

## The role of the Climate Investment Funds in meeting investment needs

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Climate Policy Initiative works to improve the most important energy and land-use policies around the world, with a particular focus on finance. An independent organization supported in part by a grant from the Open Society Foundations, CPI works in places that provide the most potential for policy impact including Brazil, China, Europe, India, Indonesia, and the United States.

Our work helps nations grow while addressing increasingly scarce resources and climate risk. This is a complex challenge in which policy plays a crucial role.

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### **Executive Summary**

The global climate finance landscape has changed significantly since the establishment of the Climate Investment Funds (CIF) in 2008. New institutions have come to the fore, countries' economic circumstances and investment needs have evolved, and climaterelated risks have become clearer. Given this evolved landscape, and in light of the request put forward by the CIF Trust Fund Committees (TFCs), this study examines the role of the CIF in the changed context in which it now operates and in relation to other providers of concessional climate finance. This is a particularly timely and important task because a "sunset clause" conceived at the CIF's establishment requires the fund to conclude its operations once a new financial architecture now embodied by the Green Climate Fund (GCF) — is effective.

This study's primary aim is to identify if and where the CIF business model adds value in the landscape of climate finance and whether the CIF holds a comparative advantage in supporting climate-relevant investment needs compared to other multilateral climate funds. This report also examines the role of concessional climate finance, characterizes its main providers, and discusses where and how concessional resources are most needed to address climate investment gaps in priority sectors in developing countries. It concludes with recommendations for the CIF going forward.

Our findings provide insights for those considering the delivery of international climate finance both in the short and long term. They are based on the views and opinions of the CIF, the GCF, and other climate finance stakeholders, and a review of relevant literature and climate finance data. Further in-depth portfolio- and country-level analyses would help provide more detail and further substantiate some of our findings.

## Current and future investment needs and gaps

Investments in clean and efficient energy systems, urban infrastructure, climate-smart land-use and water management need to scale up significantly in the next 15 years to enable low-carbon, climate-resilient development consistent with limiting global temperature rise to below 2 °C. The Intended Nationally Determined Contributions (INDCs) of developing countries highlight these sectors as key investment priorities. Achieving the goals captured in the INDCs will require large-scale support and the engagement of multiple stakeholders from both the public and private sectors.

Barriers to climate investment in priority sectors in developing countries remain significant. The lack of adequate access to capital, particularly patient capital, and the presence of both real and perceived risks (sovereign risks, technology risks, financing risks and first-mover risks) are holding back investors. Sustained access to concessional sources of finance to overcome these barriers will be critical to support countries in meeting their goals. In this regard, Multilateral Development Banks (MDBs) have a role to play in helping to narrow investment gaps, and will likely require additional injections of external concessional finance to do so.

## The role of the CIF in tackling investment needs

# The CIF has provided more multilateral concessional climate finance more quickly than any other climate fund:

- It is the largest source of external concessional climate finance for the six MDBs that act as its implementing agencies,<sup>1</sup> providing about 45% of the external concessional finance managed by MDBs in 2013-2014;<sup>2</sup>
- Over the past ten years, it approved around 60% of the total finance committed by eight multilateral climate funds (Figure ES 1).

Other sources of multilateral concessional climate finance such as the Global Environment Facility (GEF) and the GCF have also played an important role in addressing barriers to investment or are expected to do so in the future.

<sup>1</sup> External concessional finance is channelled through MDBs. but provided by multilateral climate funds or other bilateral and multi-donor trust funds.

<sup>2</sup> This is based on CIF (2015a) and data from four of the six MDBs implementing the CIF.

Over the past ten years the CIF approved around 60% of the total finance committed by eight multilateral climate funds.

The CIF is well-suited to support some of the most urgent climate investment needs going forward.

Advancing climate action calls for, among other things, private sector engagement at scale, significant deployment of novel technologies to drive down costs, risk-taking and flexibility to pilot-test new approaches in challenging investment environments. Furthermore, translating INDCs into concrete investments will likely require the mobilization of multiple stakeholders under coherent strategic investment plans and supportive policy frameworks. Given the distinctive features of the CIF's business model compared to other multilateral climate funds' and considering future investment needs, we find that the CIF appears well-suited to play a role in these

Figure ES.1: Finance approved by selected multilateral climate funds over their years of operation



Note: Global Environmental Facility includes only GEF-4, GEF-5, and GEF-6.

areas, particularly in the short to medium-term while the GCF gets up to speed. More specifically:

The CIF's programmatic approach offers a predictable and strategic framework within which to develop and structure investments. The CIF is the only climate fund to date to prioritize a programmatic national investment planning process. The GEF offers a programmatic approach to supplement its projectbased approach, but this has not been the primary focus of GEF funding to date. The GCF is currently undertaking a competitive project-by-project approval process, but may choose to adopt a more programmatic approach in the future.

The CIF's national investment planning process involves multiple stakeholders in the development and implementation of policy reforms and investments aligned with countries' climate strategies. It starts with countries being informed of the indicative amount of resources they are eligible for, followed by the development and endorsement of the investment plans and finally approval of projects. This approach has provided a certain level of predictability to both the recipients and implementing partners. Consultations with MDB representatives highlighted that a predictable funding stream is particularly relevant to the development of, for instance, first-of-a-kind projects that require substantial preparation (e.g. climate-resilient infrastructure projects). The competitive project-byproject approval approach followed by some climate funds does not provide the same level of certainty and this can hamper the development of individual projects and markets more broadly. Indeed, almost all respondents to a survey of CIF and GCF recipient countries indicated that predictability of finance flows, along with scale, is of critical importance.

The CIF has a role to play in tackling key investment barriers, and is particularly well-suited for advancing investments in cutting-edge technologies and low-carbon and climate-resilient infrastructure.

 The CIF partnership with MDBs has allowed recipient countries to benefit from these banks' different areas of expertise and work with them in a more coordinated manner under a common investment framework. This MDB partnership has allowed recipient countries to draw from these institutions' varied skillsets, including their ability to attract and coordinate financing on the ground,

provide broader policy support, and deliver resources at scale to given markets and technologies. The CIF has also enabled MDBs to experiment with new financing approaches, mainstream climate in their operations, and generate significant institutional learning. The CIF has created a collaborative platform among MDBs both at the program management and at the operational level, resulting in enhanced on-theground and intra-bank coordination.

 MDB stakeholders and recipient countries consulted in this study value the range of financial instruments available through the CIF. Interviewees noted that this range differentiates the CIF from other sources of concessional finance. The flexibility with which instruments are provided was particularly noted in the context of the Clean Technology Fund (CTF)'s Dedicated Private Sector Program (DPSP) and means that interviewees found this fund particularly well-suited to fostering the piloting of first-of-a-kind approaches and business models. The CIF is also the only multilateral climate fund that has provided reimbursable finance (e.g., concessional loans) for adaptation measures and the only one to develop a dedicated grant mechanism for indigenous people to tackle the drivers of deforestation. Beyond grants and loans, the CIF also offers its resources in the form of equity, subordinated or mezzanine debt structures, guarantees, local currency, as well as currency hedging tools. It is important to note, however, that some of these financial and risk instruments have yet to be fully utilized.

• Representatives of MDBs and recipient countries value the CIF's risk appetite. This appetite is reflected by the types of risk-taking instruments the CIF provides and also noticeable at the portfolio-level. For instance, the CIF has allocated about 36% of its approved funding to unproven or risky technologies (geothermal and Concentrated Solar Power) in low-and middle income countries, and has provided up to 55% of international public finance currently flowing to the earliest, riskiest stages of geothermal projects.

Figure ES.2: Share of resources set aside for the private sector as a percentage of total funding available per climate fund.



Note: GEF private sector set-asides only exist in GEF-5 and GEF-6. The total pledged amount only accounts for the climate change focal areas for GEF-4, GEF-5, and GEF-6.

The CIF has allocated more finance to private sector investments in mitigation, forestry and adaptation than any other multilateral climate fund (Figure ES.2). Overall, the CIF has allocated 28% of its financing (or USD 2.3 billion) to private sector investments to help cover the viability, knowledge, and risk gaps that can affect private actors' ability and incentive to invest. This is more private sector funding than any other multilateral climate fund to date both in absolute dollar terms and as a share of each funds' total financial resources. Nevertheless, despite noteworthy pioneering investments, the CIF and its implementing entities have struggled to attract private investment in key areas, particularly forestry and adaptation, as well as in the less developed countries in which the CIF operates. The geographic restrictions on use of the set-aside funds and the weaknesses of these countries' policy frameworks have made attracting private investment challenging. The GCF also places a strong emphasis on private sector engagement, but it is too early to evaluate how this will take shape.

#### Recommendations

Grounded in the above findings, we recommend the following to the CIF Administrative Unit, CIF stakeholders, and the broader climate finance community:

Keep the CIF in operation to maintain momentum on climate finance and climate action, bearing in mind investment needs and the additional gaps that may arise in a "no-CIF" scenario. The CIF has experience and a functional structure in place which can help to maintain momentum and bridge major climate investment gaps. Other climate funds have notable strengths, but do not necessarily offer the same capabilities as the CIF does right now. While the establishment of the GCF - a new and critical institution within the climate finance landscape — is intended to fill investment gaps, questions remain regarding the extent to which the fund will be able to deliver the scale and type of support recipient countries need in the short to medium-term as it gets up to speed. In fact, the recently released World Bank Group's Climate Change Action Plan highlights that "[...] uncertainties exist around how this [GCF] process will move forward [...] There remains a risk of a global shortage of access to leveraged 'climate finance' for transformative activities in the critical

period from Paris through 2020" (WBG, 2016). Additionally, the Intergovernmental Group of Twenty-Four (G-24) countries, which coordinates the position of developing countries on development issues, recently called for "[...] the urgent replenishment of the Climate Investments Funds" (IMF, 2016)."

- Focus on maintaining and strengthening those unique characteristics of the CIF business model that are valued by CIF recipients, contributors, and MDBs, and are relevant for filling gaps in the climate finance landscape. These include the CIF's programmatic approach, partnership model with MDBs, private sector focus, flexibility, adaptive learning, innovation, and risk-taking capacity. The CIF's programmatic approach and its resulting predictability could be a model for the implementation of the INDCs through the development and financing of investment plans, particularly when considering the broader institutional and regulatory challenges countries would need to overcome.
- Pursue concrete opportunities to work with the GCF in a complementary manner. The CIF does not currently have sufficient resources to finance either the projects in its pipeline or those to be developed by new CIF pilot countries. These resource constraints are creating uncertainties for both recipient countries and MDBs. To advance action while maintaining the CIF programmatic implementation approach, CIF pilot countries and MDBs could request funds from the GCF (or other sources) for project and program concepts that have been developed under CIF investment plans. This could create a win-win scenario by both providing funding for the CIF pipeline and helping the GCF build off the CIF's robust investment portfolio to achieve the GCF's ambitious USD 2.5 billion per annum programming goal. Such an arrangement would also foster coordination and complementarity across sources of climate finance, a need emphasized in the Paris Agreement. Some synergies across the two funds have already emerged: the GCF recently provided USD 20 million in the form of a guarantee for an Energy Efficiency Green Bond Facility that had previously received USD 19 million from the CIF's Clean Technology Fund. In addition, some CIF recipient countries, in partnership with their MDB counterparts, have or are planning to take projects they are developing under the CIF

investment plans to the GCF for funding. Possible areas for further complementarity could be explored in future work.

Continue to engage with private actors, pursuing ways to enhance their involvement in forestry and adaptation. All MDB stakeholders interviewed highlighted the achievements of the Clean Technology Fund's (CTF) DPSP in driving private investment, in particular its flexibility in providing instruments well-suited for private investments and its thematic focus on specific sectors and technologies. While the CIF should continue its efforts to scale up private investment in energy systems through the DPSP, there is room for making its private sector engagement in forestry and adaptation more effective. Some interviewees noted that this could be achieved by: 1) removing the private sector set asides' tight time restrictions placed on the project proposal development period; 2) allowing MDBs to collaboratively identify private sector investment opportunities under thematic areas (as in the DPSP model); and 3) focusing resources on strengthening the policy and business frameworks

in low or/least developed countries where the formal private sector is small in size and investment environment challenging. The MDBs' public and private sector arms can work in cooperation to pursue this aim. Further, the CIF can help support the piloting and testing of private sector adaptation or forestry approaches in middle-income countries with relatively stronger private sector and business environments to develop viable business models that can then be replicated in lower-income countries.

Generate and share knowledge on how to optimize the use of concessional finance in public sector operations to increase the efficiency of scarce resources. All providers of concessional finance should consider working together to identify appropriate terms and conditions for public sector projects in ways that better target specific investment barriers. This would allow for scarce public resources to be used more efficiently. The portfolios of MDBs' renewable energy sector projects could offer opportunities for further analysis and an appropriate testing ground.

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### 1. Introduction

Given that the Climate Investment Funds (CIF) was originally conceived as an interim solution prior to the establishment of the new international climate finance architecture — embodied by the now operational Green Climate Fund (GCF) — there is a need to assess its role in relation to other providers of concessional finance and in the context of developing countries' evolving financial needs.

This study aims to identify the role of the CIF within the evolving climate finance landscape and assess whether its business model holds a comparative advantage over other climate funds in supporting climate-relevant investment needs and gaps. It develops from the request put forth in November 2015 by the CIF Trust Fund Committees (TFCs) to conduct a gap analysis of the existing climate finance architecture and to explore potential future opportunities and roles the CIF could play within this landscape (see CIF, 2015b). The findings of this analysis aim to inform the thinking of the CIF TFCsmembers as they make decisions on the future of the CIF.

The scope of the analysis is primarily — though not exclusively — focused on climate finance delivered through Multilateral Development Banks (MDBs) given that the CIF business model relies on MDBs as implementing agencies. Considering the type of finance provided by the CIF, this study focuses on *concessional* finance, defined as resources extended at terms and conditions more generous than what the market or conventional MDB lending offers.<sup>3</sup>

The report is structured as follows: the following section provides details on the methodology used for the analysis; Chapter 2 examines the role of concessional climate finance in driving climate action and provides an overview of the concessional climate finance landscape with a focus on resources channeled through MDBs; Chapter 3 reflects on the estimated climate-relevant investment needs and gaps; and Chapter 4 assesses the potential role of the CIF in meeting these needs by first assessing the CIF on its own and second by comparing the key features of its business model with other multilateral climate funds. Finally, Chapter 5 concludes with insights and recommendations to the CIF TFCs and Administrative Unit regarding the potential strategic niche for the CIF going forward. The annexes provide further details on the terminology used, stakeholders consulted, and the fundlevel comparative assessment performed.

### 1.1 Methodology

The methodology adopted for this study involved a combination of qualitative and quantitative approaches. In particular, we conducted:

- A desk-based review and analysis of relevant literature, including a comparative assessment of eight multilateral climate funds and their programs;<sup>4</sup>
- 2. Analysis of empirical data on MDBs' sources and uses of concessional climate finance in 2013-14, which we collected via a survey and in the context of the *Global Landscape of Climate Finance 2014 and 2015 reports*;<sup>5</sup>
- 3. Interviews with a number of stakeholders, including the CIF Administrative Unit, MDBs' CIF focal points and investment officers, representatives of contributing and recipient countries members of the CIF Trust Fund Committees, and stakeholders of the GCF. In total, we conducted interviews with 51 stakeholders:
- 17 MDB focal points from across all CIF-implementing MDBs;<sup>6</sup> to collect relevant data, we also consulted with additional MDBs staff working on CIF projects or climate finance tracking;
- 12 CIF Trust Fund Committee members (7 contributors and 5 recipients);

- 5 See Buchner et al. (2014) and (2015).
- 6 Interviewed stakeholders: 3 from Asian Development Bank (ADB), 3 from African Development Bank, 1 from European Bank for Reconstruction and Development (EBRD), 4 from Inter-American Development Bank (IDB), 2 from International Finance Corporation (IFC), and 4 from World Bank (WB).

