



Use of Other Financial Instruments

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Recommended action by the Board

It is recommended that the Board:

- (a) Take note of the information in the document GCF/B.08/12 *Use of Other Financial Instruments*; and
- (b) Adopt the decision presented in Annex I to this document.

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Use of Other Financial Instruments

I. Introduction

1. The Fund's Governing Instrument identifies grants and concessional loans as the initial financial instruments through which the Fund will provide financing (Governing Instrument, paragraph 54). The same paragraph also raises the possibility of "other modalities, instruments or facilities as may be approved by the Board" to achieve the Fund's objectives. This document considers what other financial instruments the Fund could pursue beyond grants and concessional loans, subject to Board approval. The introduction of these additional financial instruments would present enhanced flexibility for the Fund to finance projects and programmes.
2. This document should be read in conjunction with its companion document *Potential Approaches to Mobilizing Funds at Scale* (GCF/B.08/13), which reviews options for crowding in other sources of financing for the Fund, notably from the private sector. In order for the Fund to be able to effectively leverage private financing it will need to be able to deploy financial instruments beyond grants and concessional loans. Deploying other financial instruments will allow the Fund to better adapt to project and programme requirements and better match country and investor needs.

II. Linkages with other documents and prior Board decisions

3. This document is intended as a companion document with close linkages to the *Potential Approaches to Mobilizing Funds at Scale* document (GCF/B.08/13). While the companion document presents the ways in which the Fund can catalyse private sector investment, this document offers complementary financial instruments that could mobilize funds from all potential sources, public and private. It is anticipated that the Fund will need a range of financial instruments in order to mobilize climate investment on the necessary scale.
4. This document also has linkages with and addresses matters that cut across the following documents:
 - (a) *Financial Terms and Conditions of Grants and Concessional Loans* (GCF/B.08/11);
 - (b) *Modalities to Promote Participation of Private Sector Actors in Developing Countries* (GCF/B.08/14); and
 - (c) *Financial Risk Management Framework* (GCF/B.07/05) and decision B.07/05.
5. This document addresses the mandate adopted by the Board in decision B.07/08, paragraph (e), from which the Board decided to consider at its eighth meeting further work on the modalities of the Private Sector Facility (PSF). This document is also in line with decision B.04/08 regarding the PSF.

III. Examples of other institutions

6. Annexes III and IV provide illustrative examples of initiatives' use of financial instruments in climate change projects and programmes.
7. Such initiatives include:
 - (a) Global Climate Partnership Fund;

- (b) GAVI's International Finance Facility for Immunisation;
- (c) Green Bonds;
- (d) IFC and DFID's Climate Catalyst Fund;
- (e) ADB and DFID's Climate Public-Private Partnership Fund;
- (f) Global Environment Facility (GEF);
- (g) Climate Investment Funds (CIFs);
- (h) International Finance Corporation's (IFC) Blended Finance;
- (i) African Development Bank's (AfDB) Sustainable Energy Fund for Africa;
- (j) African Union Commission's (AUC) Geothermal Risk Management Facility;
- (k) AUC's African Risk Capacity;
- (l) Caribbean Catastrophe Risk Insurance Facility;
- (m) Green Credit Lines;
- (n) European Investment Bank's (EIB) Project Bond Credit Enhancement Facility;
- (o) Overseas Private Investment Corporation's (OPIC) Global Renewable Resources Fund call; and
- (p) US-Africa Clean Energy Finance Initiative.

IV. Classes of possible additional financial instruments

8. The financial sector makes available to the real economy a very large range of financial instruments. In order to facilitate the review of possible financial instruments for the Fund to deploy, they have been grouped into four broad classes. These exclude derivatives because of their complex deployment and less immediate attractiveness for the Fund.¹ The four broad classes are as follows:

- (a) Debt (senior and subordinated debt/loans provided at concessional rates and/or extended maturities) – currently deployed and approved;
- (b) Guarantees (comprehensive,² partial risk and partial credit) based on grants received by the Fund – for which this paper is seeking approval;
- (c) Non-debt risk-bearing instruments such as equity based on grants received by the Fund – for which this paper is seeking approval; and
- (d) Insurance products (e.g. for the provision of disaster and weather insurance) – for which approval for deployment will be sought at a later date.

9. The value added of debt and equity instruments is that the Fund can close a specific financing gap for specific projects and programmes, thus bringing more projects and programmes to fruition.

10. The value added of guarantees and insurance is that these instruments crowd in new private sector financing as well as from multilateral development banks, national development banks, and others. In the case of guarantees, the crowding in factor is potentially transformative

¹ It is proposed that the advisability of their introduction will however be reviewed by the Board at a later date.

² Comprehensive guarantees can be used to limit the default exposure of energy efficiency loans derived from technical and creditworthiness risks. For this purpose, they are used in conjunction with an energy efficiency loan contract established between a financial institution and either an energy service company or electricity end-users.

in its scale and reach, particularly as it would also leverage investment in the other instrument classes listed above. Insurance products are more complex to deploy than guarantees as they require an actuarial (probabilistic) accounting for the use of financial resources.

11. As noted in the introduction, these additional financial instruments would present enhanced flexibility for the Fund to invest in projects and programmes through intermediaries, in a tailored manner that makes projects and programmes financially viable. The Fund's internal credit and investment review process is critical, and as such the Fund will have in place the requisite internal functions including Risk, in-house expertise, authorization procedures and due diligence processes.

