

# CLIMATE INVESTMENT FUNDS

CTF/TFC.16/5  
November 6, 2015

---

Meeting of the CTF Trust Fund Committee  
Washington, D.C.  
Tuesday, November 10, 2015

Agenda Item 4

## **NEW FINANCING MODALITIES FOR THE CLEAN TECHNOLOGY FUND (CTF)**

**Proposed decision:**

The CTF Trust Fund Committee, having discussed the document CTF/TFC.16/5, *New Financing Modalities for the Clean Technology Fund*, agrees that the Clean Technology Fund (CTF) has:

- Building on the extensive knowledge, experience and networks of the multilateral development banks (MDBs), expanded the scale and brought down the cost of key mitigation activities in developing countries;
- Evolved in its use of financial instruments and leveraged private sector investments; and
- Employed effective pipeline management system, including over programming, for accelerated delivery of the CTF resources.

The Committee further agrees that the key financial indicators of the CTF relating to leverage, liquidity relative to immediate cash flow needs, and its low administrative costs show the CTF to be in a good financial position relative to comparators among supranational financing vehicles.

The Committee appreciates the work done and analysis conducted by the CIF Administrative Unit and the MDBs to explore how best to build on the CTF's financial and operational strength, experience and unique "MDB-collective" business model to increase the scale and broaden the range of the capital engaged.

Taking into account the principles expressed in the paper the Committee requests the CIF Administrative Unit, in collaboration with the MDBs and the Trustee, to further explore detailed modalities, including legal and institutional changes required, to strengthen the current business model of the CTF in mobilizing additional capital from public and private sources and deploy its resources efficiently and effectively for enhanced mitigation actions in developing countries. The Committee would review these modalities in conjunction with the discussion of the future of the CIF at its next meeting in May 2016.

**Contents**

- I. Introduction .....4**
- II. Background .....4**
  - a) Clean Technology Fund (CTF).....4**
  - b) CTF Finances Today and the Present Review .....6**
  - c) The Value Proposition for CTF Moving Forward .....7**
- III. CTF Going Forward: Key Options .....9**
- IV. CTF Opportunities: Contributions from the MDBs .....12**
- V. Conclusion.....13**
- VI. ANNEX 1: KEY FINANCIAL INDICATORS.....14**
- VII. ANNEX 2: CTF FINANCIAL STATEMENTS (PRO FORMA) .....15**
- VIII. ANNEX 3: INDICATIVE CASH FLOW PROJECTIONS (10-yr.) .....17**
- IX. ANNEX 4: “NEW” CTF FINANCES (SIMPLIFIED) .....20**
- X. ANNEX 5: LEGAL FRAMEWORK .....21**
- XI. ANNEX 6: CTF FINANCIAL INSTRUMENTS .....24**

