revenue models within each sector, can be found below.

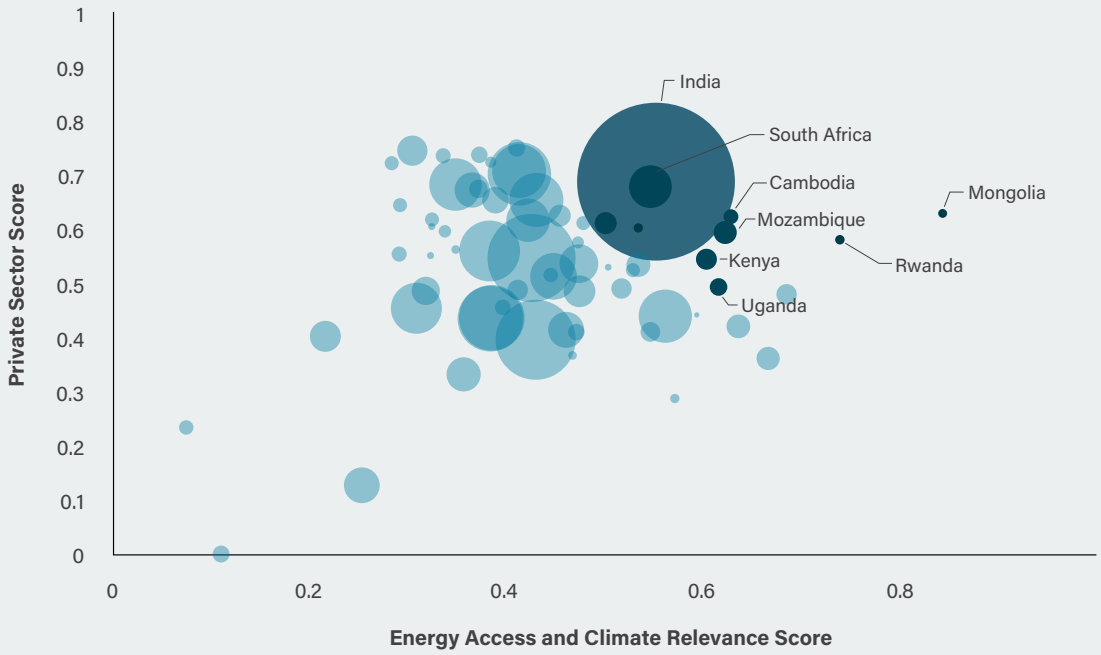
Clean Energy

- BSDC estimates a $1.2 trillion market opportunity by 2030 in the clean energy sector, which it defines as primarily renewable energy. It is a relatively mature market for blending – with many successful initiatives performing well, with some successes replicated and scaled in multiple geographies.
- Many (high) middle-income countries such as Mexico, Malaysia and China – with sovereign investment grade ratings – offer a conducive enabling environment for clean energy investments today, typically without the need for concessional finance. Innovative blended finance instruments, structures, and pooled funds therefore offer a way for investors to participate in clean energy investment opportunities in countries with riskier policy environments, often encapsulated by a lower credit rating, and/or technologies and business models without an established track record. Opportunities for blended finance to achieve impact – defined in terms of climate change and energy access benefits and conduciveness to leverage private investment in clean energy – are highest on a regional basis in South and South-East Asia and Sub-Saharan Africa. Within these regions, CPI's analysis ranked the following eight countries highest in terms of both impact per dollar and potential for private investment: India, South Africa, Mozambique, Cambodia, Mongolia, Kenya, Uganda, and Rwanda.
- Together these eight countries are estimated to offer $369 billion of clean energy investment potential by 2030, with India representing by far the largest market share. They are expected to increase total planned and targeted capacity by 269 GW. The most prominent clean energy sub-sectors for these countries are hydropower, solar, and wind. Clean energy offers a wide variety of investment opportunities, from investments in grid-connected electricity projects and development companies to established and start-up off-grid service providers.
- Within clean energy, blended finance instruments are used to address a variety of risks. Investors today are concerned with (among others) lack of liquidity and scale of many clean energy investments, as well as risks from volatile currencies and off-takers who lack credit-worthiness. Many are also concerned with the uncertainties present in early-stage businesses, such as start-up off-grid companies or grid-connected projects that face policy and permitting uncertainty before they advance to construction. Risk mitigation instruments such as guarantees, hedging, and insurance are increasingly needed, as are initiatives that absorb early stage risks and those that focus on aggregating and securitising investments.
- Compared to other private investors, large institutional investors such as pension funds and insurance companies are underrepresented in clean energy. Risk profiles of blended finance instruments have traditionally been best matched with venture capital and private equity, however innovative blending structures (such as aggregating investments into a layered fund or other tradeable securities, or hedging local currency risk) are increasingly attracting long-term capital by more conservative investor categories too.

- For example, using blended finance vehicles like the Currency Exchange Fund (which allows foreign lenders to provide local currency loans in emerging markets by pooling FX risks in a globally diversified fund, with a cushion of first loss capital) could have an outsized effect.
- Simply put, mitigating key barriers using blended finance in these countries could allow private players to realise the huge investment potential for clean energy.

EXHIBIT 20 | CPI's Clean Energy "High Impact Opportunities"[44]

(energy access and climate relevance by private sector score, size represents extent of additional planned and targeted capacity)



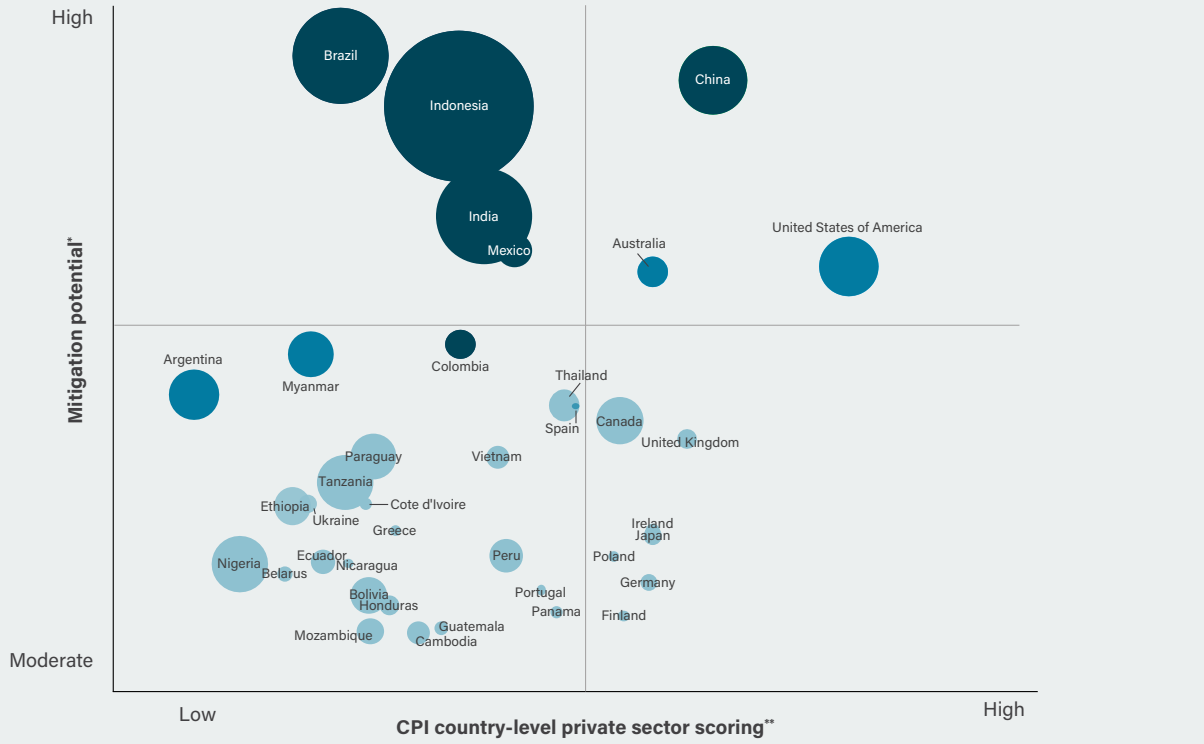
Sustainable land use

- Sustainable land use activities seek to protect the climate by avoiding or mitigating deforestation, the degradation of land and carbon-intensive agriculture, while providing safeguards to meet the growing needs for food production and protecting habitat for biodiversity. It offers one of the most powerful ways to address the SDGs. Globally, new food and agriculture systems are estimated by the BSDC to provide a market opportunity of US$2.3 trillion by 2030, of which forest and ecosystem services are estimated at US$365 billion a year.[45] Yet it has so far seen relatively little in the way of private investment.
- In comparison with clean energy, using blended finance instruments and structures in the sustainable land use sector is relatively new. Estimates vary widely, but even at the top end, annual global capital flows into to sustainable land use only reach around $52 billion (compared to clean energy at $285 billion in 2016 or compared to total financial flows to agriculture and forestry activities in developing countries – often which do not have a sustainability focus – which reaches hundreds of billions). Investment could be much higher with the use of blended finance to tip the scales and make major sustainable land use opportunities more investable for the private sector.

- With the spectrum of investments with attractive risk-adjusted returns across different time horizons – from quick wins in the agriculture space (<5years, target IRR 6-12%) to long-term opportunities in relation to avoided deforestation and restoration of degraded land (e.g. 10-20+ years, IRR 10-20%) – means this can be an attractive space for investors; even more so with some blending support. To date, most of these opportunities are based in the sustainable timber sectors in developed markets, like the New Forests' timber plantations in Australia, New Zealand and the US. However, countries like Brazil, Colombia, Mexico, Indonesia, China and India are beginning to provide attractive impact and return opportunities through their natural climate solution resources along with positive changes in their enabling environments. One such example is the Tropical Landscape Finance Facility for smallholder agriculture in Indonesia.

EXHIBIT 21 | Sustainable Land Use "High Impact Opportunities"[46]

(mitigation potential by private sector score, size represents total emissions)



* Logarithmic distribution of the total potential of 8 natural climate solution pathways (which account for 58% of the estimated impact of all natural climate solutions – Reforestation, Natural Forest Management, Grazing - Optimal Intensity, Grazing – Legumes, Improved Rice Cultivation, Avoided Coastal Impacts – Mangroves, Avoided Peatland Impacts, Peatland Restoration), based on data from Griscom, et al (2017)

**ß CPI. 2017. Country-level private sector scoring

Although sustainable land use represents a tremendous opportunity for investment and impact, much of it relies upon developing specific revenue generation models, financial structures and blended finance instruments that can properly capture long-term economic value and catalyse private capital. KOIS Invest identified five separate revenue models which tap into a diverse set of revenue sources, such as commodity production, carbon credits, payment for ecosystem services, ecotourism revenues, and other technology revenues. An integrated landscape approach combining multiple revenue models and financial structures in a certain jurisdiction is becoming increasingly common in the sustainable land use space.

- Successful financing in this sector also relies on a stable pipeline of bankable projects. Blended finance presents an enormous opportunity to drive pipeline development in this nascent sector with numerous donor initiatives focused on this space due to REDD+. This has seen countries like the UK through DFID, Norway through NICFI and the US through USAID provide technical assistance, grants, guarantees and support pay-for-performance schemes for sustainable land use projects, already mobilising billions of dollars in private investment.
- There is a huge opportunity for private investors to improve the risk/return profile in both the clean energy and sustainable land use space by using blended finance tools which address challenges specific to each sector. As momentum builds in this market, we will see blended finance instruments being standardised and leading to the development of high quality pipelines, making the opportunity even more attractive.

Need to scale the market

Despite the inherent opportunities in the blended finance business case, the market needs to rapidly mainstream, providing standardised products, more effective intermediation of capital and developing strong project pipelines in order to attract long-term capital to invest in emerging markets infrastructure. We are already seeing signs of growth in the blended finance market; the last 5 years has seen the blended finance market double in size, driven largely by activity in clean energy. More than 50 blended finance funds and facilities were launched in the same period, and tens of billions of dollars of donor facilities have been committed to blended finance vehicles including the $2.5 billion committed to the IFC's IDA Private Sector Window, which focuses on catalysing private sector investment into fragile and conflict-affected states, the Private Sector Facility of the $10 billion Green Climate (GCF), which finances private sector projects relating to climate change mitigation and adaptation, and the $4 billion in the EU's External Investment Plan / EFSE Fund, which is set to mobilise at least €44 billion of sustainable investment for Africa and the EU Neighbourhood countries by 2020.

With this kind of momentum, it is possible that the market could double again in the next 3-4 years as more development capital is earmarked for blended finance, and as private investors learn more about how they can take advantage of the blended finance risk cushion. But this growth needs to happen more rapidly, and on a larger scale. One way to do this is by replicating and scaling what is happening in more mature sectors and geographies; taking the lessons learned from blending in clean energy in middle income countries, to nascent sectors like sustainable land use – a form of natural infrastructure – in low- and middle-income countries in Asia and Latin America. However, we will not get to $1+ trillion of private capital invested per year through $100-200m complex small funds. Arguably, there has been enough experimentation (although there will always be new opportunities for financial innovation to bring private capital into the delivery of public goods). The challenge is now how to go from a series of relatively high-cost, idiosyncratic funds to a set of scaled, standardised financial instruments. If public financial intermediaries, such as the MDBs, were able to provide some liquidity (even if only partial) around the more mature blended finance instruments, they would become even more investible.

What we need is to move from a world of $100 million bespoke funds to $5-10 billion mainstream blended funds, accounting for at least 80% of the market. By 2020, we need at least 25-30 of these larger scale blended funds to be launched and for the number to keep on scaling from there. There are no shortage of opportunities to create blended fu\nds (global, regional, country-specific) around different classes of sustainable infrastructure: clean energy, public transport, affordable energy-efficient housing, water/waste management, special economic zones for clean industrialisation and plays around land regeneration, forest conservation and ocean/marine restoration. And we will only get to $1 trillion of private capital into sustainable infrastructure per year by the mid-2020s in a world with 100 of these much larger funds, operating with a relatively standardised set of products and performance metrics. On the assumption that between 10-20% of the capital stack is provided as concessional or development capital, that also implies a very large shift in resource allocation by the MDBs, DFIs and ODA providers.

Policy signals

Recent policy signals appear to acknowledge the urgency, and support the scaling, of blended finance. First and foremost, the Addis Ababa Action Agenda[47] which, for the first time, had every country signing on to a statement that recognised the private sector's critical role to play in solving the development challenge. Second, the Paris Agreement, which provides a much more transparent investment demand function for international capital providers, requiring countries to submit their Nationally Determined Contributions to climate change laying out their 15-20 year indicative programme to drive low-carbon growth and investment. This gets updated every 5 years and provides an ongoing mechanism for shaping sustainable investment priorities and improving policy regimes. It has also led to the creation of platforms like "NDC Invest" – a one-stop-shop run by the IADB, which offers a comprehensive package of assistance for both private and public sector projects, including policy development needed for low carbon and resilient investments. Amongst other things, it mobilises funding from internal and external sources to help countries manage risks in the priority investments needed to meet their NDC commitments. Flagship projects including climate finance for the Los Loros Solar PV Project in Chile and the design and implementation of the Colombia Sostenible facility which was established to invest in initiatives that maximise the environmental, economic and social benefits of peace in Colombia.

Third, the Task Force on Climate-related Financial Disclosures (TCFD) – a set of guidelines which calls for organisations to report on the climate-related risks to their operations when filing annual reports and financial statements – is creating stronger expectations around asset allocation for investors, in a way that should strengthen capital provision towards sustainable infrastructure.

Fourth, the MDBs are driving collaborative efforts, together with DFIs, to strengthen their catalytic role "as a system" in crowding in long-term private finance. In addition to their joint climate finance report, the MDBs have, for the first time, published a report on private capital mobilisation. They have announced targets to collectively increase the amount of private financing mobilised by 25-35% over the next three years.[48] They are, in many respects, leading on the blended finance agenda as they work with other stakeholders including their shareholders, the G20, the OECD and the Taskforce, as well as internally and across development banks to optimise the use of blended finance to ensure they continue to crowd-in, not crowd-out, private investment. The MDBs along with the European DFIs

have also revised their "Principles on Blended Concessional Finance", first published in 2013, which govern the way they blend. These principles include promoting commercially sustainable solutions so that the use of scarce public concessional finance is minimised ("cascade approach"); and state the need for high social, environmental, and governance standards. The European DFIs have also been particularly active in looking at how to make blended finance more effective.

Fifth, the DAC is making solid progress on collecting and reporting data around concessional capital flows and private capital mobilisation. It has also published a set of Blended Finance Principles for donors (see **Exhibit 22**), putting the spotlight on blending as a critical way forward to narrow the infrastructure funding gap in developing countries.

EXHIBIT 22 | OECD blended finance principles for donors

OECD
BETTER POLICIES FOR BETTER LIVES

1. Anchor blended finance use to a development rationale
2. Design blended finance to increase the mobilisation of commercial finance
3. Tailor blended finance to local context
4. Focus on effective partnering for blended finance
5. Monitor blended finance for transparency results

Sixth, convening platforms like Convergence are working to connect, educate, and support investors to execute blended finance transactions that increase private sector investment in emerging markets. Convergence offers grant funding for practitioners to design catalytic blended finance vehicles, an online platform where investors connect with blended finance deals, and workshops, knowledge, and data to help investors execute blended finance transactions. The Global Impact Investing Network (GIIN) is another convening body which is focused on blended finance. Finance labs like the Climate Policy Initiative's "Global Innovation Lab for Climate Finance" (which supports the identification and piloting of cutting edge climate finance instruments for climate change mitigation and adaptation in developing countries) and the WWF's "Landscape Finance Lab" (which incubates sustainable landscape solutions in the world's most biodiverse locations) are pioneering ways to drive billions of dollars of private investment towards the SDGs.

The World Economic Forum's "Sustainable Development Investment Partnership" (SDIP) is another platform which has been instrumental in educating the private sector about blended finance, as it facilitates blending projects in emerging and frontier markets – with a particular focus on sustainable infrastructure. SDIP has organised 38 institutions (countries, investors, banks, bilateral donors, MDBs and philanthropies) into an operational coalition to kickstart the blended finance sustainable infrastructure movement by linking country's investment processes and infrastructure pipelines.

Finally, the G20's focus on infrastructure will be closely linked with the scaling of the blended finance market. As the main forum for international economic and financial coordination, the G20 is in a unique position to address global challenges through more effective policy cooperation. As Chair of the

G20 in 2018, Argentina is right to focus its leadership on driving private investment into infrastructure. Tools like the G20's Global Infrastructure Hub should be supported to facilitate this agenda.

All this makes the transition to a low carbon economy and more investment in sustainable infrastructure as a means of driving global growth almost inevitable. This policy synchronicity could see the blended finance market scale rapidly. However, this policy shift is necessary, but not sufficient.

Scale needs leadership across the blended finance ecosystem

If blended finance is really going to scale, then action is needed end-to-end across the whole investment system. Leading stakeholders need to believe that there are major gains to be had by reforming the current model where there is low appetite from investors for emerging markets infrastructure, insufficient incentives to create a catalytic intermediation system which mobilises enough private capital for every public dollar spent, and not enough origination of high-quality assets.

To that end, the Blended Finance Taskforce has developed a simple framework to help organise the priority areas for action.

1. **Investors:** Increase the effective availability of large-scale, long-term capital (demand).
2. **Intermediaries:** Strengthen the "blending" market (through higher mobilisation targets and enhanced instruments and vehicles).
3. **Pipeline:** Create enabling environments which support the development of a pipeline of investible projects (supply).

Change is needed in all three parts of the system to bring the market to scale at the speed required. The rest of the report will lay out how that journey to scale can happen. Typically, reports on blended finance start their narrative with the need to "improve the pipeline of bankable assets in developing countries" and hence, the imperative to get policy and regulatory regimes right. There is of course, much truth to this. However, we have decided to start the story at the other end – with the large institutional capital providers who control around $200 trillion of assets today and will be in the middle of $300-400 trillion of gross savings over the next 10-15 years. This is the money which needs to start flowing, at scale, into sustainable infrastructure to create better growth and higher returns over the coming years. They provide the market test.

It is worth getting this agenda right. There is a huge prize. First, greater investment in the right infrastructure could lead to higher, better quality growth. If it were possible to deploy an extra $1 trillion of private capital per year into sustainable infrastructure assets, it could generate between $40-100 billion of additional capital returns per year; it could drive up global productivity rates and create a much wider lift to the economy (and hence, overall investment returns); and it could create up to an extra 10 million direct jobs per year across developing world. It might even create an extra $10-20 billion of net revenues for the financial services industry, which as other markets get automated and disrupted through fin-tech, may represent a huge purpose-driven opportunity for the next generation of financial professionals.

None of this will happen on automatic pilot. Rather, it will require deliberate conscious acts of leadership. That leadership agenda is what we seek to describe in the rest of the Blended Finance Taskforce report.

CHAPTER 2 – INCREASING THE FLOW OF LONG-TERM CAPITAL

Key takeaways

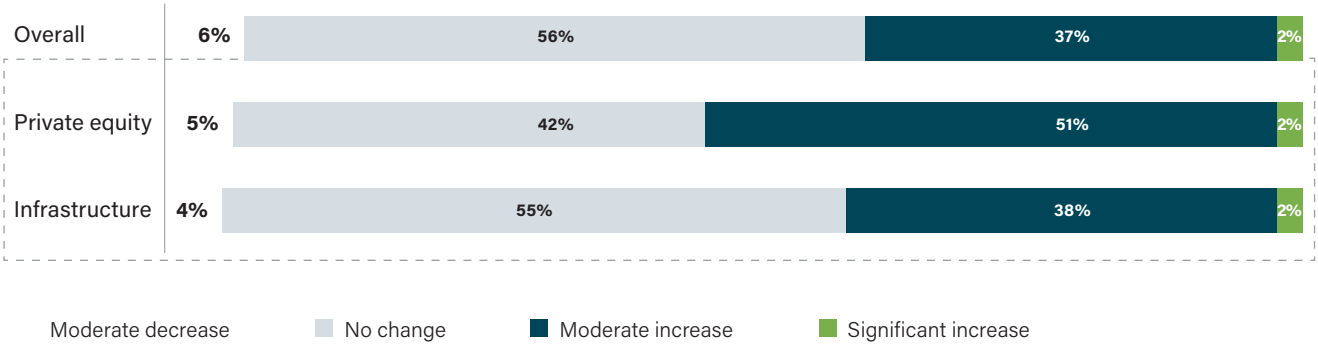
- Investors have a window of opportunity to increase their exposure to sustainable infrastructure in developing countries while benefiting from significant downside protection using blended finance.
- Compared to other asset classes, both infrastructure equity and debt funds have delivered strong long-term returns globally. In general, infrastructure tends to provide portfolio diversification benefits, and historical default rates show lower credit losses than comparable corporate issuers.
- However, in practical terms, many institutional investors still perceive infrastructure as a difficult asset class – especially direct investments in emerging markets. It is seen to be high risk relative to the return, illiquid, and subject to political interference and FX risk.
- Institutional investors could accelerate their own participation in sustainable infrastructure in developing countries by taking advantage of the growing number of blended finance funds and facilities, to increase familiarity with a high degree of downside protection.
- Leading foundations could act as "pioneer species" in the landscape, increasing their endowment allocations faster than the industry average and helping to crowd in other more conservative investors.
- Developed country governments could further grow the supply of concessional capital into blended finance by targeting significantly higher mobilisation ratios for their ODA and applying that same logic as shareholders of the MDBs.

Infrastructure in a low yield environment

Up to 2030, the world economy should generate between $300-400 trillion of gross savings, which needs to deliver real, long-term risk-adjusted returns of at least 3-4% for investors. As low interest rates persist, investors are looking to increase their allocation to alternative asset classes, including infrastructure and emerging markets to meet return requirements. Institutional investors currently sit on almost $10 trillion of negative yielding assets[49] (albeit that only 20-30% of these might be eligible for less liquid, longer-term investments). This should provide further reasons to look for new areas of higher yielding assets, especially when these can be matched against long-term liabilities.

Alternative investments and infrastructure are therefore increasingly being viewed as an important means to generate strong returns and further diversify portfolios, and are on a strong growth trajectory; equity AUM for unlisted infrastructure fund managers recorded a 15% CAGR over the past five years.[50] According to recent surveys, around 40% of institutional investors expecting to increase future allocation to alternative investments moderately or significantly in the next 12 months according to a recent BNY Mellon survey (see **Exhibit 23**).[51] Developing country investment trends are more mixed, but have taken an upturn since 2015 and the outlook remains constructive. Investors point both to: (a) pressure on yields in mature markets driving the hunt for better returns elsewhere; and (b) improvements in growth, lower inflation, and contracting current account deficits in emerging markets – particularly in middle-income countries – as evidence of the resilience of developing countries to global shocks.[52]

EXHIBIT 23 | Investor future allocation to alternatives globally



a) Returns

In principle, the providers of long-term, large-scale capital – including pension funds, insurers, sovereign wealth funds, banks and foundations – have good evidence to justify investing in alternatives and infrastructure. For alternatives, 65% of institutional investors report that investments globally have returned at least 12% on average, including 28% that report performance

of 15% or more. For infrastructure specifically, 70% of respondents report historical performance of between 12% and 17%.[53] Preqin's latest survey of institutional investors stated that the performance of infrastructure had either met or exceeded their expectations in the past 12 months.[54] Over the past decade, listed infrastructure equity benchmarks[55] and unlisted infrastructure equity funds have provided solid returns (see **Exhibits 24** and **25**). With yields of other asset classes at low levels today, stable and relatively high yields from infrastructure can be beneficial to a diversified portfolio.

In today's low-interest rate environment, infrastructure's strong yield potential is a major reason why institutional investors should be turning their attention to this asset class. In developing countries, the evidence is less comprehensive. However, returns appear on average to be 200-600 basis points above those in developed markets, albeit with higher variation in outcomes.