12. These additional financial instruments would also enable the Fund to support financial actors (both accredited intermediaries and others) consistent with paragraph 48 of the Governing Instrument, as well as provide support to financial markets such as the debt markets (e.g. providing credit enhancement for green bonds), particularly in developing countries.

V. Attractiveness and timing of the introduction of additional instruments

5.1 Principles for deployment of financial instruments with the private sector

13. In introducing additional financial instruments to work with the private sector, it will be important for the Fund to ensure it provides additionality, avoids crowding out other sources of finance and minimizes distortion to financial markets. Multilateral development banks (MDBs) have drawn up a set of principles in their private sector operations to address these areas of concern. These five principles are:³

- (a) **Additionality:** The Fund's suite of financial instruments should make a contribution that is beyond what is currently available, or that is otherwise absent from the market, and should not crowd out private sector funding;
- (b) **Crowding-in:** The Fund should, to the extent possible, catalyse market development and the mobilization of private sector resources;
- (c) **Commercial sustainability:** The Fund and its operational impact should be sustainable, both during and after its involvement, thereby contributing to the commercial viability of the project/programme;
- (d) **Reinforcing markets:** The Fund should effectively and efficiently address market failures and minimize the risk of disrupting markets or crowding out private finance, including new entrants; and
- (e) **Promoting high standards:** The Fund should seek to promote adherence to high standards of conduct in its recipients and in intermediaries that manage the Fund's resources for and on behalf of the Fund.

5.2 Attractiveness criteria of possible additional financial instruments

14. Not all possible additional financial instruments will have the same degree of attractiveness for the Fund. To rank their attractiveness and therefore the timing of their

³ See <http://www.ebrd.com/downloads/news/mdb.pdf>.

introduction, additional financial instruments will be assessed on four criteria (see table in Annex II):

- (a) **Leverage:** Potential for crowding in additional private sector financing and other resources;
 - (b) **Risk-bearing capacity** of the instrument A specific feature of the Fund which distinguishes it from other existing sources of climate finance is its ability to assume risk, with appropriate safeguards against moral hazard and with pricing commensurate with this risk;
 - (c) **Innovation and prototyping:** Includes the capacity of the instrument to pilot innovative approaches across a range of differing country, sector and technology contexts; and
 - (d) **Scalability**, including catalytic/transformational impact and learning potential. This covers the capacity of the instrument to create new investment areas and sectors through demonstration effect and overcoming information-related market failures.
15. In addition to the four attractiveness criteria outlined above, an analysis of the attractiveness of the financial instrument class will consider **the complexity of deployment** of the instrument (complexity of legal agreements, ease of monitoring and evaluation, accounting practices) and the corresponding capacity requirements within the Secretariat.
16. The outcome of the ranking is provided in the table in Annex II and below.

5.3 Attractiveness of additional instruments

17. The ranking of the different classes of instrument according to these four dimensions of attractiveness is provided in the table in Annex II. The outcome is as follows:
- (a) **Debt:** Already available. Currently the Fund is authorized by the Board to extend concessional loans, including senior and subordinated debt, for projects and programmes;
 - (b) **Guarantees:** Seeking approval for deployment. While guarantees represent a wide range of different approaches (comprehensive, partial risk, etc.) they for the most part represent very high attractiveness, especially for mobilizing private sector resources. Guarantees would enable the Fund to begin mobilizing private sector resources on a potentially transformative scale, thus unlocking highly additional private sector investment in developing countries. Guarantees can be structured to minimize the Fund's liability, thus mitigating a critical risk factor of the instrument, while still effectively catalysing new sources of funding. It is therefore recommended that guarantees be introduced into the Fund's range of instruments in its initial phase based on grants received by the Fund;
 - (c) **Equity (Non-debt risk-bearing instruments):** Seeking approval for deployment. This class of instrument scores well on all four dimensions of attractiveness and is of medium complexity of deployment. Equity represents an attractive instrument class for the Fund and it is recommended that it be introduced into the Fund's range of instruments in its initial phase based on grants received by the Fund; and
 - (d) **Insurance:** Not seeking approval for deployment. This class of instrument is of medium attractiveness. Provision of insurance by the Fund would have the potential to create new private insurance and re-insurance markets (particularly appropriate for support for adaptation). However, insurance is complex to deploy compared to the other



instruments as it requires an actuarial approach to the management of capital, and it requires a large capital base within the Fund to offset potential claim payments.⁴ It is therefore recommended that the issues relating to the deployment of insurance be further studied before proceeding.

⁴ Insurance products can also present a contractual difficulty when used in a project finance structure, because of issues relating to seniority in the project finance structure and consequent pledge of shares issues with lenders.

Instrument	Example of use in other Climate Funds	Compliance with MDB principles	attractiveness*	Complexity of deployment	Recommendation
Debt	(Already available in GCF) CIFs, IFC, ADB, AfDB, OPIC, IFC, AfDB	Depends on terms. Some danger of crowding out private financing if mispriced.	Medium	Low / Medium	Currently deployed in phase I
Guarantees	MDBs' Partial Risk Guarantee programmes	Full compliance, high potential for crowding in	Very High	Medium/Low	Introduce in phase I
Equity (non-debt risk-bearing instruments)	IFC, ADB, AfDB, OPIC leverage	Full compliance, little danger of crowding out	High	Medium	Introduce in phase I
Insurance	OPIC, MIGA	Full compliance, little danger of crowding out	Medium	High	Further review required; Introduce in Phase II

*Overall ranking compared to attractiveness criteria (see Annex II)

18. In mobilizing grants in the form of guarantees and equities, the Fund achieves two benefits. First, the Fund maximizes the impact of each grant dollar by creating a multiplier effect through the recycling of grant money. Second, the Fund ensures that grant money remains valued and safeguarded by intermediaries and beneficiaries.