## I. Introduction

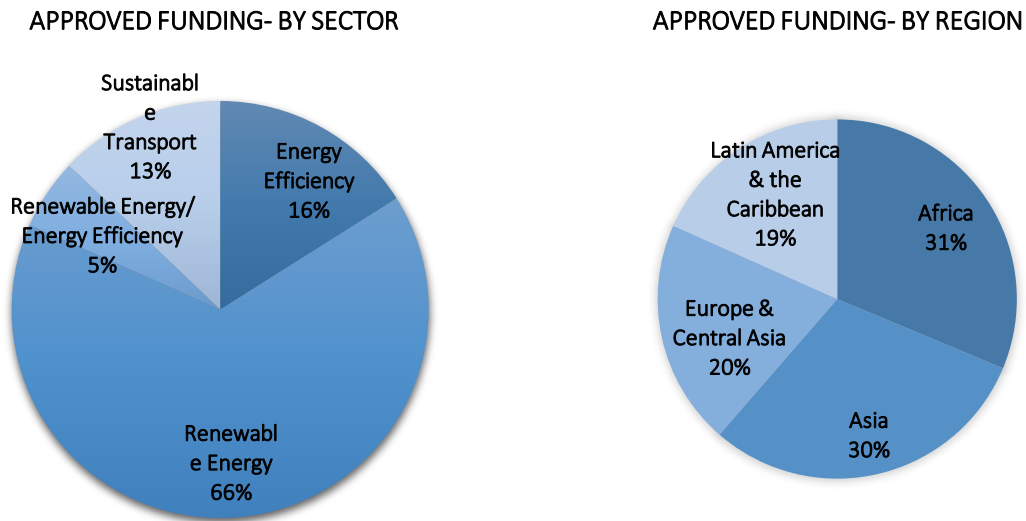
1. At the last CTF Trust Fund Committee (“TFC”) meeting in May 2015, the Committee invited the CIF Administrative Unit, working with the MDBs and in consultation with Committee members, to present the TFC with options for alternative financing models and increasing resource availability in the CTF.
2. The CIF Administrative Unit invited the six MDBs to form a working group together with external experts with extensive experience in finance, fund structuring and the related legal considerations. The MDBs nominated specialists from relevant departments within their institutions. The Trustee and its legal advisers also participated in the work, engaging the IBRD financial risk management team to provide the financial modeling and analytic input underpinning the recommendations outlined herein.
3. Three MDBs (AFDB, IDB and WB) submitted detailed proposals covering various approaches to reinforcing the CTF capital structure and making more flexible and responsive the CTF instruments MDBs can use to further CTF-qualified activities. These proposals included, *inter alia*, monetization of existing loans to raise new funding and formation of a risk sharing facility.
4. This paper summarizes the analysis undertaken over the past few months, the options considered by the team, and its conclusion and recommendation.

## II. Background

### a) Clean Technology Fund (CTF)

5. The \$5.3 billion CTF was established to provide scaled-up financing to middle income countries to contribute to the demonstration, deployment and transfer of low carbon technologies with a significant potential for long-term greenhouse gas emissions savings. It differs significantly from other mitigation-focused, multilateral climate instruments by focusing exclusively on larger clean technology transactions in a smaller number of countries (15 middle-income countries and the Middle East and North Africa region) to lower technology costs, address key risks in key sectors and in the process, stimulate private sector participation and catalyze replicable, transformative change. Projects have included, *inter alia*, low-carbon (primarily renewable) energy, energy efficiency, transportation (modal shifts to public transportation, improved fuel economy, and fuel switching) and large-scale adoption of energy efficient technologies and other demand management techniques in the industrial and commercial and residential building sectors. Current sector and country allocations are shown in Figure 1, below.

Figure 1: Funding Approved by TFC- By SECTOR/ REGION



6. From the outset, to ensure rapid uptake and a concomitant “proof of concept” for its multi-MDB business model, CTF emphasized highly concessional, long-term sovereign loans for large-scale projects. It also has had an active grant-making component. At the same time MDBs utilizing CTF co-financing have understood that its greatest potential as a catalyst for private investment at scale lies in the flexibility it has to offer a full range of instruments (including guarantees, equity investments, and senior and mezzanine lending) as part of financing packages developed for key private sector projects in CTF recipient countries. This approach has the added advantage of providing a better risk-adjusted return to CTF for the financing it provides.
7. It was this realization that in 2013 led to the launch of the Dedicated Private Sector Programs (DPSPs) with the objective to finance operations that can deliver scale (in terms of development results and impact, private sector leverage and investment from CTF financing) and speed (faster deployment of CTF resources, more efficient processing procedures), while at the same time maintaining a strong link to country priorities and CTF program objectives. The DPSP is underpinned by a programmatic approach where MDBs collaboratively identified funding opportunities.
8. Currently, the CTF has a \$6.1 billion pipeline of 134 projects and programs, expecting co-financing of \$49 billion from various sources. CTF allocations are projected to result in approximately 1.5 billion tons of CO2 emission reductions over their lifecycle—equivalent to taking 315 million cars off the road. CTF \$3.3 billion has been approved by MDBs for 71 projects, expecting more than \$32 billion in co-financing. CTF projects aim to deliver 15 GW of renewable energy capacity of which close to 20% is already installed. As of June