EXHIBIT 24 | Infrastructure returns

GLOBAL - INFRA INDEX (listed equity)	5YRS ANNUALISED RETURN
MSCI Infra Index (partially hedged)	12.5% (2011-2016)
S&P Infra index (hedged)	10.3% (2012-2017)
GLOBAL - INFRA FUNDS (unlisted equity)	**AVERAGE BY VINTAGE**
Preqin Infrastructure Funds (median net IRR)	10% (2004-2014)
Preqin Infrastructure Funds (median net IRR)	14.9% (2000-2005)
EMERGING MARKET - INFRA FUNDS (unlisted equity)	**5YRS CAGR RETURN**
Example - India Infra Fund (average)[56]	17.6% (2011-2016)

EXHIBIT 25 | General return expectations by underlying asset class and region[57]

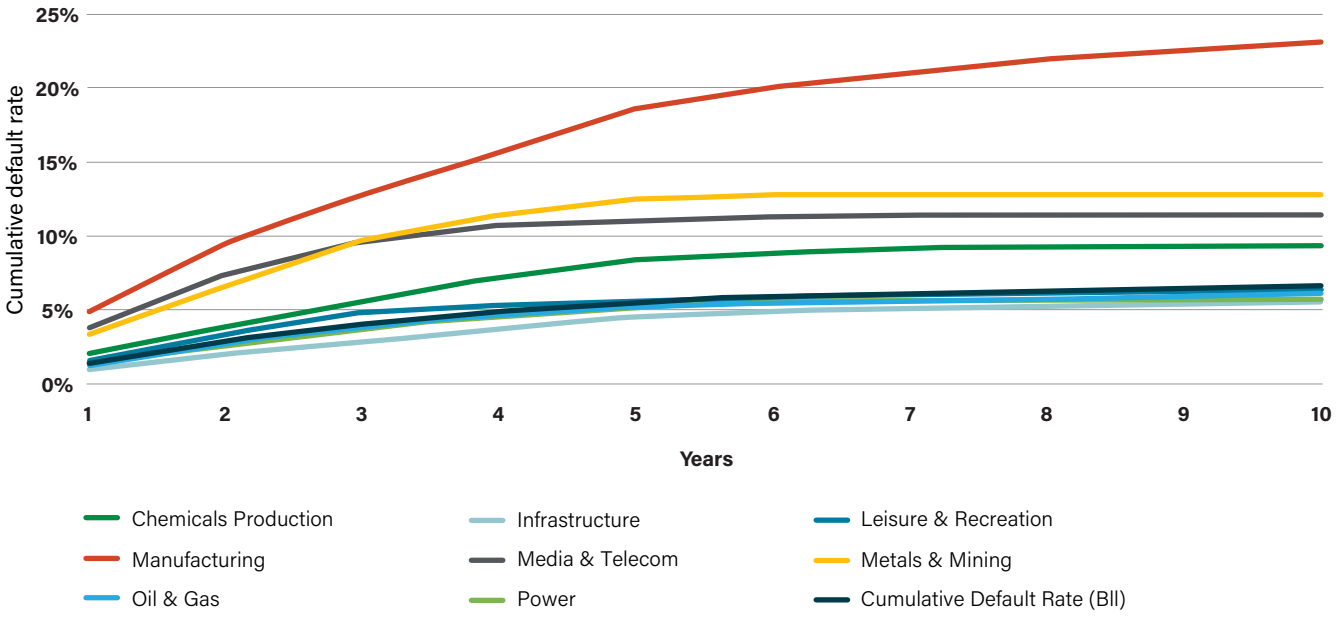
ALTERNATIVE ASSET CLASS – DEVELOPED	RETURN EXPECTATION
Private Equity	12-14%
Infrastructure	10-14%
Illiquid Credit	20-80 basis point premium
ALTERNATIVE ASSET CLASS – DEVELOPING COUNTRIES	**RETURN EXPECTATION**
Private Equity	14-16%+
Infrastructure	14-16%+
Illiquid Credit	50-100 basis point premium

b) Default rates

As well as strong returns, default rates on infrastructure assets in both developed and developing country are low and statistically similar. Moody's historical data (1983-2015) show that rated corporate infrastructure credits (roughly 90% investment grade) in aggregate have incurred lower credit losses than comparable non-financial corporates. And the marginal default rates of unrated project finance transactions also decline significantly as assets mature. By about Year 6, these assets are comparable to Baa rated securities; from Year 10, they are comparable with single A rated securities.[58]

By region, default rates on infrastructure in Africa (which makes up around 4% of infrastructure projects globally) are around 3%. This this is lower than both Western Europe (at around 4%) and the US (at around 7%).[59] By sector, the cumulative default rates for infrastructure are outperforming other sectors (see **Exhibit 26**).

EXHIBIT 26 | Moody's historical average cumulative default rate for project finance by industry[60]



So why don't institutional investors like infrastructure?

Notwithstanding its track-record, most institutional investors (who are typically looking for long-term, liquid, investment-grade assets with large ticket sizes), find infrastructure – especially in developing countries – a difficult asset class. Overall, it accounts for just over 1% of institutional investor assets (a number which needs to increase to about 3-4% by 2030 to meet the sustainable infrastructure requirements of the SDGs). See **Annex 6** for a full analysis of investor segments.[61]

a) Lack of data on emerging markets infra

This is not helped by the lack of performance data specifically in relation to emerging markets. Although large amounts of capital have been raised for unlisted infrastructure funds in recent years, the vast majority of this has been for *developed* countries. This leaves significant data gaps when looking at the historical performance of emerging markets infrastructure and may act as a barrier to investing. According to the latest survey by Preqin, most institutions say they will target *domestic* infrastructure opportunities over the next 12 months. As an example, although CDPQ – the second largest pension fund in Canada – has more than doubled its infrastructure portfolio in the last five years to $15 billion at the end of 2016, it has less than 5% of the infrastructure portfolio in "growth" markets (including a recent investment in solar producer in India). For the five-year period ended 2016, CDPQ's global infrastructure portfolio reports an annualised net return of 10%, and for the year 2016 a return of 11.1%.[62]

More data on historical performance of unlisted direct infrastructure transactions and funds in growth markets (developing countries) should be made available to facilitate greater private sector investment. Emerging market default and recovery rates existing on MDB and DFI platforms, such as the GEM Risk Database,[63] could be shared to help to fill the gaps of the external rating agencies information for markets that lack statistically robust data. Recognising the "infrastructure data need", the G20 and the OECD have established a taskforce to advance the agenda for research on data gaps in long-term investment supporting sustainable investment in infrastructure and developing infrastructure as an asset class.[64]

b) Lack of local institutional investment

Investment by local institutional investors in developing countries is also critical. With at least $5 trillion under management, assets of local institutional investors – particularly in middle-income countries – are growing rapidly.[65] Pension funds in Africa are expected to double in size by 2020 to $620 billion as a result of the continent's growing workforce and expanding economies. But, as with their international peers, this is a conservative sector; estimates suggest that Africa's pension funds may allocate as little as 0.1% of total assets to infrastructure.[66] Of course, domestic pension funds face a number of the same issues when investing in infrastructure in developing countries as foreign investors do, including lack of familiarity with the asset class and concern about policy risk (especially post-investment). But, some of the barriers to entry are lower: local investors have knowledge of local markets and projects so can price country and political risks better; plus they don't face currency risk / FX exposure or overseas investment restrictions.

Failure by domestic investors to allocate enough capital to sustainable infrastructure assets in their own country therefore sends a strong signal to international investors – that even the locals think that the returns are not high enough to justify the risks. As a result, finding ways to crowd in domestic private capital into infrastructure deals is particularly significant; it is central to inspiring confidence in the international markets – no foreign institutional investor will be comfortable taking risks that the local pension funds or insurers won't take.

But mandate and regulatory constraints can make this difficult. Local pension funds are often restricted by law from investing in infrastructure. Policy-makers play an important role here: for example, the Colombian government recently implemented regulatory changes to allow pension funds to invest in infrastructure-debt funds, meaning they could invest in the country's Fourth Generation "4G" roads project, giving confidence to international investors. The Peruvian infrastructure bonds market has also seen strong success partly because local pension funds were allowed to invest in infrastructure bonds in 2001.

Blended finance vehicles like GuarantCo can also help. GuarantCo is a specialist provider of guarantees for infrastructure projects in least developed, low income and lower middle-income countries. It operates by partnering with local banks and financial institutions to jointly evaluate projects and to share financing risk. Uniquely, GuarantCo operates only in local currencies, thereby helping recycle savings productively in its target countries. It is often overlooked that many developing countries have high savings rates relative to developed countries. These domestic resources can be used to finance infrastructure, thereby avoiding hard currency debt (which can prove crippling for projects and countries to pay back if their home currencies devalue). A focus on local markets also helps "crowd in" local financial institutions and investors thereby developing experience and skills which can be used for future projects. This provides benefits in the long run by reducing reliance on international banks and development agencies.[67]

c) High barriers to entry

As well as a lack of performance data, and low confidence without local institutional investment, many institutional investors are on the sidelines when it comes to emerging markets infrastructure due to perceptions around risk, mandate and regulatory constraints.

i) High perception of risk

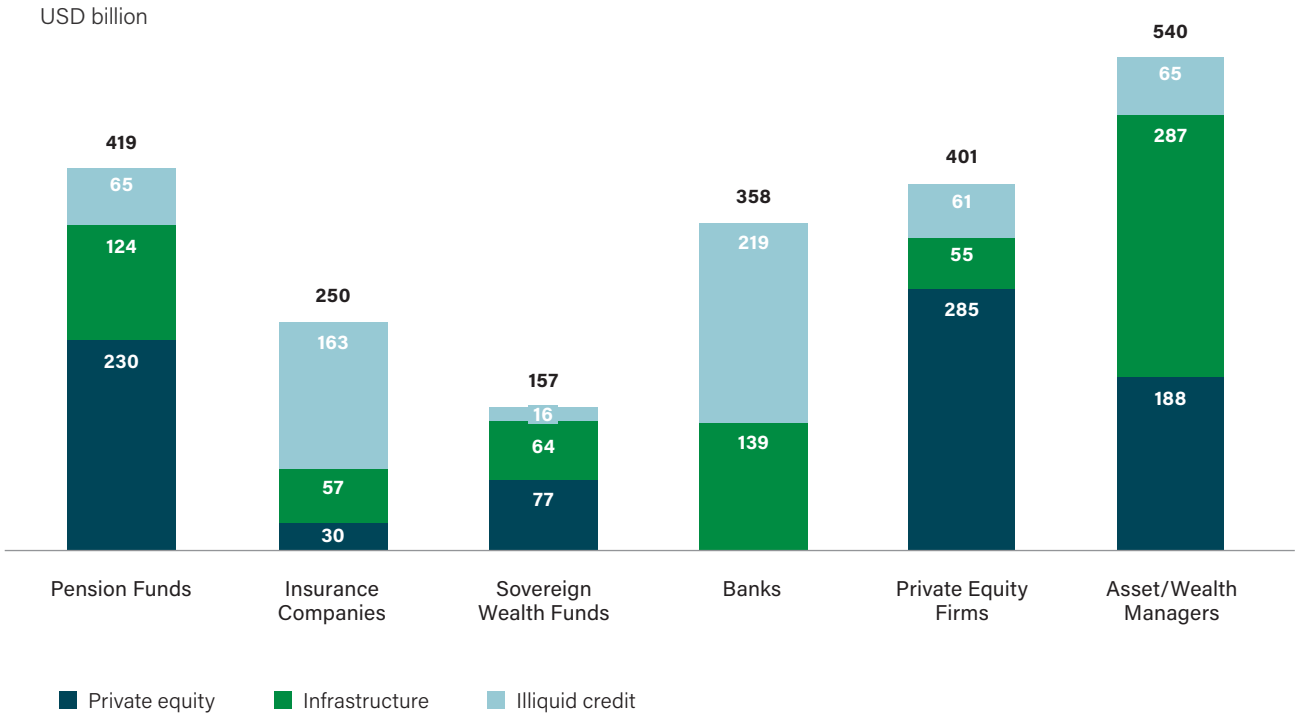
Compounded by (or perhaps because of) the lack of data, investors continue to view infrastructure in developing countries as inherently high-risk without generating commensurate returns, illiquid and prone to corruption. They worry that returns are highly policy- or subsidy-dependent and that the returns do not justify the risks. This perception simply gets compounded for *sustainable* infrastructure (even more policy/subsidy-dependent) in low-income countries (subject to material country risk). As a result, very few (very large) asset owners have a direct infrastructure investing capacity; only a limited number appear to have strong relationships with key intermediaries in this market, such as the MDBs and DFIs; and asset allocation parameters result in relatively limited mandates for infrastructure fund managers (largely restricted to developed economies).

ii) Mandate constrained

Most investors also perceive themselves to be mandate-constrained. Pension funds have traditionally been limited to investing in certain asset classes and geographies, with strict fiduciary duties that drive a preference for investment-grade, operating assets that already generate a cash flow and are situated in a stable regulatory and macroeconomic environment. Many insurance companies are not allowed to invest in infrastructure at all and SWFs are bound by government mandates that often exclude certain investments. This is often true, however, **Exhibit 27** illustrates a sample of existing institutional investor allocations to alternative asset classes in developing countries, suggesting that not every part of the institution may be as constrained as it appears. Insurance companies are a good example. Under Solvency II – a European Union directive for insurance companies aimed at reducing the risk of insolvency, insurers must "match" their investments with their liabilities. This means that the major UK and European insurers which have pension and insurance liabilities denominated in Sterling or Euro, will largely need to invest in the same country or currency, ruling out emerging markets. Even where the insurer can invest in emerging markets, liquidity requirements under Solvency II mean that its asset allocation must be investment grade and fixed income, such as sovereign bonds that can be swapped or hedged according to matching needs. Solvency II also establishes a tough capital adequacy regime that may force insurers to seek shorter-dated debt to meet regulatory solvency requirements.

There are, however, growing "alternatives" teams within insurance companies that have more flexibility to take risk in illiquid infrastructure assets such as exploring private placements and project finance. It is therefore important to distinguish between the different pockets within institutions – not all are subject to the same regulatory constraints. For example, infrastructure finance is becoming an increasing part of the book of global insurer, Aviva. Aviva has invested in PPPs in the UK for decades, with about $6 billion on the book – this is small relative to their total AUM but it is still a significant amount. Aviva has, however, recently designated a specific allocation for infrastructure, being able to invest in both infrastructure equity and debt. Given that this is new territory for the big institutional investors, it takes time for these "alternative" teams to get comfortable or mobilise resources to go beyond their normal playground of Northern Europe. But as investors chase higher returns, it is useful to know that not all parts of the business are necessarily restricted in the same way and that leading institutions are already acting on this agenda. This suggests that investors will increasingly want to take advantage of the risk cushion provided by various blended finance instruments as they look to invest in emerging markets infrastructure.

EXHIBIT 27 | Institutional investor allocation to alternative asset classes in developing countries[68]



iii) Regulatory restrictions

Many capital providers, particularly the banks, are subject to a range of regulatory constraints which may act as a barrier to investing in emerging markets or infrastructure or both. If not a barrier to investing itself, regulatory constraints can limit the effect of particular blended finance instruments like development guarantees to de-risk investments in emerging markets. For example, most of the development guarantees offered fail to address the market or regulatory realities faced by financial institutions, such as Basel III guidelines on liquidity and risk management that put developing markets at a disadvantage.

Under Basel III, most development guarantees will not qualify as high-quality liquid assets (HQLA) because they are not sufficiently tradable or transferable. Although guarantees typically do include assignment and transfer rights, the process usually requires guarantor approval of the potential assignee. Therefore, originating banks cannot easily or quickly sell their exposures, and this directly reduces the attractiveness of guaranteed loans to risk managers and regulators who focus on the illiquidity of the particular asset. Features of guarantees like unilateral termination rights, although rarely invoked, also prevent banks from gaining the level of certainty needed for capital relief from a regulatory perspective. Similarly, rather than paying on demand, or before loan acceleration, many guarantors prefer to pay claims after a bank's collection efforts. A guarantee that requires such collection efforts has implications for a bank's liquidity, and therefore has a negative impact on its financial statements and reduces the attractiveness of the guarantee.

Although achieving true tradability of development guarantees is not feasible in the near term, streamlining their assignment and transfer provisions to provide clean exit mechanisms could be an important step to activating banks and capital markets. Three things would make a difference here:[69]

1. **Assignability** – improving the assignability of guarantees will address both the business reality that banks want to sell exposure to institutional investors, and also regulatory needs because assignability is an important component of liquidity.

2. **Standards** – creating more universal guarantee agreements will facilitate efficiency and syndication, and ultimately scale. These should be done with banking regulations in mind, without having to change the regulations themselves.

3. **HQLA treatment** – some guarantors have structured their agreements to allow banks to get capital relief, but none have been able to address liquidity regulations. A guarantee that could allow banks to get HQLA treatment for SDG-aligned investments would be incredibly catalytic, but would require changes from both the guarantors as well as banking regulators.

See **Annex 5** for a more comprehensive discussion about the regulatory challenges faced by capital providers, including **Exhibit 43** for a summary of key legislation which can disincentivise capital flows to emerging markets and **Exhibit 44** for a deep dive of Basel III and development guarantees.

Of course, the Taskforce acknowledges the importance of international financial regulations to ensure global financial stability. We therefore call upon asset owners to work with regulators to strike the right balance between ensuring financial stability on one hand, and realising universally-agreed policy priorities on the other. This should involve the expertise of existing initiatives like the European Union's High Level Expert Group on Sustainable Finance (EU HLEG) – which was established to develop an overarching and comprehensive strategy to integrate sustainability into EU financial policy. Investors should also draw on support from thinktanks like the Milken Institute who are looking at the treatment of development guarantees to identify how they can be most effective under Basel III, for example working with regulators to consider guarantees (from AAA-rated governments) with specific terms (on-demand and assignable) as meeting both a transferability and social return threshold sufficient enough to merit HQLA designation.

Blended finance could tip the scales

Apart from regulatory changes, what would institutional investors need to increase their asset allocations in infrastructure from 1 to 2 or 3% of their total AUM? A large part of it is about addressing some of the risks of investing in infrastructure in emerging markets. This is where becoming more familiar with the blended finance tools that can de-risk these investments will be critical. That also requires scaling internal resources, skilling up teams and providing leadership from the top on this agenda, as well as the availability of better data on infrastructure performance. We have seen the beginning of this movement already in the green finance space in recent years, where leading pension funds are taking advantage of blended finance vehicles to limit downside and improve returns as they look to invest in clean energy infrastructure in developing countries. For example, Danish pensions – PensionDanmark and PKA – are major investors in the Danish Climate

Investment Fund (KIF), each investing €200 million into the fund. KIF targets 12% net IRR and offers a preferential return to institutional investors in the fund once all invested capital has been paid back. This is made possible by the junior equity investments of the Danish government and IFU (Denmark's DFI). KIF also benefits from a concessionary technical assistance facility from the IFU that supports getting projects to bankability. Another example, Climate Investor One (CIO) has, to date, attracted pension funds from the UK, Norway and South Africa, who benefit from the use of donor funds in a first loss position as well as guarantees to reduce pricing. There is also the perceived risk reduction which comes from being invested with entities such as the Dutch and US governments as well as the European Commission.[70] The CIO-Construction Fund is targeting expected returns of up to 20%.[71] As with the KIF and CIO, institutional investors who have participated in blended finance transactions tend to stick with proven sectors like clean energy funds where there is participation of a major development bank and / or the relevant donor government; this provides a clear signal of the fund's legitimacy.

Outside of clean energy, other blended finance models which have worked particularly well for institutional investors are in somewhat familiar territory like real estate (affordable housing) or financial services (specifically financial inclusion). For example, the $400 million 10 year LeapFrog II Fund crowded in major institutional investors including AXA, Christian Super, MetLife, HESTA, Prudential Finance, Swiss Re and TIAA-CREF off the back of investment from DFIs like CDC, DEG and FMO who provided anchor equity investments as well as technical assistance grants for pipeline discovery. The Fund aims to provide microinsurance and related financial products to underserved populations in Sub-Saharan Africa and Asia, investing in companies like Reliance Capital Management, an Indonesian financial services company with deep reach into rural areas and nearly 1 million customers who have historically lacked access to essential financial tools. Return targets for the fund are in the mid to high teens, but with projects growing at 46% per annum on average, fund exits have met or exceeded financial return targets.

While clean energy and financial services are familiar territory, social infrastructure like water, sanitation, waste management and education have seen less activity. On the other hand, healthcare has seen clear interest from investors, but tends to require the presence of a major anchor investor to be successful. For example, the Gates' Global Health Investment Fund saw investment from institutional investors like AXA, Storebrand and JP Morgan Social Finance, with concessionary support from the Gates Foundation and Sweden's SIDA in the form of a 60% guarantee.

The Abraaj Growth Markets Health Fund (AGHF) is another example, and was established entirely on commercial terms. Targeting $1 billion, the fund saw investment from pension funds like PBUCC following key commitments from several development finance institutions (IFC, AfDB and OPIC), healthcare operators (Philips and Medtronic) as well as the Bill & Melinda Gates Foundation. The AGHF's investment strategy is aimed at improving access to affordable high-quality healthcare services for the low- and middle-income healthcare populations of Africa And South Asia. The fund works with the private sector, governments and NGOs in a "new compact" – these various players complement each other to deliver greater impact. The Philips partnership also ensures quality medical equipment is leveraged across geographies, best value solutions, benchmark uptime commitment, and training and education. Medtronic provides AGHF with leading technologies,

hospital solutions, and preferred pricing. Additionally, there is potential for a consortium between Philips, Medtronic, and AGHF to bid for specialty PPPs.[72]

To take advantage of similar opportunities, institutional investors should make sure they understand what blending can offer; there is a window of opportunity for investors today to gain exposure to an asset class like infrastructure (which could help meet the demand for higher returns in today's low interest rate environment) with the benefit of a risk cushion.

Call to action

However, changing the picture to see more investment in sustainable infrastructure will not be easy, especially given the conservative nature of the institutional capital owners. The Blended Finance Taskforce calls upon three sets of actors to drive the system change needed to make sustainable infrastructure a growing part of the portfolio of mainstream investors:

1. The institutional investors themselves can accelerate the change by pushing their asset managers harder to come up with investment grade infrastructure products, by rigorously implementing the TCFD and challenging perceived fiduciary limitations and by encouraging better regulation.
2. Philanthropic foundations have a special role to play as "pioneer" species in the blended finance landscape.
3. Developed country governments could shift more of their $140 billion ODA flows towards catalytic instruments, such as guarantees, that would make sustainable infrastructure "investment grade".

Institutional investors

a) Mandating asset managers and increasing intermediation capacity

For all the challenges, one of the main reasons asset owners – especially pension funds, insurers and SWFs – have limited exposure to infrastructure is because they are not mandating their asset managers (through whom they deploy most of their capital) to invest in this asset class. Key actions for institutional investors that want to increase their exposure to these assets would include:

- Incentivise asset managers, as they are increasingly doing with green bonds, to invest into sustainable infrastructure in emerging markets.
- Set targets and clearly communicate the need for intermediaries to pool assets to create scale and liquidity in this market.
- Structure long-term rewards for asset managers to get the best talent to play into this territory.
- Look to build direct relationships with the MDBs and DFIs as intermediaries; today, relatively few institutional investors have experience working with the development banks or have a key point person to deal with them unless they are already investing actively in emerging markets.[73]

b) Fiduciary duty

Mandating asset managers is one thing, but, as mentioned earlier, institutional investors often perceive *themselves* to be mandate constrained from investing in sustainable infrastructure. For example, an investor's fiduciary duty is often misinterpreted as a duty to maximise short-term returns.[74] This means that pension fund trustees and other investors often fail to consider sustainability factors, such as climate risk, unless it directly feeds into corporate / asset valuations on a standard accounting basis, even though these considerations could have a material impact on the value of their investments.

i) ESG

Better reporting, particularly around ESG criteria, can help to convince trustees and shareholders of the value in investing in sustainable infrastructure. Evidence is mounting that investing sustainably, especially using strong ESG filters, does not mean institutional investors need to sacrifice performance, especially over the long-term. In fact, a 2017 MSCI study[75] shows that ESG has had a positive impact on historical risk adjusted performance, tilting the portfolio towards companies with higher market cap, better earnings quality, higher earnings stability, lower mobilisation and lower residual volatility. MSCI found that integrating ESG has improved the valuation and performance of companies both through their systematic risk profile (lower costs of capital and higher valuations) and their idiosyncratic risk profile (higher profitability and lower exposures to tail risk).[76] In other words, running a sustainable and socially responsible company can generate bottom-line benefits. As well as evidence around high performance, recent analysis from Bank of America Merrill Lynch confirms that ESG screening would have helped investors avoid 90% of bankruptcies over the past ten years. The BAML study found that ESG integration can also protect investors from, volatility, price declines, and earnings risk.[77]

ii) TCFD

The Task-Force on Climate Related Disclosures (TCFD), which calls for organisations to report on their climate-related risks, is another mechanism which can encourage trustees of pension funds and other major asset owners to take a long-term perspective on their portfolios and reveal the risks of ignoring investments which are not compatible with a low carbon economy.

237 companies that span the entire investment chain and have a combined market capitalisation of over $6.3 trillion have publicly committed to support the TCFD. They range from companies that issue equity and debt to the largest credit rating agencies to stock exchanges and ultimately to investors that buy the equities and debt. This includes several Dutch pension investors, such as the civil service pension scheme ABP and its manager APG, and major North American pension funds such as the $293 billion California Public Employees' Retirement System (CalPERS), California State Teachers' Retirement System (CalSTRS) and Ontario Teachers' Pension Plan. Leading insurers like Aviva, Allianz, AXA and Swiss Re have also endorsed the recommendations. 14 companies are now committed to implement the recommendations in the next 3 years, and the TCFD will launch a new platform to monitor the implementation of the recommendations, called TCFD Knowledge. The Taskforce calls on all investors to rigorously implement the TCFD.

More than that, investors need to actively communicate with their trustees and shareholders that investments in climate-resilient assets like sustainable infrastructure are in line with, and in fact critical to, upholding their fiduciary duties. The TCFD should facilitate this dialogue much more easily as it creates stronger expectations around asset allocation for investors in a way that should strengthen capital provision for sustainable infrastructure (see **Exhibit 28**).

Leading pension funds are already moving in this direction. Storebrand – Norway's biggest private pension fund with $80 billion AUM – is one example. At the Macron *One Planet Summit* in Paris in late 2017, Storebrand launched a $1.3 billion fossil-fuel-free bond programme and urged investors to do more to curb climate change. The bond fund adds to $2.1 billion equity funds run by Storebrand which also have no investments in fossil fuels. This momentum should drive more investment towards sustainable infrastructure, especially in the clean energy space, and drive others to also show such leadership.

EXHIBIT 28 | Investors are leading on TCFD and climate action

Climate Action 100+

A five-year initiative led by investors to engage with the world's largest corporate greenhouse gas emitters to improve governance on climate change, curb emissions and strengthen climate-related financial disclosures. To date, 225 investors with more than USD $26.3 trillion in assets under management have signed on to the initiative. The initiative is designed to implement the investor commitment first set out in the Global Investor Statement on Climate Change in the months leading up to the adoption of the historic Paris Agreement in 2015.