VI. Introduction of additional financial instruments

6.1 Maximizing the effectiveness of existing financial instruments

19. As noted in paragraph 8 of this document, the Fund's current financial instruments include grants and concessional loans. In addition to the additional financial instruments described throughout this document, the Fund can also maximize the effectiveness of its existing financial instruments, especially grants. Grants need not necessarily be a one-time disbursement with no expectation of repayment; grants can also be used so that they are "recycled" and thus greatly increase their leverage and catalytic effect. Recycling represents the ability to be repaid and then redeploy the funding for a future, separate use. In this form of use, one grant may be deployed to bring many successive projects or programmes to fruition. The Fund would also retain the option to use grants as a one-time disbursement.

20. A central feature of traditional grants is that there is no expectation of repayment for grants as traditionally defined. This has the potential of creating distorting subsidies and material moral hazard in the private sector. These risks can be greatly mitigated by extending Smart Grants that have to be repaid under certain conditions.

21. The risks and potential downsides of this approach to grants are minimal. This is a "no regret" option that enables the Fund to work through existing Board-approved arrangements through intermediaries and implementing entities and gain the benefits of substantially higher leverage and catalytic effect through recycling grants for future deployment, all the while mitigating against the risk of subsidizing the intermediary, implementing entity and/or executing entity that could reasonably occur under other grant-giving arrangements.

22. The Fund can create Smart Grants that are repayable and recyclable through equity and guarantee structures without creating additional risk for the Fund. The granting of and equity or guarantee would be limited to the amount of the grant. Project risk will be managed in the same manner as for concessional lending, working through intermediaries.

6.2 Timetable of deployment

23. In the Fund's current initial phase (Phase I), during which the Fund's Board has authorized the deployment of grants and concessional loans, it is recommended to expand the range of products. Following Phase I, it is recommended to introduce a subsequent phase for the introduction of additional instruments and capabilities, as outlined below:

(a) **Phase I: (initial phase): Use of grants and concessional loans.** Greater flexibility to maximize the effective use of grants would be introduced, in the sense outlined in section 6.1 above. The additional flexibility to use grants would enable the Fund to deploy guarantees and equity through intermediaries and implementing entities such that the intermediaries return the grant funds to the Fund as and when the associated guarantees expire unused and the equity is repaid to the intermediary.

A review would be taken after [24 months] to draw lessons from the effectiveness of the Fund's initial operations before considering the introduction of further instruments.

(b) **Phase II: Introduction of insurance and direct project investment (if appropriate).** Following an internal review of the Fund's financial products, and if it is deemed advisable to proceed with the introduction of insurance and the ability to invest directly in projects, this would then occur. The timetable for Phase II would be timed around the first Fund replenishment in 2018.

6.3 Managing the risks

24. As addressed in the Financial Risk Management Framework (GCF/B.07/05), the Fund must manage credit, securities, and market risks associated with deploying resources. Additionally, pursuant to the financial risk policies adopted in decision B.07/05 (see GCF/B.07/11, Annex XI, paragraph 2(g)), the Fund must take extra care to ensure that it mitigates against the risks of:

- (a) Subsidizing select intermediaries and creating market distortions; and
- (b) Moral hazard/conflict of interest in intermediaries that will need to reconcile their primary objectives with those of the Fund when managing the Fund's resources.

25. The most effective way of mitigating the credit, securities and market risks covered in the Risk Management Framework is to work with intermediaries who have adequate resources and country/market specific expertise. However, in doing so, the Fund creates the aforementioned risks of market-distorting subsidies and moral hazard.

26. To mitigate the resulting risks, the Fund will take on project risk, albeit through the intermediary to ensure that the benefits of concessionality are captured by the project and its beneficiaries rather than the intermediaries.

27. By creating expectations of repayment when using grants in the form of equity and guarantees, the Fund mitigates the potential of providing excessive concessionality that can be captured by private sector entities and intermediaries, thus subsidizing their respective shareholders

Annex I: Draft decision of the Board

The Board, having considered document GCF/B.08/13 *Use of Other Financial Instruments*:

- (a) Decides that, in addition to concessional loans (senior and subordinated) and the classical use of grants, the Fund will also use grants to provide guarantees and equity;
- (b) Agrees that, as is the case with classical grants and concessional loans, the Fund will take risk exposure to climate programmes and projects through accredited intermediaries so as to benefit from said intermediaries' due-diligence processes and local knowledge;
- (c) Agrees that the potential losses to the Fund from guarantees and equity positions will not exceed the amount of the grants used to issue said guarantees and equity positions;
- (d) Requests the Secretariat to carry out, [24 months] following the first financial support operations, a review of lessons learned from the first phase of operations, under the oversight of the Risk Management Committee.