With their ordinary capital resources, MDBs typically extend finance at closer to market-rates. With the support of resources from donor partners, MDB can provide finance at concessional or at more affordable terms (some MDBs use a "blended" finance approach, mixing grants from donor alongside own commercial funds to address specific market barriers (see e.g. IFC, 2015). The so-called "grant element" is a measure of the level of concessionality of a financial instrument. It reflects the financial terms and conditions of a commitment: interest rate, maturity and grace period (interval to first repayment of capital), security or rank or a combination of these. See Annex I for further details.

<sup>4</sup> We assessed the Clean Technology Fund (CTF), the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP) and the Scaling Up Renewable Energy Program (SREP) from the CIF, the Green Climate Fund (GCF), the Global Environment Facility (GEF), Least Developed Countries Fund (LDCF), Special Climate Change Fund (SCCF), Adaptation Fund (AF), Forest Carbon Partnership Facility (FCPF) and the BioCarbon Fund (BCF).

 22 GCF stakeholders, including: 7 GCF Board members and advisors,<sup>7</sup> 6 GCF recipient country National Designated Authorities, 2 private sector observer organizations, and 7 accredited implementing entities, including 3 accredited for private sector operations.

Following a specific request put forward by the CIF Trust Fund Committee members, we also develop a conceptual framework for the use of concessional finance, reviewed the terms and conditions offered by various sources and case studies. A CPI working paper published alongside this report presents the outcomes of this analysis, and outlines possible opportunities for better optimizing the use of concessional finance.<sup>8</sup>

To gain early feedback on the work, we presented preliminary results in March 2016 during a CIF retreat with CIF Trust Fund Committee members. The report also benefitted from the review of a number of CIF and non-CIF stakeholders.

We based our findings on the views and opinions of CIF, GCF and other climate finance stakeholders as well as on a review of relevant literature and analysis of climate finance data. This report does not aim to evaluate the strengths, weaknesses and performance of the CIF as other reports provide this type of assessment (e.g., ICF 2014, Nakhooda et al., 2013, and Nakhooda et al., 2014). Instead, it aims to identify areas where the CIF has played a unique role in the landscape.

Our analysis was done in a condensed timeframe (February-May 2016). We acknowledge that additional in-depth portfolio/country-level analyses, access to more comprehensive and granular data, and consultations could help to provide further evidence on investment gaps, and the overall impact of the CIF and its performance vis-à-vis other providers of concessional finance.

<sup>7</sup> Some interviewees were both members of the GCF Board and the CIF TFCs. See Annex I for details.

<sup>8</sup> See CPI web site at http://climatepolicyinitiative.org/.

### 2. A closer look at the concessional climate finance landscape

Climate finance flows in diverse ways. It originates from different public and/or private sources, is intermediated through a variety of multilateral, bilateral and national public or private channels, and invested in various forms — at commercial or concessional terms — to satisfy activity- and recipient-specific needs and circumstances. Recipients of finance also vary, ranging from purely public entities, such as national or local governments, to purely private, such as smallholders or business owners. This chapter looks at the role of public actors and more specifically different providers of concessional climate finance in driving climate-relevant investment.

## 2.1 The role of public actors in the climate finance landscape

Different sources of concessional finance support climate action in developing countries. They do so by helping address market and institutional failures that can hinder climate investment.

Public actors, including governments, aid agencies, bilateral and multilateral climate funds, and development finance institutions (DFIs), drive the global climate finance system. Public actors drive investment through a wide range of economic and financial instruments. In particular, by providing finance at concessional terms, they help reduce risks, lower the cost of capital, facilitate access to capital, and enhance project cash-flows. This increases the attractiveness of mitigation and adaptation projects compared to conventional investments.<sup>9</sup>

Governments, either directly or through intermediaries, are the main sources of concessional climate finance. Multilateral, bilateral, and national DFIs, bilateral agencies and climate funds are the principal intermediaries through which concessional finance is invested on-the-ground. Among public intermediaries, **MDBs have played a** strategic role in advancing the climate agenda. By blending concessional resources alongside close to market-rate finance, **MDBs have tackled barriers and** risks inhibiting climate investments.<sup>10</sup> MDBs have also provided policy guidance to strengthen enabling environments, and built knowledge and technical skills.

The strategic role played by MDBs is highlighted in particular by:

- The scale of MDBs' climate-related investments in developing and emerging economies. Commitments from the group of MDBs implementing the CIF<sup>11</sup> reached an annual average of USD 18 billion over 2013-2014, or 23% of the total USD 78 billion channeled by DFIs into developing and emerging economies.<sup>12</sup>
- Their ability to attract private or public sector co-financing for investments. MDBs occupy an intermediary space between development assistance and private investment, acting as "honest brokers" between public and private actors to catalyze private capital and help strengthen countries' investment climates (Joint-MDBs and IMF, 2015). MDBs' catalytic potential is for instance highlighted by the volume of finance invested alongside their own resources: USD 18.3 billion co-invested from public sources and USD 46 billion from private sources in 2014 (Joint-MDBs, 2015b).
- Sharing thei expertise: MDBs have developed climate finance expertise across a wide range of interventions and sectors. Such expertise, spanning from project structuring to regulatory reform processes, has been

<sup>9</sup> See for instance Gupta et al. (2014).

<sup>10</sup> MDBs structure financing terms according to borrowers/recipient circumstances. For instance, they provide non-concessional financial assistance to middle-income countries and some creditworthy low- income countries (see e.g. World Bank Group web site).

<sup>11</sup> The Asian Development Bank (ADB), African Development Bank (AfDB), European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IDB), International Finance Corporation (IFC), and the World Bank.

<sup>12</sup> Source: direct reporting from MDBs, Joint-MDBs (2014), Joint-MDBs (2015a), Buchner et al. (2015) and Buchner et al. (2014). Note: USD 78 billion refers to the annual average of multilateral, bilateral, and national DFIs' commitments over 2013 and 2014 in flows captured (Buchner et al., 2015 and 2014). Data on MDBs commitments differ from what is reported in Buchner et al.'s reports because of differences in scope and data coverage.

relevant to build the capacity of other actors in the financial system such as national development banks and local financial institutions.<sup>13</sup>

- 13 The IDB, for instance, has convened a number of events to foster exchange of experiences with the National Development Banks of the Latin America and Caribbean Region and raise awareness about their role in the "landscape". The EBRD, through its Sustainable Energy Financing Facilities (SEFFs), has developed the capacity of local financial institutions to e.g. financing energy efficiency investments. The IFC's Sustainable Banking Network convenes financial sector regulatory agencies and banking associations to develop regulatory guidance that encourages local banks to adopt sustainable banking
- Establishing industry standards: the MDBs' Environmental and Social Safeguards represent industry benchmarks<sup>14</sup> for climate funds, national development banks and local financial institutions. They help drive responsible financing decisions across the financial system.

#### practices.

14 For instance, the Equator Banks and bilateral finance institutions follow the World Bank's and IFC's Environmental and Social Safeguards (For details see e.g. Equator-principles.com and KfW (2012)).

#### Box 1. Concessional climate finance to address barriers to climate investments

## Concessional resources can help tackle market and institutional failures that prevent the development of climate projects.

Figure 1 illustrates how concessional resources can be deployed to bridge the viability gap that can exist between a 'business-as-usual' investment and a climate investment. The viability gap can exist because low-carbon and climate-resilient investments can have additional or higher up-front costs, insufficient revenues, or face risks and information gaps that can discourage investors.<sup>a</sup>

A targeted grant, for instance, can bring-down capital expenditure costs (CAPEX). Concessional loans or the provision of risk coverage mechanisms can either help to extend loan tenors so that they better match project cash flows or bring down financial expenditures (FINEX).

Figure 1: Illustrative representation of the role of concessional climate finance in addressing the viability gap that can exist between a business-as-usual investments and a low-carbon and climate-resilience investment.



More specifically, concessional finance can help address three broad and interrelated categories of investment barriers:

- **Regulatory, policy and institutional gaps:** refer to weaknesses in the enabling environment of a project's host country or region that influence the attractiveness of a investing in a country, and a country's ability to raise resources on capital markets or service debt.
- Knowledge, funding and viability gaps: refer to market failures, project-specific bottlenecks such as gaps in risk-return expectations, lack of local capacity for structuring or managing a climate project, and real or perceived risks associated with, e.g., a novel technology or sovereign instability.
- **Public good-related gaps:** refer to obstacles preventing the consideration of broader socio-economic and environmental objectives (positive or negative externalities) in investment decisions.

More than one of these barriers can influence investors' or financiers' ability and incentive to invest in lowcarbon or climate-resilience measures.

a In a mitigation project, for instance, concessional finance is typically used to 'level the playing field' between technology options, that is addressing a viability gap between a renewable energy project and a business-as-usual project based on unabated fossil-fuels. In the context of adaptation, for instance, making an infrastructure climate-resilient can have higher up-front costs associated with project preparation work such as climate vulnerability assessments and resilience audits

## 2.2 Key sources of concessional climate finance channeled through MDBs

The CIF represents a significant share of the external concessional finance invested by MDBs to address policy, knowledge and viability gaps. External concessional climate finance complements MDBs' own resources and enhances their ability to further recipient countries' low-carbon and climate-resilient development objectives.

The CIF, the GEF and other bilateral and multilateral donor trust funds channel concessional finance through MDBs for climate-related investments in developing and emerging countries. In addition to these *external* sources, some MDBs provide grants and loans at zero or low interest rates to selected member countries using their own concessional resources (often called "soft lending windows"). These *internal* resources, whose primary aim is to achieve poverty reduction and economic and social development goals, include the ADB's Asian Development Fund (ADF), the AfDB's African Development Fund, the IDB's Multilateral Investment Fund and Fund for Special Operations (FSO), and the World Bank's International Development Association (IDA).<sup>15</sup>

All these concessional sources are relevant as they provide finance (or other instruments) at terms more generous or "softer" than the MDBs can provide through their ordinary capital resources. The external sources of concessional finance channelled through the MDBs have played a particularly important role in supporting MDBs' climate agenda given their specific focus on climaterelated goals.

## 2.2.1 MAIN SOURCES OF EXTERNAL CONCESSIONAL FINANCE TO MDBS

To understand the relative importance of the various sources of external concessional climate finance

<sup>15</sup> See: See IDA web site (IDA.worldbank.org and Worldbank.org); the African Development Fund's website (AfDB.org); the Asian Development Fund's website (ADB.org); IDB's Fund for Special Operations website (IADB.org). In addition, governments can also provide direct co-financing to MDBs' climate projects or MDBs-led initiatives.

(in % of total volume).

Figure 2: CIF share of total 2013-2014 MDBs external concessional finance

channeled through MDBs, we surveyed the MDBs implementing the CIF. Based on available data,<sup>16</sup> we find that in 2013-2014:

- The CIF was the top provider of external concessional climate finance for several MDBs, representing about 45% of the external resources they collectively received (annual average of USD 0.5 billion);
- 2. The GEF was another key provider of external concessional finance for the MDBs, representing 9% of their total external concessional climate finance (annual average of USD 0.1 billion);
- 3. Bi- and multi-donor trust funds administered by MDBs such as the Canadian Climate Fund for the Private Sector also played an important role because of their flexible arrangements and ease of use.<sup>17</sup>

The GCF is an emerging player in the climate finance landscape, but given its recent operationalization (2015), our MDB survey does not capture its contribution. Nevertheless, it is worth noting that all MDBs have been accredited to the fund, and are in the process of signing legal agreements that will govern their relationship with it. Furthermore, the projects recently submitted by two MDBs (IDB and ADB) (November 2015) received funding approval by the GCF Board (GCF, 2015a).

Our analysis of MDBs' intermediation of external concessional climate finance in 2013-14 shows that those MDBs for which we received data (ADB, AfDB, IDB and IFC) mostly deployed such resources in the form of concessional loans and grants with important differences between public sector and private sector operations (see 45% from CIF TOTAL EXTERNAL CONCESSIONAL FINANCE TO MDBs 55% from other

Source: authors' estimates based on direct reporting from surveyed MDBs (ADB, AfDB, IDB and IFC).

Figure 3). For public sector projects, the vast majority of grants — 75% of the grant volume captured — supported MDBs to reduce the capital expenditure costs of projects (CAPEX). In private sector transactions, instead, most grants (91%) took the form of technical assistance, which is an important facilitator of private sector investment in mitigation and/or adaptation.

**Most, if not all, MDBs' climate projects would not have taken place without the support of concessional finance.** This was highlighted by MDB stakeholders interviewed and evidence drawn from 17 project examples shared by surveyed MDBs.<sup>18</sup> Concessional finance addressed a variety of viability gaps: high levels of indebtedness faced by many public borrowers, high project risks during the construction phase (particularly for first-of-a-kind technologies), and weak institutional and technical capacity of project developers.

<sup>16</sup> Source: authors' estimates based on direct reporting from surveyed MDBs. Due to data limitations our estimate is based on direct reporting from four out of the six MDB implementing the CIF: ADB, AfDB, IDB and IFC. EBRD (2014) and interviews with EBRD staff indicate that the CIF was the top provider of concessional climate finance available to EBRD for climate projects in developing countries. Our findings align with CIF (2015a) reporting that the CIF provided USD 3.5 billion, or 44%, of the nearly USD 8 billion in external concessional resources delivered by all its implementing MDBs from 2011 to 2015.

<sup>17</sup> The Government of Canada established the fund as part of its fast-start contributions. ADB administers the Canadian Climate Fund for the Private Sector in Asia (USD 82 million), IDB administers the Canadian Climate Fund for the Private Sector in the Americas (USD 250 million), and IFC administers the Canada Climate Change Program (USD 292 million) (IDB, 2012a; ADB, 2013; Government of Canada website).Based on IFC directly reported data, in 2013-14 the Canada Climate Change Program represented 35% of IFC's external concessional climate finance resources.

<sup>18</sup> For details see: IDB (2016a); IDB (2016b); IDB (2014); IDB (2013); IFC (2014a); IFC (2014b); ADB (2014); ADB (2015a); ADB (2015b); ADB (2015c); AfDB (2014a); AfDB (2013).





Source: direct reporting from surveyed MDBs (ADB, AfDB, IDB and IFC).

## 2.2.2 KEY FEATURES OF EXTERNAL SOURCES OF CONCESSIONAL FINANCE TO MDBS

Each donor-backed concessional trust fund has different objectives, features, and funding capabilities, and each source of external concessional finance helps MDBs to meet their aims of supporting recipient countries' climate goals in different ways. Looking at the variety of providers indicated by surveyed MDBs, we highlight the following main distinctive elements of providers of external concessional finance:

- **Core mandate:** some funds including the CIF specifically focus on tackling climate change issues, others concentrate on countries' development priorities with climate benefits, such as the AfDB's Rural Water Supply and Sanitation Initiative;<sup>19</sup>
- Scope of activity: some funds have sectoral priorities (e.g., the Global Agriculture and Food Security Program) or a specific geographic focus (e.g., the Sustainable Energy Fund for Africa or the CIF's Clean

Technology Fund (CTF) that places a particular emphasis on middle-income economies);

- **Direct support to private sector transactions:** the Canadian Climate Fund for the Private Sector and the CIF and the GEF through e.g. dedicated set asides directly support private sector transactions. Other providers of external concessional finance work with public sector entities to help create an enabling environment for the private sector to engage in climate activities;
- Volume of financing: the amount provided to MDBs for transactions can range from relatively small to large.<sup>20</sup> This encompasses dedicated one-off envelopes like the Canadian Climate Fund for the Private Sector, and longer-term financing opportunities like the GEF;

<sup>20</sup> For instance, the scale of the CIF's transactions ranges from USD 100,000 preparation grants to USD 250 million at country-level. For GEF, the range is USD 2 million to 126 million, with an average of about USD 6.5 million. For the GCF it ranges from USD 2 to 40 million. For the IDB's Canadian Climate Fund the max scale for projects is USD 30 million.

<sup>19</sup> See AfDB web site at AfDB.org.