"As institutional investors and consistent with our fiduciary duty to our beneficiaries, we will work with the companies in which we invest to ensure that they are minimising and disclosing the risks and maximising the opportunities presented by climate change and climate policy."

Investor representatives from Australian Super, California Public Employees' Retirement System (CalPERS), HSBC Global Asset Management, Ircantec and Manulife Asset Management have helped to lead the design and development of the initiative.

Growing momentum on this agenda is also evident from the numerous commitments made the climate space by major banks in 2017. JP Morgan has announced that it will facilitate $200 billion in clean energy financing by 2025; HSBC will combat climate change with a $100 billion boost for sustainable financing; Citi has made a $100 billion commitment to finance sustainable growth. Goldman Sachs announced a similar target back in 2015, to invest $150 billion in clean energy by 2025, with a cumulative $54 billion already invested by the end of 2016.

In a coordinated effort, a number of the world's leading banks also announced in 2017 that they would work together with UNEP FI to develop analytical tools and indicators to strengthen their assessment and disclosure of climate-related risks and opportunities. Increasing the amount of

reliable information on financial institutions' exposure to climate-related risks and opportunities will strengthen the stability of the financial system, and facilitate financing the transition to a more stable and sustainable economy. The TCFD pilot group includes the following UNEP FI banking members: ANZ, Barclays, BBVA, BNP Paribas, Bradesco, Citi, DNB, Itaú, National Australia Bank, Rabobank, Royal Bank of Canada, Santander, Société Générale, Standard Chartered, TD Bank Group and UBS. Their message was clear: climate change poses a real and serious threat to our economy, but at the same time there are enormous business opportunities in taking climate action.[78]

The Sovereign Wealth Funds (SWFs) are also driving momentum in this space, with Norway's Norges Bank Investment Management (NBIM) – the world's largest SWF – having divested from coal and companies which support deforestation, now considering divesting shares in oil and gas companies.[79] The progressive coalition of SWFs that is emerging after the One Planet Summit (including the Abu Dhabi Investment Authority, the Kuwait Investment Authority, the New Zealand Superannuation Fund, NBIM, the Public Investment Fund of the Kingdom of Saudi Arabia, and the Qatar Investment Authority), will also be a powerful champion of this agenda as it looks to accelerate efforts to integrate financial risks and opportunities related to climate change in the management of large, long-term asset pools.[80]

Foundations

Foundations can play an even stronger role in the change programme. Globally, foundations manage just over $1 trillion in assets or almost 0.5% of total global AUM. Although this is small in comparison to other institutional investors, foundations are uniquely placed to support the SDGs, both as long-term investors as well as "blenders" or providers of catalytic finance. Foundations can play an outsized role by coordinating their endowment, programme-related and grant-making strategies. With fewer regulatory restrictions plus a "mission" driven mandate, foundations should be just as well-positioned, if not better, than major institutional investors to allocate some of their long-term endowment capital[81] (which has low liquidity requirements and is largely externally managed with specified targets for return of 6-8% pa)[82] towards SDG-aligned assets. Some foundations are already leading by example, recognising the potential of their endowments as a tool to reach their programmatic goals. For example, the Ford Foundation recently made a record announcement to allocate $1 billion from their $12 billion endowment towards mission related investments (MRIs) over the next decade, with a particular focus on affordable housing and financial services. The Taskforce calls on other leading foundations to target at least 10% of their endowment capital to flow towards SDG-related investments and applauds those who are already moving in this direction.

As well as carving out part of their endowments for SDG-related investments, foundations could consider more creative ways to mobilise private investors by "blending" grant capital or programme-related investment (PRI) funds. At $70 billion a year, grants represent the vast majority of foundation activities. PRIs, on the other hand, make up a much smaller portion of a foundation's activities (rarely more than 5% of annual flow). PRIs are investments made to support charitable activities, but they are able to make a return. As highly flexible and mission-driven pools of capital, foundations could consider using some of their grants and PRI funds to seed a next generation of blended finance vehicles; particularly those which target high-impact areas that are difficult for more traditional investors due to uncertain revenue streams and risks which are too high for (unprotected) commercial market participants (e.g. healthcare and education). They could also consider deploying

grant and PRI capital into a wider variety of catalytic financial instruments like issuing guarantees, taking subordinate positions in transactions or covering the operational costs required to set-up and run blended finance intermediary vehicles. The MacArthur Foundation is one of the pioneers in this space. For example, in 2016, MacArthur invested $50 million into a vehicle issuing low cost, patient loans to enterprises in Chicago. Getting more of this to happen will require targeted leadership. The Taskforce calls upon the world's leading foundations to start reporting on specific targets for private sector mobilisation (being the total commercial financing relative to the foundation activity), acknowledging that mobilisation ratios may initially be low because they tend to play in the hardest sectors and geographies. Initiatives which pool resources from a number of foundations should also be supported as a way for foundations to achieve greater impact. One example is the "coalition of philanthropists" which was announced at the One Planet Summit. The coalition comprises 10 foundations promising to step up their commitment to fighting climate change. Another example is the Co-Impact initiative – whereby leading philanthropists (led by Rockefeller along with other core partners like Richard Chandler, Bill and Melinda Gates, Jeff Skoll, and Romesh and Kathy Wadhwani) will work together in a global collaborative for systems change, with $500 million in planned initial funding.[83]

We also see a new breed of philanthropy emerging that could play a major role in directing capital towards sustainable development. "Venture philanthropists" – foundations and other organisations that take a more VC-type approach than traditional foundations – are the new kids on the block in this space. Often backed by "Silicon Valley" tech or millennial money, these venture philanthropists often have a different approach to development and are more likely to take a "high risk", VC-style approach to philanthropy. They accept many of the projects funded may not yield an immediate direct impact but have significant potential to lead to disruptive market level impact. They also tend to be more comfortable or experienced using financial products like guarantees, making them prime candidates for blending. Omidyar Network is one such example, backed by the E-bay fortune and pushing the limits in emerging tech, digital identity, education, financial inclusion, citizen engagement and property rights. Omidyar calls itself an "active impact investor". Around 50% of their $1 billion commitment have gone to grants but the remainder have been primarily deployed in early stage VC equity and a small portion has been mezzanine or convertible debt. They are not established as a foundation as they have no endowment, but refer to themselves as "building a philanthropic investment firm". New business models in the philanthropic space will be highly relevant for SDG sectors, especially for investments that are in need for early stage "high-risk" funding.

Developed countries

The last type of long-term capital providers to discuss in this section are the developed country donors. Together, they provide around $143 billion of ODA aid each year. To a large extent, this capital is viewed as "short-term cash grants" rather than "long-term investment capital". This mindset needs to change if ODA is to help make sustainable infrastructure in developing countries "investment grade". Even if it grew to $200 billion a year, grant-based ODA will not deliver the SDGs. While some ODA will inevitably continue to flow to developing countries as grants (especially for social infrastructure and institutional strengthening), an increasing share could to be deployed against infrastructure investment. And in turn, that will need to be designed to crowd in private capital at scale.

Many countries are already taking huge leadership to move in this direction. The UK, Canada, Denmark, Norway, Sweden, Germany and the Netherlands are amongst the most active and have pioneered blended finance activities to date (particularly in the clean energy and land use sectors). More countries are following suit and starting to prioritise private capital mobilisation, especially for climate change activities. For example, Finland launched the "Finland-IFC Climate Change Program" at the recent Macron One Planet Summit. This will be a €114 million returnable capital contribution to spur private sector financing for climate-change solutions, targeting low-income countries focused on investments in renewable energy, energy efficiency, green buildings, climate-smart agriculture, and forestry.

To get this to scale, the Taskforce calls for developed countries to set blending targets for their ODA. They need to channel ODA in more catalytic vehicles (including those established by developing countries for sustainable investment), moving from a largely grant-based system to using more catalytic instruments. If the main ODA providers were to target e.g. a doubling or tripling of their current mobilisation ratios (which are significantly less than 0.5x) by 2025, then this would go a long way to scaling up the market and driving private capital into sustainable infrastructure.

Meeting this blending target could be enabled through a mixed of different channels (discussed further in **Chapter 3**): using their own DFIs (with stronger blending mandates), putting mandates into the private sector asset managers, directly supporting the creation of developing country blended finance institutions, and also via MDB trust funds/private sector windows. Developed countries could also set up a third-party vehicle (e.g. an SDG Guarantee Fund)[84] to receive grants from donors (allowing them to get the 0.7% foreign aid credit – guarantees themselves currently do not qualify)[85] and then aggregate the capital to provide guarantees or equity to financial institutions to enhance their assets (similar to the US Troubled Asset Relief Program).

As well as providers of concessional aid, it is also critical that developed countries take an active leadership role as *shareholders* of the development banks. As well as setting mobilisation targets for their ODA, countries should mandate their MDBs and DFIs to do the same, and support the required adjustment to the development bank business model accordingly (this is discussed further in **Chapter 3**).

Finally, governments can take leadership in relation to company behaviour. For example, Article 173[86] – French law requiring that institutional investors and asset managers disclose how their business strategies cover climate change including reporting on their climate-related risks – came into force in June 2017. China made a similar commitment at the December 2017 Macron Summit, announcing that "every listed company must disclose information on environmental impacts by 2020". China is also encouraging sustainable or "green" investment at home by providing cheap money for banks that invest in green projects, and requiring certain industries to take out pollution liability insurance.[87]

Catalytic leadership

All players in the investment "system" can take a more active leadership role in order to get long-term capital flowing more effectively. The momentum around blending, and the fundamentals of infrastructure, should already be driving investors to take advantage of the window of opportunity to increase their portfolio exposure to this asset class, while benefiting from significant downside protection through blended finance.

Photo credit: © Gustavo Frazao/Shutterstock.com

CHAPTER 3 – INTERMEDIATION

Key takeaways

- The MDBs and DFIs are indispensable actors in scaling the blended finance market and mobilising up to a trillion dollars per year for sustainable infrastructure investments. They are central to making the system work: supporting policy and institutional reforms to reduce absolute risk, strengthening the supply of investible projects, developing and executing new risk-mitigating instruments, and shifting investors' risk perceptions.
- To do so, they need to shift the emphasis towards a private sector focused model and set ambitious targets for mobilisation of external private financing alongside their own activities. The MDBs currently have private capital mobilisation ratios of less than 1:1 across their whole portfolios; this ratio needs to increase significantly, and would need to more than double over the next decade to get close to the trillion dollar target.
- Beating the 2:1 ratio (and getting closer to 3:1) would require two major steps. The first is to sharply increase the share of private sector activities which currently account for only around 30% of MDB activities. The second would be to ramp up the mobilisation ratios of the private sector arms from less than 2:1 to closer to 4:1 (or more).
- Developed country governments have a major role to play in driving this agenda: (i) as shareholders of the MDBs; (ii) in growing their allocation of ODA towards their own bilateral DFIs; and (iii) in supporting their own DFIs to push up their mobilisation ratios.
- Targeting higher mobilisation of private capital by the MDBs and DFIs will potentially shift portfolios toward more infrastructure investment and more stable middle-income countries. But it will also

free up additional development capital to be allocated toward lower income countries and sectors where private capital is much harder to attract. Setting the specific mobilisation targets will require comprehensive analysis to ensure that this does not occur at the expense of the development agenda.

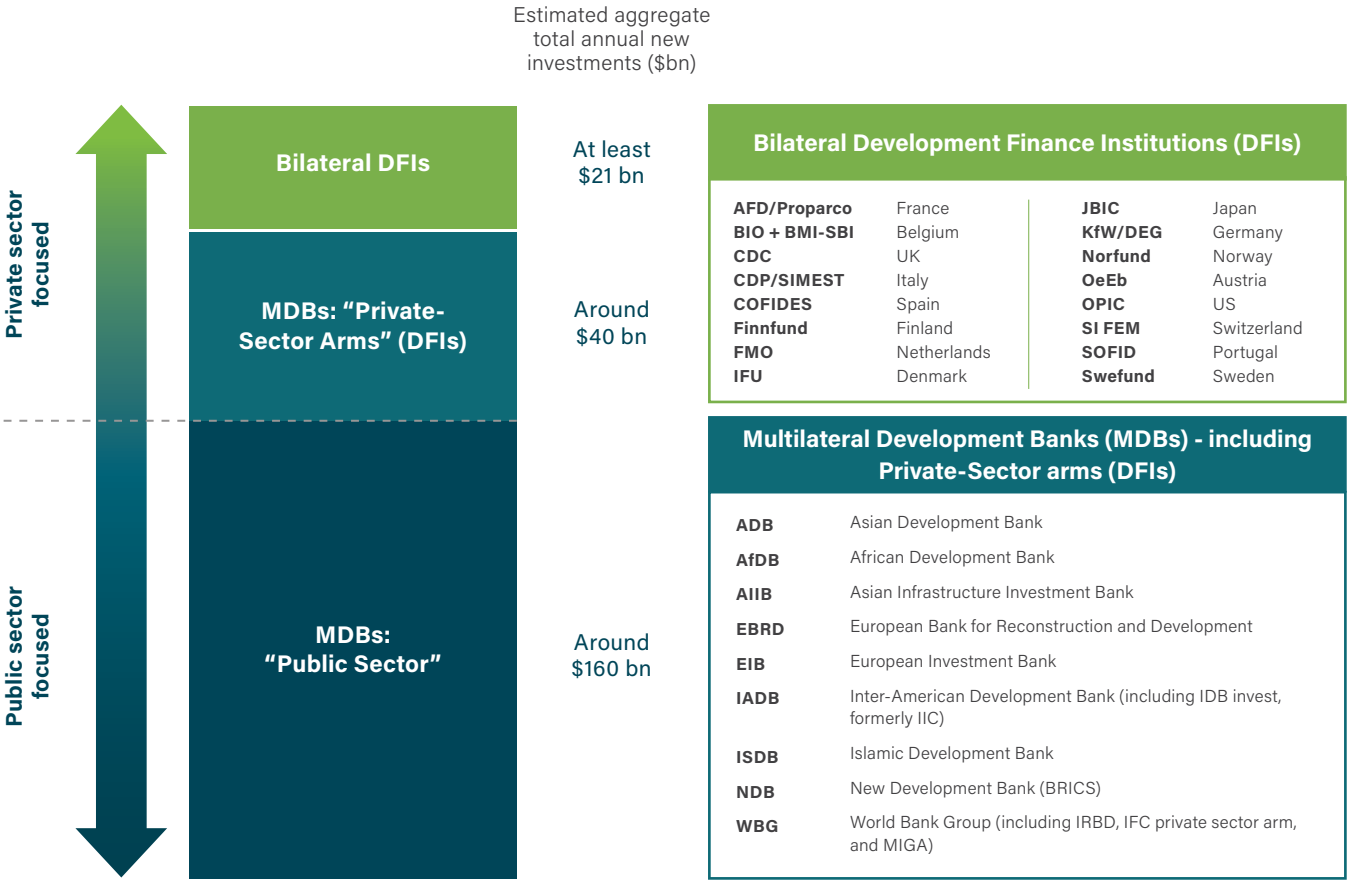
- Setting ambitious mobilisation targets will help with product standardisation and asset pooling across the MDBs/DFIs, provided that they are accompanied by reinforcing shifts in incentives and capabilities. For the MDBs, it should also involve structural integration of the private sector activity into the rest of the sovereign lending institution in order to streamline operations and processes, and integrate private sector skillsets across the whole organisation.
- Setting targets may also encourage the emergence of an MDB ecosystem in which different MDBs provide leadership on particular assets/products where they have comparative advantage, driving innovation and greater transactional efficiency with the private sector.
- As well as setting targets, the MDBs and DFIs need to share information on the historical financial performance of their portfolios so that external private investors and credit rating agencies can evaluate the risk/return of infrastructure as an asset class. They also need a harmonised approach to measuring and reporting on private capital mobilisation.
- Private asset managers and project developers could also accelerate their entry into the blended finance market, with support from the MDBs/DFIs. Private intermediaries should work with (i) the providers of concessional capital to build effective, low-cost, common systems for impact measurement that would be most relevant for their institutional investors; and (ii) credit rating agencies around risk metrics. In doing so, the private sector will help drive the creation of the market infrastructure (information, ratings, legal, documentation, awards, fee norms etc.) required to bring this market to scale.

Intermediaries make the market work

As the "blenders" of capital, financial intermediaries are central to achieving the promise of blended finance and making the whole system work. They need to be able to take development capital and use it in such a way that crowds in private investment at high enough mobilisation ratios to be a worthwhile use of scarce resources. They also need to be able to deploy this blended capital into sustainable infrastructure and other assets, meaning the quality of the intermediation capacity directly affects project and pipeline development. Intermediaries must be able to effectively structure investments or vehicles which combine different players with varying risk-reward profiles into a seamless capital stack. An effective intermediary is one who can do this efficiently, in ways that can be replicated and scaled.

The majority of "blending" experience sits within the private sector arms of the MDBs, and the bilateral DFIs – the so-called "original blenders" (see list in **Exhibit 29**) – who possess clear development mandates and lend exclusively to the private sector (as opposed to the "public sector" arms of the MDBs, which only lend to governments). As such, the private sector arms of the MDBs and the DFIs sit at the intersection of deal flow, concessionary and commercially-oriented capital. In addition, the bilateral DFIs generally operate as self-financing entities at no net cost to the public so they represent a powerful and easily scalable business model that could deliver significantly greater development impact, at little or no cost, were governments to provide relevant authorities.

EXHIBIT 29 | Overview of major development banks (MDBs and DFIs)



Bilateral Development Finance Institutions (DFIs)

AFD/Proparco	France	**JBIC**	Japan
BIO + BMI-SBI	Belgium	**KfW/DEG**	Germany
CDC	UK	**Norfund**	Norway
CDP/SIMEST	Italy	**OeEb**	Austria
COFIDES	Spain	**OPIC**	US
Finnfund	Finland	**SI FEM**	Switzerland
FMO	Netherlands	**SOFID**	Portugal
IFU	Denmark	**Swefund**	Sweden

Multilateral Development Banks (MDBs) - including Private-Sector arms (DFIs)

ADB	Asian Development Bank
AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
IADB	Inter-American Development Bank (including IDB invest, formerly IIC)
ISDB	Islamic Development Bank
NDB	New Development Bank (BRICS)
WBG	World Bank Group (including IRBD, IFC private sector arm, and MIGA)

Setting mobilising targets to address blending issues

There is no doubt that the MDBs, through their private sector lending arms, and the bilateral DFIs play an indispensable role in mobilising private capital. Nevertheless, the existing challenges to do so at scale, makes it clear that something needs to change: we need to increase the ambition of the MDBs and DFIs to become the "preferred intermediary for the institutional investors" and make private capital mobilisation a core aim of both the MDBs and DFIs in order to scale up the blended finance market. This will, by necessity, require the MDBs to place increased emphasis on supporting the growth of their private sector operations, and both MDBs and DFIs to streamline, standardise, pool assets and share information. And most importantly, it will require the MDBs and DFIs to

set ambitious targets to mobilise external private capital. Of course, measuring private capital mobilisation ratios of the MDBs and DFIs can be more of an art than a science – the data is scarce and the exact numbers depend on a lot of assumptions. However, as discussed in the following pages, the important thing is not the precise starting point but its order of magnitude and the scale and direction of the change required.

a) MDB mobilisation ratios

MDB mobilisation ratios are a function of two factors: (i) the size of the private sector lending arms relative to their generally much larger public sector lending arms; and (ii) the mobilisation ratio of their private sector lending arms. In order to meaningfully increase the overall mobilisation ratio for the MDBs, attention should be paid to both factors. First, shareholder governments should increase the emphasis and resources committed to the private sector investing arms of the MDBs while maintaining adequate flow of funds to critical public sector projects. The recent growth of bilateral DFIs, and the success of the private-sector focused IFC Asset Management Company (discussed further below), shows both how impactful and cost effective the private-sector model of development can be. Second, the MDBs should focus on increasing their mobilisation ratios. This will tend to tilt portfolios toward investments in more stable, middle-income countries. But, carefully managed, the balance sheet resources which are freed up in this process can be strategically invested in lower-income countries, where private sector investment is far harder to attract.

i) Aggregate MDB mobilisation ratios

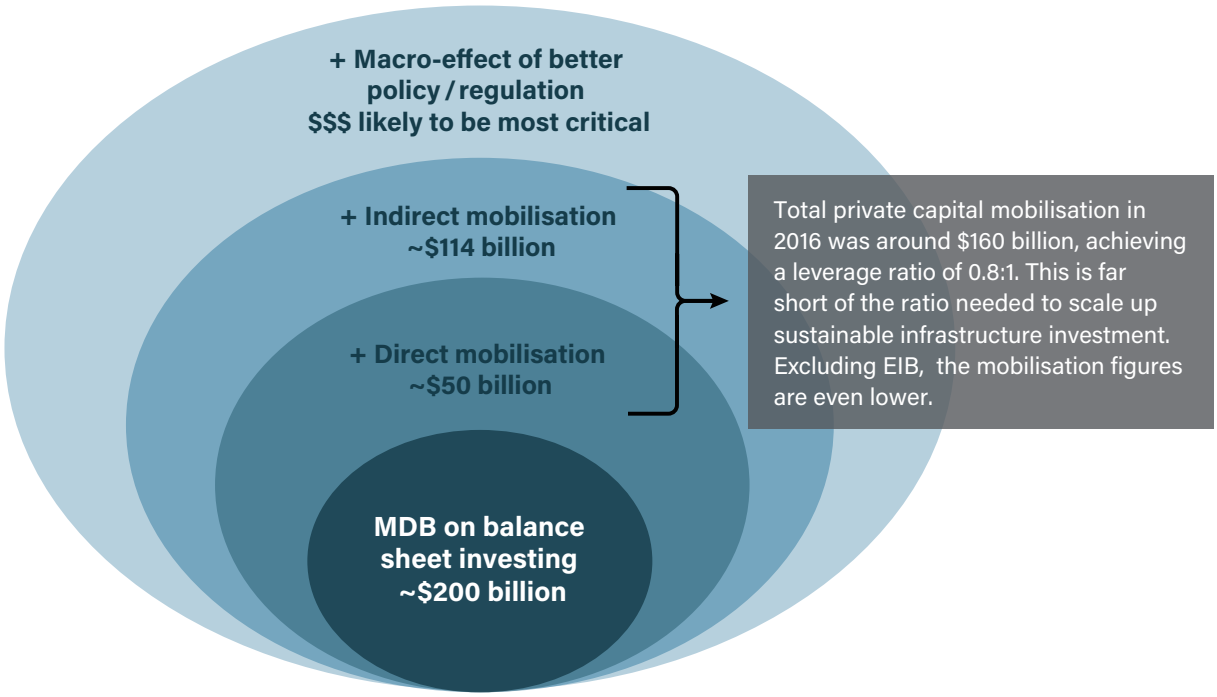
Overall, the MDBs provide around $200 billion per year from their own account. This is significant when compared, for example, with annual ODA flows from donor countries of $143 billion in 2016. The MDBs are not only key "blenders," but also critically important to reducing total risks through policy work, sectoral programme development and project design. However, at best, current estimates suggest that overall MDB financing in 2016 achieved a 0.8:1 mobilisation ratio (i.e. $1 of MDB financing crowds in only 80c of private capital). This ratio takes into account both direct and indirect mobilisation against their overall operations. If we consider only *direct* mobilisation, the amount of private capital "crowded in" by the MDBs (excluding EIB) drops to $13 billion (i.e. around 0.12:1 ratio). These ratios need to increase significantly, and would need to more than double over the next decade to get anywhere close to the trillion dollar target – though determining the exact mobilisation targets will require comprehensive analysis to avoid unintended consequences for the MDB's development goals. Infrastructure only makes up around 25% of total MDB activity and achieves a direct mobilisation of less than 1:1 as well; to address the infrastructure funding gap, MDBs therefore need to increase their infrastructure activity as well as mobilisation ratios.

EXHIBIT 30 | Analysis of MDB private mobilisation compared to their overall activities (including reporting on infrastructure and climate finance – 2016)

Total MDB Mobilisation (FY2016)	Direct MDB Mobilisation (US$m)*)	Indirect MDB Mobilisation (US$m)*)	Total MDB Co-financing (US$m)*)	Total Infra. Co-financing (US$m)*)	Climate Co-financing incl. public (US$m)**)	MDB own account (US$m)**)	Direct Mobilisation vs. MDB own account (%)	Total Co-Financing vs. MDB own operations (%)
ADB	460	8,536	8,995	8,576	5,164	17,624	0.0	0.5
AfDB	1,088	821	1,909	1,909	633	10,640	0.1	0.2
EBRD	1,480	8,471	9,950	3,350	5,036	10,394	0.1	1.0
EIB†	36,503	53,854	90,357	31,650	–	95,062	0.4	1.0
IADB	703	953	1,656	1,202	4,560	11,619	0.1	0.1
WBG	8,706	29,607	38,313	14,649	9,322	61,275	0.1	0.6
Total MDB	49,885	113,747	163,632	68,676		206,614	0.2	0.8
Total MDB (excl. EIB)	13,382	59,893	73,275	37,026		111,552	0.1	0.7

* Joint 2016 MDB Mobilisation report cover: ADB, AfDB, AIIB (US$ 5m co-financing), EBRD, EIB, IADB, IsDB, WBG (incl. IFC and MIGA)
** Joint 2016 MDB Climate finance report cover 6 institutions: ADB, AfDB, EBRD, EIB, IDBG, WBG (incl. IFC and MIGA)
† EIB report for non EU-12 activity in Joint Climate finance report. EIB's operations Annual Results 2016 (EIF and EIB signed volume)

EXHIBIT 31 | MDB overall direct and indirect mobilisation (2016)



ii) MDB mobilisation ratios for private sector windows

Total operations of the private sector windows of the MDBs (which interact exclusively with the private sector and therefore engage the most in blended finance) was $40 billion in 2016.[89] This figure relates specifically to the "private sector arms" of the MDBs (i.e. not including any sovereign or sovereign-guaranteed activity), and includes only the 10% of EIB's activities that are outside the EU (see **Exhibit 32** below for further details). Comparing this against the *aggregate* lending operations of the MDBs (excluding the EU operations of the EIB) shows that the *private sector* activities of the MDBs account for around only 30% of the total.