Annex II: Ranking the attractiveness of additional financial instruments

Instrument		INVESTMENT INSTRUMENT ATTRIBUTES		
		Leverage / Crowding In Capabilities	Risk-bearing capacity	Other Benefits
Grants	Already Approved for Deployment.	High Capacity to crowd in private sector investment by enhancing the credit profile of an investment.	High	Medium Catalytic impact via the Demonstration Effect (Good for Regional Test Cases)
Debt	Already Approved for Deployment.	High Whilst senior debt has medium capacity to crowd-in other debt (e.g. demonstration effect; anchor investor), subordinated debt has a high capacity to crowd-in other debt by enhancing the credit worthiness of a project.	Medium / High.	Medium Demonstration effect; anchor investor effect.
Guarantees	Seeking Approval	Very High Potentially unlocks investment in all of the other instrument classes	Medium/High Depends on extent of guarantee	Very High Close the funding gap and mobilize local private sector investment on a potentially transformative scale.
Equity (Non-debt risk-bearing instruments)	Seeking Approval	High Capacity to enhance the creditworthiness of an investment and make it more attractive for debt providers	High By definition, equity is considered to be risk-bearing capital	High Can adapt to a wide range of situations (e.g. patient long-term capital, provide the Fund with material influence over a project/programme)

Annex III: Illustrative examples

1. **Global Environment Facility (GEF):** The GEF is an environmental fund with climate change as one of its seven focal areas. The GEF only disburses finance through grants, which are intermediated and implemented by United Nations agencies and multilateral development banks (MDBs). In addition to channelling direct grant support to projects, intermediaries can use GEF grants to structure funding in the form of other instruments, e.g. the Global Environment Facility–International Finance Corporation (GEF-IFC) Earth Fund, which finances private sector projects and financing facilities such as the CleanTech Innovation Facility, was partly capitalized by GEF contributions. GEF-supported projects have been successful in attracting private sector co-financing in climate-relevant projects: almost half of the climate-relevant projects reviewed in a recent study included a private sector capital contribution, ranging from 0.5 per cent to 97.3 per cent, and averaging 36.6 per cent, of the total financing. Despite its success—especially in the case of energy efficiency financing—several internal barriers, including long processing times and internal allocation policies, appear to have prevented these grants from instigating more effective engagement with the private sector.¹
2. **Climate Investment Funds (CIFs):** The CIFs are comprised of two international climate change funds: the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), the latter serving as an overarching fund to support three targeted programs: the Forest Investment Program (FIP), Scaling Up Renewable Energy Program (SREP), and the Pilot Program for Climate Resilience (PPCR). Like the GEF, the CIFs work through multilateral development banks (MDBs), which serve as both intermediaries and implementing entities. As of completion of the recent Independent Evaluation Report, only the CTF and SREP had endorsed investment plans envisioning private sector co-financing for projects, the CTF more so than the SREP. The vast majority of private sector projects received concessional project finance loans. Private sector participation in CIF projects has varied: the share of private sector finance in total ranged from 12 per cent in the Morocco Ouarzazate Concentrated solar power (CSP) project to 78 per cent in Mexico's Renewable Energy Program (both under the CTF).² CTF concessional funding as part of an overall project finance package can be critical to attracting and securing private sector participation in a project, as it was in the case of Morocco's 160 MW, CSP project, worth US\$ 1.3 billion, which attracted a consortium of private developers to provide US\$ 190 million of equity capital.³ CIF concessional loans can also be used to support on-lending by local financial institutions. This was the case in Turkey, where roughly US\$ 150 million of CTF concessional funding and US\$ 800 million of MDB funds have helped leverage over US\$ 500 million in private sector investment in renewable energy and energy efficiency by supporting on-lending (including to small and medium enterprises [SMEs] and households) for sustainable energy investments.⁴ A major barrier to further private sector engagement in CIF projects has been the length of the investment plan process as—some private sector players involved at the outset lose patience and walk away. The CIFs have attempted to address this by developing dedicated private sector programmes and set-asides that are intended to speed up the process while still being aligned with countries' investment plans and priorities.⁵
3. **International Finance Corporation (IFC):** Historically, most IFC investments have been made on a commercial basis, however GEF, CIF, and bilateral donor funding has been a

¹ <http://www.wri.org/publication/public-financing-instruments-leverage-private-capital-climate-relevant-investment>.

² <http://www.cifevaluation.org/index.html>.

³ <http://climatepolicyinitiative.org/publication/san-giorgio-group-case-study-ouarzazate-i-csp/> and <http://www.cifevaluation.org/index.html>.

⁴ <http://www.cifevaluation.org/index.html>.

⁵ <http://www.cifevaluation.org/index.html>.

major source of concessional financing for IFC projects⁶—what it calls “Blended Finance.” The outside funds are often matched by IFC resources and can be deployed as concessional loans, guarantees, equity, and grants for private sector projects that would generally not have proceeded due to market barriers.⁷ In a recent study, the IFC reported that between 2006 and 2013, it had committed 39 investment transactions using blended finance: 15 of these transactions have used guarantee instruments, 23 have used debt products, and one project has used equity. Nearly three quarters of these projects are investments made through local financial intermediaries (FIs), where every dollar of concessional finance to FIs has leveraged more than US\$ 13.8 of investment on the ground, including US\$ 9 of IFC investment that would not have occurred without such risk mitigation support. These projects often involve an emerging area (venture capital or early stage funding of Cleantech) or activities that have not yet entered the mainstream FI environment. Of the remaining ten blended finance projects, six are in the power generation sector. Leverage ratios for these projects, at an average of 19.4 for the total project cost and 3.5 for IFC funds to donor funds, conceal significant variations between technologies. The IFC notes that the fact that a power sector project even seeks concessional support suggests limited commercial viability without such support, which in turn suggests a greater need for the concessional support.⁸ The challenge with the IFC’s blended finance is that it rarely reaches least developed countries (LDCs) and small island developing States (SIDs). This stems from the IFC’s mandate to respond to private sector demand with its general cap on providing more than 25 per cent of the total financing requirement. It is thus limited in its ability to create direct demand for particular types of investment. As a result of this and higher levels of private sector activity in relatively developed markets, projects tend to be located in middle-income countries.⁹