- Type of financing and degree of concessionality offered: ranging from grants only, such as the GEF's Special Climate Change Fund (SCCF), through to a broader range of concessional finance instruments including equity, guarantees, and local currency loans available through the CIF. The degree of concessionality ("grant element") offered also varies across fund;<sup>21</sup>
- **Target stage of a project's lifecycle:** from project preparatory funding in support of, for instance, recipient countries' counterparts formulating financing proposals (e.g. Nordic Development Fund),<sup>22</sup> through to investment stage financing, including support for associated advisory services work (e.g. IFC's Canada Climate Change Program).<sup>23</sup> Some providers such as the CIF and the GEF provide support from country-level investment strategy formulation through to implementation.

These distinctive elements also differentiate *external* finance from the MDBs' *internal* sources of grants and no- or low-interest loans. These "soft windows" typically have a poverty reduction and economic and social development mandate, and are provided to the world's

poorest countries or least developed markets.<sup>24</sup> Anchored in these banks' strategies, internal concessional sources also aim to contribute to climate change mitigation and adaptation goals but not as a principal priority.<sup>25</sup>

According to the MDB representatives interviewed, and based on their distinctive features, external and internal sources of concessional climate finance provide complementary support to MDBs and enhance their ability to further recipient countries' low-carbon and climate-resilient development objectives.<sup>26</sup> Complementarity appears to exist also between the various external providers (given, for example, the varying degrees of concessionality, risk coverage, funding size and stage of project development support offered). There are several examples of where the CIF and the GEF or the GFC have played complementary roles at the country and project levels. For example, the GEF, given the relatively smaller size of its project financing, has supported projects upon which further investments by the CIF have been based to scale up results (GEF, 2014d).<sup>27</sup> Country/ project-level analyses could help to identify how to strengthen complementarity and coordination among these providers.

- 24 See IDA web site (Ida.worldbank.org and Worldbank.org); AfDB's web site for the African Development Fund (AfDB.org); ADB's web site for the Asian Development Fund (ADB.org); IDB's Fund for Special Operations.
- 25 IDA for instance committed about USD 4 billion in climate action in 2014 (Buchner et al. 2015). The agenda of IDA's programming under its 18<sup>th</sup> replenishment include climate-resilient development as a special theme (see IDA, 2016).
- 26 For instance, in an IDB's private sector adaptation project in Haiti, the Bank has complemented non-grant resources from the CIF's PPCR with grants from the IDB's Multilateral Investment Fund (MIF) to cover for technical assistance measures (CIF, 2013a).
- 27 For example, the CTF support in the MENA region and in Chile for Concentrated Solar Power (CSP) follows a number of GEF projects supporting the first trials of CSP implemented in developing countries. In Mexico, a USD 50 million GEF grant for a wind energy project encouraged further development of wind energy by removing a bottleneck related to the lack of financial competitiveness. Another example is offered by the GCF recent approval of USD 20 million in the form of a guarantee for the IDB Energy Efficiency Green Bond in Latin America and the Caribbean which previously received USD 19 million from the Clean Technology Fund. For further examples see e.g. World Bank, (2008); World Bank (2011b); World Bank (2013a); and World Bank (2013b).

<sup>21</sup> See Annex II and IV for details.

<sup>22</sup> NDF (2016).

<sup>23</sup> IFC web site IFC.org.

### 3. Needs and gaps in the current and future climate finance landscape

Under the Paris Agreement, Parties aim to start reducing their greenhouse gas emissions as soon as possible in order to meet the long-term global objective of zero greenhouse gas emissions well before the end of the century (UNFCCC, 2015a).

To accelerate the low-carbon transition and deliver upon these and the Sustainable Development Goals adopted in 2015, investments need to scale up significantly and as soon as possible. If they do not, the rapid growth expected in the next 15 years in developing and emerging economies, enhanced urbanisation trends, and the resulting demand for energy and food (GCEC, 2014), could lock-in climate vulnerabilities and a high-carbon pathway.

Both "hard" (e.g., physical infrastructure/technology) and "soft" (e.g., capacity building, policy, or management practices) investments are needed to aid the transition. This chapter highlights the magnitude of the "hard" investment challenge (given the difficulties in quantifying 'soft' investment), the main barriers to address, and the instruments needed to make the transition happen.

## 3.1 Investment needs in developing and emerging countries

The Global Commission on the Economy and Climate (GCEC) estimated that around USD 90 trillion is likely to be invested in infrastructure in the world's urban, landuse and energy systems over the next 15 years to 2030 (GCEC, 2014). "Climate-proofing" these investments will be essential and will require an additional USD 2.6-3.4 trillion. About 65% of this additional investment will be required in developing countries.<sup>28</sup>

The GCEC indicates that climate investment in clean and efficient energy systems, low-carbon and climate-resilient cities, sustainable transport, and climate-smart landuse — including agriculture and forestry — and water management, in particular, needs to scale up fast (GCEC, 2014). These areas align with the investment priorities indicated in the INDCs submitted by Parties to the UNFCCC<sup>29</sup> and the sectors targeted by the MDBs' climate change strategies and action plans in the period to 2020.<sup>30</sup> Table 1 shows the estimated annual investment gaps for each of these sectors.

- 29 A UNFCCC analysis of 161 INDCs representing 189 Parties from both developed and developing countries indicate that renewable energy investments are a key priority as they were mentioned in 76% of submitted INDCs, followed by water management (74%), energy efficiency (71%), agriculture (66%), transport (64%), and forestry (43%) (see UNFCCC, 2015b and 2016). Agriculture and water are the main adaptation sectors prioritized in the INDCs including adaptation components.
- 30 Some MDBs recently developed, or are developing, new climate change strategies to outline how and where they intend to scale up their climate financing to 2020. The WBG Board approved the Climate Change Action Plan in April 2016, including the IFC's Climate Implementation Plan (IFC, 2016). Sources: WBG (2016); Joint-MDBs (2016) and interviews with MDBs' representatives carried out between February and April 2016. As at the time of writing, some MDBs had not yet published their own climate action plans. In addition to the interviews, we hence based our analysis on ADB (2008), AfDB (2012), IDB (2015), EBRD (2015a) and Joint-MDBs (2016).

Table 1: Estimated annual investment gaps per sect	ors to 2020 or beyond (in USD billion per year).
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	ENERGY SYSTEMS		CITIES		CLIMATE-SMART LAND-USE	
	EE	RE	SUSTAINABLE TRANSPORT	URBAN DEV'T	LULUCF	WATER
Total additional investment required	350-500	540	730	400-1,100	>150-250	260-800
Developing countries	>200	295	50-470	n/a	n/a	>260

Key: Energy efficiency (EE); Renewable energy (RE); Land-use, land-use change and forestry (LULUCF). Note: the investment estimates per sectors reported above rely on different methodological approaches and, therefore, cannot be aggregated due to the risk of double counting.

Investment needs estimates based on: SE4ALL (2014) and IEA (2015) for energy efficiency (doubling energy efficiency improvement rates); IRENA (2016), SE4ALL (2014), IEA (2014a) and IEA (2015a,b) for renewable energy (doubling renewable energy by 2030); Bielenberg et al. (2016) and UNCTAD (2014) for transport. CCFLA (2015) for urban; Delgado et al. (2015) and UNCTAD (2014) for forestry; Bielenberg et al. (2016) for water (including sanitation).

<sup>28</sup> The range depends on the assumed growth in global investments during that period (Bielenberg et al., 2016 based on GCEC (2014)). The estimated investment gap for sustainable infrastructure in low and middle-income countries is over USD 2 trillion per year (Bielenberg et al., 2016).

#### 3.2 Estimated volume of concessional climate finance needed to support MDBs' commitments

Concessional finance from bilateral and multilateral sources will likely be important to support MDBs' targets to scale up climate financing from current levels to around USD 36 billion per year by 2020, and to help recipient countries meet their own climate goals.

#### MDBs have a role to play in helping to narrow the investment challenge, and are likely to require additional injections of concessional finance to meet their climate finance goals and the objectives of the countries in which they operate.

In the run up to the 21<sup>st</sup> Conference of the Parties, MDBs committed to scale up their own climate financing from current levels (around USD 18 billion) to around USD 36 billion per year by 2020. This aims to help advance the long-term low-carbon and climate-resilient transition in the regions and countries where they operate.<sup>31</sup>

To achieve this goal, MDB stakeholders noted they would require continued access to concessional resources (Joint-MDBs, 2015c and 2016). For instance, the World Bank Group's Climate Change Action Plan and the IDB Group Board of Governors noted that the achievement of the 2020 climate finance targets and the mobilization of private sector participation at scale is conditional on sustained access to concessional finance (WBG, 2016; IDB, 2016c). The WBG (2016), in particular, highlighted that the volume of needed concessional climate finance would need to be comparable at least to past amounts.



### Figure 4: MDBs own versus external concessional climate finance resources in 2013-14 and 2020 (in USD billion).

Source: Authors' elaboration based on direct reporting from surveyed MDBs, Joint-MDBs (2014 and 2015a), Joint-MDBs (2015c), Join-MDBs (2016), MDBs direct reporting and UNFCCC (2015c).

Based on inputs from and through consultations with MDB stakeholders, we estimate that MDBS may require at least USD 3.5 billion per year by 2020 in external concessional climate finance, almost double the amount they currently use. This estimate assumes that the share of external concessional finance to total climate finance remains consistent with current levels, about USD 2 billion on average in 2013-2014, or 9% of their total climate financing over the same period.

MDB representatives noted that the needs for external concessional finance in 2020 may even be higher, and that our estimated USD 3.5 billion per year in 2020 can be viewed as a "floor" for a number of reasons.<sup>32</sup>

<sup>31</sup> Since the MDBs announced climate finance goals to 2020, the analysis in this chapter focuses on this time frame. While this period will be important for starting the early development and implementation of the INDCs, the post-2020 period will require intensive investment and structural change (GCEC, 2014).

<sup>32</sup> The World Bank has, for instance, estimated a need of USD 1 billion annually in concessional climate resources to meet the renewable and energy targets in its Climate Change Action Plan.

First, MDBs plan to expand climate action into many sectors and/or technologies on which they have relatively little or no experience such as energy storage, climate-smart land-use, and climate-resilient infrastructure.<sup>33</sup>

Second, barriers to investments in the sectors and countries targeted will likely involve improvement in countries' enabling environments, costly interventions (e.g. for sustainable transport infrastructure), or require deployment at scale to drive down technology costs. Moreover, the volume and need for climate investment may be higher as countries ramp up ambition when implementing their INDCs.<sup>34</sup>

Third, there is room for further mainstreaming climate change into MDBs' development operations. Climate finance represented about 20% of total MDB investments in 2013-14. While this is noteworthy, more effort is needed. Concessional resources - both internal and external — will be important to incorporate climate considerations across MDBs' core business operations. Access to external resources is expected to be important considering the role they have played in e.g. funding the incremental costs associated with climate investments, supporting project preparation work and catalysing private investment.<sup>35</sup> Internal sources of concessional finance can also play a role where available, but considering their specific mandate and relative volumes, they are unlikely to be sufficient. WBG (2016), in fact, calls for non-IDA concessional financial support to meet the targets in its Climate Change Action Plan.

MDBs could also explore ways to increase their own financial resources. Bhattacharya et al. (2015), Humphrey (2015) and MDBs themselves (Joint-MDBs and IMF, 2015) state that MDBs could use their balance sheets to leverage their internal concessional resources in new ways or adjust existing exposure to increase "headroom" capacity (e.g., by diversifying their risk exposure). These actions could potentially free up significant resources for the banks, and further unlock investments.<sup>36</sup> The ADB as well as the AfDB, IDB and IBRD have recently been taking steps in this direction.37

## 3.3 Barriers to climate investment in key sectors

Barriers to climate investment in priority sectors remain significant. The lack of adequate access to capital and the presence of both real and perceived risks are holding back investors. Sustained access to concessional sources of finance will be critical.

Barriers to climate investment in key sectors and markets remain significant. In particular, we highlight two important barriers: the lack of adequate access to capital and the presence of both real and perceived risks. Sustained access to concessional sources of finance to overcome these barriers will hence be critical to support countries to meet their investment ambitions.

To identify the main barriers that are holding back investments across priority sectors in key markets, we assessed the 124 proposals submitted by public and private actors to the *Global Innovation Lab for Climate Finance* ("The Lab") and *Finance for Resilience* (FiRe) in 2014 and 2015.<sup>38</sup> To complement this, we also reviewed the analysis undertaken in these initiatives and relevant literature. Figure 5 below highlights the main barriers cited in these proposals.

This analysis identified a lack of access to long-term, affordable capital as a major barrier in developing

<sup>33</sup> More details of the sectoral actions are provided in Annex IV.

<sup>34</sup> At the same time, the need for concessional finance in other sectors/ technologies may decrease as a result of e.g. market maturity or reduced technology costs/risks.

<sup>35</sup> See e.g. WBG (2016b) and CIF (2015a).

<sup>36</sup> Humphrey (2015) explains that if MDBs had an equity-to-loan ratio like those in many commercial banks, they could increase their financing capacities to over USD 200 billion per year.

<sup>37</sup> The ADB has combined the lending operations of its "soft" window, the Asian Development Fund with its ordinary capital resources balance sheet (ADB, 2015d). The AfDB, IDB and IBRD, instead, have approved a sovereign exposure exchange agreement to diversify their risk exposure and optimize their balance sheets.

<sup>38</sup> Note: We assessed ideas compliant with the criteria of The Lab and FiRe. The Lab and FiRe are global initiatives aimed to identify and piloting of cutting edge climate finance instruments. See The Lab website at http://climatefinancelab. org/ and FiRe website at <u>http://www.financeforresilience.com/</u>.



Figure 5: Main barriers mentioned in the 124 Lab and FiRe proposals, by frequency.

Note: "Non-financial" barriers refer to information, capacity, and policy gaps, as well as high-transaction costs. Around 41% of proposals cited non-financial barriers as having an important impact on holding back investments. High transaction costs were highlighted as an important secondary barrier in 12% of the cases, illustrating that there is scope to improve efficiency of market interactions, either through ICT or aggregation.

countries across all sectors, particularly for energy efficiency, urban-related, and land-use investments, including climate-smart agriculture and forestry. Indeed, a survey of recipient country stakeholders (both CIF and GCF recipients) also identifies lack of access to affordable long-term capital as the main barrier to climate action and investment in their countries. High commercial risk is a key barrier for investments in renewable energy. This can refer to the weak creditworthiness of the power off-takers or currency and political risks, all of which represent key challenges for attracting private capital in developing countries. Technology costs, risks and payback time associated with uncertain revenue streams are also relevant barriers to the deployment of innovative technologies such as energy storage (see IEA, 2014b).

Non-financial risks such as information, capacity or policy gaps are also emphasized as key obstacles to investments in most sectors. Lack of technical capacity to assess the potential of investments in energy efficiency or climate-smart agriculture hinders investment in these measures. Sub-optimal policy and regulatory environments also remain key issues to be addressed to shift investments in agriculture and land-use from business as usual to "climate compatible" practices.<sup>39</sup>

Sustained access to concessional sources of climate finance will continue to be relevant to support MDBs testing, improving and demonstrating on-the-ground the financial viability of climate investment in the face of these key barriers.

## 3.4 Instrument needs and gaps in the climate finance landscape

Based on our analysis, interviews, and The Lab and FiRe submissions,<sup>40</sup> we summarize in Table 2 the instruments the "market" regards as having high potential to spur investment in priority sectors, but that are missing or in short supply. Table 2 shows which investment barriers each instrument aims to address. Providers of concessional finance can help to develop, pilot and support the provision of such instruments.

<sup>39</sup> Falconer et al. (2015); Trabacchi et al. (2014) and Trabacchi et al., (2015a,b) and

<sup>40</sup> In addition to the 124 Lab and FiRe submissions, and analyses undertaken under such initiatives (see Escalante (2015), Micale et al. (2014), Micale et al. (2015a), Trabacchi et al. (2015a,b), Trabacchi et al. (2016)), we also reviewed the four ideas selected by the India Innovation Lab for Green Finance (Greenfinancelab, 2016) and relevant literature including GCF (2015b), GCF (2014); WBG (2016), IEA (2012), Donnelly (2015) and Guislain (2016).