EXHIBIT 32 | Analysis of MDB private mobilisation compared to their private sector activities (2016)

MDB Private Sector Window Mobilisation (FY2016)	MDB Annual private only operations estimate ($bn)*	Private operations share of total estimate (%)**	Direct Mobilisation ($bn)†	Indirect Mobilisation ($bn)†	Co-Financing ($bn) (Direct + Indirect)	Direct Private Mobilisation Ratio	Total Private Co-Financing Ratio
IFC (WB)	10.0	100%	4.1	16.0	20.1	0.4	2.0
MIGA (WB)	4.3	100%	4.0	3.2	7.2	0.9	1.7
EBRD	7.4	70-80%	1.5	8.5	10.0	0.2	1.3
EIB†	8.8	na	3.7	5.4	9.0	0.4	1.0
IADB (IDB Invest)	2.2	20%	0.7	1.0	1.7	0.3	0.8
ADB	2.5	15%	0.5	8.5	9.0	0.2	3.6
AfDB	2.7	25%	1.1	0.8	1.9	0.4	0.7
AIIB	1.7	100%	0.0	0.01	0.0	0.0	0.0
Total	**39.6**		**15.5**	**43.4**	**58.9**	**0.4**	**1.5**
WB (other sovereign)	0.0	0%	0.6	10.4	11.0	na	na
Total (incl. WB other)††	39.6	37%	16.1	54.8	69.9	0.4	1.8

* Source: Informal EDFI estimate (note not all figures fully comparable, FX EUR/USD rate 1.1). Assumes 10% of EIB outside EU (FY2016 10% commitments non-EU)
** Source: Approximations from various MDB Annual Reports FY2016 (not all information available)
† Source: MDB Joint reporting 2016. Assumes 10% of EIB mobilisation/operations outside EU (FY2016 10% commitments non-EU)
†† Total incldluing other World Bank Group (WB) sovereign operations

The proportion of MDB private sector activities needs to increase significantly to drive the mobilisation of private capital for the SDGs. However, each of the major MDBs is different; their business models vary widely, with large differences in how much of their activities are "private sector focused". The EBRD for example, sees 70-80% of its annual operations investing and lending to private sector clients. Naturally, the IFC – as the private sector arm of the World Bank Group – only does private investments (similar to the bilateral DFIs). At the other end of the spectrum, the private

sector activities of the ADB, AfDB and IADB only account for 15-25% of annual approvals. There is some momentum to become more private-sector focused through; for example in 2016, the IADB carved out a private arm – now called "IDB Invest", formerly the IIC[90] – to cater for their strategy to expand financing of private projects that advance clean energy, modernise agriculture, strengthen transportation systems and support access to financing across the Caribbean and Latin America.

When analysing the MDB private capital mobilisation in 2016 against their private sector operations only, the ratios increase somewhat – to 1.5:1 overall when looking at *total* co-financing (i.e. direct and indirect mobilisation). In other words, for every dollar provided by the private sector arm of the MDBs, $1.5 dollars of private capital was invested. But looking at *direct* mobilisation, this ratio remains below 1:1 across the board. While recognising that there is variation among the MDBs, the institutions that only have a fraction of their total dealings with private sector clients generally have the lowest mobilisation ratios (though the ADB's estimated indirect mobilisation is something of an outlier in this respect).

b) Bilateral DFI mobilisation

For a bilateral DFI, the mobilisation ratio is a simple function of its success at mobilising private capital in its operations. In recent years, bilateral DFIs which are focused exclusively on the private sector and are the other key "blenders" of capital – have significantly increased their overall lending activities. In 2016, their overall new commitments amounted to at least $21 billion. The European DFIs, in aggregate, account for 36% of this; with 18% from the US OPIC, and the remainder (46%) from Japan's JBIC. This figure does not, however, include the operations of a number of important bilateral banks globally (e.g. from Korea, China, Brazil and South Africa etc.). Analysing the current mobilisation efforts of the bilateral DFIs is more challenging than for the MDBs due to lack of common definitions and reporting.[91] However, data from a few examples supports the fact that, along with the MDBs, the bilateral DFIs also need to scale up and set much more ambitious targets for external private mobilisation. For example, the Netherlands' FMO reports that it had a mobilisation ratio of around 0.6:1 in 2016.[92] OPIC is an example at the high end of the scale, partially driven by their guarantee activities which, in effect, translate to transactions with mobilised amounts (suggesting an overall mobilisation of 2.6:1 since 2008).[93] Despite having slightly higher mobilisation than the MDBs, it is clear that the bilateral DFIs also need to do much more to mobilise private capital in order to meet the SDG- financing gap in developing countries.

Setting the right targets

While the exact direct and indirect mobilisation targets for MDBs (both overall and on their private sector activities) and for DFIs will need to be set after comprehensive analysis, it is clear that they need to increase. For example, the MDBs currently have private capital mobilisation ratios of less than 1:1 across their whole portfolios; this ratio would need to more than double over the next decade to get close to the trillion dollar target. Meeting and then beating the 2:1 ratio (and getting closer to 3:1) would require two major steps. The first is to sharply increase the share of private sector activities which currently account for only around 30% of MDB activities. The second would be to ramp up the mobilisation ratios of the private sector arms from less than 2:1 to closer to 4:1 to

reach the trillion a year of private capital mobilisation may require even higher targets (e.g. 5: or 6:1) but such targets would imply shifts in MDB activities to the point where they would be unable to do enough work in frontier countries or on tougher projects (with high additionality).

However, setting ambitious, but progressive targets that ramp up over time, and having the right safeguards and incentives in place, the shift towards higher mobilisation could allow for a growth of investment in sustainable infrastructure, while at the same time allowing for enough MDB own-account capital to be deployed into more challenging countries and projects. MDBs should also aim for structural integration of their private sector arms into the broader sovereign lending institution. This will help streamline operations and processes, and integrate private sector skillsets across the whole organisation – particularly to increase the private sector experience of key leaders within the more public-sector focused MDBs.

Issues with intermediaries

As the blended finance market gains momentum – particularly if the MDBs and DFIs set mobilisation targets, now more than ever, the shareholders of the development banks need to recognise that these agencies are the transformative players, and that they have a critical role in shaping this huge new marketplace. This means that they need to operate in a way which is more "private sector friendly".

Despite doing the majority of blended finance activities today, the MDBs and DFIs are not always incentivised to drive private capital mobilisation, nor set up to respond to the needs of their private sector "clients". There are a number of steps which could improve MDB/DFI engagement with investors and enable them to mobilise greater quantity and quality of private capital.

a) Incentive structures

To date, with a few exceptions, there has been relatively little concrete action taken by leading MDBs or DFIs to mainstream blending practices and align incentives to encourage private capital mobilisation. With few exceptions, neither the MDBs nor the bilateral DFIs set annual capital mobilisation targets or track or report on annual capital mobilisation figures, though this is beginning to change.[94] Most organisations still have in place internal incentive structures – both formal and informal – that place a higher value on an organisation's own annual investment commitments ("volume targets") then on total external capital mobilisation. This can result in situations where some organisations channel concessional funds exclusively to de-risk their own investments, instead of focusing on how to use concessional funds to best crowd in external private sector players.

b) High transaction costs

In addition to the issue of incentive structures, the Taskforce recognises that part of the reason that the private sector avoids blended finance is because of slow, more complex processes within public "blending" institutions. This adds significantly to transaction costs. Multiple factors are at play here, including the lack of standardised blending instruments and terms, the proliferation

of first-time funds (versus participation of mainstream players), together with the cultural challenge for the private sector of working with the MDBs and DFIs. Throughout its work, the Taskforce has repeatedly heard representatives from the private sector express a strong preference to work with private intermediaries rather than "having to deal with the MDBs and DFIs". In fairness, this is less true of the smaller and nimbler bilateral DFIs who "almost work as fast as the private players". Another big issue is scale itself: small ticket sizes also present an issue for many institutional investors – they simply do not justify traditional (and often fixed-price) transaction costs. This often prevents investors from participating in deals. Lastly, the lack of information about the MDB and DFI portfolios in terms of returns and defaults keeps many investors on the sidelines, as they have little means to properly evaluate the risk of investing in emerging markets.

Addressing intermediation challenges

The private sector arms of the MDBs and the DFIs are ideally placed to address these issues, including (a) product standardisation; (b) asset pooling and securitisation and (c) information sharing; all of which will make the blended finance market more easily accessible by the private sector. A lot of this is about understanding the needs of institutional investors: it is important to speak "their language" (e.g. communicate in terms of risk and return), to bring them in early when creating new products, to ensure that transactions are executed efficiently and in a way that is easy for investors to fit into existing portfolio allocations.

a) Product standardisation

Currently, most blended finance transactions still have to be individually tailored,[95] posing a barrier to investors with limited resources, time, and expertise. Having to create unique financing structures for each project and jurisdiction increases transaction time and costs. Standardising a set of core blended finance instruments and vehicle structures by aligning their contractual terms and conditions will alleviate some private sector difficulties to participating in blended finance transactions including deal complexity, high costs associated with delay, and lack of familiarity and in-house expertise to deal with bespoke financial structures. It will require ongoing financial innovation to address the needs of institutional investors including liquidity, diversification, and rating of instruments. This kind of standardisation has been done in a number of other contexts, including in the credit market.

Standardising guarantee instruments, one of the more powerful capital mobilisation tools in the blended finance toolbox, should be a priority in order to reduce transaction costs for the private sector, increase transparency and enable risk-sharing between development banks more easily. At the same time, the Taskforce recognises that current accounting treatment of guarantees by national treasuries and rating agencies can create a disincentive for their broader use (for example, the use of a *guarantee* for a private sector loan and a *direct* private sector loan may have the same balance sheet impact with different economics for the development banks). This should be addressed, as should the fact that guarantees may be underutilised because they do not currently count toward countries' ODA targets.[96]

Green bonds, as one of the most dynamic segments of sustainable finance today, are a good example where progress has been made to progressively a product, creating a language which both the public and private sector can understand. Green bonds have allowed many private sector players to get into new markets. They are already helping drive the mainstreaming of blended finance. For example, the IFC is investing in initiatives like the Green Cornerstone Bond Strategy,[97] a $2 billion initiative that aims to deepen local capital markets and expand financing for climate investments by creating the world's largest green-bond fund dedicated to emerging markets. The IFC will invest up to $325 million in the new Green Cornerstone Bond Fund, which will buy green bonds issued by banks in Africa, Asia, the Middle East, Latin America, Eastern Europe, and Central Asia. Leading European asset manager, Amundi, will manage the fund and raise the rest of the $2 billion from institutional investors worldwide. With an equity investment of $325 million by the IFC into a target fund of $2 billion, we get private capital mobilisation of over 6x (albeit, this is lower when considering the planned participation of other development banks, namely EBRD and EIB, who announced that they are planning to commit significant investment into the fund in late 2017.

Current initiatives which are working on the standardisation of green bonds (like the EU High Level Expert Group on Sustainable Finance, the Climate Bonds Initiative and the Sustainable Banking Network) are also critically important; they could look to expand their work to include standardisation of specific forms of credit enhancement. This could help build institutional appetite, and take certain blended finance tools out of the "alternatives" space. The ratings agencies also play a role and need to start thinking about risk differently to account for the risk of disruption when assessing assets, particularly in the climate space.

b) Scale / asset pooling and securitisation

Blended finance can play a transformative role in enabling small, distributed projects as well as large scale projects, however the challenges of delivering for small projects is quite different from big ones, and should be explicitly addressed. So much of the low carbon transition and other SDG-related investments need to happen at a project scale of $1-5 million (distributed energy is the obvious example, but not the only one). If blended fiance ends up just being a tool to fund $100m+ utility scale renewable energy projects and we fail to design financing mechanisms that serve the market of smaller projects, then a huge opportunity will be missed. As long as the investment is sub-scale, even financially attractive deals will not be considered by most commercial investors – they simply do not justify traditional (and often fixed-price) transaction costs unless and until they can be bundled together. This explains why traditional institutional investors (e.g. pension funds and insurers) are underrepresented in blended activities – they are looking for much bigger ticket sizes and may not consider investments less than $100 million.

Finding a way to bridge this divide will be very important. One way around this is funding through pipeline aggregators which pool a number of small (or below-investment grade) assets into a blended finance vehicle, thereby increasing transaction size, improving liquidity of long-term assets, diversifying risks, enhancing the underlying creditworthiness of the assets and creating separate tranches of capital that appeal to different types of institutional investors.[98]

Developing instruments which allow institutional investors to participate at the right scale will require setting incentives for MDBs and DFIs to collaborate in (i) creating diversified asset pools for international institutional investors and (ii) upgrading their risk frameworks to enable more private sector investment (especially the provision of scarce risk capital such as equity and mezzanine lending).

MDBs and DFIs should also be considering how they can pool mature assets and incentivise loan officers to get assets off their balance sheets. This can provide investors with brownfield assets which better fit their required investment profiles. Finally, MDBs should also be exploring more "open" models of large blended finance funds. Rather than setting up a co-invest type of fund where the MDB would simply allow private players to invest in its existing pipeline, MDBs should be encouraged to use the existence of such mobilised capital to intensify their pipeline development efforts, broaden their net and work jointly with other MDBs to align and standardise diligence requirements. Furthermore, regional MDBs could pool resources to develop large global sector facilities (for example on waste or sustainable cities) that would work beyond the geographical limitations of one MDB. This kind of "global" blended facility (similar to the Global Fund for HIV AIDS) would again drive the standardisation of instruments across the MDBs and address issues of scale by pooling assets. It could also allow for the MDB system to evolve more on the basis of pooled technical specialisation rather than through geographic focus, helping to drive financial innovation and transactional efficiency.

c) Sharing information

After setting capital mobilisation targets, the most important lever to scaling up the blended finance market will be if the MDBs and DFIs share information about blended finance transactions. Being able to access development bank data about historical returns and default rates of blended finance vehicles would go a long way to (i) reduce the misperception of risk from investors; and (ii) allow the rating agencies to evaluate blended finance instruments as more effective forms of credit enhancement.

i) Performance data

Investors make decisions based on past performance of an asset class and they have long memories, continuing to cite their favourite example of direct infrastructure investments that turned sour. The MDBs and DFIs sit on decades of data and should publish the performance data for their portfolio. Without any returns data and with little visibility about how blended finance instruments support investments, investors will not fully buy-in. With more transparency on actual performance, return metrics and default rates in developing countries – institutional investors and credit rating agencies can gain more clarity on the real financial opportunities and actual credit risks. Furthermore, institutions should collaborate to standardise external impact reporting against the SDGs to make it easier for institutional investors to report back to their shareholders on the impact of their asset allocation. The Impact Loan eXchange is responding to this need (see **Exhibit 33**). Frameworks such as Integrated Reporting have also been developed to help integrate the SDGs into a company's business model and strategy.

EXHIBIT 33 | Impact Loan eXchange (ILX)

Overview: Long term (20 year+) debt fund sponsored by Cardano development (the Dutch development finance institution managing TCX, Frontclear and GuarantCo) to invest in B-loans syndicated by leading development banks such as IFC, EBRD and others.

Size: first close (Q1 2019) targeting $1 billion

Region: Developing countries

Sector: All

Private Investors: Dutch pension funds

Blending Approach: De-risking for specifically high-risk investments (e.g. LDC/F&CAS countries) would allow more enthusiastic appetite for frontier investments.

Impact approach: Dutch pension funds have developed a Sustainable Development Investments (SDI) framework leading to explicit appetite for impact investing at scale. On the other hand, development banks have long invested for impact and have developed tools for quantified and qualitative impact targeting, screening, monitoring and reporting. In order to unlock the co-investment potential between the two, ILX needs to translate the development impact methodology of the development banks with the SDI framework used by the institutional investors and create a common language.

ii) Rating agencies

Credit rating agencies are important players in the financial value chain and the lack of data from the MDBs and DFIs impacts their ability to rate blended finance vehicles.[99] Given that ratings are based on default risk, this makes it harder for the agencies to view these tools as something which provide sufficient credit enhancement. Most emerging markets sovereigns are rated below investment grade (low single B or not rated at all!)[100] and even with investment structures that have significant credit enhancement (using blended finance tools like guarantees or risk insurance etc.), credit rating agencies are reluctant to pierce the sovereign ceiling. There are obviously exceptions like the Elazig Turkish hospital PPP which benefited from a liquidity facility and political risk insurance from MIGA which achieved a rating of Baa2 by Moody's – above Turkey's sovereign bond rating of Ba1 – but this is not the norm. If projects in the first place are located in countries with no sovereign rating, it is more or less impossible to obtain a rating. As a result of the "blending", the bond was bought by foreign investors such as Japanese MUFG, Italy's Intesa Sanpaolo, Germany's Siemens Financial Services, France's Proparco, Dutch FMO and the Industrial and Commercial Bank of China.

With the largest stock of relevant project information, the Taskforce calls on the MDBs and DFIs to report their project-related data. This would allow a comprehensive study on the performance of blended finance assets, including returns and default rates. From our initial analysis, we would expect the proportion of projects defaulting to be low. If that proves to be true on a broader analysis, then theoretically the rating agencies should be able to view projects with this type of support as having a lowered risk (to attract a higher rating).[101] This analysis could build on the existing good work already done by S&P and others around ESG integration

iii) Standard performance metrics

Along with information sharing, it will be important for both the development finance players and commercial investors to move to a common set of performance metrics for measuring impact if this market is going to scale efficiently. The MDBs and DFIs, who can to some extent claim to be the "original" impact investors, have developed their internal frameworks for impact measurement and reporting over the past few decades. Their systems have been created by large teams of economists according to each institution's development specific development mandate. However, these impact measurement systems are yet to speak fully to the SDGs (as the emerging reference point for the impact investor community) or speak to other MDBs and DFIs (though early steps are underway to align reporting). The development banks should work with each other, along with aid agencies and the impact investor community to align approaches. This can build on existing initiatives.

For example, alignment processes are ongoing in the context of the G7 and G20 discussions and some of the MDBs and DFIs have started sharing their methodology around impact indicators. The EBRD has already shared the impact indicators it uses in its new internal software impact ranking tool with the IFC. Together, they have started mapping impact to the SDGs with the aim of being able to report impact in an aggregate manner for investors that have a portfolio across various MDBs. This will help external stakeholders and investors to understand and compare the impact of projects. **Exhibit 34** shows some examples of organisations pushing initiatives to help harmonisation of SDG integration and impact reporting.

EXHIBIT 34 | Standard performance metrics initiatives for impact measurement

The Global Impact Investing Network (GIIN)[102]

In 2016, GIIN began developing Navigating Impact, a resource designed to reduce fragmentation in approaches to impact measurement among impact investors with similar impact expectations and to facilitate the adoption of common core sets of metrics by impact objective, strategy, and/or investment theme. The project currently serves three investment themes: affordable housing, clean energy and smallholder agriculture in emerging markets. Supporters of the project include: DFID, Rockefeller Foundation, JP Morgan, Kellogg Foundation, and MacArthur Foundation. Further, GIIN is managing the "Investors' Council Leadership Initiative on Impact Management" with actors such as Abraaj, Credit Suisse and JP Morgan, IFC, FMO, CDC and many others (but not all MDBs are involved). The council is piloting an impact management project to test, refine, and solidify a shared set of fundamentals for impact investing, as a first step in establishing norms for the industry.

Principles for Responsible Investment (PRI)

The PRI is an investor initiative launched in partnership with UNEP Finance Initiative and UN Global Compact. Today, PRI is signed by more than 1750 signatories, gathers the commitment of investors to six voluntary and aspirational investment principles to incorporate not only ESG factors in the investment process, but also incorporates the guidance of the SDGs on the broader objectives of society. In October 2017, PRI (in partnership with PwC) published the SDG Investment Case specifically outlining why investors should want to contribute to the SDGs. As a next step, PRI will develop a programme that stimulates and helps signatories to align their responsible investment practices with the broader sustainable objectives of society, as currently best defined by the SDGs.

The Fourth Sector Mapping Initiative[103]

The Fourth Sector Mapping Initiative is a global, multi-stakeholder collaborative effort that intends to foster consensus on a global census instrument and a scheme of classification for organisations primarily driven by social and/or environmental motivations and that earn most of their income through business activities. The initiative has been developed in partnership with the B team, the Urban Institute as well as a diverse Advisory Council of 180+ thought leaders and seasoned practitioners (including Rockefeller Foundation, the GIIN, McKinsey and Harvard business school).

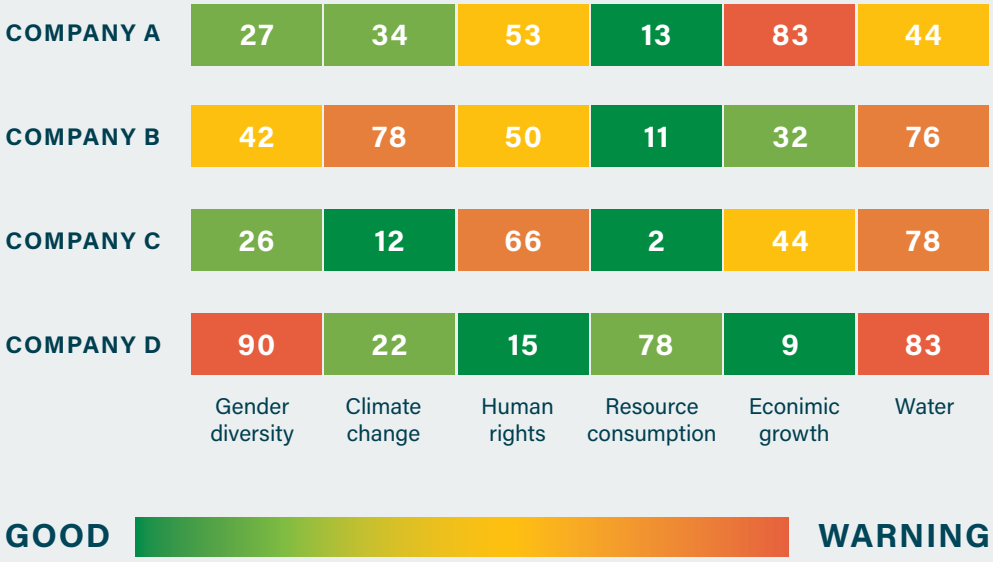
The Impact Management Project[104]

Launched in late 2016, it is designed to provide rigorous framing to articulate what impact means and how to pursue impact by agreeing on shared fundamentals. The project is facilitated by Bridges Impact+ and partners include the Omidyar Network, the Ford Foundation, Anthos, and the DFID. Last year, the initiative collected data on impact investors, social and environmental enterprises, and other mission-driven organisations and will be released in a freely accessible interactive database to encourage consistency of impact measurement practice.

World Benchmarking Alliance[105]

The last decade has seen a quiet revolution in how companies disclose information about sustainability issues. Nevertheless, companies find the existing data hard to digest, difficult to compare, privately held and costly to access. One solution is to develop corporate sustainability benchmarks – league tables that use the data companies report and then rank how companies perform against others in their sector. This is a concrete, achievable and market-friendly initiative that will help create a race-to-the-top in corporate sustainability performance.

This is why the World Benchmarking Alliance (WBA) was established – to develop a benchmark for the SDGs that are the most relevant to companies. The benchmark needs to be sectoral in nature to make sure it compares companies on a like for like basis, and the methodology needs to be built in a highly public way engaging companies, their investors and the full range of policy experts and non-governmental stakeholders. The WBA's mission is to provide everyone with access to information that indicates how companies are contributing to the SDGs by developing free and publicly available corporate sustainability benchmarks that rank companies on their sustainability performance and contribution to achieving the SDGs (see illustrative example **below**). The WBA is expected to play a role in leveraging and harmonising the incoming wave of SDG-related monitoring initiatives that are currently being developed.[106]



Addressing issues with intermediaries – including using mobilisation targets

Changing the way that the MDBs and DFIs interact with the private sector will not happen without concerted leadership. As discussed earlier in this chapter, the Taskforce sees the most important lever to accelerate development of the blended finance market would be if these institutions, supported by their shareholders, were to commit to specific blending targets over the next 3, 5 and 10 years and placing increased relative weighting on their private sector lending operations. Setting these targets should follow comprehensive analysis around the portfolio consequences (particularly the potential trade-off that higher mobilisation targets push investment into safer territory), the design of a targeting framework that recognises differences across countries and project types, and a review of risk implications, revenue impact and balance-sheet capital requirements.

Setting these targets would send a shock-wave through the development finance system and would drive many of the required changes, from the need for product standardisation through to asset pooling, different incentive structures, streamlining processes and procedures and more competitive pricing. It will require MDBs and DFIs to invest significantly more human resources in their mobilisation activities and become an ever-more active, predictable, and consistent partner to private capital partners. In turn, this means the MDBs and DFIs would need to ensure they have the right skills, experience and institutional culture to modernise and shift the mindset to be more "private sector focused". Investment professionals within development agencies should be rewarded both on achievement of development objectives and on delivering private capital mobilisation goals.

The IFC's Asset Management Company (AMC) is a good example of this more commercially-minded culture, constructing diversified portfolios for investors by investing selectively and actively alongside the IFC in high potential companies and infrastructure projects in emerging markets.[107] The AMC's ability to operate as a "private sector-like institution" housed within the IFC has been fundamental to its investment and fundraising success, having raised $10 billion for 13 funds from institutional investors across the globe. To date, AMC-managed funds have committed $6 billion in about 100 emerging market companies and investment funds.

For the private sector, having the MDBs and DFIs set mobilisation targets would send a strong market signal, incentivising major financial players to build up their teams on this agenda. In a world with $1 trillion per year of sustainable infrastructure assets being originated and intermediated through a grown-up blended finance marketplace, revenue pools for intermediaries could be at least $20-40 billion per year, enough to attract serious talent and stimulate the development of the market for private intermediaries.

The Taskforce also recommends that concessionary capital in blended finance structures should be treated with the full respect that it deserves. Concessionary capital providers and managers (e.g. ODA donors, philanthropy foundations and MDBs) should set explicit and ambitious targets to mobilise private commercial financing. While we recognise that for certain high-risk or unproven projects, concessionary capital is a necessary tool to secure MDB or DFI participation, the use of concessionary capital should be primarily to de-risk private commercial investment in projects and other investment vehicles. For example, IFC's recently announced blended

finance facility integrating IDA funds should place a high priority on achieving ambitious private capital mobilisation targets, not simply enabling IFC participation in various deals. At the same time, scarce donor-provided concessionary funds should, in the future, be made available to development finance organisations that have a strong mandate and commitment to enhanced private capital mobilisation.