2015, CTF \$1.3 billion has been disbursed. The DPSP, currently in its second phase, has allocated a total of \$508.5 million to eight programs reaching countries as diverse as Chile, Colombia, Indonesia, Mexico, Turkey, under six thematic areas: geothermal power, mini-grids, mezzanine finance, energy efficiency, solar photovoltaic power, and early stage renewable energy. Within each thematic area, MDBs are developing sub-programs/projects. Currently, there are 21 sub-programs/projects under the six DPSP thematic areas.

b) CTF Finances Today and the Present Review

9. In 2013, among other measures to improve the efficiency and effectiveness of its resource utilization, TFC approved over-programming CTF to the extent of 30% of uncommitted resources. Over-programming has enabled more projects from new and existing countries to enter the CTF pipeline. On the other hand, as a result of over-programming, the current CTF pipeline includes more projects than its resources can deliver.
10. In May 2015, the CTF TFC asked the CIF Administrative Unit, in collaboration with MDBs, to review the pipeline, including expected timelines of projects and potential withdrawals, and present a clear picture of resource availability and the USD-equivalent amount associated with the approved over-programming. As of September 30, 2015, this amount was USD 724 million, and progress in implementing projects in the pipeline suggests that a shortfall in CTF resources could occur as early as December 2015. It is, therefore, important for the Committee to secure new and additional resources and explore alternative approaches to financing CTF in order for it to continue its proven catalytic role in facilitating the flow of cost-effective financing from major global savings pools into climate-related investments in CTF recipient countries.
11. In this connection, it is important to note that customary financial indicators suggest that CTF has been a cost-effective vehicle for its sovereign Contributors' deployment of public resources in support of climate-related projects and programs. Annex 1 shows these indicators across a varied group of multilateral financing vehicles. Annex 2 shows financial statements for CTF (balance sheet, income statement and statement of loans, equity investments and guarantees outstanding), from which are derived the CTF figures in Annex 1.
12. The key messages in Annex 1 are clear. First, the basics of CTF as a financing vehicle are in place: leverage is minimal, liquidity at present is good and CTF has shown a positive (though small) return on equity.<sup>1</sup> The latter, of course, reflects another key point: CTF administrative costs – including both charges assessed by MDBs as implementers and the

---

<sup>1</sup> It is important to understand that the financial indicators shown in Annex 1 should, and do, vary significantly depending on the capital structure and business activities of different entities. IFC, for instance, operates with a much lower leverage ratio given the relatively higher credit risk in its private-sector portfolio.

costs associated with trusteeship and administration in The World Bank - have been very low.

13. On the other hand, the financials clearly convey the position in which CTF finds itself at present: In its public sector business it is an especially concessional financier, both in respect of the long tenor (20-40 years) of its lending, extremely long grace period before principal repayments begin, zero interest rate and extremely low administrative fee (in most of its current public sector loan book it is 0.25% - only 1/3<sup>rd</sup> the fee charged by IDA, and 1/3<sup>rd</sup> what CTF itself pays for “concessional” funds it borrows from some of its Contributors).
14. It will be several more years before CTF begins receiving meaningful reflows on its public sector lending activity. As a consequence, in the absence of new sources of financing, disbursements on CTF’s existing commitments likely will exhaust its working capital and it will cease operations. Given the priority the international community increasingly assigns to facilitating climate finance, and the proven effectiveness of CTF’s business model, this would not be a desirable outcome.