Table 2: Instruments the "market" perceives as needed to address outstanding barriers to investment in priority sectors.

SECTORS	BARRIER	INSTRUMENT			
	Policy risks	Insurance mechanisms and guarantees			
	Mismatch between local currency revenues and repay- ment obligations	Local currency lending or currency swaps with tenors aligned with con- tracts and payback periods; currency hedging tools			
RENEWABLE ENERGY	Limited market liquidity	Early stage pre-construction and construction financing, e.g. convertible/ contingent recovery grants or equity for high-risk investment; subordi- nated debt			
	Gap between equity required by lenders and availability of equity from developers	Subordinated debt with concessional sources of finance taking on a portion of the first-loss position			
	Limited institutional investment capital	Investment vehicles (securitization or bundling)			
	Lack of capacity to evaluate energy efficiency invest- ments and develop adequate investment / financing approaches	Grants for technical support/capacity building			
ENERGY EFFICIENCY	High risk perceptions / lack of confidence on financial viability	Insurance instruments, partial guarantees or performance-based financial incentives			
	High upfront costs	Long-term debt capital and investment subsidies			
	Insufficient regulatory frameworks and misaligned incentives	Technical assistance and policy advice			
	Unstable regulatory and tax policies	Technical assistance and policy support			
LOW CARBON	Risk of unilateral changes to concession agreements that alter investors returns	Counterparty risk guarantee			
AND CLIMATE- RESILIENT CITIES	Lack of access to long-term debt for infrastructure projects due to lack of creditworthiness and high default risk	Credit enhancement with concessional finance, technical support (e.g. to issue bonds)			
	Inability to integrate climate considerations in invest- ment planning and design	Technical assistance to support pre-investment vulnerability assessment / project structuring			
	Gaps in regulatory frameworks	Grants for policy dialogue and technical assistance			
CLIMATE- SMART LAND- USE, INCLUDING AGRICULTURE, AND FORESTRY	Credit default risks associated with farmers' inadequate credit history and collateral	Risk management solutions such as first-loss coverage			
	Exposure to weather-related risks	Risk mitigation and transfer mechanisms such as parametric insurance; Grants to support the collection of relevant data			
	Lack of business-relevant information on potential hazards, exposure, and climate vulnerability	Provision of business-relevant data; impact assessment tools			
	Lack of equity capital to develop adaptation/resilience products and services	Seed private equity funds / patient capital and venture capital with lower returns expectations			

# 4. Identifying and assessing the CIF's comparative advantage in responding to investment needs and gaps

Drawing on evidence from literature and interviews with CIF and GCF stakeholders,<sup>41</sup> this chapter explores the unique features of the CIF and its relevance for addressing some of the gaps and needs identified in Chapter 3. To do so, we assess the role the CIF has played in the climate finance landscape over the past seven years and compare the CIF's business model with other multilateral climate funds. The chapter does not seek to present an evaluation of the CIF's performance as other studies have done (e.g. ICF, 2014).

## 4.1 Key findings regarding role of the CIF in the climate finance landscape

Advancing climate action calls for, among other things, private sector engagement at scale, deployment of novel technologies to drive down costs, risk-taking and flexibility in piloting new approaches in challenging investment environments. Furthermore, translating INDCs into concrete investments will require the mobilization of multiple stakeholders under coherent investment plans.

Over the past several years, the CIF has helped to significantly increase the volume of climate finance flowing to developing and emerging economies and to fill financing gaps. It did so by directly providing concessional climate finance as well as by helping to catalyze resources from other public and private actors — at least an additional USD 58 billion for over 300 projects in 72 developing countries.<sup>42</sup> Going forward, the CIF appears well-suited to play a role in the future landscape of climate finance. Advancing climate action calls for, among other things, private sector engagement at scale, deployment of novel technologies to drive down costs, risk-taking and a flexible approach to pilot new approaches and instruments in challenging investment environments. Furthermore, translating INDCs into concrete investments will likely require the mobilization of multiple stakeholders under coherent strategic investment plans and supportive policy framework. The CIF, working in partnership with the MDBs has demonstrated it can play a salient role in all of these areas because of the distinctive characteristics of its business model. However, whether or not the CIF can and should help fill future investment gaps depends primarily on resource availability and programmatic decisions to be made by the CIF TFC members.

Other climate funds offer notable strengths relevant to move investments in these areas. Nevertheless, our analysis shows that they do not currently have the same capabilities exemplified by the CIF. Moreover, while the establishment of the GCF is intended to fill the gap, questions remain regarding the extent to which it will be able to deliver the necessary scale and type of support recipient countries need to achieve a "paradigm shift", particularly in the short to medium term (see Section 4.5).

Stakeholders noted that, given the global investment gaps, there is the need for increased action across many actors and an *overall* increase in concessional climate finance rather than a trade-off of one source of concessional finance for another. The desire for the CIF to continue has been voiced by the Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development, who recently called for the "*urgent replenishment of the Climate Investment Funds*" (IMF, 2016).

## 4.2 The role of the CIF in responding to sectoral needs

To date, the CIF has helped to fill investment gaps in priority sectors by supporting MDBs to scale up support in key areas. Based on a survey of MDBs' 2013-2014 climate finance data we find that CIF provided a

<sup>41</sup> See list in Annexes I.

<sup>42</sup> WBG (2016) and CIF (2016d). WBG (2016) specifies that the CIF USD 8.3 billion is on track to support at least an additional USD 58 billion from the MDBs and public and private sources, with USD 35 billion already committed for projects

under implementation.

significant share of the external concessional climate finance that supported MDBs to finance climate-related transactions in priority sectors. In particular, as shown in Figure 6, the CIF provided:

• Over 60% of external concessional finance supporting MDBs' public and private renewable energy projects;

Figure 6: Breakdown of external concessional finance deployed by four MDBs in 2013-14, by mitigation and adaptation sectors (in USD million) compared to the share that came from the CIF.



Note: Due to data limitations, our analysis is only based on 2013-14 climate finance data from four of the six MDBs that implement the CIF, namely: ADB, AfDB, IDB and IFC. Data limitations also prevent a comprehensive understanding of the CIF contribution to MDBs private adaptation projects.

for instance, the CIF has provided up to 55% (USD 400 million) of public finance currently flowing to the earliest, riskier stages of geothermal projects, an area where other investors have been reluctant to invest;<sup>43</sup>

- More than 80% of external concessional finance supporting MDBs' public transport projects;
- Around 50% of external concessional finance supporting MDBs' agriculture, forestry and land use public projects;
- Almost 60% of external concessional finance supporting MDBs' public projects in climate-resilient energy, transport, infrastructure and policy and institutional capacity.

The CIF also supported pioneering private sector adaptation projects, for example EBRD's Climate-Resilient Financing Facility (CLIMADAPT)<sup>44</sup> and an EBRD hydropower rehabilitation project in Tajikistan (see EBRD, 2015b; CIF, 2013b and Vivid Economics, 2015).

Without the support from the CIF, many investments would not have been possible. As reported in the Independent Evaluation of the CIF published in 2014, nearly three-quarters of CIF project leads believed that their project would not have proceeded without the addition of CIF funding. This figure may be even higher for private sector projects where at least one MDB reports that none of its CIF private sector projects would have been able to reach financial close without the availability of CIF funds (ICF, 2014). Interviews with MDBs' representatives and evidence drawn from a number of case studies support these findings. Examples extend across clean energy, adaptation and forestry-related investments.<sup>45</sup>

## 4.3 The role of the CIF in providing appropriate financing instruments

All CIF stakeholders interviewed emphasized the value of the CIF's range of instruments and most importantly the flexibility in the types of financing models it offers. This was particularly noted in the context of the CTF Dedicated Private Sector Programs (DPSP).

#### The CIF can provide an array of financial instruments that can be tailored to meet specific investment needs. This is demonstrated by the CIF's:

- Support to relatively risky investments in challenging regional and country contexts;<sup>46</sup>
- Backing of novel technologies;
- Provision of a toolbox of flexible risk-bearing instruments, particularly for private sector investments.

For example, the CIF has offered contingent recovery grants (e.g., for the financing of early geothermal exploration drilling in Mexico and the Caribbean), firstloss guarantees/subordinated debt (e.g., for an energy efficiency and renewable energy regional program in Latin America), guarantees (e.g., to cover potential losses associated with a portfolio of energy efficiency projects in Thailand), and dedicated lines of credit to financial intermediaries (e.g., the Renewable Energy Financing Facility in Mexico). Our analysis — presented in Chapter 3 — highlights these as important instruments to respond to investment barriers in priority sectors.

These risk-bearing instruments have primarily been used in CIF private sector operations, an area dominated by energy sector projects. There are fewer examples of the use of such instruments in, for example, forestry or

<sup>43</sup> See Micale et al. (2015b).

<sup>44</sup> With CLIMADAPT, EBRD will provide, with the backing of the PPCR, up to USD 10 million to micro- small and medium sized enterprises and households via local partner financial institutions for investments in water use improvement, energy use improvement and sustainable land management. See e.g. CIF (2016c) and (Pyrkalo, 2015) for further information.

<sup>45</sup> CIF financing played a catalytic role in mobilizing other financers for investments in e.g. CSP (Ouarzazate I, KaXu) and wind (La Ventosa and Eurus (CIF, 2015a). MDBs indicate that "many other types of potentially transformative projects, including CTF and SREP geothermal projects, innovative energy efficiency and CSP projects in India, off-grid solutions in Africa and South Asia, and urban transport operations would likely not have materialized without CIF financing and the ability of the CIF to bring other funders around the table" (ICF, 2014). Several CIF stakeholders from MDBs and recipient countries also noted that without the availability of PPCR finance,

certain transactions would not have been carried out, or a "business as usual" development project would have gone forward. There is also some, albeit less, evidence of the FIP played a catalytic role, for example in the private sector teak project in Ghana which required the CIF concessionality and tenor to go forward.

<sup>46</sup> Initially, mainly due to the different risk tolerance of its contributor countries (lenders being generally more conservative than those who contributed grant funds), the CIF did not utilize the full range of available financial instruments. Given that losses were shared across all its contributors, the CIF favored lower risk investments, which lessened its appetite for riskier private sector projects (ICF, 2014 and based on interviews). The CIF governing body recently addressed this issue by deciding to separate risk sharing based on the type of contribution provided (i.e., ring-fencing loan contributors from high risk).

adaptation, two areas where private sector activity has been relatively more limited. The CIF is also the only known multilateral climate fund that has allowed for loans to be provided in local currency and to cover hedging costs.<sup>47</sup>

#### 4.4 Distinctive features of the CIF compared to other sources of multilateral concessional finance

To better understand the added value of the CIF's business model within the climate finance landscape we present in this section a comparative assessment of eight multilateral climate funds and their programs. The aim is to identify both the similarities and unique features of the CIF compared to other multilateral climate funds. Table 3 provides an overview on some of the key elements compared across fund.<sup>48</sup>

The CIF shares several features with other multilateral climate funds, namely: key objectives to support mitigation and adaptation, sectoral focus, geographic focus, MDBs as implementing entities, and private sector programs. There are also several areas where the CIF is distinct from other major multilateral sources of concessional climate finance. The CIF has:

- Provided the largest source of concessional climate finance approved to date;
- Offered a wider range of risk-bearing instruments than other concessional climate funds;
- Adopted a programmatic funding approach to enable a country-driven process;
- Provided predictable programmatic resources and involved implementing entities in strategic decisions;
- An MDB partnership approach to harness the banks' varied skillsets under a common strategic framework and provide a collaborative platform;
- Maintained a particularly strong private sector focus;

- Established a dedicated grant mechanism for indigenous peoples;
- Provided support for REDD+ activities at the "investment stage".

#### 4.4.1 LARGEST SOURCE OF CONCESSIONAL CLIMATE FINANCE APPROVED TO DATE

Based on data from eight multilateral climate funds, the CIF provided about 60% of the aggregated funding approved by these funds in support of climate change activities over the past decade. This represents the majority of climate fund finance. Moreover, as shown in Figure 7 and 8 below, the CIF also approved funds more quickly than any other climate fund. Considering the large sale of funding at its disposal, the GCF also has significant potential going forward.

At the country level, the CIF has focused its resources on a selection of eligible countries in order to achieve scale and greater impact within these countries, rather than spreading its support to all ODA-eligible developing countries in order to achieve equitable access.

The CIF is the only dedicated climate fund to date that has prioritized large-scale technology programs and infrastructure investments (e.g., CSP, geothermal) and has made strides to support key technologies at scale across different countries to move the market most efficiently and effectively. Based on our GCF and CIF recipient survey, all respondents indicated that scale of finance at the country and/or investment level is of "somewhat" to "critical" importance.

## 4.4.2 A WIDER RANGE OF RISK-BEARING INSTRUMENTS THAN OTHER CONCESSIONAL CLIMATE FUNDS

The CIF offers guarantees, subordinated loans, contingency grants, local currency, and hedging or guarantee tools to support the provision of local currency.<sup>49</sup> It is also the only fund that offers both nonreimbursable and reimbursable resources for adaptation and forestry (the GCF's provision of non-reimbursable

<sup>47</sup> See for instance XiNa Solar One project in South Africa (AfDB, 2014b) and IDB's Support for Forest Related Micro, Small, and Medium-sized Enterprises in Ejidos in Mexico (CIF, 2013c). In the AfDB's XiNa Solar One transaction, the project will repay the Ioan to AfDB in ZAR and the proceeds will again be swapped into USD before being repaid to the CTF. The CTF covered the USD 2 million hedging costs associated with the swap (see a.so CIF, 2013d).

 $<sup>48 \</sup>hspace{0.1 cm} \text{Annex IV provides further details on the characteristics of different funds.}$ 

<sup>49</sup> This is based on our review of CIF project-level data and interviews with CIF stakeholders. However, due to tracking constraints, existing data does not fully capture the full range of instruments the CIF is providing. The GCF Board has agreed to a suite of instruments including grants, equity, quasi-equity (patient capital), guarantees and credit support, and climate insurance; to date, grants, equity, loans and guarantees have been approved. As discussed in Section 5.6, the overall risk appetite of the GCF is still under development.

#### Table 3: Comparative assessment of 8 multilateral climate funds

FUND NAMEACCESS MODALITIES AND ACCREDITED IESAMOUNT APP AS % OF PLECTF*No direct access, MDBs.62.5%		AMOUNT APPROVED AS % OF PLEDGED	INSTRUMENTS PROVIDED TO DATE	GEOGRAPHIES	PRIVATE SECTOR SET-ASIDE	COP MANDATE
		62.5%	Grants: 3.4% Concessional loans (soft): 47.4% Concessional loans (hard): 21.2% Private sector loans: 26.7% Guarantees: 2.3%	15 middle income countries & 1 regional program	V	
FIP*	No direct access, MDBs.	37.1%	Grants: 21% Loans: 79%	22 low- and middle- income countries	$\checkmark$	
SREP* No direct access, 24.3% MDBs.		24.3%	Grants: 80.1% Loans: 4.4% Guarantees: 3% Equity: 3% Others: 8.9%	28 low- and middle- income countries & 1 regional program	V	
PPCR*	No direct access, MDBs.	75.8%	Grants: 67% Loans: 33%	27 low- and middle- income countries & 1 regional program	$\checkmark$	
GCFDirect access offered.1.6%Grants: 76%USub-national,Guarantees: 12%ccnational, regional, andEquity: 12%multilateral.France		UNFCC non-Annex I countries	V	V		
GEF CC Direct access offered. ( MITIGATION National, regional, and AREAS multilateral. (		GEF-6 (2014-18): 12.4% GEF-5 (2010-14): 77.2% GEF-4 (2006-10): 75%	GEF-5 (2010-14) Grants: 87.8% Non-grants: 12.2% Debt: 4.7% Equity: 1.0% Risk mitigation: 4.7% Mixed: 1.8%	World Bank and UNPD eligible developing countries	V	V
LDCF	Direct access offered. National, regional, and multilateral.	99.7%	100% grants	Least-developed countries		V
SCCF	Direct access offered. National, regional, and multilateral.	98.9%	100% grants	UNFCC non-Annex I countries		V
AF	Direct access offered. National, regional, and multilateral.	59.4%	100% grants	Developing countries part of the Kyoto Protocol		CMP mandate
FCPF	Multilateral.	Total: 26.7% Readiness fund: 59.2% Carbon Fund: 0%	Readiness Fund: 100% grants Carbon Fund: Delivered in exchange for emission reductions	47 developing countries		
BCF	WBG.	46.9%	Emissions reductions payments: 83.2% Grants: 16.8%	World Bank eligible developing countries		

\* denotes CIF funds

funds for adaptation is to be determined). Indeed, based on our GCF and CIF recipient survey, all respondents indicated that scale of finance at the country and/ or investment level is of "somewhat" to "critical" importance, and most respondents find flexibility in terms of the types of financial instruments provided to be of "critical" importance. Furthermore, the CIF's risk taking capability is proven by the allocation of about 36% of its approved funding to geothermal and CSP projects in lowmiddle income countries — both of which are considered to be risky technologies, particularly in lower income countries.