Building new private intermediation capacity

The participation of private intermediaries will be critical to expand the blended finance market. To date, banks, project developers and private asset managers have only played a smaller role in intermediating blended finance transactions. There are too few seasoned private sector institutions with the networks and expertise to effectively structure blended finance transactions. The importance of creating this private sector intermediation capacity should not be underestimated. The importance of local or international commercial banks with presence on ground like Standard Chartered, or asset managers like Climate Fund Managers, as private intermediaries should not be underestimated. As providers of credit, pipeline aggregators or facilitators for asset pooling through fund structures, private intermediaries channel billions of funds to underserved segments (like SMEs and the "missing middle").

Local banks are particularly important private sector intermediaries, not only as originators of assets but because they know the local markets and can provide local currency financing. Development banks could be particularly catalytic if they provide credit guarantees to local banks who are lending to infrastructure projects. This allows project developers to access debt at a reasonable cost and helps local banks build up a track record and operating history and build capacity, decreasing the perception of risk. Finally, local banks can also play a vital role in helping to structure deals in the early stages. As a long term asset, an infrastructure project goes through different risk cycles across each phase of the project (development, construction, operation) and the financing needs to be structured with this in mind: not all investors intend to be invested for the duration of the asset life. As a result, if the assets are not structured to ensure that they are transferable, then investors who are looking for liquidity and a reasonable exit strategy will be immediately put off.

Recognising the huge opportunity for the private sector to participate as intermediaries (with tens of billions of dollars in value creation as the blended finance market matures), we expect that leading project developers and asset managers will skill up quickly once investors start prioritising blending as a mechanism to de-risk investments and the money starts flowing at greater scale. If we get the rest of it right, the smart money will invest ahead of revenue to capture the opportunity. However, the Taskforce calls on private asset managers and project developers to accelerate their entry into this market. And we call on the MDBs and DFIs to support the creation and scaling of such entities which should work with (i) the providers of concessional capital to build effective, low-cost, common systems for impact measurement that would be most relevant for their institutional investors; and (ii) the credit rating agencies around risk metrics. In doing so, the private sector asset managers will drive the creation of the market infrastructure (information, ratings, legal, documentation, awards, fee norms etc.) that will bring this market to scale.

While scaling up the intermediation function is key to system redesign, there is still an important space for innovation and learning. This is especially true for the less capital-intensive components of SDG delivery, such as in health, education and other interventions (such as insurance mechanisms) which are critical to building more inclusive, socially just economies. There is a special role for philanthropic foundations, working together with the public and private sectors, to drive innovation through supporting blended finance vehicles, using grant making and PRIs to de-risk new results-based interventions (discussed earlier in Chapter 2). The foundations have a good track-record already in this arena, for example around global public health, affordable housing, education and financial inclusion.

One area where new blended finance vehicles can be particularly catalytic is to seed the next wave of investment plays in e.g. water, off-grid and sustainable land-use. Or in poorer, less creditworthy regions or countries. Waste management systems are also a good example. In reality, it is hard to get private investors to come in and play at scale today in many developing countries. There are too many risks of different types, including feedstock risk, off-take risk, regulatory risk, land-access risk and indeed, technology risk – since some of the waste conversion technologies are new and hence are similar to where solar was five years ago. But with some blending, it becomes possible to play, and is a "sweet" spot where new private sector intermediaries could add the most value before taking it to scale. Blending plays a number of roles here: (a) it helps investors participate in risks that they would otherwise perceive to be too high; (b) it helps project developers deploy technologies that could get much more cost-effective as there is a faster technology cycle; and (c) it helps host country governments get clear about the requirements to mobilise mainstream capital, by clarifying what risks are/are not investible. Again, the blended finance "risk cushion" helps to lower perceived risks, making the asset class more investible on a regular basis.

In light of the importance of private intermediaries in offering a nimbler interface with private sector investors and tackling the more difficult SDG-related investments, and acknowledging the time and cost it takes to set one up, the Taskforce calls on donors / philanthropies to help establish and scale private blended finance intermediaries for "less investable" sectors or geographies, providing support for operational expenses associated with the development and launch of outstanding blended finance concepts. A $30 million pool of capital could catalyse the creation or scaling of up to 10 organisations offering a blended finance solution in a specific sector, country or region. Eligible recipients would need to show clear pathway to a self-sustaining and highly-catalytic blended model within a defined period of time (e.g. 2-3 years). Interested parties would likely come from one of three categories; (a) nascent organisations with particularly strong blended finance strategies; (b) existing organisations active in blended activities who are in a position to significantly scale their efforts in a new geography or toward a new SDG, etc.; and (c) large established entities looking to create blended finance functions. This money would provide support for operational expenses associated with the development and launch of outstanding blended finance concepts, and could be administered in coordination with activities such as those being run by CPI's "Climate Finance Lab" or Convergence.

CHAPTER 4 – PIPELINE

Key takeaways

- A lack of bankable projects is often said to be the key barrier to investing in emerging markets. Countries that do this well tend to have particular institutional mechanisms that coordinate across national strategy, policy and investment programmes. They bring the private sector in early and have robust sustainability standards.
- At the project level, we need to rethink the traditional model of project-based "technical assistance" to ensure it is closely linked to follow-on sources of investment capital or contributes to pipeline development for an existing vehicle.
- Developing countries who can replicate these institutions and vehicles should be able to generate quality infrastructure assets and so, should not be short of financing.
- Many middle-income countries are already tapping into international capital markets at a historically low cost of capital. As blended finance models begin to scale alongside other mechanisms such as green bonds and OBOR funds, capital will not be the constraint. Instead, performance differentiation over the next decade is more likely between those developing countries that get policy and institutional mechanisms right to attract long-term capital versus those that are slower to adapt.
- We can see this story play out when looking at how the clean energy market has scaled. Lessons can be learned for sectors like sustainable land use which is at a much earlier stage in the journey but is also critically important to the world's economic and climate agenda.

Preconditions for pipeline

The "supply-side" problem is well-known. Speak to anyone from the private sector about using "billions" of aid to mobilise "trillions" of private capital for the SDGs and they will ask you what the trillions should be invested in. Strengthening project pipelines therefore a key priority. And when we look at particular countries who seem to be "getting it right," we can figure out that there are a number of preconditions which need to be in place for effective development of a stable project pipeline. First and foremost, it's a good enabling investment environment, with effective local laws, clear policies, political certainty and operational transparency.

More specifically, countries with good pipelines have (a) institutions that take a "programmatic" approach to pipeline development, linking policies with investment plans and which can blend public and private interests; (b) good capacity at the government level; and (c) have shifted in the way project preparation and technical assistance is provided away from one-off, project-based support to a more systematic, sectoral approach.

a) Development institutions

Countries which have infrastructure development vehicles that can link sectoral strategies with policies, investment plans and sustainability standards, tend to have more success in developing stable pipelines of bankable projects. Even better if these vehicles have the capacity to blend a mixture of public and private finance and are commercially oriented.

One good example is in Colombia, where the national development bank, Financiera de Nacional (FDN) is the poster child for delivering priority infrastructure with a tight link between sectoral strategy, policy and investment programs. For example, FDN was instrumental in supporting the government's efforts to upgrade Colombia's Fourth Generation "4G" road network to improve and build over 7,000 kilometres of roads with an estimated capital expenditure investment of $24.4 billion. At least eight projects have reached financial close under the 4G road program with an estimated FDN financing of approximately $331 million. Through this financing, FDN is expected to mobilise more than ten times as many private resources (estimated around $3.7 billion) including from Colombian pension funds and international investors. While domestic capital market development is complex and interrelated, the efforts of FDN to crowd-in local investment will help deepen Colombia's markets and begin to provide financial products that were previously scarce.

EXHIBIT 35 | Colombia's infrastructure bank - FDN[108]

Background: Financiera de Desarrollo Nacional (FDN) is a Colombian financial institution with mandate to catalyse the domestic infrastructure finance market (it is estimated that $40 billion in infrastructure investment is needed across Colombia over the next ten years). In 2014 IFC and the Development Bank of Latin America (CAF) acquired equity stakes, reducing the government's stake to around 65%, meaning no longer subject to the rules and regulations for state firms.

Product offering: FDN can provide long-tenor loans, subordinated debt, and credit enhancements. Its operations are intended to supplement, rather than compete with, existing structures, and FDN's active presence and participation in transactions facilitates greater participation by local banks, domestic institutional investors, as well as foreign banks and international institutional investors.

Technical Assistance: FDN also plays an important advisory role to market actors in project structuring, financing, and advisory services to domestic financial institutions as well as advisory on execution of public-private partnerships, concession agreements, and project management to state and local governments (supported by IFC facility). FDN's activities are expected to not only transform the infrastructure finance sector but further develop and deepen Colombia's capital markets.

Public partnership: The government of Colombia has introduced a number of institutional and regulatory changes to promote the development of the infrastructure sector with private sector participation, such as implementing regulatory changes to allow pension funds to invest in infrastructure-debt funds.

Example projects: (i) Pacifico 3, which closed in February 2016 part of the domestic 4G road program: a 146 km initiative with 26 bridges and six tunnels. FDN committed $66 million in credit enhancements through its liquidity facility, while mobilising $663 million (59% from international institutional financing). (ii) A few bonds for the programme were issued internationally, while the rest were financed mostly through syndicated loans and other standard financing schemes. The IFC issued ca $12 million in local currency bonds in September 2017 to support local capital market development.

FDN shows that it is possible for quasi-national vehicles to drive sectoral investment programmes which engage local institutional capital through strong commercial discipline. Building this kind of intermediation capacity in the middle of the government is often very difficult; so having an arm's-length vehicle like FDN is important as it allows the hiring of the right people who can engage effectively with the private sector in a deal-oriented environment.

This approach has contributed to the success of institutions like the UK's Green Investment Bank (now owned by Macquarie) and dedicated project preparation facilities like the Africa Clean Energy Finance (ACEF) initiative, which provides small amounts of early-stage capital to take project developers from initial concept to bankable investment plan. The Senegalese Strategic Investment

Fund (FONSIS) is another good example of an intermediary which has taken strong steps to align with the private sector. FONSIS shares its investment criteria publicly to ensure transparency with the private sector and has targets which are aligned with commercial interests, with a hurdle rate of 12% on its investments. By taking a "private sector oriented" approach, FONSIS is able to act as a financial intermediary that provides market credibility with the capacity to structure, negotiate and transact deals.

Having a dedicated vehicle to develop national infrastructure also allows for very targeted capacity building around project development and blending capital. Ideally, it also keeps the institutions from becoming heavily politicised while still benefiting from national strategic support. For example, FDN is governed like a private actor and operates with commercial discipline. However, it has benefited from being linked in to the national strategy for matters such as land acquisition and licensing in the construction of the 4G highways network. This combination of public and private has seen it attract investments from major Wall Street banks.[109]

b) Government capacity to engage with private sector

Building capacity within the relevant government departments is also extremely important. Finance ministries and other local policy institutions need to have the right skills amongst staff and advisers to test for the bankability of a project or investment program. What makes a something "bankable" differs across industry sectors and investor profiles, so this requires a degree of understanding of project preparation and structuring at the national planning level.[110] Government execution capacity is also critical. This is where private sector secondments to government ministries could help share skills and bridge language gaps between the public and private sector.

This is also where governments can draw on existing tools like the G20's Global Infrastructure Hub (GIH)[111] – which was developed to establish and disseminate best practice in project development. The GIH recently launched a new tool to guide governments in creating the best conditions to deliver infrastructure; though it seems to lack the resources required to market these products for widespread use.

Finally, viewing the relationship with the private sector as a "collaborative partnership" can go a long way to support project development. For example, the Tropical Landscapes Financing Facility (TLFF) was launched by the Coordinating Minister of Economic Affairs of the Republic of Indonesia in 2016, and is based on a partnership between UN Environment, BNP Paribas, ADM Capital and The World Agroforestry Centre (see **Exhibit 36**). With strong support from the Indonesian government, the TLFF provides a mechanism to access and deliver private sector capital (targeting 5-10% IRR) enabling the country to meet its significant development and climate targets. The objective is to support closing the $20 billion funding gap in Indonesia for projects with significant environmental and social impact which are critical to securing long-term economic prosperity by scaling up investment in landscapes. This results in enhancing the "GDP of the Poor" achieved through sustainable production of agricultural commodities, and improved smallholder productivity with reduced deforestation in Indonesia.

EXHIBIT 36 | Tropical Landscape Finance Facility (TLFF) - Indonesia

The TLFF provides affordable, long-term loans to enhance smallholder farmer livelihoods, rehabilitate degraded land, and provide cleaner electricity, through mobilising international capital markets for projects with financial, environmental and social returns. While donor-based capital is used to finance early stage development costs and technical assistance through the Grant Fund, once projects reach maturity and generate sustainable cash flows, these are securitised and sold as notes to patient capital investors.

The TLFF enables public, philanthropic and private investors to invest in different SLU projects, at different maturity stages according to their risk-taking capacity. By securing strong security packages (e.g., corporate and DFI guarantees, off-take agreements, hard asset collaterals and more), the TLFF aims to attract institutional investors (DFIs, pension and insurance companies). Thanks to the Grant Fund managed by UNEP and ICRAF and acting as a deal originator, TLFF has a strong pipeline of immediate investment prospects in Indonesia. The initial deal pipeline for land rehabilitation and smallholder livelihoods projects amounts to US$350 million.

In December 2017,[112] TLFF announced that it finalised its first investment to help reduce poverty while preserving the habitat of three critically endangered species. The TLFF has worked with key private sector partners to finance a wildlife-friendly rubber plantation using state-of-the-art technology. The novel project is designed to provide sustainable livelihoods, with fair wages, for 18,000 marginalised farmers in Sumatra and Kalimantan in Indonesia.

Key Terms: Target size $1bn Loan Fund, $100m Grant Fund. Expected 5-10% IRR; 5-15 years payback period (deal dependent)

Impact: Expected to preserve over 90,000 hectares and improve livelihoods of more than 42,000 farmers in Indonesia.

Leading organisations: ADM Capital, BNP Paribas

Building on the TLFF, UN Environment and BNP Paribas have recently announced a large milestone agreement, the "Sustainable Finance Facilities" initiative, to establish collaborate partnerships with a target of capital funding up to $10 billion by 2025 in developing countries.[113] UN Environment and BNP Paribas will work to identify suitable commercial projects with measurable environmental and social impact. The aim is to support smallholder projects related to renewable energy access, agroforestry, water access and responsible agriculture, among other sustainable activities. The Sustainable Finance Facilities programme is deemed to be first of its kind in terms of collaboration between companies, investors, development sector partners, and civil society organisations, with the support of national governments.

c) Programmatic technical assistance

Third, we need to change the way project preparation and technical assistance is provided. Much de-risking still happens at the project level, rather than higher up in the system and with very low mobilisation ratios. Technical assistance is also heavily project-based, rather than applied to a sectoral strategy. We need to shift from one-off, project-based support to a more systematic, sectoral

approach. Many priority projects in developing countries lack the adequate depth and breadth of preparation to fulfil the requirements of commercial investors.[114] This is not for lack of funding. There are billions of dollars of technical assistance grant funding for project preparation that have either been spent in producing consultancy reports and/or sit undisbursed in a proliferating range of trust fund facilities. Meanwhile private sector project developers complain that they are starved of the operating capital needed to complete the often-lengthy pre-construction development phase of the project lifecycle.

The Government of Norway is one example of a donor using blended finance to drive project development in a systemic way. Through the REDD+ programme, Norway commits hundreds of millions of dollars a year to reducing emissions from deforestation and forest degradation in developing countries like Indonesia, Brazil, Colombia, Ethiopia, Vietnam and the Congo Basin. But rather than simply providing grants, Norway´s International Climate and Forest Initiative (NICFI) channels money through a range of different instruments and vehicles to drive project development at the sectoral level in order to attract private sector investment to the space.

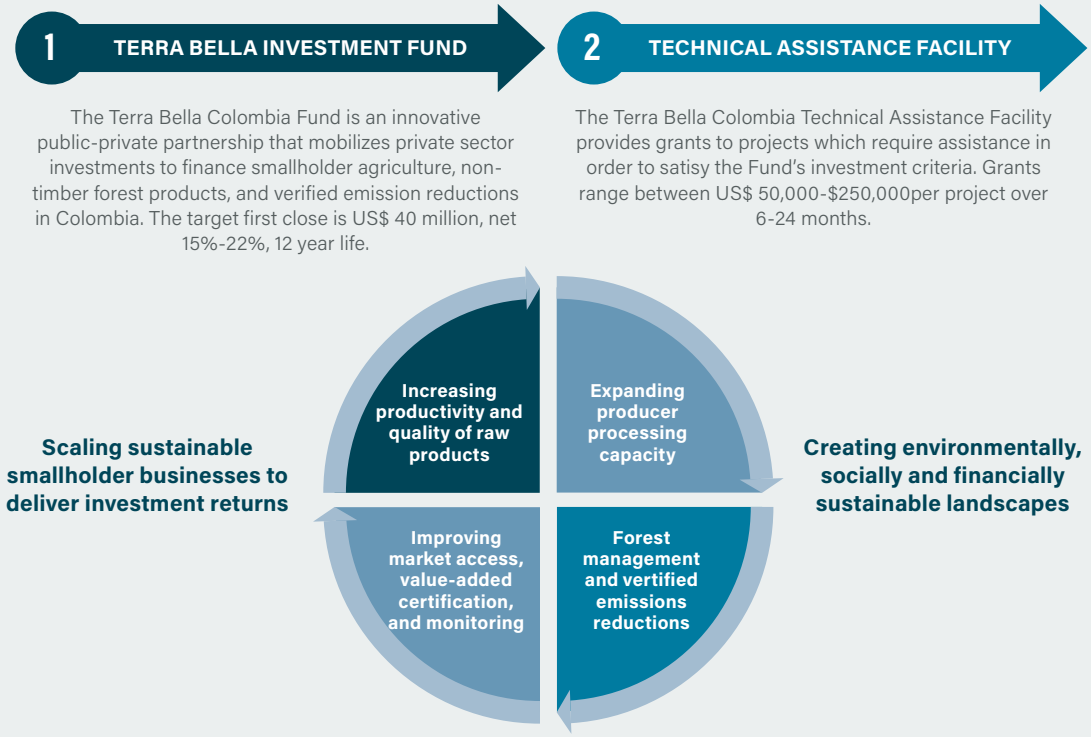
We also need to rethink the traditional model of project-based "technical assistance" to ensure it is closely linked to follow-on potential sources of investment capital or contributes to pipeline development for an existing fund. An "ecosystem" approach whereby funds are closely linked to organisations that can subsequently invest are one solution. This must be done in a way which manages conflicts of interest, or sees the technical assistance provider putting real skin in the game for the construction/development phase to achieve a better integrated outcome. The Terra Bella Colombia Fund is a good example of this – it benefits from having a "soft" link to a USAID technical assistance facility that provides grants of US$50-250k to projects which require support to satisfy the fund's investment criteria.

EXHIBIT 37 | Terra Bella Colombia Fund – Investment Strategy

Background: The Terra Bella Colombia Fund is designed to mobilise private equity investments to finance smallholder agriculture, non-timber forest products, and climate change mitigation in Colombia. The Fund utilises a public-private partnership structure, combining anchor investments from USAID/Colombia with private funds to deliver Colombia's first investment fund dedicated to the production-end of smallholder agricultural value chains that also produce verified emission reductions.

Mandate: The Fund aims to generate long-term returns for investors while delivering measurable environmental and social benefits. The Fund's investments target the production-end of value chains, focusing on the stages that are managed directly by the smallholder producers – enabling transformation to sustainable landscape management and increased rural incomes. The Fund also seeks to generate financial returns through the sale of emission reductions that are generated from avoiding deforestation, promoting reforestation, and adopting climate-smart agriculture. By also producing emission reductions through the Fund's investment, a new source of climate finance can be channelled from private companies which are subject to Colombia's carbon fuel tax to smallholders for sustainable landscape management.

Technical Assistance: In order to support the Fund's projects, a Technical Assistance Facility has been established to "bridge the gap" that smallholders face in achieving readiness to access investment capital. The Fund will leverage Terra's experienced international and local portfolio management team to identify and deliver the support required to make projects bankable. This technical assistance facility is awarded to eligible projects after close evaluation and determination by the Fund's portfolio management team.



The journey to bankability

Countries which have put the right institutions and vehicles in place have already been successful in getting funding because they have the right environment to support development of a strong pipeline of investable projects. Large capital flows will systematically go towards those developing countries which generate high quality assets, but the institutional and policy settings have to be right first in order to build pipeline in order for the investment to flow.

Many middle-income countries are already tapping into international capital markets at a historically low cost of capital. As blended finance models begin to scale alongside other mechanisms such as green bonds and OBOR funds, capital will not be the constraint. Instead, the next decade could see greater performance differentiation between those developing countries that get policy and institutional mechanisms right to attract long-term capital versus those that are slower to adapt.

We can see this story play out when looking at how the clean energy market has scaled dramatically (clean energy investment for 2017 is likely to reach $290 billion). Lessons can be learned for sectors like sustainable land use which is at a much earlier stage in the journey but is also critically important to the world's economic and climate agenda.

a) The clean energy transition

We have seen a whole series of countries like Chile, Brazil and Turkey go on the journey from having no investable projects in the clean energy space, to where they are today: countries with high quality clean energy projects and dramatic reductions in capital costs. India is arguably the best example, where renewable energy targets have provided enormous momentum for project development, particularly in the rooftop solar space, where capital costs for rooftop PV are now even lower than China (see **Exhibit 38**).

The flood of capital into the clean energy space in countries like India depended on it having the right institutional and policy settings in place to build pipelines to attract investment at scale. India's Energy Efficiency Services Ltd (EESL) is an example of this – as a joint venture set up under India's Ministry of Power to facilitate implementation of energy efficiency projects and to provide affordable LED lights for all. It is the world's largest public energy services company. By operating in sync with India's national priorities, it aims to unlock the energy efficiency market in India, estimated to be at US$12 billion. Mexico is another example, which has seen a dramatic scaling up in its wind industry after the government passed an aggressive climate change law that required 35% of the country's energy to come from renewable sources by 2024, and made other policy changes to support the wind sector.

Other countries have not caught up so quickly, with Wandee Khunchornyakong, the Thai entrepreneur who set up Thailand's first solar project lamenting that she is keen to venture into Myanmar, where millions of people lack access to electricity, but says it is difficult without a concrete national policy on renewable energy.

EXHIBIT 38 | Accelerating India's Clean Energy Transition[115]

The good news: favourable policy and low equipment costs

India is accelerating development of renewable energy projects to provide cheap, reliable and clean energy to its 1.3 billion people. Bloomberg New Energy Finance estimates that India's total renewables sector is a $53 billion investment opportunity. Rooftop solar continues to be the fastest growing sub-sector, and needs to grow faster still to reach the ambitious 40GW target for 2022 (rooftop solar estimated to represent a $23 billion investment opportunity). Installation of renewable energy projects will be higher than fossils fuel technologies for the first time in 2017 and in the years thereafter. The country added 12GW of renewable energy plants in between April 2016 and March 2017, representing 66% growth compared to the previous year.

The levelised cost of electricity (LCOE) of rooftop photovoltaics (PV) in India for both residential ($0.077/kWh) and commercial ($0.062/kWh) consumers is one of the lowest in the world and comparable only to some of the sunniest parts in Australia and US. The low price is driven by capital expenditures that are 39-50% lower than the global average. All components, including equipment, EPC, labour and soft costs are cheaper in India. The capital costs are even lower than in China, from where India imports most of its PV equipment. Rapidly declining costs of wind and solar projects mean that India's financing requirement for utility-scale projects over the period will be an estimated $19 billion lower than projected just a year ago. Fierce competition in the market and drop in equipment costs have led to cheaper rooftop PV power.

Renewables financing is also expected to go public. Project finance in India is typically raised via debt through domestic and international banks and equity from private investors and corporates. Several independent power products (IPPs) are now expected to launch initial public offers in the near future, opening up the market to broader investor participation. Green bonds worth $2.9 billion were issued in India in 2017 (till October), up from $1.5 billion in the whole of 2016. This financing mechanism is expected to pick up as more IPPs try to free up equity locked in commissioned projects.

Why blended finance is needed[116]

Despite a decline in the cost of debt for renewable projects in India in recent times, it still lies between 9-11%, making it one of the highest in Asia. India's policy conditions for clean energy investment are strong but blended finance can play a key role in providing much needed capital at attractive terms. Unfavourable terms of capital, especially high cost and short tenors of debt, can increase renewable energy project costs by approximately 30%. Finally, although off-grid solar markets are active, with 40+ established players, few companies have achieved profitability and most need to scale 2-4 times to break even. Most providers sell under 5,000 units annually at 1-5% operating margins. Many barriers play a role. First, **off-taker risk** is driven by low credit ratings for operating assets. Utilities struggle with high debt burdens ($67bn sector-wide in 2015) and operating losses of 20-25%. The UDAY debt restructuring program launched in November 2015 aims to decrease debt servicing costs and increase efficiency in the long-term. In the short-term, Payment Security Schemes are being developed to provide comfort to lenders. Second, **currency risk** for financing denominated in foreign currency is a major risk for investors. Third, there is a **shortage of liquid instruments** for renewable energy investment. It is clear that blended finance mechanisms are ideal to address these barriers to enable private investment in the enormous clean energy opportunity in India.

b) The sustainable finance transition

China is another example which has successfully financed a mega infrastructure program at unprecedented levels. This has required strong pipeline development and recently seen increasing emphasis being placed on sustainability standards and "green" investments.

EXHIBIT 39 | China's push for a green pipeline

China has invested in infrastructure projects around the world since the 1970s but a coherent policy for infrastructure investment first appeared in 2013 under the Silk Road Economic Belt initiative, shortly followed by the establishment of the Asian Infrastructure Investment Bank and the New Development Bank led by China, Brazil, Russia, India, and South Africa. The crown jewel, China's One Belt, One Road initiative (OBOR), is expected to attract $1 trillion for trade, transport, and energy initiatives around the world[117] and has seen a wave of fundraising and institution-building. Planned investments range from ports in Pakistan and Sri Lanka to high-speed railways in east Africa to gas pipelines crossing central Asia. Core projects include a $54bn land route from China's Xinjiang region to a deep-water port in Pakistan, Gwadar. It will spend $1.1bn on creating a "port city" in Sri Lanka's Colombo, across from Gwadar. A planned 3,000km (1,900 mile) high-speed rail line from south-west China to Singapore will cost even more. OBOR is arguably the largest overseas investment drive ever launched by a single country with the potential to help solve the global infrastructure gap and aid growth in developing countries while boosting trade and generating investor returns.[118]

The scale of China's national infrastructure strategy ensures that significant resources have been made available for project development, demonstrating how a nationally coordinated approach can help drive pipeline development if it is in conjunction with sectoral policy and investment plans. But China is now turning its focus to try to be "greener", a push which has seen initiatives from the development of green bonds standards to the launch of a national emissions trading scheme in December 2017.[119] Commercial viability of OBOR projects is the primary focus, however there have also been calls for the consideration of social and environmental investment criteria – for example through integration of the SDGs.