**c) The Value Proposition for CTF Moving Forward**

15. The CTF concept was and is straightforward (and compelling). Through CTF, sovereign contributors provide additional capital to MDBs, earmarked for climate-related investments, to expand the scale and bring down the cost of key mitigation activities in developing countries.
16. From the outset, CTF contributors recognized the value of building on the unique and extensive knowledge, experience and networks of the MDBs to source and implement these projects. Contributors also understood that MDBs are especially well placed to assure adherence to fiduciary standards and safeguards essential in the deployment of public resources.
17. The record to date, outlined above, has been impressive, even more so because of the complex nature of the activities themselves and the related MDB authorizing and fiduciary environments, and the correspondingly long lead times. From the outset, CTF has provided extreme concessionality as a way to “jump-start” countries and MDBs’ engagement in low carbon investments, and thereby encourage the prioritization of climate-change investments in country and in MDBs’ business mix. CTF’s current asset profile is illustrative: approximately 80% of projects under implementation carry zero interest, annual administrative fees as low as 0.25% and extremely long maturities and grace periods. Its engagement in private-sector operations – a rapidly growing part of its business has also been on concessional terms when the more-varied structures and risks of those operations are taken into account. CTF’s concessionality, together with the effectiveness of MDBs’ efforts to incorporate CTF financing in their respective country

programs and operations, have met the aspirations of those that created it: CTF operations are up-and-running, countries and MDBs are fully engaged and tangible and substantive results have been obtained on the ground.

**The question now for the CTF is how to build on its unique “pure green MDB driven” business model to increase the scale and broaden the range of the capital engaged.** In particular, this

**Box 2: IBRD – A Model of Efficiency in the Use of Public Credit**

While it was established early in the process of institutionalization of savings in the developed countries, the International Bank for Reconstruction and Development's (IBRD) capital structure and business model were and are great solutions to the challenging of leveraging global public credit to mobilize savings to fund public purposes. The IBRD capital structure, coupled with conservative financial management, has enabled it to offer a triple-A, fixed-income investment opportunity even though (1) only a handful of its members carry that rating themselves, (2) its loan assets are obligations of unrated or much less highly rated emerging market countries, and (3) IBRD leverages more than three times its paid-in capital and retained earnings. The contingent obligation on the books of IBRD's owners—its “callable capital”—has never been drawn, even through successive emerging market and global financial crises.

A key point for the present discussion is that IBRD's triple-A-rated bonds go into the high-grade, liquid part of institutional investors' portfolios—the asset class for which investors expect the lowest return, given the high credit rating, relatively low price volatility and good liquidity of the instruments comprising it.

IBRD's low financing costs have enabled it to lend to members at rates far below market. Even so, the interest margin it has maintained on its loans, together with returns on its reserves, have been sufficient to fund (1) a global development resource management capacity (country teams and the teams orchestrating solutions to GPGs—the signature business of the institution) and (2) an extensive consultancy across every major development-related discipline that it offers essentially for free to members. Even after funding its share of World Bank Group knowledge and development resource management work, IBRD generates a profit that, even after additions to reserves, enables its owners to direct a dividend to the aid agency— International Development Association (IDA)—they asked IBRD to administer from about 1960.

means routinely and efficiently accessing the huge pools of savings in the world's pension funds, insurance companies, sovereign wealth funds, mutual funds and other investment vehicles. This, of course, has been the proverbial “holy grail” in the “climate finance” discussion.

While there has been some progress, the scale so far has been tiny in relation to the more than \$200 trillion in financial assets in the global savings pool. The reasons are well documented. Reduced to essentials, there have been far too few climate-related

investments on offer that are competitive in risk-adjusted return with other investment opportunities available to the owners and managers of the global savings pool.<sup>2</sup>

18. It is easily understood that public resources (loans, equity investments and guarantees and other credit enhancements) are essential to overcome this dearth of competitive climate-related investments: the challenge is to use these public resources as efficiently as possible. Competing demands on these resources are immense – simply dealing with aging demographics in developed countries, and meeting the basic needs of poor people in developing countries, easily could exhaust the pool of public resources.

<sup>2</sup> Institutional asset owners could not have been clearer in their discussions around this issue. In September 2014 major asset owners committed to the UN Secretary General that they would engage on any climate-related investment that fit within an existing asset allocation, are competitive in risk and return with other opportunities in the asset class and otherwise meet portfolio objectives and constraints. United Nations, Office of the Secretary General, “Pocantico Statement,” September 23, 2014.