#### 4.4.3 A PROGRAMMATIC FUNDING APPROACH THAT ENABLES A COUNTRY-DRIVEN PROCESS AND LINKS PROJECT INVESTMENTS WITH POLICY REFORMS AND CAPACITY DEVELOPMENT

While most other climate funds focus on project-byproject financing, the CIF is the only fund to support a programmatic national investment planning process with the aim of achieving national or sector-wide transformation. The CIF's approach is distinctive because it involves engaging multiple stakeholders and combining finance for projects with capacity building, advisory services and support for policy changes (ICF, 2014).

As articulated in the independent evaluation of the CIF (ICF, 2014), the programmatic investment plan approach succeeded in securing strong government ownership and effective collaboration (positive examples include the Democratic Republic of Congo, Mexico, and Peru) but had uneven results in promoting mainstreaming and coordination. The investment plans were less successful in spurring intragovernmental coordination and in some cases a lack of clear roles and responsibilities and/ or weak capacity in the coordinating ministry undermined the process.<sup>50</sup> The GEF does offer a programmatic approach, but it supplements their project-based approach and has not been the primary focus of GEF funding to date. The GCF is

currently undertaking a competitive project-by-project approval process, but may choose to adopt a more programmatic approach in the future (see Section 4.5).

#### 4.4.4 PREDICTABLITY OF PROGRAMMATIC RESOURCES AND INVOLVEMENT OF IMPLEMENTING ENTITIES IN STRATEGIC DECISIONS

The approval process associated with the CIF's programmatic approach provides a level of predictability and certainty to recipient countries and implementing partners. It starts with countries being informed of the indicative amount of resources they are eligible for, then endorses their investment plans and finally approves the projects within the investment plans. This process distinguishes the CIF from other providers of concessional climate finance, many of whom rely on a competitive project-by-project approval approach, and even from other programmatic approaches that rely on

Figure 7: Pledged and approved funding per climate fund (in USD million)



Data as of December 2015. See Annex IV. GEF pledged amount only accounts for the climate change focal areas for GEF-4, GEF-5, and GEF-6, rather than the entire GEF portfolio dating to 1991.

<sup>50</sup> In a few cases, inter-ministerial coordination diluted donor funding by dispersing it among too many agencies. For detailed examples of the strengths and drawbacks of a programmatic approach (see ICF, 2014).





Note: Our analysis considers GEF-4, GEF-5, and GEF-6 replenishment cycles only because of data availability and to compare climate funds that have been operational over a similar timeframe. Since its inception in 1991, the GEF has provided a total of USD14.5 billion of grants across its focal areas (GEF, 2014c).

a competitive allocation approach. The predictability associated with the CIF's programmatic approach was highlighted as a key strength by recipient countries and MDBs alike. We do however note that predictability can be also achieved using different approaches, e.g., the GEF uses an ex-ante resource allocation system to provide financial predictability to its recipients.

Additionally, CIF implementing entities work very closely with the CIF Administrative Unit and the CIF TFCs, and advise on program criteria and priorities. Interviewed stakeholders remark that this close collaboration between the CIF's decision makers and the entities carrying out the programs (the MDBs), coupled with the predictability of resources secured through the programmatic approval process, allows the MDBs and the recipient countries to have greater ownership in the programs and priorities established by the fund. The predictability also allows implementing entities to work with longer time horizons and bring in partners from the beginning. This type of ownership, long-term planning, and buy-in is harder to achieve when working with competitive funding schemes and when decision-making is more removed from the implementing entities. These features appear to be unique to the CIF among multilateral climate funds. In other funds, implementing entities are kept at "arm's distance" from the decision making.

## 4.4.5 "MDB PARTNERSHIP" APPROACH TO PROMOTE COLLABORATION AND COORDINATION

While other climate funds also work with MDBs as implementing entities, the CIF is also the only multilateral climate fund to work with them exclusively and collectively. The CIF recipients benefit from these banks' varied skillset and ability to leverage financing, mobilize other actors, and provide broader policy support (CIF, 2015a). The CIF's governance design includes a platform for continuous MDB collaboration in the form of the MDB Committee; this has been useful to discuss operational, policy and strategic issues and enhance the effectiveness of the CIF over time. MDB collaboration to support country-led programming is unique feature of the CIF; According to the 2014 independent evaluation, 80% of all endorsed investment plans have been prepared with the support of two or more MDB partners. Most countries visited during the independent evaluation process reported that they experienced effective collaboration between MDBs and the government and among MDBs. There have also been positive "spillover effects" of the MDBs working together through the CIF process; this has allowed MDBs to more closely collaborate on climate risk screening, greenhouse gas reporting, and climate finance tracking.

#### 4.4.6 A STRONG PRIVATE SECTOR FOCUS

The CIF has allocated 28% of total financing (or USD 2.3 billion) to private sector investment (CIF, 2015c and CIF, 2016d), the largest amount of any fund to date (this is compared with the USD 246 million set aside collectively for the GEF-4, GEF-5 and GEF-6, which supports all of the GEF focal areas, beyond just climate change), and the USD 700 million recently set aside by the GCF — USD 500 million for its pilot program on Mobilizing Funds at Scale by the Private Sector Facility and USD 200 million for its pilot program on Micro, Small and Medium Enterprises).

While some other climate funds have created private sector set asides (e.g., the GEF), the CIF has been one of the few that has made engagement with the private



Figure 9: Breakdown of financial instruments approved by selected climate funds (expressed in percentages of 100%).

\* denotes CIF funds

sector a top priority. The CIF has provided private sector oriented finance via a variety of instruments through the Strategic Climate Fund private sector set-asides (PSSAs) and the CTF's dedicated private sector program (DPSP), which allocated resources to six thematic areas: geothermal power, mini-grids, mezzanine finance, energy efficiency, solar photovoltaic power, and early stage renewable energy.

The GCF is also placing a strong emphasis on private sector engagement, yet it remains to be seen how this prioritization will be executed (many aspects still under development — see Section 4.5). GCF private sector stakeholders (both implementing entities and observers) interviewed noted that the fund is not yet showing the risk appetite needed to ensure GCF financing is catalytic and goes above and beyond what the market and/or DFIs can offer. However, as happened with the CIF, the risk appetite of the GCF may increase over time.

The CIF is also the only fund to date that offers a private sector set aside for adaptation and forestry.<sup>51</sup> There have been issues related to the roll out of the PSSAs, some of which were addressed through decisions taken by the CIF TFCs in 2015.<sup>52</sup> However, some interviewees noted that

52 Issues related to the PSSAs include: geographic restrictions on use of the setasides funds and the deficiencies in these countries' enabling environment that private sector engagement in adaptation and forestry could be made even more effective by, e.g., removing the tight time restrictions placed on the project proposal development period that characterized the private sector set asides, and allowing MDBs to collaboratively identify private sector investment opportunities under thematic areas (as in the DPSP model).

#### 4.4.7 DEDICATED GRANT MECHANISM FOR INDIGENOUS PEOPLES TO ADDRESS THE DRIVERS OF DEFORESTATION

Conceived and designed by Indigenous Peoples and Local Communities, the FIP's Dedicated Grant Mechanism (DGM) provides resources to Indigenous Peoples and Local Communities to enable them to strengthen their participation in the FIP and other REDD+ processes. This innovative feature is one of the comparative advantages of FIP among other forestry funds (ICF, 2014).

#### 4.4.8 SUPPORT FOR REDD+ ACTIVITIES AT THE "INVESTMENT STAGE"

While other REDD+ funds support either readiness activities (known as REDD+ "Phase 1") or ex-post emissions reductions credits (REDD+ "Phase 3"), the

<sup>51</sup> The GEF's set aside can cover forestry investments, but investments to date have been minimal.

makes private investment challenging; time-restricted and competitive funding windows; and lack of awareness among project developers (Vivid Economics, 2014). The CIF has worked to try and address some of these challenges by opening up the PSSA to all CIF countries (see e.g. CIF, 2015t).

FIP is the only forestry fund focused on supporting REDD+ activities at the investment and implementation stage<sup>53</sup> (also referred to as REDD+ "Phase 2"). Thus, the FIP is often described as "the missing middle" in REDD+ finance (CIF, 2014a).

#### 4.4.9 OTHER FEATURES OF THE CIF HIGHLIGHTED IN INTERVIEWS AND LITERATURE REVIEW

Based on in-depth interviews with CIF stakeholders, we find that all stakeholders place a high value on the CIF and its business model. In addition to the ones outlined above, other key features that emerged during the interviews include:

• Organizational learning and adaptive evolution: the CIF's ability to evolve and make revisions along the way is a key strength. Indeed this was confirmed in the 2014 independent evaluation of the CIF (ICF, 2014). The CIF has continued to evolve in response to any issues, gaps, or challenges that arose. For example, the CIF created dedicated funding windows for the private sector and adapted its approach to risk taking in order to better meet the needs of recipients. This adaptive evolution is likely a byproduct of the CIF's lean governance

structure, as well as the fact that the implementing entities work very closely with the CIF Administrative Unit and its TFCs and provide recommendations related to program criteria and priorities.

• Strengthened MDB institutional capacity: The CIF has led MDBs to change the way they do business and think about climate change. It has led to significant changes in country dialogues, particularly with regards to adaptation. By working under the CIF model, the MDBs have increased their institutional capacity to advance the climate agenda and helped develop momentum within their institutions as well as a pipeline of potential investments.

Figure 10: Share of finance set aside for private sector investment as percentage of total funding available per climate fund.



Note: GEF private sector set-asides only exist in GEF-5 and GEF-6. The total pledged amount only accounts for the climate change focal areas for GEF-4, GEF-5, and GEF-6.

- Coordination and collaboration among MDBs: The CIF has provided an opportunity for MDBs to learn from each other on the ways in which they do business, as well as coordinate on the planning and provision of climate finance. Stakeholders noted that it has created a platform for governments to draw on the comparative strengths of different MDBs to better manage the implementation of investment plans (CIF, 2015n; CIF 2008). This coordination and collaboration on climate finance has not existed to before.
- **Fostering innovation:** The CIF has helped to pilot test new approaches, business models and technologies to demonstrate new ways of doing business and create the evidence base needed to attract other investors.

## 4.5 Comparing the roles of the CIF and the GCF

The CIF was established in 2008 as an interim solution to meet the climate finance challenge. Because of this it

<sup>53</sup> Roughly 50% of FIP resources are allocated to enhancing enabling environment for forest landscape management, conservation and enhancing forest monitoring, while the other 50% is allocated to site-specific demonstration investments CIF (2015h) and (Sareen, 2015).

was given a "sunset clause", requiring the CIF "to conclude its operations once a new financial architecture is effective" (CIF, 2014b). The GCF — the embodiment of the 'new financial architecture' under the (Cancun agreement) is now operational, raising questions regarding whether it is worth continuing with the CIF and what its unique value compared to the GCF might be. We find that there are several core differences between the two funds in terms of how they function that should be taken into account when deciding on the future of the CIF. The differences fall into two broad categories:

- *Structural*, i.e. those relating to the mandate, scope and governance of the funds, and
- *Temporal*, i.e. those relating to how long the funds have been up and running, and/or any elements that are still unclear and to be determined.

While the structural differences are paramount in terms of demonstrating the key differences between the funds, the temporal differences matter a great deal given the urgency of the climate challenge and the desire of contributors and recipients countries alike to maintain momentum and work towards the 1.5/2 °C target.

#### 4.5.1 STRUCTURAL DIFFERENCES BETWEEN THE CIF AND THE GCF

- **Geographic allocation strategy:** While the GCF is open to all developing country Parties to the UNFCCC, the CIF is targeted at 72 pre-selected pilot countries. The CTF lacked a formal country selection process, while country selection in the SCF was based on clear selection criteria (ICF, 2014). The GCF allows all developing country Parties to submit proposals, and is therefore taking a broader, disbursed approach to programming. The CIF's approach, instead, limits access to provide greater scale of support in certain countries with the aim of increasing impact.
- Implementing modalities and accreditation: The CIF is structured around a "partnership model" with MDBs. The GCF is designed to take a more inclusive and competitive approach with respect to accreditation, enabling both international access through e.g. MDBs as well as direct access through accredited regional and national entities in order to strengthen country ownership. To date it accredited 33 implementing entities, including private sector organizations.

- Predictability of funding and involvement of implementing entities in strategic and decisions: As mentioned in the previous section, the CIF implementing entities work closely with the CIF Administrative Unit and the CIF governing body, and advise on recommendations related to program criteria and priorities. By contrast, GCF funding is allocated competitively and implementing entities are working at "arms distance" from the Fund's decision making process.
- Secretariat function: the CIF has opted for a 'light touch' secretariat (called the CIF Admin Unit) and delegates authority to MDBs for portfolio supervision, quality control, fiduciary controls, safeguards, and accountability at the project level, while maintaining program management and reporting function (ICF, 2014). The GCF, on the other hand, envisages a large secretariat with an executive function, housing many of the functions that the CIF outsources to the MDBs.
- The role of the COP: One of the key differences between the CIF and the GCF is that the CIF operates independently of the UNFCCC's Conference of the Parties (COP) while the GCF, as an operating entity of the Financial Mechanism of the Convention, is accountable to and operates under the guidance of the COP, in particular as it relates to the fund's programs, policies and priorities. This absence of COP oversight often translates into a more operational focus to the CIF, whereas COP oversight of the GCF makes it more closely linked to political considerations.

#### 4.5.2 TEMPORAL DIFFERENCES BETWEEN THE CIF AND THE GCF

- **Programming and experience to date:** One of the most obvious temporal differences between the two funds is that the CIF has been operational since 2008 and has built experience and knowhow through operating with MDBs and pilot countries in that time. The GCF, on the other hand, is just getting off the ground and has no proven track record. In this regard, it is quite difficult to compare the two funds as there is little evidence of experience within the GCF against which to compare the CIF.
- **Programmatic versus project-by-project approach:** The CIF supports programmatic national and regional investment plans, which has largely secured strong government ownership and alignment of CIF plans

with existing national strategies and programs (ICF, 2014). To date, the GCF has taken a projectby-project approval approach to show the GCF is "open for business" (based on interviews with GCF stakeholders). There is still a lack of clear direction for the fund in terms of whether and how it will strive for a more programmatic approach. This matter is likely to be addressed by the GCF Board this year, so at this stage, it is hard to know if this is a temporal or structural difference. The fund's Governing Instrument references programmatic approaches, and there has been a push within the GCF Board to clarify what this would look like. In reality, both approaches are necessary and in fact can be complementary: programmatic approaches can help shift the paradigm in the medium-longer term, while projectlevel approaches can help to catalyze financing on a case-by-case basis in the more immediate term.