This has also been a focus on the home front. China is now targeting 15% of energy generation and consumption to come from renewable sources by 2020. In addition, the government plans to gradually reduce subsidies, forcing companies to reduce production costs by improving their own technologies. Green finance supports China's desire to rebalance the economy away from growth driven by heavy industry while simultaneously making itself the key player in an "industry of the future" and guaranteeing its own energy security. For the second year running, it is the world's largest issuer of green bonds (having issued $25 billion in the last two years), and the Chinese government is actively supporting capacity building for green finance within its financial institutions. It is regarded as a political priority – maybe even an imperative – for China to expand green finance as a means to tackle the environmental challenges and to meet set investment targets. China has seized on the huge investment opportunity in exporting low-carbon technology such as solar power or electric vehicles. China also became the world's largest PV producer market in 2014 and has a current solar target capacity of 105 GW by 2020. As at the end of June 2017, the country had a PV power generation installation capacity of 102 GW.

"One Belt One Road" is a Chinese initiative to integrate 60 countries across three continents through the development of land and maritime infrastructure, such as roads, rails and airports. Predominantly funded by the China Investment Corporation (CIC), commercial viability of projects is the primary focus, however there have also been calls for the consideration of social and environmental criteria – for example through integration of the SDGs. Currently it remains to be seen what standards are being used to judge the environmental sustainability of projects.

In addition to its green infrastructure push, China has also made huge strides in its green finance agenda. For the second year running, it is the world's largest issuer of green bonds (having issued $25 billion in the last two years), and the Chinese government is actively supporting capacity building for green finance within its financial institutions. It's regarded as a political priority – maybe even an imperative – for China to expand green finance as a means to tackle the environmental challenges and to meet set investment targets.

Photo credit: © Dr Morley Read/Shutterstock.com

CHAPTER 5 - ACTION PLAN

The business case for scaling up the blended finance market is clear: blended finance offers a window of opportunity for private investors looking to increase their exposure to sustainable infrastructure in emerging markets. It has the power to drive up long-term returns for savers; it is one of the critical pathways to delivering the SDGs; and it can contribute to the creation of high-quality assets. In doing so, blended finance can become a key driver of global growth. But the blended finance market needs to scale dramatically if it is going to have this kind of impact.

This will require decisive leadership from a diverse set of actors. Driving such a coordinated leadership agenda is always going to be complex, which is the reason we are publishing *Better Finance, Better World* initially as a consultation paper – so that the "action plan" can be developed in collaboration with the key stakeholders. *Better Finance, Better World* identifies 6 key areas for action (see **Exhibit 40**). The consultation phase will explore what would really be needed to move forward decisively with these actions and the action plan will set out the primary accountabilities to deliver on this growth agenda. Over the next 100 days of consultation, the Taskforce will look to identify where there is momentum on which we can build and where there may a need for fresh action. It will work closely with key institutional investors, a number of the leading foundations that have already committed to taking strong action around blended finance, the progressive coalition of SWFs that is emerging after the One Planet Summit, the MDBs and DFIs, the OECD and a number of developing countries that are committed to this agenda. The strong focus of this consultation will be around how to get into action with real ownership and milestones.

There is a case for some degree of strategic coordination across the action plan. The consultation phase will therefore also explore what might be the best coordination mechanism for this action plan, with a bias to leveraging one or more of the existing platforms

EXHIBIT 8 | Leadership agenda and call to action

LONG-TERM CAPITAL

1. **Institutional investors** should mandate asset managers to invest in emerging markets sustainable infra; embrace TCFD; and use blended finance to support SDG-investments in line with their fiduciary duty.
2. **Foundations** should coordinate their endowment, programme-related and grant-making strategies in support of blending.
3. **Developed countries** should set mobilisation targets for ODA and do the same for their MDBs and DFIs.

INTERMEDIATION

4. **MDBs and DFIs** should target higher private capital mobilisation. This will drive changes to incentive structures, product standardisation, asset pooling, private sector skill building etc. **MDBs** need to increase the relative share of their private sector activities. **MDBs and DFIs** should share information on historical performance of blended finance vehicles.
5. **Private asset managers / project developers** to accelerate entry into the market.

PROJECT PIPELINE

6. **Developing countries** should prioritise strong enabling environments with good policies, supportive regulatory regimes and government capacity for infrastructure investment especially for domestic institutional investors.

   Developing countries could create blended finance vehicles with the capacity to develop high quality assets for investment.

The Taskforce would welcome your feedback on developing this action plan and will set up a number of consultation forums up until 16 March 2018, with the *Better Finance, Better World* final report and action plan to be published at the World Bank / IMF Spring Meetings in late April 2018. Please email katherine.stodulka@systemiq.earth and catharina.dyvik@systemiq.earth if you wish to be involved in the consultation process.

ANNEX 1: STEERING COMMITTEE

The Blended Finance Taskforce is co-chaired by Lord Mark Malloch-Brown and Jeremy Oppenheim with special thanks to Senior Advisor, John E. Morton. Members of the Blended Finance Taskforce act in their personal capacity.

MEMBER	ORGANISATION
Matt McGuire (Vinay Chawla)	Abraaj
Astrid Manroth	AfDB
Steve Waygood	Aviva
Carsten Stendevad	ATP (former) / Bridgewater
Abyd Karmali	BAML
Brian Herlihy	Black Rhino
Ashley Schulten	BlackRock
Ed Mathias	Carlyle Group
Michael Eckhart	Citi Group
Sean Kidney	Climate Bonds Initiative
Joseph Brandt	Contour Global
Marisa Drew	Credit Suisse
Tony Adams	EastSpring (former)
Mattia Romani / Alan Rousso	EBRD
Nanno Kleiterp / Soren Andreasen	EDFI
Cherie Nursalim	GITI
Stewart James (Ed Wells)	HSBC
Julie Katzman (Matthieu Pegon)	IADB
Gavin Wilson (Kruskaia Sierra-Escalante)	IFC
Hendrik du Toit / Chris Newson (Aniket Shah*)	Investec
Fuat Savas	JP Morgan Chase
Lord Nicholas Stern	LSE / NCE
Debra Schwartz	MacArthur Foundation
Aron Betru (Chris Lee)	Milken Institute
Charlotte Petri-Gornitzka (Paul Horrocks)	OECD – DAC
Elizabeth Littlefield	OPIC (former)
Lorenzo Bernasconi	Rockefeller Foundation
Daniel Hanna (Katharine Steger)	Standard Chartered
Neo Gim Huay	Temasek
Rick Samans (Alex Wong)	WEF

ANNEX 2: GLOSSARY AND KEY TERMS

ADB	Asian Development Bank
AfDB	African Development Bank
Asset managers	Financial institution which manages assets / funds / investments on behalf of clients (asset owners) for a fee.
Asset owners	Has legal ownership of assets; can manage assets directly and/or outsource asset management. Examples: pension funds, insurers, banks, sovereign wealth funds, foundations, endowments, family offices, individuals.
AUM	Assets under management
Basel III	A global capital framework which requires financial institutions to hold more capital and higher quality of capital than under current Basel II rules. Basel III was intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage.
Blended finance	The use of development capital (public or philanthropic) to mobilise external private commercial finance for SDG-related investments. The Taskforce focuses primarily on the use of blended finance to make sustainable infrastructure in developing countries more investable.
Blended Finance Taskforce or Taskforce	Initiative of the BSDC set up to explore how to better deploy blended finance to achieve the SDGs.
BSDC	The Business & Sustainable Development Commission is a two-year initiative to encourage business leaders to align their companies with the SDGs; the BSDC established the Blended Finance Taskforce.
Catalytic capital	Capital deployed in a way which mobilises other investment.
CDC	UK Development Finance Institution
Co-Financing	Sum indirect and direct private mobilisation
Clean energy	Sources of energy consistent with achieving a low carbon, <2 degree world including renewable energy like solar and wind.
Credit enhancement	Various instruments that improves the chances that financing will be repaid (e.g. insurance or guarantee).
Credit rating	A credit rating is an assessment of the creditworthiness of a borrower in general terms or with respect to a particular debt or financial obligation.
Credit rating agencies	Companies that assign credit ratings, which rate the relative ability of an entity to meet financial commitments and the likelihood of default e.g. Moody's or S&P. Developing countries tend to have lower credit ratings which affect the flows of financing.
Currency hedging	The process by which a portfolio manager reduces or eliminates a fund or an investments' exposure to the movement of foreign currencies.
Development & Philanthropic Funders	Includes donor agencies, development finance institutions and public and private philanthropic foundations.
DFI	Development Finance Institutions are set up to support private sector development. They are usually majority-owned by national governments and source their capital from national or international development funds or benefit from government guarantees.
DFID	UK Department for International Development
Direct MDB Mobilisation	Financing from a private entity on commercial terms due to the active and direct involvement of a MDB leading to commitment. Evidence of active and direct involvement include mandate letters, fees linked to financial commitment or other validated or auditable evidence of a MDB's active and direct role leading to commitment of other private financiers. PDM does not include sponsor financing. (MDB Joint definition)

Endowment	An endowment is a financial asset, in the form of a donation made to a non-profit group, such as a foundation, may or may not have a stated purpose.
EBRD	European Bank for Reconstruction and Development
EDFI	Association of bilateral European Development Finance Institutions
ESG	Environmental, Social and Governance criteria used to screen investments
EU	European Union
First-Loss Funding	A position that will suffer the first economic loss if the assets below it lose value or are foreclosed on (can be provided through grant or guarantee).
FMO	Netherlands Development Finance Company
FX	Foreign exchange, the exchange of one currency for another or the conversion of one currency into another currency.
G20	The Group of Twenty is an international forum that brings together the world's 20 leading industrialised and emerging economies.
GIB	Green Investment Bank
GIH	Global Infrastructure Hub
GIIN	Global Impact Investing Network
Grants	A financial award with no expected repayment or compensation over a fixed period of time
Green bond	A debt security that is issued to raise capital specifically to support climate related or environmental projects.
Green finance	Green finance is a broad term that can refer to financial investments flowing into sustainable development projects and initiatives, environmental products, and policies that encourage the development of a more sustainable economy.
Guarantees	Risk reduction tools that protect investors against capital losses or provide credit enhancement. There are a number of different types of guarantees including: • Partial risk guarantees (PRGs): cover risks to debt (loan or bond) repayment post government action or inaction; • Partial credit guarantees (PCGs): cover all or part of the financial obligation regardless of the reasons for non-payment; • Trade finance guarantees: cover a portion of a bank's portfolio of trade finance.
HNWI	High Net Worth Individual
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association, a part of the World Bank that helps the world's poorest countries
IFC	International Finance Corporation (private sector arm of World Bank Group and a multilateral DFI)
INDC	Intended Nationally Determined Contribution identifies the actions a national government intends to take under the Paris Agreement agreed in December 2015 at the 21st session of the Conference of the Parties (COP21)
Indirect MDB Mobilisation	Financing from private entities provided in connection with a specific activity for which an MDB is providing financing, where no MDB is playing an active or direct role that leads to the commitment of the private entity's finance. Includes sponsor financing, if the sponsor qualifies as a private entity (MDB Joint Definition)

Impact investing	Investments made into companies, organisations, and funds with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return (at or below market rate).
KfW	KfW Entwicklungsbank (German government-owned development bank)
Loan Syndication	A loan offered by a group of lenders (a syndicate) that work together to provide funds for a single borrower
MCPP	Managed Co-Lending Portfolio Program - IFC's syndicate fund
MDB	A multilateral development bank is an international financial institution chartered by two or more countries for the purpose of encouraging economic development. They can include Global, Regional or Sub-Regional Banks (e.g. World Bank, EIB)
Mobilisation ratio	Amount of private external commercial capital mobilised directly or indirectly.
MRI	Mission Related Investments: Investments that further the investor's organisational mission. MRIs are generally made from a foundation's endowment.
NCE	New Climate Economy: a project by The Global Commission on the Economy and Climate which provides evidence on the relationship between actions which can strengthen economic performance and those which reduce the risk of dangerous climate change.
NDC	Nationally Determined Contributions
OBOR	One Belt One Road
ODA	Official development assistance, defined as government aid designed to promote the economic development and welfare of developing countries
Off-taker agreement	An agreement between a producers and buyers of a resource to purchase or sell portions of future production, such as energy.
OECD	The Organisation for Economic Co-operation and Development is an intergovernmental economic organisation which works to promote policies that will improve the economic and social well-being of people around the world.
Partial credit guarantee	Guarantee which covers all or part of the financial obligation regardless of the reasons for non-payment
Partial risk guarantee	Guarantee which covers risks to debt (loan or bond) repayment post government action or inaction
Pay for performance	Financial mechanism whereby the funding flows only once the target impact outputs have been reached.
Political risk insurance	Insurance against adverse government actions or war, civil strife, and terrorism. Provide a more stable environment for investments into developing countries, and to unlock better access to finance.
PPP	Public-private-partnership, a co-operation between a government and private partners in which the latter provide public services for a financial return
PRI	Program Related Investments: investments made by foundations to support charitable activities that involve the potential return of capital within an established time frame (US tax rules treats PRIs similarly to grants). Examples include loans, loan guarantees, linked deposits, and equity investments.
Private Sector Capital Providers/Investors	Diversified financial institutions and intermediaries, institutional investors (such as pension funds, insurance companies, sovereign wealth funds) and high net worth individuals
Project preparation	Grant or concessional funding provided specifically to deploy resources for early stage project exploration.
PSW	Private Sector Windows of the MDBs

REDD+	Term referring to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.
Results-based incentives	A programme where the principal (often a government body in a developing country) sets financial or other incentives for an agent (an implementing agency) to deliver predefined outputs or outcomes and rewards the achievement of these results upon verification.
SDGs	The Sustainable Development Goals, or the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.
SDIP	The Sustainable Development Investment Partnership: a neutral, multi-stakeholder platform coordinated by the World Economic Forum and the OECD that is comprised of banks, funds, DFIs, donors, foundations, governments, and MDBs; working together to facilitate blended finance for projects that contribute to development impact in emerging and frontier markets.
SIDA	Swedish International Development Cooperation Agency
Solvency II	A Directive in European Union law that codifies and harmonises the EU insurance regulation and came into place in 2016. Primarily this concerns the amount of capital that EU insurance companies must hold to reduce the risk of insolvency.
Subordinated / junior financing	Financing which in the event of default will only be repaid after all senior obligations have been satisfied.
Sustainable finance	Sustainable finance is the provision of finance to investments taking into account environmental, social and governance considerations aiming to support economic growth while reducing pressures on the environment. It also encompasses increasing awareness of and transparency on the risks which may have an impact on the sustainability of the financial system, and the need for financial and corporate actors to mitigate those risks.
Sustainable infrastructure	The assets required to build cleaner, more resilient energy, transport, urban and land-use systems across the world. It is infrastructure that is planned, designed, constructed, and operated to be economically, socially, and environmentally sustainable and resilient to changes in climate over the long term.
Sustainable land use	Sustainable land use protects the climate by averting or mitigating deforestation, degradation and carbon-intensive agriculture while providing safeguards for meeting increasing needs for food and protecting habitat for biodiversity.
SWF	Sovereign wealth fund, being a government or state-run fund usually created by profits from natural resources such as oil, gas or minerals
TCFD	Task Force on Climate-Related Disclosures, an industry-led disclosure task force on climate-related financial risks under the chairmanship of Michael R. Bloomberg
Technical assistance	Advisory or preparatory services, assistance, and training to facilitate private investment in high-impact projects and enterprises in order to supplement the capacity of investees or more generally to lower transaction costs
TLFF	Tropical Landscape Finance Facility
Trade finance guarantee	Guarantee covering a portion of a bank's portfolio of trade finance
USAID	United States Agency for International Development
WBA	World Benchmarking Alliance; an initiative to develop, fund, house and safeguard free, publicly available corporate sustainability benchmarks aligned with the SDGs
WEF	World Economic Forum; the international organisation for public-private cooperation committed to improving the state of the world.
2015 Paris Agreement	At the Paris climate conference in December 2015 (COP21), 195 countries adopted a universal global climate deal which sets out a global action plan to limit global warming to well below 2°C.

ANNEX 3A: BLENDED FINANCE INSTRUMENTS

INSTRUMENT	DESCRIPTION INSTRUMENT	TYPE	DESCRIPTION TYPE	RISKS / BARRIERS ADDRESSED
Direct debt or equity investment	Direct financial investment into a transaction or blended finance vehicle (project or fund)	Junior/Subordinated capital	Subordinated debt or Junior equity (incl. mezzanine). Losses on the value of the security are absorbed by the junior/ subordinated tranche first.	Multiple risks including off-taker risks, construction risks, credit risk etc.
		Catalytic Capital	Capital provided on commercial terms can be catalytic when used for demonstration effect ('anchor capital')	Access to capital, reputational risk
		Loan Syndication	A loan facility offered by a group of lenders. If MDBs/DFIs act as lender of record, International banks and institutional investors benefit from their tax exemption, preferred creditor status and immunities (A/B loan structure).	Transfer and convertibility risk, political risk,eEnvironmental and social risk
		First-Loss Funding (incl. as grant or guarantee)	A position that will suffer the first economic loss if the assets below it lose value or are foreclosed on (can be provided through grant or guarantee).	By improving risk-return profile, first-loss can catalyse the participation of more risk-averse investors
Guarantees Insurance	Generally, three party agreements, where a third party provides an extra layer of protection for the beneficiary of a service (protect against capital losses or provide credit enhancement).	Loan Guarantees	Loan guarantees can be complete or partial.	Multiple risks including off-taker risks, construction risks, credit risk etc.
		Performance Guarantees	Issued by an insurance company or bank to a contractor to guarantee the full and due performance of the contract according to the plans and specifications.	Completion risk / construction risk / technical risk
		Volume Guarantees	Tool to reduce risk associated with R&D and manufacturing of products	Demand risk / R&D risk
Insurance	Two party contracts between the insurer and the policy holder. The insurance provider promises to provide financial compensation in the instance of an event that results in a financial loss	Political risk insurance	Insurance against adverse government actions or war, civil strife, and terrorism. Provide a more stable environment for investments into developing countries, and to unlock better access to finance.	Provide a more stable environment for investments into developing countries, and to unlock better access to finance.
		Commercial / business insurance	To support operations against unexpected events. Typically agreed threshold for compensation for a given policy.	Construction risks / operation and output risks / upstream resource-related risks

INSTRUMENT	DESCRIPTION INSTRUMENT	TYPE	DESCRIPTION TYPE	RISKS / BARRIERS ADDRESSED
Hedging	Contractual instruments to help manage different types of risks faced by an investor or borrower	FX hedges/swaps	There are many promising blended finance solutions for reducing FX risk in developing countries (e.g. TCX), but cost and scale are still key problems.	FX risk
Securitisation	Securitisation refers to the process of transforming a pool of illiquid assets into tradable financial instruments (securities)	Asset Pooling	Securitisation can create products that attract larger institutional sources of capital through aggregation and securitisation of underlying assets.	Liquidity / time horizon, scale, counterparty / off-taker / credit risk
Grants	A financial contribution with no expected repayment to for example support capacity building, provide strategic or technical support. Preparation facilities can improve project financial viability by offsetting high up-front transaction costs, reducing the uncertainty of a project becoming operational.	Technical Assistance facilities (TA)	Advisory, assistance or training to the investee business or other value chain and ecosystem actors provided either pre- or post-investment.	Access to capital, capacity development, reduce transaction costs, operational risks
		Project Prep Assistance	Grant or concessional funding provided specifically to deploy resources for early stage project exploration	Lack of bankable pipeline, lack of local intermediaries
Other contractual mechanisms	Various contractual and project finance arrangements to supports the development of bankable infrastructure projects	Off-taker agreements, Subsidies such as feed in tariffs and tax credit	An agreement between a producers and buyers of a resource to purchase or sell portions of future production. Used to secure financing of a production facility or buy the equipment needed to extract a resource (e.g. power purchase agreements (PPAs) in the energy sector).	Demand Risk, Financing risk (demonstrate bankable revenue stream)
Results based incentives	Instruments that provide incentives and disincentives to achieve desired outcomes or results (tie at least a portion of payments to achievement)	Social Impact Bonds, Performance-based contracts	This type of financing is aimed at rewarding innovation and successful implementation of a project with clear climate benefits.	Operation and output risks

ANNEX 3B: CASE STUDY OVERVIEW

	NAME	STRUCTURE	SUMMARY	INSTRUMENTS	GEOGRAPHY / SECTOR	KEY TERMS	PRIVATE COMMERCIAL FINANCING
1	&Green	Fund	Provides purpose-built capital for the sustainable intensification of agricultural production systems and business models that reduce deforestation.	Concessional / Subordinated loans	Global / Sustainable Land Use	Target size: $400m (incl. $100m Norway)	Unilever
2	Abraaj Growth Markets Health Fund (AGHF)	Fund	Aims to improve access to affordable high-quality healthcare services for low- and middle-income healthcare populations.	Anchor Investment	Africa and South Asia / Healthcare	Target size: $1bn	PBUCC, Phillips, Mediatronic
3	Africa Agriculture Trade Inv. Fund (AATIF)	Fund	Financing agricultural businesses and local financial institutions which on lend. Structured with three different levels with different risk/return profiles.	First loss mechanism / Subordinated capital	Sub-Sarahan Africa / Sustainable Land Use	Size: $146m Fund	Deutsche Bank, Other investors
4	Africa Clean Energy Facility (ACEF)	Project Prep Facility	First-Loss Funding (incl. as grant or guarantee)	A position that will suffer the first economic loss if the assets below it lose value or are foreclosed on (can be provided through grant or guarantee).	By improving risk-return profile, first-loss can catalyse the participation of more risk-averse investors		
5	Climate Investor One (CIO)	Fund	Three separate facilities to spread the risk between the development stage, the construction stage, and the operations stage of clean energy projects.	TA / subordinated / guarantee	Africa, SE Asia, Latin America / Clean Energy	Size: $445m, Target return: varies / inflation to 20% (8% hurdle)	SANLAM, KLP, CFM, Royal Berkshire Pension Fund, Phoenix
6	Danish Climate Investment Fund (KIF)	Fund	Established by the Danish State and IFU (The Danish DFI) to invest in low-carbon and climate-resilient projects in developing countries.	Preferred return structure / TA	Global / Clean Energy	Target: 12% net IRR (8% hurdle) Size: DKK 1.2bn	Pension Danmark, Dansk Vækstkapital, PBU and PKA
7	Elazig Hospital Turkey	Project (PPP)	A hospital construction project in eastern Turkey which employs a hybrid financing structure made up of a loan and bond issuance (achieved rating above sovereign ceiling).	Bond / Political Insurance / Subordinated liquidity Facility	Turkey / Healthcare	Size: €360m bond, €90m equity	HSBC, Siemens, various private sector

	NAME	STRUCTURE	SUMMARY	INSTRUMENTS	GEOGRAPHY/ SECTOR	KEY TERMS	PRIVATE COMMERCIAL FINANCING
8	Global Energy Efficiency and Renewable Energy (GEEREF)	Fund-of-funds	Initiated by EU and supporting the deployment of clean and renewable energy technologies in developing countries by investing in specialised private equity funds that in turn invest in a broad mix of SMEs.	Seed Equity	Developing Countries / Energy Efficiency	Size: €222m (typically invest in funds €50-200m). Target: 20%	Other private: €110m EC, EU, Germany, Norway (€112m)
9	Global Health Investment Fund (GHIF)	Fund	A social impact investment fund designed to provide financing to improve healthcare. GHIF supports late-stage innovations for public health challenges.	First loss guarantee / Mezzanine debt	Developing Countries / Healthcare	Size: $108m	AXA, Storebrand, JP Morgan Social Finance
10	IFC Asset Management Company (AMC)	Institutional / Fund	Invests in high potential companies and infrastructure projects across Latin America and the Caribbean, Africa, the Middle East, Eastern Europe and Asia.	Equity	Developing Countries	Size: $10bn raised (13 funds), $6bn committed (102 funds)	Various
11	Impact Loan eXchange (ILX)	Debt Fund / Platform	Debt fund to invest in MDB/ DFI B-loans. An investment platform where MDB/DFI investments, initially loans, can be managed on behalf of institutional investors.	Syndicate / platform	Developing Countries	Target size: $1bn Term: Long term (20 year+)	Target: Dutch Pension funds
12	Lake Turkana wind power	Project	Wind farm (producing 310.25 MW) which has a public - private aspect: i.e. the wind farm was finance by the private sector and the transmission by the public sector	Partial Risk guarantee / political commercial guarantee	Africa: Kenya / Clean Energy	Size: €625m	South African banks, KP&P Africa, Aldwych, Vestas / Google (Share purchase agreement)
13	LeapFrog II Fund	Fund	Invests in high-growth companies across Asia and Africa that offer empowering tools such as insurance, savings and investment products to emerging consumers.	Anchor Investment	Africa & Asia / Financial Inclusion	US$400 million; currently fundraising for second fund up to US$100 million	AXA, Christian Super, MetLife, HESTA, Prudential Finance, Swiss Re and TIAA-CREF
14	Livelihoods Fund for Family Farming fund (L3F)	Fund	Provides upfront concessionary capital to project developers to train, assist and provide equipment to smallholder farmers to improve their agricultural productivity while restoring ecosystems.	Offtaker agreements / Results-based payments	Global: Africa, Asia, LATAM / Sustainable Land Use	Targeting >10% IRR; currently breakeven	Companies seeking to transform their supply chains: Danone, Mars, Firmenich, Veolia

	NAME	STRUCTURE	SUMMARY	INSTRUMENTS	GEOGRAPHY / SECTOR	KEY TERMS	PRIVATE COMMERCIAL FINANCING
15	Managed Co-Lending Portfolio Program (MCCP)	Platform	Offers a syndications process that allows institutional investors the opportunity to passively participate in IFC's future loan portfolio.	First-loss / Guarantees	Global	Target size: $5bn, Committed: $1.5bn	AXA, Allianz, Eastspring ($500m each)
16	REDD+	Market based initatives	REDD+ is a climate change mitigation solution developed by the UNFCC. It incentivises developing countries to keep their forests standing by offering results-based payments for actions to reduce or remove forest carbon initatives.	Various market based instruments / TA	Developing Countries / Sustainable Land Use	n/a	None
17	Solar Power Company Group (SPCG)	Project	Solar farm reducing CO2 emissions by almost 200,000 tonnes per year. SPCG is the leading developer of solar farm projects. Strong returns are resulting in replication of this model	Below market rate debt	Asia: Thailand / Clean Energy	Size: $800m	3 x local commercial banks
18	Terra Bella Colombia Fund	Fund	Mobilises private equity investments to finance smallholder agriculture, non-timber forest products, and climate change mitigation.	First-loss / TA	LatAm, Colombia / Sustainable Land Use	Target Size: $100m	Fundraising (N/A)
19	Tropical Landscapes Financing Facility (TLFF)	Facility	Loans to enhance smallholder farmer livelihoods, rehabilitate degraded land, and provide cleaner electricity, through mobilising international capital markets (initial projet sustainable rubbber)	Long Term Loans / Notes / TA	Asia, Indonesia / Sustainable Land Use	Target size: $1bn Loan Fund, $100m Grant Fund, Target: ca. 10% IRR, 5-15yrs payback (deal dependent)	BNP Paribas, ADM Capital

ANNEX 4: MORE ON INFRASTRUCTURE RETURNS

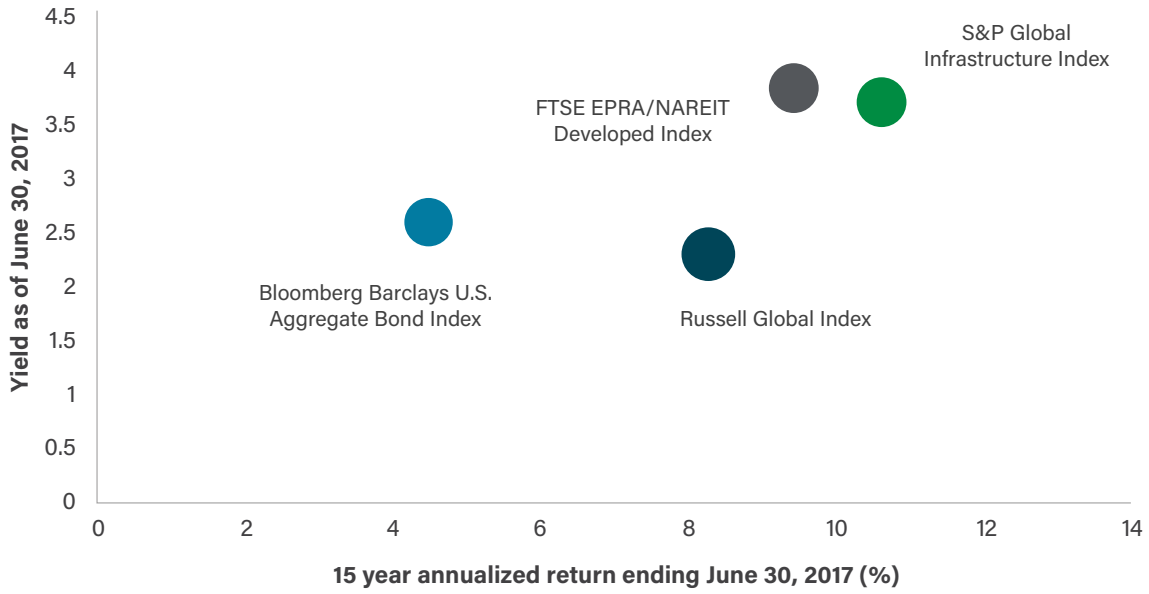
Infrastructure assets can be highly attractive to institutional investors, offering competitive risk-adjusted returns and diversification as part of a broader portfolio (generally low correlation to other asset classes, see chart **below**). Infrastructure can deliver longer and more predictable stream of distributions on the back of tangible real assets. Its risk/return profile differs from private equity, where the achievement of returns is often predicated on achieving growth and business transformation.