4. **African Development Bank’s (AfDB) Sustainable Energy Fund for Africa (SEFA):** SEFA is a bilateral trust fund administered by the Energy, Environment and Climate Change Department of the AfDB—anchored in a US\$ 57 million commitment by the Government of Denmark—that supports small and medium clean energy and energy efficiency projects in Africa. SEFA has two windows, both of which incorporate technical assistance. The first window provides project preparation grants for private project developers/promoters for renewable energy and energy efficiency projects with total capital investment needs in the range of US\$ 30-75 million. The other window provides seed/growth capital (equity) for SMEs with renewable energy and energy efficiency projects requiring total investments of US\$ 10-30 million.¹⁰ SEFA’s equity window operates through the African Renewable Energy Fund (AREF), a US\$ 100 million fund which closed in March 2014. SEFA provided AREF with US\$ 25 million of equity (alongside an equity contribution of the same amount from the AfDB) plus a US\$ 10 million Project Support Facility to assist the development of bankable projects.¹¹ Established in 2011 and operational in 2012, SEFA is a relatively new fund so it is too soon to gauge its success at crowding in private sector investment.

5. **Geothermal Risk Mitigation Facility (GRMF):** Launched in 2012 with support from the African Union Commission (AUC), the German Federal Ministry for Economic Cooperation

⁶ http://climatepolicyinitiative.org/wp-content/uploads/2011/12/Patel_Climate-Related-Investment-at-IFC.pdf.

⁷ http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/cb_home/mobilizing+climate+finance/blendedfinance.

⁸ http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/cb_home/publications/publication_leverage_ifc_climate_investments.

⁹ <http://www.wri.org/publication/public-financing-instruments-leverage-private-capital-climate-relevant-investment>.

¹⁰ <http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/sustainable-energy-fund-for-africa/>.

¹¹ <http://www.afdb.org/en/news-and-events/article/african-renewable-energy-fund-aref-launched-with-100m-committed-capital-and-anchor-investments-from-afdb-and-sefa-12901/>.

and Development (BMZ) and the European Union (EU)-Africa Infrastructure Trust Fund via KfW Entwicklungsbank (KfW), the GRMF is a € 50 million facility that provides grants to co-finance surface studies and drilling projects in East Africa. GRMF's support helps to mitigate the geothermal exploration risk for specific projects, which should improve their access to equity and other funding sources; thus the facility could play a catalytic role in establishing geothermal energy as a strategic option in power expansion planning of participating Eastern Africa countries. In turn, reduced risks and costs for early stage geothermal development are expected to encourage further geothermal investments by both public and private sector actors.¹² Grant funding amounts range from 20 per cent of infrastructure costs, 80 per cent for surface studies, 40 per cent for exploration testing and drilling, and 30 per cent for further testing and drilling for continued projects. GRMF provides grants to developers through competitive two-stage application processes. It selected five projects from public and private sector developers in Ethiopia and Kenya in the first application round, with an overall grant amount of US\$ 22 million. Most of the grant agreements were signed in spring 2014. The GRMF is currently in the evaluation phase of its second application round.¹³

6. African Risk Capacity (ARC): ARC is a continental sovereign risk pool and early response mechanism that aims to channel investment into adaptation activities to safeguard communities from drought and other climate change-induced impacts. Jointly developed by the African Union Commission (AUC) and the World Food Program (WFP), ARC will use *Africa RiskView*, an advanced satellite weather surveillance and software platform developed by the WFP, to estimate and trigger readily available funds to African countries hit by severe weather events. The pan-African disaster risk pool should be financially effective since such events do not happen in the same year in all parts of the continent.¹⁴ ARC's cost benefit analysis estimates the economic benefits of acting early. Thus, protecting a household's economic growth potential could prevent losses of up to US\$ 1,300 per household. In total, they estimate that one dollar spent on early intervention through ARC—i.e. scaling up national, regional, and local social safety net programmes in the first three months after a drought—can save nearly US\$ 3.5 spent after a crisis unfolds and households have initiated negative coping methods.¹⁵ Germany (KfW) and the United Kingdom (Department for International Development [DFID]) have made capital contribution commitments of € 50 million and £ 90 million to the insurance fund (to be returned without interest by 2034).¹⁶ Other donors, including the Swiss Agency for Development and Cooperation (DEZA) and the Swedish International Development Cooperation Agency (SIDA), have supported the development of the model and various types of preparatory work.¹⁷ In May 2014, ARC launched the first-ever African catastrophe insurance pool, issuing policies to Kenya, Mauritania, Mozambique, Niger and Senegal. Over time, ARC hopes to crowd-in international reinsurers to take substantial risks on an uncertain market at an affordable price.¹⁸

7. Caribbean Catastrophe Risk Insurance Facility (CCRIF): Launched in 2007, CCRIF was the first multi-country risk pooling facility. CCRIF was developed under the technical leadership of the World Bank and with a grant from the Government of Japan. It was capitalized

¹² <http://www.grmf-eastafrica.org/about>.