- **Risk appetite and flexibility in instruments that can be deployed:** While both the CIF and the GCF provide concessional finance and aim to de-risk climate investments, interviewees noted that the CIF has, over time, been able to offer a range of instruments, enabling more risk-taking. Interviewees noted that the risk appetite of the GCF is still to be defined and likely to initially be more conservative particularly given that the fund does not yet have a complete risk management framework in place,<sup>54</sup> dedicated staff for managing risk at the portfolio level or fully fledged investment guidelines. To date, there are a few key differences in the risk appetite of the two funds:
  - » While somewhat limited, the CIF offers tools to facilitate local currency operations in order to

avoid local currency risk (CIF, 2013d); the GCF offers loans only in major convertible currencies (GCF, 2015d).

» The CIF de-risks MDB investments enabling, for instance, subordination. Based on conversations with the MDBs and GCF stakeholders, the GCF appears to be offering finance that is *parri passu* with MDB lending.

While the GCF's risk appetite may be initially limited, this may grow overtime as has happened with the CIF. Based on the recently endorsed Strategic Plan for the GCF (endorsed by the Board at its 12th meeting through Decision B.12/20), the fund intends to "signal more clearly what kinds of projects and programmes it is looking to finance. This requires providing improved and coherent guidance on the Fund's [...] risk appetite" (GCF, 2016a).<sup>55</sup>

It is worth noting that while the points above highlight key differences between the two funds, there is also potential for complementary or synergistic action between the two funds. The GCF, for instance, can build on the work that the CIF has initiated within recipient countries. In fact, some synergies across the two funds have already emerged: the GCF recently approved USD 20 million in the form of a guarantee for an IDB Energy Efficiency Green Bond in Latin America and the Caribbean that had previously received USD 19 million from the Clean Technology Fund. In addition, some CIF recipient countries, in partnership with their MDB counterparts, have started to develop projects under the CIF investment planning process and plan to take them to the GCF for funding. Possible areas for further complementarity could be explored in future work.

<sup>54</sup> At the 12th Board meeting in March 2016, the GCF Board took a decision on the risk register, but has not yet made a decision on updated risk policies and guidelines.

<sup>55</sup> The Strategic Plan also states that, in order to achieve maximum impact, the GCF should " [...] build on its comparative advantages and operate in coherence with the existing climate finance institutions", including its ability to "[...] take on risks that other funds/institutions are not able or willing to take, including risks associated with deploying innovative climate technologies"(GCF, 2016a).

### 5. Conclusions

Through a desk-based literature review, in-depth interviews and two surveys, this study provides an evidence-based assessment of the role and value added of the CIF within the evolving landscape of concessional climate finance and in the context of developing country investment needs. We focus on the specific role the CIF has played in providing concessional finance to MDBs and recipient countries to assist with their climate objectives, and assess its potential future role in helping put countries on the path to achieving the commitments outlined in the Paris Agreement.

While the future of the CIF is of course dependent on decisions related to the CIF's "sunset clause" and the availability of donor finance to support its operations, the CIF nonetheless appears to be well-suited to play a role in the future landscape of climate finance and to support some of the most urgent climate investment needs, This is because of its ability to: focus on private sector engagement at scale, support significant deployment of novel technologies to drive down costs, and offer a range of risk-taking instruments to pilot test new approaches in challenging investment environments. Furthermore, the investment plan process developed by the CIF in partnership with MDBs and countries as part of its programmatic approach will likely be relevant for translating INDCs into concrete investments, which will require the mobilization of multiple stakeholders under coherent strategic investment plans and supportive policy frameworks. Given the distinctive features of the CIF's business model compared to other multilateral climate funds and future investment needs, the CIF appears wellsuited to play a role in these areas.

#### Key findings:

 MDBs have a role to play in scaling up climate finance and are likely to require additional injections of concessional finance to meet their goals and the objectives of the countries in which they operate. Concessional resources have been an important part of MDBs' efforts to scale up climate finance in recipient countries, accounting for approximately 9% of their total climate financing in 2013-14. In the run-up to Paris, MDBs committed to doubling their own climate finance investments. To achieve these commitments, MDBs will likely need further injections of external concessional climate finance to address key barriers and risks in the sectors and countries in which they aim to focus their actions. Concessional finance can also further support MDBs' efforts to mainstream climate in their operations to become even more strategically engaged actors on climate change through their country-level engagement.

- The CIF has helped to overcome barriers to climate investments in developing countries and build capacity within MDBs to do so. The CIF has helped MDBs to undertake more climate projects, for instance by lowering investment costs, risks, and/ or providing finance with longer terms to address prevailing barriers to the commercialization of new technologies. Further, it has enabled MDBs to experiment, mainstream climate in their operations, and build significant institutional capacity. It has also created a platform for recipient countries to work with these institutions under a more coordinated approach to investment development and implementation.
- The CIF plays a unique role in the concessional climate finance landscape. Comparing the CIF with other major multilateral climate funds, we find that the CIF is unique in terms of: 1) its scale of support and related choice to work only with selected countries; 2) the range of risk-bearing instruments it provides; 3) its programmatic approach and focus on promoting 'transformational' change in countries and sectors; 4) its MDB partnership; 5) its strong private sector focus; 6) its provision of reimbursable finance for adaptation, and dedicated focus on REDD+ implementation and investment activities; and 7) its prioritization of large-scale technology programs and infrastructure investments.
- The key strengths of the CIF business model added value to the climate finance landscape. Going forward, the CIF is particularly well-suited to:
  - » Build partnerships and invest at scale, thanks to its programmatic approach, predictable investment process, limited country focus, and implementation through MDBs. This is of particular relevance in sectors such as energy, infrastructure, urban development, or land use where multiple skills and capabilities are needed and different stakeholders must be engaged to work towards unified goals.

- » Pilot new and innovative approaches, business models, and novel technologies thanks to its range of instruments and appetite for risk. This is relevant to demonstrate new ways of doing business, creating the evidence base needed to attract other public and/or private investors.
- » Act as a climate finance knowledge and MDB coordination hub. Over time, the CIF has accumulated valuable insights, knowledge, and data that are difficult to replicate. The CIF has also enabled MDBs to regularly and routinely interact and collaborate with each other.
- Promote the climate agenda within MDBs. Through internal advocacy of stakeholders within MDBs, the CIF has paved the way for climate to become a front and center issue within and across these banks. There is further scope for MDBs to prioritize climate issues and to become more strategically engaged. The continuation of the CIF could help MDBs to continue to move in this direction.

#### Recommendations

Grounded in the above findings, we recommend the following to the CIF Administrative Unit, CIF stakeholders, and the broader climate finance community:

- Keep the CIF in operation to help meet existing investment needs and maintain momentum on climate action. Without the CIF there is the risk that momentum on climate action will slow both among recipients and the MDBs. The large-scale, programmatic, and predictable support needed to commercialize less mature technologies would have to come from other channels. Other climate funds have notable strengths, but do not necessarily offer the same capabilities as the CIF. While the establishment of the GCF — a new and critical global institution within the climate finance landscape — is intended to fill future gaps, at this early stage in its development questions remain on the extent to which it will be able to deliver the scale and type of support recipient countries need to achieve transformational change. This is particularly true in the short to medium term as the GCF gets up to speed.
- Pursue opportunities to work in a complementary manner with the GCF. The CIF does not currently

have sufficient resources to finance either the projects in its pipeline or those of new pilot countries. In light of these resource constraints and the uncertainties they are creating for both recipient countries and MDBs, CIF pilot countries and MDBs could request funds for project and program concepts that have been developed under CIF investment plans. This could create a win-win scenario by both providing funding for the CIF pipeline of climaterelevant projects and helping the GCF, who is facing challenging in receiving high-quality proposals, to achieve its ambitious USD 2.5 billion per annum programming goal. Such an arrangement would also foster coordination and complementarity across sources of climate finance, a need that was emphasized in the Paris Agreement.

- Focus on maintaining and strengthening those characteristics of the CIF business model that are most valued by CIF recipients, contributors, and MDBs. These include its programmatic approach and accompanying predictability, its partnership model with MDBs, its private sector focus, flexibility, adaptive learning, innovation, and risk-taking capacity. These will all be relevant for helping fill future gaps in infrastructure investment and supporting novel, risky technologies.
- Continue to engage with private actors, pursuing ways to enhance their involvement in forestry and adaptation. All interviewed MDB stakeholders praised the achievements Clean Technology Fund's (CTF) Dedicated Private Sector Program (DPSP) in driving private investment and in particular its ability to offer a range of instruments well-suited for private investments and its thematic focus on specific sectors and technologies. While the CIF should continue its efforts to scale up private investment in energy systems through the DPSP, there is room for making its private sector engagement in forestry and adaptation more effective. This could be achieved by: 1) removing the tight time restrictions placed on the project proposal development period; 2) allowing MDBs to collaboratively identify private sector investment opportunities under thematic areas; and 3) focusing resources on strengthening the policy frameworks in low-income or least developed countries where the investment environment is challenging.

### 6. Index of Acronyms

ADB	Asian Development Bank
ADF	Asian Development Fund
AF	Adaptation Fund
AfDB	African Development Bank
BCF	BioCarbon Fund
CIF	Climate Investment Funds
СОР	Conference of the Parties
CSP	Concentrated Solar Power
CTF	Clean Technology Fund
DGM	Dedicated Grant Mechanism for Indigenous Peoples and Local Communities
DPSP	Dedicated Private Sector Program
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse gas
GNI	Gross National Income
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
INDC	Intended Nationally Determined Contribution
IRR	Internal Rate of Return
ISFL	Initiative for Sustainable Forest Landscapes
LCOE	Levelized cost of electricity
LDCF	Least Developed Countries Fund
LULUCF	Land-use, Land-Use Change, and Forestry
MDB	Multilateral Development Bank
MENA	Middle East and North Africa
NDA	National Designated Authority
NDF	Nordic Development Fund
PPCR	Pilot Program for Climate Resilience
PSSA	Private Sector Set-Aside

RE	Renewable Energy
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund
SIDS	Small Island Developing States
SOE	State-owned enterprise
SREP	Scaling Up Renewables (in Low Income Countries) Program
T&C	Terms and conditions
TFCs	CIF Trust Fund Committees
UNFCCC	United Nations Framework Convention on Climate Change
WB	The World Bank

### **Annex I. Methodological notes**

### Definition of key terms

The study focuses on concessional climate finance which we define as finance extended at terms and conditions more generous than those offered by the market<sup>56</sup> or development finance institutions with their own ordinary capital resources. The so-called "grant element" is a measure of the level of concessionality of a given financial instrument.<sup>57</sup>

The study concentrates on concessional resources provided for low-carbon and climate-resilient development interventions with direct or indirect greenhouse gas mitigation or adaptation benefits.<sup>58</sup>

- 1. **Grants** are transfers made in cash, goods or services for which no repayment is required. Grants have a grant element of 100% (OECD Glossary of Statistical Terms).
- 2. Concessional loans refer to loans extended on terms substantially more generous ("softer") than market loans. The concessionality is achieved either through interest rates below those available on the market, grace periods, longer tenors/maturities, or a combination of those.<sup>59</sup> Other aspects of structure may also make a loan concessional e.g. a lower seniority would be considered concessional if other financiers would not accept it (EBRD, 2013).
- 3. **Other concessional finance instruments** refer to, for instance, risk mitigation instruments, contingent recovery loans or equity provided at terms more favourable than the market can offer.

- 57 The "grant element" reflects the financial terms of a commitment: interest rate, maturity and grace period (interval to first repayment of capital). It is expressed as the percentage by which the present value of the expected stream of repayments falls short of the repayments that would have been generated at a given reference rate of interest (commercial/market terms). The grant element is 100% in the case of a grant, as no repayment is required, and anywhere between 0-100% in the context of concessional loans (OECD, 2015a).
- 58 Following OECD (2011) and the Joint tracking approach of a group of MDBs, mitigation finance refers to resources directed to activities contributing to reducing or avoiding GHG emissions, or enhancing GHG sinks and reservoirs. Adaptation finance, instead, refers to resources directed to activities aimed at reducing the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

<sup>56</sup> In practice, assessing what the market offers (market rates) is often challenging, particularly in developing economies where local capital markets are often under-developed and commercial bank lending limited or not provided (EBRD, 2013).

<sup>59</sup> As a reference, Official Development Assistance (ODA) loans have a "grant element" of at least 25% (calculated at a discount rate of 10% (OECD, 2015a).

### Stakeholders interviewed

NAME	ORGANIZATION	CIF TFCs	CIF MDB Focal point	GCF BOARD/ ADVISOR	GCF STAKEHOLDERS <sup>a</sup>
Claudio Frenk Alatorre	IDB		Х		Х
Marco Aurelio Dos Santos Araujo	Ministry of Finance of Brazil	Х			Х
Leandro Azevedo	African Development Bank		Х		Х
Catherine Berg	U.S. Department of the Treasury	Х			
Claire Bernard	Planning Institute of Jamaica	Х		• • • •	
Andreas Biermann	EBRD		Х	•	Х
Karan Capoor	The World Bank		Х		Х
Ato Kare Chawicha Debessa	Ministry of Environment, Forests, and Climate Change of Ethiopia			6 6 7 8 8 8 8 8 8 8 8 8	х
Matthew Cranford	U.S. Department of the Treasury			Х	
Joao Duarte Cunha	AfDB		Х	•	Х
Artur Cardoso de Lacerda	The World Bank	Х		•	
Gerhard Dieterle	The World Bank		Х	• • • •	Х
Christian Ellermann	ADB		Х	•	Х
Zaheer Fakir	South Africa Co-chair of the GCF Board CIF Trust Fund Committees	Х		x	
Frank Fass-Metz	Federal Ministry for Economic Cooperation and Development of Germany	Х		х	
Jaime Alfredo Miranda Flamenco	Ministry of Development Cooperation of El Salvador				Х
Gianleo Frisari	IDB-IIC		• • • • • • • • • • • • • • • • • • •	Х	• • • • • • • • • • • • • • • • • • •
Peter Gentiles	CIF Admin Unit			• • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
Ben Green	UK Department of International Development	Х			
Michael Hoelter	Deutsche Bank		• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	Х
Alfredo Idiarte	IDB-IIC		Х	• • • • • • • • • • • • • • • • • • •	Х
Brad Johnson	Resource Mobilization Advisors			· · · · · · · · · · · · · · · · · · ·	Х
Andrej Lakić	Ministry of Sustainable Development and Tourism of Montenegro				Х

a (NDA, accredited institution, private sector observer)

NAME	ORGANIZATION	CIF TFCs	CIF MDB Focal point	GCF BOARD/ ADVISOR	GCF STAKEHOLDERS <sup>a</sup>
Sihna N. Lawrence	Department of Finance and Administration of the Federated States of Micronesia			* * * * * * * * *	Х
Kenneth Lay	Consultant to CIF Admin Unit			• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •
Cinzia Losenno	Asian Development Bank		Х	• • •	Х
Leonardo Martinez	U.S. Department of the Treasury			Х	
Daniel Morris	U.S. Department of the Treasury	Х		• • • •	
Joyita Mukherjee	IFC		Х	• • • •	Х
Linda Nilsson	Swedish Ministry of Foreign Affairs	Х		Х	
Kanta Kumari Rigaud	The World Bank		Х	• • • •	Х
Gareth Phillips	AfDB		Х	*	Х
Madhavi Pillai	The World Bank		Х	• • • •	Х
Jason Reynolds	Ministry of Finance and Economic Development of Kiribati				Х
Andrey Shlyakhtenko	IFC		Х	• • • • • • • • • • • • • • • • • • •	Х
Graham Smith	HSBC			•	Х
Ancha Srinivasan	ADB		Х	• • •	Х
Katie Sullivan	IETA				Х
Berenice Hernandez Toro	National Forestry Commission of Mexico	Х			
Gloria Visconti	IDB		Х	• • • • • • • • • • • • • • • • • • •	Х
Frank van der Vleuten	Dutch Ministry of Foreign Affairs	Х			
Sonam Wangchuk	Gross National Happiness Commission of Bhutan				Х

### **Annex II: Concessional finance landscape**

A closer look at the lending terms of key providers of concessional finance

Table A.1 shows the terms and conditions applied by selected providers of concessional climate finance: the

CIF, the Green Climate Fund, the Global Environment Facility and selected internal sources of concessional finance to MDBs (the International Development Association, The African Development Fund and the Asian Development Fund).