EXHIBIT 41 | Infrastructure assets class correlations[120]

2008-2015	Global Equities	Global bonds	US core private real estate	Private equity	Hedge funds	Global listed infrastructure	Global core private infrastructure
Global equities	1.0						
Global bonds	-0.2	1.0					
US core private real estate	0.2	-0.2	1.0				
Private equity	0.9	-0.3	0.4	1.0			
Hedge funds	0.9	-0.3	0.1	0.9	1.0		
Global listed infrastructure	0.9	0.0	0.2	0.9	0.8	1.0	
Global core private infrastructure	-0.1	-0.2	0.5	0.1	0.0	0.0	1.0

Estimated returns of listed infrastructure against other public equity (Russell Global and FTSE EPRA Index) and bonds (Bloomberg Index), along with further historical performance of listed infrastructure benchmark indices can be found in the table below. Public benchmark indices are not however fully adequate to be used as a proxy for blended finance which more typically consist of direct infrastructure investments, unlisted infrastructure funds or notes/bonds.[121] The more limited data available for unlisted infrastructure funds suggest similar performance trends with Preqin reporting median Net IRR for infrastructure funds averaging 10% across vintages of funds closed 2004-2014. According to Preqin, its (unlisted) infrastructure index has returned higher than the its Private Equity index since 2007.[122]

EXHIBIT 42 | Global infrastructure's attractive historical yield and return[123]



INFRASTRUCTURE INDEX (listed equity)	5YRS ANNUALISED RETURN
MSCI Infra Index (partially hedged and adjusted)	12.5% (2011-2016)
S&P Infra index (hedged)	10.3% (2012-2017)
INFRASTRUCTURE FUNDS (unlisted equity)	**AVERAGE BY VINTAGE**
Preqin Infrastructure Funds (median net IRR)	10% (2004-2014)

The past years large sums of capital have been raised by unlisted infrastructure funds based in the US, Europe and Asia, with "dry powder" (i.e. capital committed not deployed) earmarked for infrastructure standing at $154 billion as at Q3 2017. For fund managers, it can be a challenge to find sufficiently advanced projects to deploy this raised capital (i.e. the pipeline challenge). As an example of large funds closed, in 2017 BlackRock's Global Renewable Power Fund II secured 165% of its initial $1 billion target, or AMP Capital Infrastructure Debt Fund III raised $2.5 billion (25% above target). In Preqin's most recent survey, six times as many investors said they planned to increase their infrastructure exposure as planned to reduce it. There also remains a tremendous need for infrastructure investment globally, and regulators and end users will need to offer incentives to attract and retain new capital.[124]

However the majority of funds deployed in more mature and developed markets. Most institutions state that they will predominantly target domestic infrastructure opportunities over the next 12 months according to Preqin. US-based investors prefer to gain access to foreign markets through some use of global funds, more so than Europe- and Asia-based investors. Asia-based institutions, on the other hand are targeting increasingly the US and Europe. As an example, CDPQ,[125] the second largest pension fund in Canada, has more than doubled its infrastructure portfolio the last five years to $15 billion at the end of 2016, but with less than 5% of the infra portfolio in 'growth' markets (includes a recent investment in solar producer in India). Majority of the infrastructure investments are in the energy sector (nearly 60%) with a few public-private partnership transactions to date (3%). In terms of returns, for the five-year period ended 2016, CDPQ's infrastructure portfolio report an annualised return of 10% and for the year 2016 a return of 11.1%.

More data on historical performance of unlisted direct infrastructure transactions and funds in growth markets (developing countries) should be made available to facilitate increased private sector participation in SDG-related investments. Extensive information on both infrastructure debt returns and historical default rates resides with the MDBs and DFIs. Default rates and recovery rates are for example shared between these institutions through platforms such as the GEM Risk Database,[126] information that could be instrumental to unlock more institutional investment. The emerging market focus of the GEMs database, which is the world's dataset of default and loss for the emerging markets business of MDBs and DFIs, could help to fill the gaps of the external rating agencies data for markets that lack of statistically robust data.

Recognising the "infrastructure data need", the G20 and the OECD have established a taskforce to advance the agenda for research on data gaps in long-term investment supporting sustainable investment in infrastructure and developing infrastructure as an asset class. However, while emphasising in December 2017 the need for private sector mobilisation by the MDBs, the taskforce have yet to explicitly call for MDBs and DFIs to share such historical data to the potential wider investor community.[127]

ANNEX 5: REGULATORY DEEP DIVE

a) Key financial regulations which impact investors

EXHIBIT 43 | Key financial regulations and their impact on institutional investor segments in the US, EU, and UK[128]

	Legislative Region	Leverage limits	Collateral req.	Liquidity req.	Central clearing	Private equity limits	Trading tax	Brokerage fee limits	Deposit and reporting req.	Compensation limits	Pension funds	Insurance companies	Banks	Asset/wealth managers	Private equity
Dodd-Frank Wall Street Reform and Consumer Protection Act	US	■	■	■	■								■		■
619 (12 U.S.C. 1851) of the Dodd-Frank Act (Volcker Rule)	US					■							■		■
Foreign Account Tax Compliance Act	US								■				■	■	■
Third Basel Accord / Capital Requirements Directive	All	■	■	■				■	■	■			■	■	■
Undertakings for the Collective Investment of Transferable Securities V	EU								■					■	
Alternative Investment Fund Managers Directive	EU								■					■	■
Solvency II Directive	EU	■	■										■		■
Markets in Financial Instruments Directive II	EU							■	■			■			■
European Market Infrastructure Regulation	EU		■		■				■					■	
European Commission's Liikanen proposals	EU					■						■	■	■	
Financial Transaction Tax	EU					■							■	■	
Packaged Retail Investment Products	EU								■			■	■	■	
International Financial Reporting Standards	EU/ US		■						■		■		■		■
Retail Distribution Review	UK							■						■	

b) Development guarantees and Basel III

The potential impact of Basel III on the effectiveness of development guarantees is one example of how international financial regulations can limit the flow of capital to the SDGs. As discussed throughout this report, development guarantees can be a powerful de-risking tool to mobilise private capital into sustainable infrastructure, with higher mobilisation ratios than other blended finance instruments. However, international financial regulations like Basel can treat development guarantees harshly if they are not structured to ensure they are easily enforceable and assignable, so as to provide appropriate credit enhancement.

EXHIBIT 44 | Development guarantees[129]

For commercial investors, and particularly financial institutions, taking risks that are justifiable to regulators and earning returns that are justifiable to shareholders are the keys to success. Social interests are secondary. Indeed, social considerations are sometimes at odds with those keys to success, because the transactions are in risky locations or are designed to reach a population without a demonstrated track record. Therefore, to attract commercial capital to SDG-aligned projects, the risk of investing must be reduced to meet investors' regulatory and business requirements.

Public sector organizations can use their resources to reduce the risk for private investors, but many policy and operational constraints stand in their way. Due to the fact that donors' OECD pledges are counted based on money spent directly rather than total money leveraged, public institutions are not incentivized to use blending tools such as investment guarantees, which offer a scalable means of engaging private capital for development. Furthermore, most of the guarantees offered do not address the market or regulatory realities faced by financial institutions, such as Basel III guidelines on liquidity and risk management that put developing markets at a disadvantage.

Continued dissonance between the rules banks follow and those that guide development organizations can have serious, unintended consequences for people in developing nations. In particular, Basel guidelines call for more conservative treatments on a number of factors: liquidity reserves, risk weighting for equity exposures, add-ons for non-hedged currency mismatches, and capital outcomes in highly collateralized lending. These treatments, if fully adopted by governments, will limit financing activities in developing and emerging economies.

The governments that created the SDGs also have a voice in framing Basel. Although Basel guidelines, are just that, only guidelines that countries must be translated into regulations, it is important to consider modifications that will foster both prudent and commercially viable investments. For example, on liquidity reserves, instead of requiring reserves to increase from 60% (as currently mandated) to 100%, considering a more flexible graduation is important as to not stifle investment. Similarly, on equity exposures, instead of requiring an increase from 150% to 250% risk weighting, as recommended, considering a less conservative level would be appropriate to encourage SDG-aligned investments. In addition, encouraging different types of collateral in proposed standardized approaches to risk modeling to allow banks to appropriately assess risk in highly collateralized lending rather than blanket capital requirements will encourage investment. Each of these technical adjustments stand on the principal of fostering development to ensure greater stability in the region, the same objective of the Basel committee.

In the end, eliminating the disparate incentives between public and private institutions is critical to the achievement of the SDGs. Despite a broad set of challenges, public-private blending can be an important means to mobilize private capital to co-finance SDG-aligned commercial projects. Although greater development as a conduit for great financial stability does make the objectives of the development community more aligned with the global financial regulatory community, time is of the essence. To ensure SDGs are achieved by 2030, development stakeholders must adjust their own processes to better attract private capital. More specifically, credit enhancement instruments (i.e., guarantees) can be powerful tools to de-risk the key obstacles that banks and other investors deem too much to overcome on their own. However, to be effective, development institutions should adopt the following series of best-practice standards in the structure and delivery of guarantees to meet the regulatory and market realities faced by banks.

- **Guarantees need to provide certainty and pay on demand.** For policy and operational reasons, public-sector guarantors are compelled to include provisions that decrease the certainty and speed of claim payments. Examples such as unilateral termination rights, although rarely invoked, prevent banks from gaining the level of certainty needed for capital relief from a regulatory perspective. Similarly, rather than paying on demand, or before loan acceleration, many guarantors prefer to pay claims after a bank's collection efforts. A guarantee that requires such collection efforts has implications for a bank's liquidity, and therefore has a negative impact on its financial statements and reduces the attractiveness of the guarantee.

- **Guarantees need to allow for seamless exits through enhanced assignment provisions.** G20 banks typically do not want to hold loans to maturity. This is particularly true for longer tenors, which create asset-liability mismatches for banks with deposit-based funding structures. Although guarantees typically do include assignment and transfer rights, the process usually requires guarantor approval of the potential assignee. Therefore, originating banks cannot easily or quickly sell their exposures, and this directly reduces the attractiveness of guaranteed loans to risk managers and regulators who focus on the illiquidity of the particular asset. Although achieving true tradability of development guarantees is not feasible in the near term, streamlining their assignment and transfer provisions to provide clean exit mechanisms could be an important step to activating banks and capital markets.

- **Guarantees may be able to counter the effect that country risk weightings have on developing markets.** Exposures to projects and institutions outside of OECD countries carry increased risk weighting under Basel guidelines. As a result, regardless of the strength of a particular project or institution, exposure to a developing country jurisdiction has an immediate and significant disadvantage from a capital perspective. If structured appropriately, development guarantees could mitigate country risk by transferring risk (rather than sharing) as a standard, from the lender to the guarantor, and thus eliminate the additional capital charge for developing market jurisdictions. A key requirement to ensure the ability to transfer risk to a guarantor is the ability of the guarantee to be called on-demand without conditions and promptly paid without delay or additional cost.

- **Bilateral and multilateral donor agencies should seek HQLA designation for approved development-focused guarantees.** By 2019, when Basel III is completely phased in, banks will be required to hold a stock of high-quality liquid assets (HQLA) that fully covers their next month's projected net cash outflows. Compared to the 60 percent banks were required to cover until 2016, this increased requirement will significantly reduce banks' appetites for illiquid exposures. To counteract this effect, guarantees could be structured such that SDG-exposures they are covering qualify as HQLA, and preferably Level 1 HQLA. Level 1 HQLA generally include cash and central bank reserves, as well as certain marketable securities backed by sovereigns, central banks, or other high credit quality institutions. Although G20 governments provide

them, development guarantees currently do not qualify for HQLA treatment because they are not sufficiently tradable or transferable. Donor agencies should work with regulators to consider guarantees (from AAA-rated governments) with specific terms (on-demand and assignable) as meeting both a transferability and social return threshold sufficient enough to merit HQLA designation.

- **Stakeholders should adopt universal standards or approaches to guarantee structures.** The lack of such standardization limits syndication or blending across multiple parties as well as increasing set up time and cost. Although near-universal approaches have been developed in certain areas, such as the International Finance Corporation's environmental guidelines, most aspects of guarantee structures remain highly institution-specific, limiting the ability of private capital to blend with multiple sources in an efficient fashion.

As the only set of organizations with a direct mission to fulfill the SDGs, it is the role of the development community to incentivize the participation of a wide range of investors that have only indirect interests in the process. Critical to that is a recognition that all institution types have unique regulatory rigidities that make them respond differently to the same incentives. Local capital sources, international banks, and institutional investors each have their limitations when considering a role in funding the SDGs. Therefore, development organizations must be the flexible partner in the equation and create products and approaches that adapt to the risks of the specific organization they are seeking to activate. To achieve this flexibility, incentives for these organizations and their personnel should prioritize private-sector leverage by adopting best practices in credit enhancement tools.

ANNEX 6: INSTITUTIONAL INVESTORS

EXHIBIT 44 | Different segments of institutional investors

SEGMENT		CAPACITY TO ALLOCATE TO BLENDED FINANCE	KEY CONSTRAINTS / REGULATORY CONSIDERATIONS
Asset Owners	**Pension Funds** (Invest pension payments from policy holders to pay future retirement benefits)	▪ Pension funds typically represent the largest domestic institutional investors. Generally, they have flexibility to allocate a material proportion of assets to 'alternative asset classes' that are relevant for blended finance but capacity may be a barrier (largest relative share allocated to alternatives at 19%). Pension funds in Australia and Canada are considered pioneers in infrastructure investing. ▪ Similarly, to insurance companies, pension funds have less exposure to developing countries within their alternatives portfolio, though with examples of pension funds increasingly exploring the area (e.g. Danish pension funds in KIF, various pension funds in CIO).	▪ Pension funds have strong fiduciary duties to their policyholders and can face significant levels of public scrutiny. ▪ Traditionally restrictions in some asset classes and geographies (e.g. limited to invest in instruments or countries below investment grade credit rating). However, these limits have been reduced in many jurisdictions in recent years. ▪ The key challenges for pension funds are often tradability and liquidity. Pension funds must be able to show assets can be sold in the event of a market downturn. This is difficult for many blended finance deals, which typically do not provide sufficient liquidity for this standard. ▪ There may be blended finance lessons to draw from developed markets approaches to creating liquidity through the establishment of secondary markets. Many institutional investors cite the creation of the secondary market for mortgages in the US as key to creating liquidity and an entire new asset class for institutional investors. ▪ Examples of pension funds that are increasingly investing in alternative assets, primarily infrastructure, in developing countries. In Denmark, PensionDanmark, PKA, and other Danish pension funds have gained exposure to investing in developing countries through blended finance vehicles (e.g., Danish Climate Investment Fund, Danish Agricultural Investment Fund). This is primarily driven by strong appetite from senior leadership to support the SDGs, as well as close working relationships between government officials and senior leadership of institutional investors in Denmark.
	Insurance Companies (Invest premium payments from policy holders to provide funding for future claims)	▪ Likely to have an allocation to participate in alternatives (average relative share around 10%), however with limited exposure to alternatives in developing countries to date. For example, Aviva having participated in PPPs in the UK but not in emerging markets to date. However, trends indicate an uptick (as an example Allianz has invested in IFC's Infra co-financing platform).	▪ In most countries, life and property/casualty (non-life) insurers are subject to different investment regulation, because life insurance is long-term in nature, while non-life insurances usually covers a shorter period (e.g., one year). ▪ Subject to risk-based capital requirements that impose high capital charges for investments with high levels of risk (e.g., equity and non-investment grade debt).

SEGMENT	CAPACITY TO ALLOCATE TO BLENDED FINANCE	KEY CONSTRAINTS / REGULATORY CONSIDERATIONS
	▪ Overall, they tend to be active investors in developing countries, however this would primarily be fixed income, investments that can be hedged / meeting matching and liquidity requirements. ▪ Allocations of life insurers in particular are likely to be aligned, given their desire to match long-term liabilities with long-term assets.	▪ In the EU, Solvency II, creates constraints on insurance companies outsourcing investment decisions and portfolio management to entities that are not regulated, making it difficult for European insurance companies to participate in transactions which are managed by DFIs/MDBs, which are not regulated. The US requires debt to be rated – even though insurance companies typically have internal rating models and therefore a rating from a rating agency is not an absolute requirement ▪ Regulations like Solvency II therefore incentivise insurers to take focus on highly rated debt. ▪ Institutional concerns: investors themselves often have internal rating restrictions, and given their liabilities, a focus on certainty of return.
Sovereign Wealth Funds (SWFs) (Invest country's wealth derived primarily from trade surpluses and commodity revenue)	▪ Tend to prefer returns over liquidity, and typically have a higher risk tolerance compared to other institutional investor segments, although each SWF has its own unique investment objectives. ▪ SWFs are often the most heterogeneous group, with allocations and capacity for alternatives varying greatly. On average, alternatives represent 18% of large SWFs AUM.	▪ SWF regulation is typically dictated by the country of domicile (in some cases similar regulations to local pension funds). ▪ Tend to have low regulatory restrictions relative to other institutional investor segments. Some SWFs subject to stringent political guidelines on allocation (e.g. the Norwegian Government Pension Fund unable to invest in unlisted infrastructure).
Foundations & Endowments (foundations distribute or invest donated funds aligned with its strategic goals. It's endowment capital is invested to preserve capital for future distribution)	▪ Some foundations are at the forefront in using financial instruments (incl. guarantees) alongside grant-making as tool to achieve development goals. A potential dual role as concessional provider (e.g. technical assistance grants or first-loss) or as financial investor (e.g. PRI) in blended finance vehicles. ▪ Foundation's endowments are typically externally managed and invested in traditional asset classes such as listed equity and bonds, but a few are increasingly experimenting with allocations that can be used for sustainable infrastructure / alternative investments in developing countries.	▪ Foundations are not subject to the same regulatory restrictions as other institutional investors (allocation and strategic targets determined by the respective governance bodies and boards). ▪ Annual tax driven requirement for US foundations to deploy at minimum 5% of assets as grants or PRIs, and generally target a minimum financial return of 5% plus inflation on their endowment capital. UK foundations have more independence and do not have this requirement – each foundation sets its own spending/distribution rate (no "payout rule").
Local institutional capital (pension funds, insurance companies etc. in developing countries)	▪ Local institutional capital (pension funds, insurance companies etc.) in developing countries is very critical for infrastructure investment and in general local capital market development. ▪ However, in many countries significant regulatory reform is required (e.g. pension system reform). Even where pension reform has been implemented and assets are available for investment, governance and regulatory obstacles as well as a lack of adequate financial instruments limit pension funds' allocation to alternatives and infrastructure.	▪ The barriers to entry for local institutional investors in developing countries are lower given certain risks may not be as acute (e.g. currency, political and country risk) compared to for international institutional investors. ▪ Some institutional investors (e.g. local pension funds) are restricted from investing in domestic infrastructure assets, however recognising the importance many governments have introduced institutional and regulatory changes (e.g. in Colombia implementing regulatory changes to allow pension funds to invest in infrastructure-debt funds).

SEGMENT		CAPACITY TO ALLOCATE TO BLENDED FINANCE	KEY CONSTRAINTS / REGULATORY CONSIDERATIONS
	Commercial Banks (provide financial services to small and large businesses – primarily loans and other credit products)	▪ Commercial banks, both international and local, play an important role lending to businesses in developing countries (incl. arranging and participating in syndicate structures, providing financing to SMEs etc.). ▪ Large banks have well-aligned capacity to participate in blended finance transactions as arrangers and distributors, with the ability to leverage expertise from various divisions (e.g., debt capital markets, asset management, research) as well as broader global networks and subsidiaries. ▪ Local banks are very important for asset origination and can play a key role in blended finance structure with pooled assets or credit line structures (e.g. on-lending to SMEs for energy efficiency).	▪ In the EU, Solvency II, creates constraints on insurance companies outsourcing investment decisions and portfolio management to entities that are not regulated, making it difficult for European insurance companies to participate in transactions which are managed by DFIs/MDBs, which are not regulated. The US requires debt to be rated – even though insurance companies typically have internal rating models and therefore a rating from a rating agency is not an absolute requirement ▪ Regulations like Solvency II therefore incentivise insurers to take focus on highly rated debt. ▪ Institutional concerns: investors themselves often have internal rating restrictions, and given their liabilities, a focus on certainty of return.
Asset Managers	**Private Equity Firms** (Invest institutional and own capital into private companies)	▪ Private equity firms, by their nature, are fully dedicated to alternative investments, and are well-aligned with blended finance. ▪ Private equity firms typically invest their own capital alongside that of their clients. ▪ While asset owners like pension funds and insurance companies are restricted in how much can be allocated to private equity, once that allocation is made, private equity firms have relative freedom in their investment activities.	▪ Typically have the least regulatory restrictions relative to other institutional investor segments. ▪ Invest directly in private companies or engage in buyouts of public companies, resulting in delisting of public equity.
	Asset/Wealth Managers (Invest institutional and retail capital in a range of investments)	▪ Allocations are driven by their clients' interests and are facing increasing pressure to build out capacity to offer 'alternative' product offerings (according to Preqin, a record of 52 unlisted infrastructure funds reached close in 2016, securing an aggregate $59bn). ▪ Asset/wealth managers invest in a range of assets, primarily public equities and bonds, but also increasingly in alternative asset classes (on average about 12%). ▪ Due to size, asset/wealth managers often have dedicated teams for emerging markets and alternatives. This capacity and expertise to execute can be leveraged by asset owners.	▪ Regulations applied to their clients (e.g., pension funds and insurance companies).

ANNEX 7: ENDNOTES

1 BlackRock Global Investment Outlook, Q4 2017: https://www.blackrock.com/investing/literature/whitepaper/bii-global-investment-outlook-q4-2017-us.pdf.

2 Total global AUM as of 2017 estimated above $200 trillion; pension funds $36 trillion, insurance companies $19 trillion, SWFs $8 trillion foundations $1 trillion, investment and commercial banks $85 trillion, and asset managers (incl. PE funds) around $70 trillion. Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018.