¹³ <http://www.grmf-eastafrica.org/news/116>Status+update+on+GRMF>.

¹⁴ <http://www.africanriskcapacity.org/about/vision-and-mission>.

¹⁵ <http://www.wri.org/blog/2013/10/qa-african-risk-capacity-how-innovative-financing-models-can-build-climate-change>.

¹⁶ https://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/s4_syroka_african_risk_capacity_unfccc_scf_21-22_june_2014_final.pdf.

¹⁷ https://www.kfw-entwicklungsbank.de/International-financing/KfW-Development-Bank/About-us/News/News-Details_184832.html.

¹⁸ <http://www.sida.se/contentassets/e91775f6a3634956bcac4a8841ba00ba/final-gap-report-26-5.docx>.

through grant contributions to a US\$ 71 million multi-donor Trust Fund by the Government of Canada, the European Union, the World Bank, the governments of the UK and France, the Caribbean Development Bank and the governments of Ireland and Bermuda. The membership fees paid by participating governments also made a contribution.¹⁹ The facility is designed to limit the financial impact of catastrophic earthquakes and hurricanes on its 16 Caribbean member governments by quickly providing financial liquidity when a policy is triggered. A secondary benefit is a more favourable investor sentiment—particularly in the tourism sector—stimulated by increased investor trust in the governments' disaster risk management strategy and ability to quickly repair the damage caused by the disaster.²⁰ From 2007–2013, CCRIF had made over US\$ 32 million in payouts, all within one month of the disaster/trigger event. There have been no payouts since 2010.²¹ On 1 July, 2014, the International Bank for Reconstruction and Development (IBRD) issued a three-year, US\$ 30 million first catastrophe ("cat") bond to benefit CCRIF—allowing the facility to tap into the capital markets in order to diversify its sources of risk capital beyond the traditional reinsurance market and keep policy prices low.²²

8. **Green Credit Lines (GCLs):** GCLs provide appropriate funding and dedicated technical support to development banks and local commercial banks in developing countries with the aim of building capacity and overcoming the financial and technical barriers to scaled-up investment. Bilateral and multilateral finance institutions have developed partnerships with financial institutions in developing countries to provide them with GCLs, which often include a mix of loans, guarantees, and technical assistance grants. GCLs help recipient banks develop their climate strategy and climate finance portfolio and mitigate credit risk; in turn, they promote the financing of private green investments that comply with climate-friendly eligibility criteria and support the expansion of private companies' and households' green investments through incentives such as low interest rates or long maturities. Some institutions, like KfW, provide grants for consultancy services to support the implementation of energy efficiency and renewable energy (EE/RE) loan products and the institutionalization of EE/RE within the partner lending institutions. This enables them to introduce a new loan product, gain access to new client groups, and gain early entry into a growing green market.²³

9. **Project Bond Credit Enhancement Facility (PBCE Facility):** The PBCE Facility was developed by the European Commission (EC) and European Investment Bank (EIB) to enable transport, energy, broadband and ICT infrastructure projects to access the capital markets in a cost-effective manner. It is a subordinated instrument (either a loan or contingent facility) to support senior project bonds and enhance their credit rating. The enhancement provided by the PBCE Facility benefits both project companies (and their sponsors) and bond investors who are reluctant to take construction risk.²⁴ The PBCE provides credit-positive features in the form of extra liquidity or reduced senior debt leverage, but it is not always enough on its own to enhance the credit quality of senior debt, particularly for those projects with weak fundamentals.²⁵

10. **Overseas Private Investment Corporation's (OPIC) Global Renewable Resources Fund call:** OPIC issued its Global Renewable Resources Fund call for proposals following its announcement at the 2010 United Nations Climate Change Conference in Cancun that it would provide at least US\$ 300 million in financing for new private equity investment funds in

¹⁹ <http://www.ccrif.org/content/about-us>.

²⁰ <http://www.worldbank.org/en/results/2013/09/10/caribbean-catastrophe-risk-insurance-project-world-bank>.

²¹ <http://www.ccrif.org/content/about-us>.

²² <http://www.ccrif.org/news/ccrif-members-benefit-world-bank%20%99s-first-ever-cat-bond-issuance>.

²³ <http://www.unep.org/pdf/UNEP Innovative climate finance final.pdf>.

²⁴ <http://www.eib.org/products/project-bonds/>.

²⁵ <http://www.infrastructurereviews.com/2012/11/13/credit-faq-how-europe-s-new-credit-enhancements-for-project-finance-bonds-could-affect-ratings/>.

emerging markets. OPIC approved nearly US\$ 500 million of financing for five funds it selected from among 56 respondents to the call.²⁶ While OPIC is not authorized to conduct equity investments itself, it can provide debt capital to private equity (PE) funds that invest in developing countries. OPIC provides senior debt of up to US\$ 250 million to fund PE funds and funds of funds. OPIC selects the PE funds through a competitive process, but the fund managers make investment decisions. OPIC's finance to PE funds fills an important gap in climate-relevant sectors, but the ability of these funds to attract private sector co-investment remains to be seen, partly as a result of the recent global financial crisis. Indeed, a recent study from 2013 pointed out that funds had not received commitments or failed to reach a financial close because of a slowdown in emerging market private equity fundraising.²⁷