Table A1: Terms and conditions offered to public and private borrower by multilateral Climate Funds and selected internal sources of concessional finance to MDB

	PUBLIC TERMS					
PROVIDER OF CONCESSIONAL FINANCE	<b>maturity</b> (In years)	<b>GRACE</b> <b>PERIOD</b> (IN YEARS)	REPAYMENT ON PRINCIPAL THROUGH YEAR 20 <sup>a</sup>	REPAYMENT ON PRINCIPAL IN YEARS 21-40	INTEREST/SERVICE CHARGE	PRIVATE TERMS
GCF <sup>b</sup>	Harder: 20 Softer: 40	Harder: 5 Softer: 10	Harder: 6.7% Softer: 2%	Harder: n/a Softer: 4%	Harder: 0.75% Softer: 0.0% <sup>c</sup>	Case-by-case
CIF: FIP <sup>d</sup>	40	10	2%	4%	0.25%	Case-by-case
CIF: SREP <sup>®</sup>	40	10	2%	4%	0.10%	Case-by-case
CIF: PPCR <sup>r</sup>	40	10	2%	4%	0.10%	Case-by-case
CIF: CTF <sup>9</sup>	Harder: 20 Softer: 40	10	Harder: 10% Softer: 2%	Harder: n/a Softer: 4%	Harder: 0.75% Softer: 0.25%	Case-by-case
GEF-6 <sup>h</sup>	To LDCs & SIDs: 40 Others: 20	10	&	To LDCs & SIDs: 4%	To LDCs & SIDS: 0.25% Others: 0.75%	Case-by-case
IDA	Regular: 38	6	3.13%	3.13% (to year 38)	1.50%	Initiation fee: 0.15% or \$100,000; Processing fee: up to 0.50% (case by case)
African Development Fund	50	10	-	-	0.75%	-
Asian Development Fund <sup>k</sup>	Project Loans: 32 Program Loans: 24	8	-	-	1% during grace period 1.5% after	-

a The schedule of the Annual principal repayment varies. For the GCF is between years 6-20 for low concessional loans and 11-20 for highly concessional loans.

b GCF (2015a).

c The GCF also charges an annual service fee of 0.25% on soft loans, and 0.5% on hard loans. It also charges a commitment fee of up to 50% on soft loans and 75% on hard loans.

d CIF (2010a) and (2015o). The Forest Investment Program applies a 0.25% service charge. These fees are meant to cover the Fund's administration and resource mobilization costs.

e CIF (2010b) and (2015p).

f CIF (2010c)

g CIF (2013). The CTF offers two loan products based on analysis of a project's financial rate of return without CTF financing. It offers (i) harder concessionality to projects with rates of return near or above the normal market threshold but that are below the risk premium for project type, technology or country; and when not accelerating deployment of low-carbon technologies will have higher opportunity costs; (ii) softer concessionality to projects with negative rates of returns or rates of return below normal market thresholds.

h GEF (2016).

i IDA (2016). For credits, in addition to regular terms, IDA also applies blend and hard terms determined according to countries' circumstances. Please see IDA (2016) for more details.

j AfDB (2016). The African Development Fund applies an annual commitment fee of 0.50% on undisbursed commitments.

ADB (2016). The Asian Development Fund's terms and conditions vary depending on recipient i.e. if borrowing countries can access resources from the ADF only or if they can also access ordinary resources from the Asian Development Bank. The Table shows the terms and conditions for ADF recipient countries only.

# Annex III: How climate-relevant investment needs match up with MDB priorities

This annex highlights how priority sectors for climate action align with MDB's sectoral priorities:

- Energy systems: Renewable energy and energy efficiency sectors have received USD 7.5 billion on average in 2013-14, or 41% of MDBs' total climate investments.<sup>60</sup> They remain key priority areas across almost all the MDBs given that their potential impact is yet to be fully tapped.<sup>61</sup> In addition to grid connected clean energy technologies such as geothermal, wind and solar, some MDBs (e.g. AfDB and the World Bank) aim to expand support to off-grid and 'frontier' technologies such as energy storage and captive power for industrial and commercial businesses (IFC). Energy storage, in particular, could be a game-changer when deployed in conjunction with variable renewable energy sources in areas without a stable or reliable electricity grid and to enhance energy access. 62
- On **energy efficiency**, almost all MDBs aim to expand investment in both industrial and housing sectors. Many MDBs (such as the EBRD and IDB) also aim to focus their interventions at the city-level given that cities are responsible for around 70% of global energy consumption and greenhouse gas emissions (GCEF, 2014).
- Low-carbon and climate-resilient cities also offer opportunities. MDBs' identified interventions include making existing and new cities 'smarter' through integrated energy systems distributed energy, sustainable mobility including multimodal transport operations, and 'green buildings' (World Bank, IFC).<sup>63</sup> There is also scope to strengthen socio-economic climate resilience. For this reason, the climate actions of almost all MDBs aim to further integrate climate into urban land-use planning, infrastructure development and water management operations.
   <sup>64</sup> This is particularly relevant considering the rapid

urbanization rates in most developing and emerging countries, particularly in Asia and Africa and the vulnerability of cities to climate change impacts.<sup>65</sup>

Climate-smart agriculture, land-use including forestry and food security are other areas where MDBs intend to increase their climate financing through 2020. Significant opportunities lie in more efficient, resilient and productive use of land, including forests and water resources. In fact, agriculture, forestry and other forms of land-use generate around a quarter of global greenhouse gas — and in many countries, the share of emissions from land-use is far higher (WRI, 2015). They are also highly vulnerable to the impacts of climate change (Porter et al, 2015). Climate interventions planned include expanded deployment of highefficiency irrigation technologies, improved livestock management, and multi-sectoral strategies to reduce emissions from deforestation and forest degradation by, for instance, engaging private actors operating in the wood, pulp and paper industries, agriculture supply chains and small holders via 'out-grower' schemes.66

MDB priorities by geographic area of action:

- Asia: the ADB *2020 Strategy* highlights environment as one of their four core areas of operation. In light of rapidly growing population and urban centres, demand for energy and need for better land management, they will focus on energy efficiency measures, clean energy, modernising transport, arresting deforestation, and supporting the development of liveable cities (ADB, 2008). The ADB note that urban development is critical and that energy investment is relatively easier to undertake compared with, for instance, adaptation.
- Africa: the AfDB strategy to 2022 has growth as the overall objective to meet increasing demand

<sup>60</sup> Based on Buchner et al. (2014, 2015) and Joint-MDBs (2014) and (2015a).

<sup>61</sup> The IEA expect two-thirds of the mitigation effort to shift from a business-asusual emissions pathway to one consistent with 2°C is from energy efficiency measures (36%) and renewable energy (31%) (IEA, 2015b).

<sup>62</sup> See, e.g., the Sustainable Energy for All initiative (http://www.se4all.org/).

<sup>63</sup> See e.g. WBG (2016).

<sup>64</sup> See e.g. WBG (2016).

<sup>65</sup> Most developing countries may see 2.5 billion more people moving into cities by 2050, of which 2 billion people in Asia and Africa. In total, 70% of the world's population may live in cities, up from 50% today (UNDESA, 2014) and OECD (2014).

<sup>66</sup> Other activities also include ecosystem based adaptation, land restoration, integrated water management, and biodiversity conservation. Sources: WBG (2016), IFC (2016 interview) and Joint MDB (2016).

for energy (including access), land and water from rapidly growing populations and land and water use. In particular, it I focussed on inclusive and green growth. The latter will require a more resilient and resource efficient economy (AfDB, 2012).

- Latin America and Caribbean: the IDB Institutional Strategy 2010-2020 highlights sustainable growth and poverty reduction as overarching objectives (IDB, 2015). In light of the IDB region having some of the highest shares of urban and forested land in the world, energy efficiency, transport and land-use/ water are investment priorities.
- **Europe:** the EBRD's *Green Economy Transition* points to supporting efficient and resilient economies in eastern/south-eastern Europe and central Asian, highlighting a need for improving energy efficiency in urban centers and transport systems, and meeting rapidly growing demand for energy and water (EBRD, 2015b).
- **Global:** The WBG *Climate Change Action Plan* restates the importance of energy systems, cities and land-use for climate action. It identifies scope to target 'high opportunity' sectors such as more innovative arrangements for energy such as distributed energy, and urban resilience including green buildings and transport (WBG, 2016).

# Annex IV: Multilateral Climate Funds — elements assessed for the comparative assessment

The following fact sheets provide information on eight multilateral climate funds. They are: the CIF's Clean Technology Fund, the Pilot Program for Climate Resilience, the Forest Investment Program and the Scaling Up Renewable Energy Program; the Green Climate Fund; the Global Environment Facility; Least Developed Countries Fund; Special Climate Change Fund; Adaptation Fund; Forest Carbon Partnership Facility and the BioCarbon Fund. For each fund we provide details on:

- Mandate
- Access modalities, including implementing entities
- The types of concessional instruments provided
- The geographical focus of activity
- Whether it has a private sector focus and the dedicated scale of support
- Amount pledged and type of contribution received
- Approved funding to projects to-date
- Whether it has a COP mandate



#### Figure A.1: Timeline of operation of the multilateral climate funds assessed

	CLIMATE INVESTMENT FUNDS: CLEAN TECHNOLOGY FUND (CTF)
DESCRIPTION	Promote scaled-up financing for demonstration, deployment and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings.
ACCESS MODALITIES	MDBs: WB, IFC, EBRD, ADB, AfDB, and IDB <sup>a</sup>
	Public: Grants, concessional loans, guarantees;
TYPES OF	Private: Grants, concessional loans, equity, guarantees
INSTRUMENTS	<b>Instruments used to date:</b> Grants: 3%, guarantees: 2%, softer-termed concessional loans: 47%, harder-termed conces- sional loans: 21%,
	Private sector loan: 26% <sup>b</sup>
	15 countries and 1 regional program <sup>c</sup>
GEOGRAPHICAL FOCUS	<ul> <li>Initial set of pilot countries [Phase I] (2008-10): Colombia, Egypt, Indonesia, Kazakhstan, Mexico, Morocco, South Africa, Thailand, Turkey, Ukraine, Vietnam, Philippines; and the Middle East and North Africa (MENA) covering Algeria, Egypt, Jordan, Morocco and Tunisia</li> </ul>
	New pilot countries [Phase II] (2010-11): Nigeria, India and Chile
	Private sector focus? Yes.
	Private sector set-aside? Yes.
PRIVATE SECTOR FOCUS	<b>Scale of private sector set-aside:</b> USD 508.5 million (Phase 1: USD 150 million, Phase II: USD 358 million), of which USD 466.5 million endorsed, USD 341.6 million approved
	<b>Focus of private sector set-aside:</b> Geothermal power, mini-grids, mezzanine finance, energy efficiency, solar photovoltaic power, and early stage renewable energy. <sup>d</sup>
AMOUNT PLEDGED	USD 5.6 billion
	Grants: USD 2.5 billion
CONTRIBUTION TYPE	Loans: USD 1 billion
	Paid-in capital: USD 1.5 billion
	As of April 2015, USD 6 billion allocated to 123 projects and USD 3.5 billion approved to 76 projects. <sup>e</sup>
TO-DATE	Factoring in all current and pending contributions, the CTF projects a shortfall of USD 647 million based on commitments and planned pipeline. <sup>(</sup>

a CIF (2015a) b CIF (2016a) c CIF (2015e) d CIF (2015e) e CIF (2015c) f CIF (2015d)

CLIMATE INVESTMENT FUNDS: FOREST INVESTMENT PROGRAM (FIP)	
DESCRIPTION	Designed to support developing countries' REDD efforts and promote sustainable forest management.
ACCESS MODALITIES	MDBs: WB, IFC, EBRD, ADB, AfDB and IDB <sup>a</sup>
CONCESSIONAL INSTRUMENTS PROVIDED	Grants: 21%
	Loans: 79% <sup>b</sup>
	27 low- and middle-income countries and 1 regional program
	Original FIP pilot countries: Brazil, Burkina Faso, Laos, Ghana, Indonesia, Mexico, DRC
GEOGRAPHICAL FOCUS	• New FIP Pilot countries: Congo Republic, Côte d'Ivoire, Mozambique, Nepal, Ecuador, Guatemala
	• Others invited to prepare FIP investment plans in 2015: Tunisia, Bangladesh, Zambia, Cambodia, Cameroon, Guyana, Honduras, Rwanda, and Uganda
	Private sector focus? Yes.
PRIVATE SECTOR	Private sector set-aside? Yes.
FOCUS	Scale of private sector set-aside: USD 56 million, of which USD 20million endorsed
	Focus of private sector set-aside: no sectoral focus <sup>c</sup>
AMOUNT PLEDGED	USD 787 million
	Paid-in capital: USD 152 million
CONTRIBUTION TYPE	Grants: USD 575 million
	The programming period is from 2009 to 2015. <sup>d</sup>
APPROVED FUNDING TO-DATE	As of November 2015, the FIP has USD 555 million allocated to 47 projects.
	USD 292 million approved for implementation across 18 projects. <sup>e</sup>
	(This does not include the USD 80 million allocated to the Dedicated Grant Mechanism for Indigenous Peoples and Local Communities). <sup>r</sup>
COP MANDATE?	No

a CIF (2010b) b CIF (2016a) c CIF (2015g) d CIF (2015h) e CIF (2015c) f CIF (2015d)

CLIMATE INVESTMENT FUNDS: SCALING UP RENEWABLE ENERGY PROGRAM (SREP)	
DESCRIPTION	Designed to demonstrate the economic, social and environmental viability of low-carbon development pathways in the energy sector in low-income countries.
ACCESS MODALITIES	MDBs: WB, IFC, EBRD, ADB, AfDB, and IDB <sup>a</sup>
	Grants: 21%
	Loans: 77%
PROVIDED	Guarantees: 2%
	Other instruments: 0.4% <sup>b</sup>
	27 low-income countries and 1 regional program <sup>c</sup>
GEOGRAPHICAL FOCUS	<ul> <li>Initial set of pilot countries: Armenia, Ethiopia, Ghana, Haiti, Honduras, Kenya, Liberia, Maldives, Mali, Nepal, Nicaragua, Pacific Region (Solomon Islands and Vanuatu), Tanzania and Yemen.</li> </ul>
	• New pilot countries (joined in 2014): Bangladesh, Benin, Cambodia, Ghana, Haiti, Kiribati, Lesotho, Madagascar, Malawi, Nicaragua, Rwanda, Sierra Leone, Uganda and Zambia.
	Private sector focus? Yes
	Private sector set-aside? Yes
FOCUS	Scale of private sector set-aside: USD 93 million (Phase I: USD 60 million, Phase II: USD 33 million), of which USD 93 million endorsed and USD 20.5 million approved.
	Focus of private sector set-aside: No sectoral focus <sup>d</sup>
AMOUNT PLEDGED	USD 798 million
	Paid-in capital: USD 151 million
CONTRIBUTION TYPE	Grants: USD 375 million
	The programming period is from 2009 to 2015 <sup>®</sup>
APPROVED FUNDING TO-DATE	USD 809 million allocated for 66 projects.
	USD 194 million approved for implementation across 19 projects (as of November 2015).
	Projects shortfall of USD 265 million considering commitments and planned pipeline (including new pilot countries) and all current and pending contributions, the SREP. <sup>9</sup>
COP MANDATE?	No

a CIF (2010c) b CIF (2016a) c CIF (2015j) d CIF (2015j) e CIF (2015k) f CIF (2015k) g CIF (2015k)