3 Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018; Pension Funds: Willis Towers Watson (2017), *Global Pension Assets Study 2017*. Retrieved from https://www.willistowerswatson.com/en/insights/2017/01/global-pensions-asset-study-2017. Data includes pension funds in 22 major pension markets. Insurance Companies: GFM Asset Management (2017), *World's Largest Insurance Companies – Top 146 Listed Insurers by Assets*. Retrieved from https://gfmasset.com/2017/10/worlds-largest-insurance-companies-top-146-listed-insurers-assets/. Banks: S&P Global Market Intelligence (2017), *The world's 100 largest banks*. Retrieved from http://www.snl.com/web/client?auth=inherit#news/article?id=40223698&cdid=A-40223698-11568. Banks assets include assets of asset/wealth management units within banks. Asset/Wealth Managers: IPE (2006), *The top 400 asset managers.* Retrieved from https://www.ipe.com/Uploads/j/t/t/Top-400-2016.pdf. Private Equity Firms: Preqin (2017), The Private Equity Top 100. Retrieved from https://www.preqin.com/docs/reports/Preqin-Special-Report-The-Private-Equity-Top-100-February-2017.pdf. Sovereign Wealth Funds: Sovereign Wealth Fund Institution (2017), *Largest Sovereign Wealth Funds by Assets Under Management.* Retrieved from https://www.swfinstitute.org/sovereign-wealth-fund-rankings/. Data includes pension funds in 22 major pension markets. Note that "assets under management" is used for simplicity across all segments, even though the term is less common when referring to banks. Note also that there might be some double-counting in this global estimate – for example pension assets potentially invested via asset managers. The global total AUM of $200 trillion nevertheless provides a good overview of the different investor groups and the total market value of assets it owns / manages.

4 Retrieved from the Green Bond database, 11 January 2018. Available at: http://www.greenbonddata.org/. Record high total issuance of green bonds during 2017 (total $123 billion).

5 BNY Mellon, 2017, Split Decisions – Institutional Investment in Alternative Assets. Available at: https://www.bnymellon.com/_global-assets/pdf/our-thinking/institutional-investment-in-alternative-assets.pdf. Future defined as in the next 12 months from date of report.

6 Moody's "Sector In-Depth: Default Research: Default and Recovery Rates for Project Finance Bank Loans, 1983-2015", March, 2017: http://www.globalinfrafacility.org/sites/gif/files/Moody%27s-Project%20Finance%20Default%20Study%20%281983-2015%29.pdf.

7 **Development capital** is capital with development mandate could include things like ODA flows from a donor country, funds from an MDB or a DFI, or grants made from a private philanthropic foundation. Commercial finance is largely aligned with the term "additional finance" in OECD's recently released Blended Finance definition. The Taskforce acknowledges that, whilst the majority of blended finance should occur in developing countries, it is still possible for it to occur in developed countries in certain SDG-related sectors. **A non-commercial objective** could be a policy objective, philanthropic objective, development objective – something other than return maximisation. External private commercial finance is intended also to capture certain public and quasi-public investors like SWFs and publicly owned pension funds. For impact investment figures see The GIIN, "What you need to know about impact investing", 2017: https://thegiin.org/impact-investing/need-to-know/#how-do-impact-investments-perform-financially and The GIIN, "Annual Impact Investor Survey", 2017: https://thegiin.org/assets/GIIN_AnnualImpactInvestorSurvey_2017_Web_Final.pdf.

8 The Global Commission on the Economy and Climate, 2014. Better Growth; Better Climate: The New Climate Economy Report. The Synthesis Report.

9 New Climate Economy, Driving sustainable development through better infrastructure: key elements of a transformation program.

10 https://nextbillion.net/the-7-trillion-dollar-question-can-sustainable-financial-products-close-the-sdg-financing-gap/.

11 https://www.cia.gov/library/publications/resources/the-world-factbook/

12 http://report.businesscommission.org/uploads/BetterBiz-BetterWorld_170215_012417.pdf.

13 http://share.thomsonreuters.com/general/PR/DCM_4Q_2016_E.pdf.

14 http://share.thomsonreuters.com/general/PR/ECM_4Q_2016_E.pdf.

15 https://www.federalreserve.gov/releases/h8/Current/.

16 https://www.ft.com/content/166c8be8-b58d-11e7-a398-73d59db9e399.

17 Business & Sustainable Development Commission, "Better Business, Better World", 2017: http:/report.businesscommission.org/.

18 Note that the Lake Turkana project began generating electricity in 2016, although was unable to connect to the grid owing to delayed construction of transmission lines. In September 2017, the Kenyan government agreed to pay the developers USD 56 million in capacity charges in compensation, to be financed by a monthly surcharge passed on to consumers, beginning in May 2018.

19 Capital with development mandate could include things like ODA flows from a donor country, funds from an MDB or a DFI, or grants made from a private philanthropic foundation.

20 This definition is largely aligned with the OECD's recently released definition.

21 WEF, A How-To Guide for Blended Finance, September 2015.

22 Adapted from International Finance Institutions and Development through the Private Sector, 2011: https://www.deginvest.de/DEG-Englische-Dokumente/PDFs-Download-Center/IFI_and_Development_Trough_the_Private_Sector.pdf.

23 https://www.climateinvestmentfunds.org/fund/clean-technology-fund.

24 https://www.reuters.com/article/us-thailand-energy-renewables-solar/look-to-the-sky-for-se-asias-energy-future-says-thai-solar-pioneer-idUSKBN19C0HW.

25 See https://www.aatif.lu/home.html.

26 See http://www.guarantco.com/.

27 https://www.economist.com/news/finance-and-economics/21697263-fad-mixing-public-charitable-and-private-money-trending-blending.

28 Dennis Price, Impact Alpha, "Gates Foundation Gears Up to Blend Capital for global Development", November 2015: http://impactalpha.com/gates-foundation-gears-up-to-blend-capital-for-global-development/; https://www.economist.com/news/finance-and-economics/21697263-fad-mixing-public-charitable-and-private-money-trending-blending.

29 SIDA, Available at: http://www.sida.se/contentassets/b0a25e34cf0f4035b4b82ff6a58d942c/18708.pdf.

30 Impact Alpha, "Ramping up global health investments to fight diseases of low-income countries", January 2018: https://news.impactalpha.com/ramping-up-global-health-investments-to-fight-diseases-of-low-income-countries-db02836dea0d.

31 Note that the organisations represented in this table may offer instruments other than the one for which they are specifically profiled. OPIC, for example, offers a political risk insurance product, but also offers direct subordinate debt into investments.

32 CPI, forthcoming 2018; Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018.

33 Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018.

34 The New Climate Economy, "The Sustainable Infrastructure Imperative": http://newclimateeconomy.report/2016/a-roadmap-for-financing-sustainable-infrastructure/ (adapted from Bhattacharya, A., Romani, M. and Stern, N., 2012. Infrastructure for Development: Meeting the Challenge. Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment).

35 In fact, the story may be even better from a public sector point of view since paid-in capital to the MDBs is typically only a fraction (10-15%) of callable capital. This means that the MDBs themselves are able to mobilise onto

their balance sheets, very significant private capital. Conceptually, $10b of public capital translates into $100b of MDB capital ... which could multiply all the way up to the $1 trillion of additional mobilised private capital.

36 http://geeref.com/assets/documents/2016%20GEEREF%20Impact%20Report_public_final_.pdf.

37 Climate Policy Initiative, "Blended Finance in Clean Energy: Experiences and Opportunities", forthcoming 2018.

38 https://www.greenclimate.fund/documents/20182/574760/Funding_Proposal_-_FP038_-_EIB_-_Multiple_Countries.pdf/2cfaf3b1-1e3d-4bf8-a02a-30d954f2dd80.

39 Convergence 2017, OECD forthcoming 2018.

40 SIDA, Available at: http://www.sida.se/contentassets/b0a25e34cf0f4035b4b82ff6a58d942c/18708.pdf.

41 Climate Policy Initiative, "Blended Finance in Clean Energy: Experiences and Opportunities", forthcoming 2018.

42 Increased wealth accumulation and young demographics are driving growth and creating new investment and commercial opportunities. According to Brookings, there were about 3.2 billion people in the global middle class at the end of 2016 which is expected to reach and exceed 5 billion by 2030 (having already exceeded previous estimates by OECD to reach 3 billion only in 2020). While the global middle-class market in advanced economies has matured and is projected to grow at only 0.5-1% per year, the middle-class market in emerging economies is far more dynamic (especially in Asia) and could register annual growth rates of 6% or more coming years. According to the UN, the population of the nearly 50 least developed countries (LDCs) is projected to increase by 33% between 2017 and 2030 (from roughly 1 billion in 2017). Between 2017 and 2050, the populations of African countries are projected to at least double from current size. Source: UN, "World Population Prospects: The 2017 Revision", June 2017: https://www.un.org/development/desa/publications/world-population-prospects-the-2017-revision.html; Brookings Institute, "The Unprecedented Expansion of the Global Middle Class, an Update", 2017: https://www.brookings.edu/wp-content/uploads/2017/02/global_20170228_global-middle-class.pdf.

43 The next tier of countries scoring high were: Namibia, Kyrgyz republic, Zambia, Bosnia and Herzegovina, Jordan, Lao, Honduras and Bangladesh. The third tier of countries include Guyana, Serbia, Algeria, Guatamala, Nicaragua, Cote d'Ivoire, Indonesia and Brazil.

44 Climate Policy Initiative, "Blended Finance in Clean Energy: Experiences and Opportunities", forthcoming 2018 (sector deep dive for the Blended Finance Taskforce). CPI looked at countries not classified as investment grade (considered by them strong enough institutional environments that blended finance should not be required except in very specific circumstances). China therefore excluded. From the sub-set of non-investment grade countries they selected countries that scored well in terms of being the most attractive for private sector investment and reached at least 500 MW in projected planned and targeted capacity for renewable energy sectors (total 46). They were then ranked by their energy access and climate change relevance scores.

45 Business & Sustainable Development Commission, "Better Business, Better World".

46 KOIS Invest, "Financing sustainable land use", forthcoming 2018 (sector deep dive for the Blended Finance Taskforce).

47 The UN member countries reached consensus on the importance of deploying public funds to attract private sector investment at the International Conference on Financing for Development in 2015 in Addis Ababa: "An important use of international public finance, including Official Development Assistance, is to catalyse additional resource mobilization from other sources, public and private. It can be used to unlock additional finance through blended or pooled financing and risk mitigation, notably for infrastructure and other investments that support private sector development." United Nations (2015), General Assembly resolution 69/313 – Addis Ababa Action Agenda of the Third International Conference on Financing for Development. Retrieved from http://undocs.org/A/RES/69/313.

48 MDB Joint Statement on Private Mobilisation: http://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Featured/G20/G20-Documents/Hamburg_reports-mentioned/Joint-MDB-Statement-of-Ambitions.pdf?__blob=publicationFile&v=2.

49 CNBC, June 2017, Negative-yielding government debt "supernova" jumps to $9.5 trillion: https://www.cnbc.com/2017/06/16/negative-yielding-government-debt-supernova-jumps-to-9-point-5-trillion.html.

50 Preqin, Global Infrastructure Report, 2017, Available at: https://www.preqin.com/item/2017-preqin-global-infrastructure-report/4/16507.

51 BNY Mellon, "Split Decisions – Institutional Investment in Alternative Assets", 2017: https://www.bnymellon.com/_global-assets/pdf/our-thinking/institutional-investment-in-alternative-assets.pdf. Future defined as in the next

12 months from date of report.

52 Preqin, Global Infrastructure Report, 2017, Available at: https://www.preqin.com/item/2017-preqin-global-infrastructure-report/4/16507.
PIMCO, Ten Investor Takeaways From the IMF/World Bank Meetings, 2017. Available at: https://blog.pimco.com/en/2017/10/ten-investor-takeaways-from-the-imf-world-bank-meetings.

53 BNY Mellon, 2017, Split Decisions – Institutional Investment in Alternative Assets. Available at: https://www.bnymellon.com/_global-assets/pdf/our-thinking/institutional-investment-in-alternative-assets.pdf. Future defined as in the next 12 months from date of report.

54 Preqin, Global Infrastructure Report, 2017, Available at: https://www.preqin.com/item/2017-preqin-global-infrastructure-report/4/16507.

55 Public benchmark indices are not however fully adequate to be used as a proxy for sustainable infrastructure and blended finance which more typically consist of rather direct investments, unlisted funds or notes/bonds.

56 Economic Times, "Why infrastructure mutual funds are a good bet for long term investors now", June 2017: https://economictimes.indiatimes.com/wealth/invest/why-infrastructure-mutual-funds-are-a-good-bet-for-long-term-investors-now/articleshow/59081983.cms.

57 Adjusted from Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018. Private equity and infrastructure: BNY Mellon, "Split Decisions – Institutional Investment in Alternative Assets", 2017: https://www.bnymellon.com/_global-assets/pdf/our-thinking/institutional-investment-in-alternative-assets.pdf; Illiquid credit: M&G Investments, "A guide to illiquid credit – New opportunities for institutional investors", 2015: http://www.mandg.com/-/media/Literature/UK/Institutional/MG-Guide-to-illiquid-credit-January-2015.pdf, Private equity: EMPEA, 2017 Global Limited Partners Survey, 2017: https://www.empea.org/research/2017-global-limited-partners-survey/; Infrastructure: Norges Bank Investment Management, "Infrastructure Investments in Less Mature Markets", 2015: https://www.nbim.no/contentassets/4cd665e4c6b344a99bf33eb4731dad8c/nbim_discussionnotes_5-15.pdf; Illiquid credit: Based on consultations with institutional investors.

58 S&P project finance analysis is similar, with marginal default rates at inception around 1.5% (comparable to BB rated securities) and move well ahead of BBB rated securities after year 6-7.

59 Moody's "Sector In-Depth: Default Research: Default and Recovery Rates for Project Finance Bank Loans, 1983-2015", March, 2017: http://www.globalinfrafacility.org/sites/gif/files/Moody%27s-Project%20Finance%20Default%20Study%20%281983-2015%29.pdf.

60 Moody's "Sector In-Depth: Default Research: Default and Recovery Rates for Project Finance Bank Loans, 1983-2015", March, 2017: http://www.globalinfrafacility.org/sites/gif/files/Moody%27s-Project%20Finance%20Default%20Study%20%281983-2015%29.pdf.

61 See also the helpful summary of how institutional investors approach infrastructure investing in AECOM's new report "The Future of Infrastructure", forthcoming 2018.

62 See CDPQ Annual Report 2016: https://www.cdpq.com/sites/default/files/medias/pdf/en/ra/ra2016_renseignements_add_en.pdf.

63 The GEMs Risk Database Consortium was established 2009 by EIB and IFC. In 2016 GEMs database reports around 8,300 counterparts, 1,700 default events and 1,900 resolved contracts from 1988 onwards.

64 OECD/G20, "Breaking Silos: Actions to develop infrastructure as an asset class and address the information gap – an agenda for G20", December 2017: http://www.oecd.org/daf/fin/private-pensions/Breaking-Silos%20-Actions-to%20Develop-Infrastructure-as-an-Asset-Class-and-Address-the-Information-Gap.pdf

65 The New Climate Economy, "The Sustainable Infrastructure Imperative: Financing for Better Growth and Development", 2016.

66 Africa Growth Initiative at Brookings, "Leveraging African Pension Funds for Financing Infrastructure Development", March 2017: https://www.brookings.edu/wp-content/uploads/2017/03/global_20170314_african-pension-funds.pdf.

67 http://guarantco.com/fr/media-centre/guarantcos-new-facility.

68 Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018.

69 Aron Betru and Chris Lee, Milken Institute, Working Paper, 2017.

70 Anecdotal evidence.

71 Climate Policy Initiative, "Blended Finance in Clean Energy: Experiences and Opportunities", forthcoming 2018.

72 See https://www.businessdailyafrica.com/corporate/companies/Dubai-PE-fund-Abraaj-pumps-billions-into-Kenyan-firms/4003102-4132656-oycsn8/index.html; https://www.abraaj.com/insights/videos/scaling-impact-investing-breakout-one-abraaj-growth-markets-health-fund/; https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Project_Brief_ABRAAJ_GROWTH_MARKETS_HEALTH_FUND_Multinational_2016.pdf.

73 Note, however, that unlike other bank relationships, the MDBs and DFIs don't take care of other ancillary business (as deposits etc).

74 Aviva, Sustainable Finance Toolkit, 2017: http://www.avivasustainablefinancetoolkit.com/#toolkit.

75 https://www.unpri.org/download_report/41990.

76 https://www.msci.com/www/blog-posts/has-esg-affected-stock/0794561659.

77 Thomson Reuters, "10 studies that show how and why ESG investing works", July 2017 http://lipperalpha.financial.thomsonreuters.com/2017/07/10-studies-that-show-how-and-why-esg-investing-works/; See Bank of America: https://www.bofaml.com/content/dam/boamlimages/documents/articles/ID17_0028/equitystrategyfocuspoint_esg.pdf.

78 UNEP-FI, "Updated: 16 UNEP FI Member Banks representing many trillions of dollars are first in industry to jointly pilot TCFD recommendations", October 2017: http://www.unepfi.org/news/industries/banking/eleven-unep-fi-member-banks-representing-over-7-trillion-are-first-in-industry-to-jointly-pilot-the-tcfd-recommendations/.

79 The Guardian, World's Biggest Sovereign Wealth Fund proposes ditching oil and gas holdings, November 2017: https://www.theguardian.com/business/2017/nov/16/oil-and-gas-shares-dip-as-norways-central-bank-advises-oslo-to-divest.

80 One Planet Sovereign Wealth Fund Working Group Joint Communiqué, December 2017: https://www.oneplanetsummit.fr/IMG/pdf/one_planet_sovereign_wealth_fund_working.pdf.

81 The endowment of a foundation is designed to achieve commercial returns used for capital preservation to sustain the foundation. However, foundations are values-driven organisations, set up with the sole purpose of funding solutions to social or environmental problems. Board members and stakeholders should therefore, in principle, be aligned with the proposal to increase endowments' mission-related investments (MRIs), which seek to achieve attractive financial returns while also advancing the foundation's mission.

82 To cover 5% pay-out requirement (applicable in the US) and inflation.

83 Rockefeller Foundation, "Leading Philanthropists Announce Co-Impact, a Global Collaborative for Systems Change, With U.S. $500 Million in Planned Initial Funding" November 2017: https://www.rockefellerfoundation.org/about-us/news-media/leading-philanthropists-announce-co-impact/.

84 A Betru, C Lee, Milken Institute, "Clearing a Path for Global Development Finance: Enabling Basel and Development Guarantees", September 2017: http://www.milkeninstitute.org/publications/view/878; see also http://www.milkeninstitute.org/blog/view/1203.

85 Under OECD guidelines, a guarantee commitment does not qualify as part of a donor country's 0.7% foreign aid pledge. As such, providing a $100 million guarantee (that might never be called) gives the donor country less "credit" in the international community than giving a direct $1 million grant. Regardless of the development impact or magnitude of investment mobilised, donors thus remain incentivised to engage in simple transfers rather than deploying a blended finance instrument such as a guarantee.

86 Acclimatise News, "French Law Requiring Investors to Disclose Climate Risks Comes into Force, June 2017: http://www.acclimatise.uk.com/2017/06/12/french-law-requiring-investors-to-disclose-climate-risks-comes-into-force/.

87 One Plant Summit: Finance commitments fire-up higher momentum for Paris Agreement: http://www.un.org/sustainabledevelopment/blog/2017/12/one-planet-summit-finance-commitments-fire-higher-momentum-paris-agreement/.

88 Overall the private sector lending arms of the MDBs counts for around 30% of MDB operations. By way of example, it accounts for 15% of the ADB's operations, 25% of the AfDB's, 12% of the IADB's and 23% of the World Bank's operations. EBRD, on the other hand, attributes a majority – around 70% – of its operations to private sector lending.

89 Estimate 2016 annual new commitments (EBRD, MIGA, IFC) or approvals (ADB, AfDB, IADB, EIB, AIIB).

90 In November 2017, the Inter-American Development Bank Group rebranded its private sector arm as IDB Invest, formerly known as the Inter-American Investment Corporation (IIC). https://www.iadb.org/en/news/news-releases/2017-11-03/idb-group-rebrands-its-private-sector-arm-idb-invest,11938.html / http://www.idbinvest.org/

91 Bilateral DFIs not yet incorporated in MDB joint reporting on private mobilisation. OECD is progressing on mobilisation data which allocates to bilateral DFIs respectively.

92 FMO Annual Report 2016, catalysed EUR 905 million compared to EUR 1.6 billion total new FMO (and Gov.) committed funds.

93 OPIC memo, Jan 2017: https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/OPIC%20Exit%20Memo.pdf.

94 The EBRD and FMO for example publish their annual targets for external capital mobilisation however with relatively modest ambition (EBRD target for FY2017 <60% their actual private sector mobilisation FY2016). The MDBs have started releasing joint reporting for overall (direct and indirect) private capital mobilisation as well as climate finance (public and private). The reporting is coordinated with ongoing efforts by the OECD to improve data for private mobilisation, including as well reporting from the DFIs.

95 Anecdotal evidence from investors.

96 A Betru, C Lee, Milken Institute, "Clearing a Path for Global Development Finance: Enabling Basel and Development Guarantees", September 2017: http://www.milkeninstitute.org/publications/view/878; see also http://www.milkeninstitute.org/blog/view/1203.

97 Xavier Musca et al, 2017; https://ifcextapps.ifc.org/IFCExt/pressroom/IFCPressRoom.nsf/0/2CC3EDA1AE8B9B558525810900546887.

98 E.g. the U.S.-India Clean Energy Finance Task Force, including standardising a model power purchase agreement, optimising a payment security mechanism for delayed payments under PPAs for utility scale clean energy projects and creating a warehousing facility of small renewable projects for an asset-backed green bond issuance.

99 Although many investors categories can allocate towards "alternatives" and rely on internal ratings and risk analysis when making an investment decision, ratings become particularly important to banks that are subject to Basel guidelines, because they are penalised by capital allocation requirements if they lend below investment grade.

100 Majority of developing countries on the OECD Development Assistance Committee list are rated non-investment grade with a median rating of B.

101 This analysis should be done with the support of, or in close connection with the ratings agencies. It could also build on or contribute to the work of initiatives like the EU HLEG, which is working with the Basel Committee to ensure that the existing capital framework doesn't overweight the risks of project financing and specialised lending activities. This is based on feedback from banks with a long history of project financing which suggests that capital requirements far exceed what is needed, with overzealous regulation due to a lack of data on defaults.

102 GIIN 2017 survey and GIIN reports: https://thegiin.org/assets/GIIN_AnnualImpactInvestorSurvey_2017_Web_Final.pdf https://thegiin.org/assets/2017_GIIN_IMM%20Survey_Web_Final.pdf / https://thegiin.org/research/publication/navigating-impact.

103 The Fourth Sector Mapping Initiative: https://www.mapping.fourthsector.org/.

104 Impact Management Project website: http://www.impactmanagementproject.com/.

105 https://www.worldbenchmarkingalliance.org/wba/.

106 Aviva Sustainable Finance Toolkit, http://www.avivasustainablefinancetoolkit.com/#toolkit.

107 See IFC Asset Management Company: https://www.ifcamc.org/home.

108 EM Compass, "Infrastructure Finance – Colombia and FDN", April 2016: http://www.ifc.org/wps/wcm/connect/a31849004c60eb0bb824bcaccf53f33d/EMCompass+-+Infrastructure+Finance.pdf?MOD=AJPERES.

109 Carter, P. Center for Global Development, "DFIs Embark on a Voyage of Rediscovery", 2017. Available at: https://www.cgdev.org/blog/dfis-embark-voyage-rediscovery.

110 Deloitte "Insight: Blended finance in the national planning process", 2017. Available at: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-blended-finance-in-national-planning-process.pdf.

111 See https://www.gihub.org/.

112 UN Environment, "New financial mechanism helps people, environment in Indonesia", December 2017: https://www.unenvironment.org/news-and-stories/story/new-financial-mechanism-helps-people-environment-indonesia.

113 UN Environment, "UN Environment and BNP Paribas partner to bring private capital to sustainable projects in emerging countries", December 2017: https://www.unenvironment.org/news-and-stories/press-release/un-environment-and-bnp-paribas-partner-bring-private-capital.

114 Understanding the challenges for infrastructure finance: Prospects for new sources of private sector finance, BIS Working Papers, September 2015, sourced in Deloitte "Insight: Blended finance in the national planning process", 2017. Available at: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-blended-finance-in-national-planning-process.pdf.

115 Bloomberg New Energy Finance, "Accelerating India's Clean Energy Transition", November 2017: https://about.bnef.com/blog/rooftop-pv-presents-23-billion-opportunity-india/.

116 Climate Policy Initiative, "Blended Finance in Clean Energy: Experiences and Opportunities", forthcoming 2018.

117 http://theconversation.com/chinas-green-planning-for-the-world-starts-with-infrastructure-85438.

118 https://www.ft.com/content/0714074a-0334-11e7-aa5b-6bb07f5c8e12.

119 Paulson Institute, "China Unveils its National ETS", December 2017: http://www.paulsoninstitute.org/the-green-scene/2017/12/19/china-unveils-its-national-ets/.

120 JP Morgan Jan 2017: https://www.jpmorganam.com.au/MI/II-The_infrastructure_moment.pdf.

121 See for example discussion herein: http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2016c.pdf.

122 Preqin Quarterly Update Infrastructure 2Q2017 and 3Q2017, http://docs.preqin.com/quarterly/inf/Preqin-Quarterly-Infrastructure-Update-Q3-2017.pdf.

123 S&P global (listed) Infrastructure index, Bloomberg Bond Index, Russel Global (FTSE equity) Index. https://blog.helpingadvisors.com/2017/10/12/potential-return-yield-opportunity-infrastructure/.

124 JP Morgan Jan 2017: https://www.jpmorganam.com.au/MI/II-The_infrastructure_moment.pdf.

125 CDPQ Annual Report 2016: https://www.cdpq.com/sites/default/files/medias/pdf/en/ra/ra2016_renseignements_add_en.pdf.

126 The GEMs Risk Database Consortium was established 2009, today 15 MDB and DFI members. The data can assist with internal calibration of estimated loss given defaults and probability of default. In 2016 GEMs database reports around 8,300 counterparts, 1,700 default events and 1,900 resolved contracts from 1988 onwards.

127 OECD/G20, "Breaking Silos: Actions to develop infrastructure as an asset class and address the information gap - An agenda for G20", December 2017. http://www.oecd.org/daf/fin/private-pensions/Breaking-Silos%20-Actions-to%20Develop-Infrastructure-as-an-Asset-Class-and-Address-the-Information-Gap.pdf.

128 Convergence "Mobilising institutional capital at scale for the global goals through blended finance", forthcoming 2018, World Economic Forum (2015), *Alternative Investments 2020 – The Future of Alternative Investments.* Retrieved from http://www3.weforum.org/docs/WEF_Alternative_Investments_2020_Future.pdf.

129 With special thanks to Aron Betru and Chris Lee, Milken Institute, 2017 for this working paper.


BLENDED
FINANCE
TASKFORCE