11. **US-Africa Clean Energy Finance Initiative (US-ACEF):** In June 2012, the United States State Department, OPIC, the US Trade and Development Agency (USTDA), and the US Agency for International Development (USAID) launched the US-Africa Clean Energy Finance Initiative (US-ACEF). The US\$ 20 million initiative is designed to align US government aid, technical assistance, and development finance resources to leverage private sector investment in clean energy projects in Africa by supporting early-stage project development.²⁸ Projects are eligible for grants and technical assistance from participating US Government agencies, as well as the suite of OPIC's financial instruments, including loans, loan guarantees, insurance, and debt investments in PE funds. To date, ACEF has pledged support to over 25 clean energy projects in ten African countries.²⁹

²⁶ <http://www.opic.gov/press-releases/2011/opic-board-approves-nearly-500-million-five-renewable-resources-investment-funds>.

²⁷ <http://www.wri.org/publication/unlocking-private-climate-investment-focus-on-opic-and-ex-im-bank>.

²⁸ <http://www.opic.gov/sites/default/files/files/ACEF%20One-Pager%2005%2021%202013%20final.pdf>.

²⁹ <http://www.opic.gov/blog/opic-in-action/highlights-from-the-field-acef-supports-african-renewable-energy-projects-for-enduring-development>.

Annex IV: Examples of other initiatives

Table 1: Use of financial instruments in climate finance initiatives

Parent Institution	Initiative/ Programme name	Partners	Primary instrument(s) used to mobilize private sector	Target sectors	Investor types, i.e. those putting money into the initiative/ programme	Insight
German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and KfW Entwicklungsbank	Global Climate Partnership Fund	Ministry of Foreign Affairs of Denmark, IFC, Deutsche Bank (investor and investment manager), OeEB, UK Department of Energy and Climate Change	First-loss equity (C-shares) in the waterfall share structure	Energy efficiency and renewable energy	Targeted investors are donor agencies, governments, international financial institutions and professional private sector investors (including institutional investors)	The tiered shareholder structure, specifically donor government contributions to the C-shares, de-risks returns for private sector investors and has been critical to the GCPF's ability to attract institutional investment. A German pension fund provided the first private investment—US\$ 30 million—in 2012, and Deutsche Bank has also invested at the fund level.
Gavi, the Vaccine Alliance	International Finance Facility for Immunisation (IFFIm)	Gavi Alliance: developing country and donor governments, World Health Organization, UNICEF, the World Bank, the vaccine industry in both industrialized and developing countries, research and technical agencies, civil society organizations and the Bill & Melinda Gates Foundation	Bond	Health: vaccinations	Capital market investors	IFFIm bundles donor pledges together and sells them as a bond to capital markets investors. The unlikelihood of donor governments defaulting makes these bonds very low risk and therefore more attractive to investors. The approach allows for greater predictability of funds in the short-term and more flexibility for donors. However, there is some concern that when the bond issuances stop and front-loaded funds have gone to Gavi, resources will be scarce since donors have to pay bond-holders for the life of the bond (ten years).

Parent Institution	Initiative/ Programme name	Partners	Primary instrument(s) used to mobilize private sector	Target sectors	Investor types, i.e. those putting money into the initiative/ programme	Insight
Various	Green bonds (general)	Various, including ESG rating agencies, certification and standard-setting organizations (e.g. Climate Bonds Initiatives)	Three main types: -Use of proceeds -Use of proceeds' revenue -Project securitized (asset backed)	Environment ally beneficial	Capital market investors	Green bonds allow public institutions—national, bilateral, and multilateral development banks, development finance institutions, and municipal and national governments—to tap into the global bond market, estimated at US\$ 80 trillion. The strong credit ratings of issuing institutions help to attract investors looking for low-risk, stable returns as well as environmental benefits. There is ongoing debate over the definition of and standards for green bonds; critics worry that certain activities that benefit from “green” bond sales are in fact not green at all.
IFC Asset Management Company and UK Department for International Development (DFID)	Climate Catalyst Fund	Governments of Canada, Norway and the United Kingdom of Great Britain and Northern Ireland; the Japan Bank for International Cooperation (all investors in the fund)	Private equity fund of funds	Low-carbon power generation, energy and water efficiency, and resource efficiency	Pension funds, sovereign wealth funds (SWFs), governments	AMC raised US\$ 418 million for the Climate Catalyst Fund, which reached financial close in July 2014. The proven track record of the IFC AMC helped them attract pension funds and SWFs. The Fund also has the benefit of having access to the IFC's investment pipeline in selected specialist investment funds.



Parent Institution	Initiative/ Programme name	Partners	Primary instrument(s) used to mobilize private sector	Target sectors	Investor types, i.e. those putting money into the initiative/ programme	Insight
ADB and DFID	Climate Public-Private Partnership Fund (CP3-Asia)	n/a	Private equity fund of funds	Low-carbon infrastructure	Institutional investors	CP3 is finalizing its first financial close in Q3 2014 of US\$ 400 million, and expects to raise the additional US\$ 600 million within 18 months. Meanwhile, the Clean Technology Fund Trust Fund Committee recently approved the ADB's proposal to establish a US\$ 35 million mezzanine side-car facility to help projects overcome the financing gap between debt and equity. This suggests that a variety of financing instruments—debt, equity and subordinate debt—are required to help projects become viable enough for funds like CP3 to invest.