CLIMATE INVESTMENT FUNDS: PILOT PROGRAM FOR CLIMATE RESILIENCE (PPCR)	
DESCRIPTION	Dedicated funding window of the CIF, it assists national governments in integrating climate resilience into development planning and implementation across sectors and stakeholder groups. It has been in operation since 2008.
ACCESS MODALITIES	MDBs: WB, IFC, EBRD, ADB, AfDB, and IDB <sup>a</sup>
CONCESSIONAL	Grants: 67%
INSTRUMENTS PROVIDED	Loans: 33% <sup>b</sup>
	28 low and middle-income countries and 2 regional programs <sup>c</sup>
GEOGRAPHIES	• Initial set of pilot countries: Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia, Caribbean regional program (Dominica, Haiti, Jamaica, Grenada, St. Lucia, St. Vincent and the Grenadines), and Pacific regional program (Papua New Guinea, Samoa and Tonga).
	• New pilot countries (joined in 2015): Bhutan, Ethiopia; Gambia, Honduras, Kyrgyz Republic, Madagascar, Malawi, Philippines, Rwanda, and Uganda.
	Private sector focus? Yes
	Private sector set-aside? Yes
PRIVATE SECTOR FOCUS	Scale of private sector set-aside: USD 70 million set aside, of which USD 65 million endorsed, of which USD 26 million approved
	Focus of private sector set-aside: No sectoral focus <sup>d</sup>
AMOUNT PLEDGED	USD 1.2 billion, including USD 70.4 million in private sector set-aside funding.
CONTRIBUTION TYPE	Paid-in capital: USD 428 million
	Grants: USD 741 million <sup>e</sup>
APPROVED FUNDING TO-DATE	As of November 2015 USD 1.1 billion allocated for 74 projects.
	USD 910 million approved for implementation across 54 projects.
	The PPCR projects a shortfall of USD 166 million based on commitments and planned pipeline. <sup>9</sup>
COP MANDATE?	No

a CIF (2010a) b CIF (2016a) c CIF (2015l) d CIF (2015l) e CIF (2015m) f CIF (2015m) g CIF (2015d)

GREEN CLIMATE FUND (GCF)	
DESCRIPTION	Aims to contribute to promoting the paradigm shift towards low-emission and climate-resilient development pathways and to adapt to the impacts of climate change.
	Direct access through accredited sub-national, national and regional implementing entities <sup>a</sup> and intermediated access via international multilateral implementing entities. Total of 33 accredited entities (as of April 2016).
	National entities (10): Ministries, national development banks, and national trust funds.
ACCESS MODALITIES	<b>Regional entities (5):</b> Regional multilateral financial institutions, supranational policy research organizations, regional development banks, and regional IGOs.
	<b>International entities (18):</b> International financial institutions (including multilateral development banks), international NGOs, and various UN programs.
TYPES OF	Instruments offered: Grants, equity, loans, guarantees <sup>b</sup>
	<b>Through the Private Sector Facility:</b> grants, equity, quasi-equity, guarantees, and climate insurance. <sup>c</sup>
PROVIDED	Instruments used to date: Guarantees (12%), equity (12%), grants (76%) <sup>a</sup>
	All developing countries that are Parties to the UNFCCC.
GEOGRAPHICAL FOCUS	Realized geographies supported: Latin America and Caribbean, East Africa, Peru, Malawi, Bangladesh, Senegal, Fiji <sup>e</sup>
PRIVATE SECTOR FOCUS	<b>Private sector focus?</b> Yes <b>Scale of private sector set-aside:</b> Pilot Program for Mobilizing Funds at: USD 500 million <sup>r</sup> and the Pilot Micro, Small, and Medium-Sized Enterprise Program: USD 200 million
AMOUNT PLEDGED	USD 10.3 billion
CONTRIBUTION TYPE	Grants: USD 8.7 billion
	Loans: USD 403 million
	Paid in-capital: USD 969 million
APPROVED FUNDING TO-DATE	USD 163 million <sup>®</sup>
COP MANDATE?	Yes, it is accountable to and functions under the guidance of the COP. $^{h}$
a GCF (2016a)	

a GCF (2016a) b GCF (2015d) c GCF(2015e) d GCF (2015f) e GCF (2015f) f GCF (2015f) g GCF (2015f) h UNFCCC (2011)

	GLOBAL ENVIRONMENTAL FACILITY TRUST FUND (GEF) CLIMATE CHANGE MITIGATION FOCAL AREA
DESCRIPTION	GEF supports developing countries and economies in transition to make transformational shifts towards a low emission development path.
ACCESS MODALITIES	Direct access through national and regional entities; Intermediated access via international multilateral implementing entities <sup>a</sup>
	<b>National:</b> Foreign Economic Cooperation Office, Ministry of Environmental Protection of China (FECO), Fundo Brasileiro para a Biodiversidade (FUNBIO)
	Regional: CAF, DBSA, West African Development Bank (BOAD)
	International and/or multilateral: ADB, AfDB, EBRD, FAO, IADB, IFAD, UNDP, UNEP, UNIDO, WB, Conservation International, International Union for Conservation of Nature (IUCN), World Wildlife Fund (WWF-US)
TYPES OF	Grants and limited non-grant instruments.
CONCESSIONAL INSTRUMENTS PROVIDED	<b>In GEF-5 Climate Change Focal Area:</b> Non-grant instruments: 12.2%, (Debt: 4.7%, Equity: 1.0%, Risk mitigation: 4.7%, Mixed: 1.8%), Grant instruments: 87.8% <sup>b</sup>
GEOGRAPHICAL FOCUS	Countries eligible to borrow from the World Bank or UNDP technical assistance.
	Private sector focus? Yes, but small.
	Private sector set-aside? Yes, a non-grants pilot.
	Scale of private sector set-aside:
PRIVATE SECTOR	GEF-4 (2006-2010): USD 56 million set aside to the GEF's Earth Fund.
FOCUS	• GEF-5 (2010-2014): USD 80 million set aside across all focal areas, of which USD 70 million committed.
	• GEF-6 (2014-2018): USD 110 million across all focal areas (access to both public and private). No known amount of funding committed to date.
	Focus of private sector set-aside: no sectoral focus <sup>c</sup>
	<b>GEF-4:</b> USD 950 billion for mitigation focal area.
AMOUNT PLEDGED	<b>GEF-5:</b> USD 1.36 billion for mitigation focal area.
	<b>GEF-6:</b> USD 4.43 billion, of which USD 1.26 billion for the mitigation focal area.
CONTRIBUTION TYPE	Grants: 100% <sup>d</sup>
APPROVED FUNDING TO-DATE (CLIMATE CHANGE MITIGATION FOCAL AREA)	GEF-4: USD 712 million
	GEF-5: USD 1 billion
	GEF-6: USD 156 million <sup>e</sup>
COP MANDATE?	Yes <sup>r</sup>
a UNFCCC (2015d)	

b c d e f

GCF (2015f) GEF (2014a) GEF (2014b) UNFCCC (2015d) GEF (2014a)

LEAST DEVELOPED COUNTRIES FUND (LDCF)	
DESCRIPTION	LDCF aims to meet the adaptation needs of least developed countries. Specifically the LDCF has financed the preparation and implementation of National Adaptation Programs of Action (NAPAs) to identify priority adaptation actions for a country based on existing information.
	The LDCF is administered by the GEF.
ACCESS MODALITIES	Uses the operating procedures of the GEF <sup>a</sup>
TYPES OF CONCESSIONAL INSTRUMENTS PROVIDED	Grants <sup>₅</sup>
GEOGRAPHICAL FOCUS	All least developed countries are eligible <sup>c</sup>
PRIVATE SECTOR FOCUS	No <sup>d</sup>
AMOUNT PLEDGED	USD 935 million
	Pledged amounts near fully programmed - shortage of funds for future programming. No clear end year on the programming of funds identified.
	Fund operational since 2002.
CONTRIBUTION TYPE	Grants: 100% <sup>e</sup>
APPROVED FUNDING TO-DATE	USD 932 million <sup>r</sup>
COP MANDATE?	Yes <sup>g</sup>

a GEF (2009) b GEF (2015b) c GEF (2014a) d UNFCCC (2011) e GEF (2015b) f UNFCCC (2015c) g UNFCCC (2015c)

SPECIAL CLIMATE CHANGE FUND (SCCF)	
DESCRIPTION	SCCF addresses the specific needs of developing countries under the UNFCCC by covering the incremental costs of interven- tions to address climate change relative to a development baseline. Adaptation to climate change is the top priority of the SCCF, although it can also support technology transfer and its associated capacity building activities. The SCCF is adminis- tered by the Global Environment Facility.
ACCESS MODALITIES	Uses the same operating procedures of the GEF. <sup>a</sup>
TYPES OF CONCESSIONAL INSTRUMENTS PROVIDED	Grants <sup>®</sup>
GEOGRAPHICAL FOCUS	All Non-Annex 1 countries are eligible to apply, although the needs of the most vulnerable countries in Africa, Asia, and the Small Island Developing States (SIDS) are prioritized. <sup>c</sup>
PRIVATE SECTOR FOCUS	No <sup>d</sup>
AMOUNT PLEDGED	USD 349 million. Made operational in 2002. Pledged amounts near fully programmed - shortage of funds for future pro- gramming. No clear end year on the programming of funds identified.
CONTRIBUTION TYPE	Grants: 100% <sup>e</sup>
APPROVED FUNDING TO-DATE	Approved projects and programs under the SCCF Adaptation Program (SCCF-A): USD 284 million
	Approved projects and programs under the SCCF Program for Technology Transfer (SCCF-B): USD 61 million
COP MANDATE?	Yes <sup>g</sup>

a GEF (2009) b GEF (2015b) c UNFCCC (2015c) d UNFCCC (2011) e GEF (2015b) f UNFCCC (2015c) g UNFCCC (2015c)

ADAPTATION FUND	
DESCRIPTION	Finance concrete adaptation projects and programmes.
	Direct access offered. Funds can be accessed through national, regional and international multilateral implementing entities:
	National implementing entities (23): National trust funds, ministries, national development banks
ACCESSED MODALITIES	Regional implementing entities (6): Regional development banks and regional intergovernmental organizations
	<b>International implementing entities (12):</b> International financial institutions (including multilateral development banks) and various UN programs <sup>a</sup>
CONCESSIONAL INSTRUMENTS PROVIDED	Grants
GEOGRAPHICAL FOCUS	All developing countries who are Parties to the Kyoto Protocol and particularly vulnerable to the adverse effects of climate change.
	<b>Countries receiving support:</b> Argentina, Belize, Cambodia, Chile, Colombia, Cook Islands, Costa Rica, Cuba, Djibouti, Ecuador, Egypt, Eritrea, Georgia, Ghana, Guatemala, Honduras, India, Indonesia, Jamaica, Jordan, Kenya, Lebanon, Madagascar, Maldives, Mali, Mauritania, Mauritius, Mongolia, Morocco, Myanmar, Nepal, Nicaragua, Pakistan, Papua New Guinea, Peru, Rwanda, Samoa, Senegal, Seychelles, Solomon Islands, South Africa, Tanzania, Turkmenistan, Uruguay, Uzbekistan <sup>b</sup>
PRIVATE SECTOR FOCUS	No
AMOUNT PLEDGED	Cumulative resources received into the Adaptation Fund Trust Fund through CER sales proceeds and donations are USD 557 million, excluding investment income.
CONTRIBUTION TYPE	Grants and 2% share of proceeds from sales of Certified Emission Reductions issued under issued under the Clean Development Mechanism. <sup>c</sup>
APPROVED FUNDING TO-DATE	USD 331 million (2010-current) <sup>d</sup>
COP MANDATE?	No, the Adaptation Fund is a financial entity under the Kyoto Protocol of the UNFCCC operating under the guidance of the CMP.

a AFB (2016) b UNFCCC (2009) c AFB (2009) and (2016) d AFB (2015)

FOREST CARBON PARTNERSHIP FACILITY (FCPF)	
DESCRIPTION	World Bank programme consisting of a Readiness Fund and a Carbon Fund created to assist developing countries to reduce emissions from deforestation and forest degradation, enhance and conserve forest carbon stocks, and sustainably manage forests (REDD+).
ACCESS MODALITIES	International multilateral implementing entities: WB, IDB, UNDP and FAO <sup>a</sup>
TYPES OF	The Readiness Fund is 100% grant-based.
CONCESSIONAL INSTRUMENTS PROVIDED	Within the Carbon Fund, funds are delivered in exchange for emission reductions (crediting mechanism). To date, no credit- ing mechanisms are in place. <sup>b</sup>
GEOGRAPHICAL FOCUS	The FCPF has grown to 47 developing countries (18 in Africa, 18 in Latin America and the Caribbean, and 11 in the Asia- Pacific Region) <sup>c</sup>
	<b>Africa:</b> Burkina Faso, Cameroon, CAR, DRC, ROC, Cote d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Mozambique, Nigeria, Sudan, Tanzania, Togo, Uganda
	<b>Asia-Pacific:</b> Bhutan, Cambodia, Fiji, Indonesia, Laos, Madagascar, Nepal, Pakistan, Papua New Guinea, Thailand, Vanuatu, Vietnam
	<b>Latin America:</b> Argentina, Bolivia, Belize, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Liberia, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay
PRIVATE SECTOR FOCUS	No <sup>d</sup>
AMOUNT PLEDGED	USD 829 million funding committed, USD 373 million to the Readiness Fund and USD 456 million to the Carbon Fund.
	Operational since 2008. Readiness Fund operational until 2020, and Carbon Fund up to 2025.
CONTRIBUTION TYPE	Grants <sup>e</sup>
APPROVED FUNDING	USD 211 million in readiness grant funding approved to date. <sup>r</sup>
COP MANDATE?	No

a FCPF (2016a); FCPF(2016b) and FCPF(2015a).
b FCPF (2015a), FCPF(2015a) and FCPF(2016b).
c FCPF (2016a)
d FCPF (2015c)
e FCPF(2015b)
f FCPF (2015b)

BIOCARBON FUND (BIOCF)	
DESCRIPTION	Public-private sector initiative housed within the Carbon Finance Unit of the World Bank. It is aimed at mobilizing financing to help develop projects that sequester or conserve carbon in forest and agro-ecosystems. The BioCarbon Fund Tranche 1 and Tranche 2 (T1/T2) focus mainly on afforestation and reforestation activities. The new initiative for Sustainable Forest Landscapes (ISFL) tries to address global deforestation challenges by scaling up smarter land-use planning across larger landscapes. BioCFplus supports BioCF activities by providing technical assistance and advance payments.
ACCESS MODALITIES	World Bank <sup>a</sup>
CONCESSIONAL INSTRUMENTS PROVIDED	83% of allocated funds are for emissions reductions payments.
	16.8% are for technical assistance grants. <sup>b</sup>
	Developing countries eligible to receive finance through the World Bank.
	Realized geographies:
GEOGRAPHICAL FOCUS	Tranche 1: Albania, Brazil, China, Colombia, Costa Rica, Ethiopia, India, Madagascar, Moldova, Nicaragua, Niger, and Uganda
	Tranche 2: Brazil, Chile, China, Colombia, DR Congo, India, Kenya, and Moldova
	ISFL: Colombia, Ethiopia, and Zambia <sup>c</sup>
PRIVATE SECTOR	Private sector focus? No
AMOUNT PLEDGED	USD 436.7 million: <b>Tranche One:</b> USD 53.8 million; <b>Tranche Two:</b> 29.5 million; <b>BioCFplus:</b> USD 88.4 million; <b>Tranche 3:</b> 265 million <sup>d</sup>
CONTRIBUTION TYPE	Grants: 100%
APPROVED FUNDING TO-DATE	USD 205 million
	(Tranche 1: USD 27.4 million private capital invested, Tranche 2: USD 5 million private capital invested <sup>e</sup> , ISFL (BioCFplus + Tranche 3): USD 173 million). <sup>(</sup>
COP MANDATE?	No

a World Bank (2016)
b World Bank (2013c); World Bank (2016)
c World Bank (2016)
d World Bank (2013c) and World Bank (2015)
e World Bank (2013c)
f World Bank (2015)

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GEF data only includes data from GEF-5 and GEF-6 replenishment periods for the climate change focal area

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