Table 2: Examples of concessional facilities and instruments designed to crowd in private climate investments

Parent institution	Initiative/ Programme name	Partners	Primary instrument(s)	Target sectors	Blending/co-finance (with other public funds) core to approach ¹	Private sector recipients ²	Insight
Global Environment Facility (GEF)	Various	United Nations agencies, MDBs	Grants	Various	Yes	Varies	By deploying its grants as a first loss partial guarantee funding with subordinated recoveries, GEF permits other funding and implementing agencies to gain experience and confidence in a new sector. However, long processing times and internal allocation policies can limit further private sector engagement.
Climate Investment Funds (CIFs)	Clean Technology Fund (CTF), Forest Investment Program (FIP), Scaling Up Renewable Energy Program (SREP), and the Pilot Program for Climate Resilience (PPCR)	MDBs	Grants and loans (though authorized to use other instruments)	Various	Yes	Varies	CIF funding has been successful at attracting co-financing from other sources, including the private sector. The lengthy investment plan process can cause some private sector players involved at the outset lose patience and walk away.
International Finance Corporation (IFC)	Blended Finance	GEF, CIF, and bilateral donor funding has been a major source of concessional financing for IFC projects	Loans and grants (as well as guarantees and equity)	Various	Yes	Varies; often local financial institutions	IFC's blended funds can help climate-relevant investments overcome the higher costs or perceived risks that inhibit fully commercial financing; however, projects tend to be located in middle-income countries.

African Development Bank (AfDB)	Sustainable Energy Fund for Africa (SEFA)	Government of Denmark, Global Environment Facility	Grants and technical assistance (as well as equity)	Renewable energy and energy efficiency (small and medium-scale projects)	Not generally; grants for project preparation	Project developers	Established in 2011 and operational in 2012. SEFA's advisory and grant resources for technical assistance and capacity-building, as well as investment capital, are intended to both offset preparation costs and crowd-in additional investment. Still too early to gauge success/challenges.
African Union Commission (AUC)	Geothermal Risk Mitigation Facility (GRMF)	German Federal Ministry for Economic Cooperation and Development (BMZ) and the European Union-Africa Infrastructure Trust Fund via KfW Entwicklungsbank (KfW)	Grants	Geothermal (exploration)	Yes	Project developers	GRMF's support helps to mitigate the geothermal exploration risk for specific projects, which should improve their access to equity and other funding sources. Launched in early 2012, most of the grant agreements from first application round were signed in spring 2014.
African Union Commission	African Risk Capacity	World Food Programme	Insurance through the "Specialized Agency" provides capacity-building to countries; approves contingency plans and monitors their implementation	Agriculture	No	Farmers and pastoralists (indirectly through their governments)	ARC's sovereign risk pool and early response mechanism aims to channel investment into adaptation activities to safeguard communities from drought and other climate change-induced impacts. The actual insurance pool was launched in May 2014, issuing policies to Kenya, Mauritania, Mozambique, Niger and Senegal. Over time, ARC hopes to crowd in international reinsurers to take substantial risks in an uncertain market at an affordable price.



Caribbean Development Bank	Caribbean Catastrophe Risk Insurance Facility (CCRIF)	World Bank, Multi-Donor trust fund	Insurance	Various; infrastructure, tourism	No	n/a However, improved disaster risk management benefits the tourism sector (and investors therein)	The facility limits the financial impact from catastrophic earthquakes and hurricanes by quickly providing financial liquidity when a policy is triggered. A secondary benefit is investors' greater confidence in the governments' disaster risk management/response. CCRIF had made over USD 32 million in payouts from 2007-2013; however, there have been no payouts since 2010. This suggests that there may be a barrier preventing greater use of the insurance (e.g. high policy prices).
Various bilateral and multilateral finance institutions	Green Credit Lines (GCL)	Various	Often include a mix of loans, guarantees, and technical assistance grants	Various	Yes	Development banks and local commercial banks	GCLs promote the financing of private green investments that comply with climate-friendly eligibility criteria and support the expansion of private companies and households' green investments through incentives like low interest rates or long maturities.
European Investment Bank	Project Bond Credit Enhancement Facility (PBCE)	European Commission	Subordinate loan or contingent facility	Transport, energy, broadband and ICT infrastructure	Yes	Project developers	The PBCE allows projects to access the capital markets in a cost-effective manner. While it provides credit-positive features in the form of either extra liquidity or reduced senior debt leverage, it is not enough on its own to enhance the credit quality of senior debt in all cases, particularly for those projects with weak fundamentals.

Overseas Private Investment Corporation (OPIC)	Global Renewable Resources Fund call	n/a	Concessional loan	Various	Yes	Private equity funds	OPIC's finance to PE funds fills an important gap in climate-relevant sectors in developing countries (where PE funding is scarce), but the ability of these funds to attract private sector co-investment remains to be seen; several funds have stalled or failed to reach financial close.
United States Department of State, OPIC, the United States Trade and Development Agency (USTDA), and the United States Agency for International Development (USAid)	US-Africa Clean Energy Finance Initiative (US-ACEF)	n/a	Grants, concessional loans, loan guarantees, insurance, technical assistance	Renewable energy and energy efficiency	Yes	Project developers	US-ACEF is designed to align United States government aid, technical assistance, and development finance resources to leverage private sector investment in clean energy projects in Africa by supporting early stage project development. Established in June 2012, it is still too early to gauge success. US-ACEF has committed support to over 25 clean energy projects in 10 countries in Africa.