19. Often forgotten, of course, is that the original MDB capital structure emerging from the Bretton Woods Conference in 1944 remains perhaps the most efficient approach yet devised for this purpose. See Box 2. It has been replicated across the MDB “ecosystem”, and the international community has engaged the capacity built around the original MDBs to deliver public resources into key private sector investments and into sovereign financing in countries lacking the financial capacity to borrow even on the triple-A terms offered by MDBs under the original IBRD model.
20. Constraints that seemed important (or politically expedient) at the time they were created have meant that individual MDBs often lack the flexibility to deploy public resources as efficiently as possible. In sovereign finance, for example, they generally lack the ability to vary pricing and other terms across borrowers or across different projects. In private sector finance, on the other hand, MDBs such as IFC and the private sector operations of the regional development banks have demonstrated that deploying private credit flexibly – to reflect varying credits and positions in project capital structure - can effectively catalyze and bring down the cost of private capital.
21. **Given this background, the CIFs – and CTF in particular – offer a continuing and attractive opportunity for the international community:** to fully engage the expertise and convening power of the MDBs to attract institutional investment at scale, and at the lowest possible cost, by deploying contributors’ public resources flexibly, efficiently and to the same high fiduciary and safeguard standards as its MDB partners. In particular, the CTF trust legal framework and authorizing environment currently permits it to provide its MDB partners with a full spectrum of financial support for their climate-related public- and private-sector investments in participating countries, a key component of its attractiveness as a co-financier.

### III. CTF Going Forward: Key Options

22. Against the foregoing background, the team believes CTF has three basic options (subject, of course, to various modifications):
  1. Take no action, in which case CTF likely will wind down new commitments once existing commitments have been disbursed, while awaiting reflows to cover administrative expenses and debt service to the three Contributors that have provided it with loan financing;
  2. Move CTF into a traditional, IDA-type pattern of periodic replenishments, perhaps supplemented with continuing low-cost borrowing from sovereign contributors; and
  3. Receive a further equity capital infusion from sovereign contributors (and perhaps others), leverage the equity position modestly, implement a self-sustaining pricing and financial management regimen and build out the aspects of the CTF business that can

most efficiently deliver into MDBs' operations the cost- and risk-reducing benefits of its public sponsorship.

23. The following describes the thinking with respect to each of the three options, and its basis for recommending Option 3. Annex 3 models ten-year forward cash flows associated with each option, based on reasonable assumptions respecting disbursement and repayment patterns, pricing of CTF financial products, and CTF borrowing and administrative costs.

- a) *Option 1.* As noted above, the long maturities and grace periods, 0% interest rate and extremely low administrative charges characteristic of CTF's initial-stage sovereign loans mean that in a steady state, CTF would exhaust its working capital (short-term assets minus short-term liabilities). Absent additional equity or debt financing, it would suspend operations pending reflows.<sup>3</sup> While, in principal, CTF could rebalance its activity toward market-based sovereign financing and more private-sector activity (both of which would improve the revenue outlook), existing programming, if contemplated operations materialized, would lead to commitments that, if disbursed, would more than exhaust CTF's working capital, making such a transition impractical without further equity contributions or highly concessional "bridge" loans from Contributors.
- b) *Option 2.* This option requires little further explanation, since it would put CTF on a track mirroring that of IDA, with the Trustee periodically approaching Contributors for additional equity to maintain support for a portfolio comprised largely of long-dated sovereign loans at zero interest, with long grace periods and very small annual administrative charges. This would enable CTF to continue its program of long-dated sovereign lending on IDA terms or better and the growing proportion of its program represented by private-sector operations. But, of course, it would mean CTF's continuing to draw periodically on Contributors' sovereign credit at a time in which demand for those resources continues to grow.
- c) *Option 3.* The Trustee, the CIF AU and the MDBs partnered with it therefore recommend that the members of the CTF TFC move forward with Option 3. This recommendation is grounded on the following principal considerations:
  - CTF is up-and-running now, with a track record as an effectively catalyst for green investments by MDBs in emerging markets.

---

<sup>3</sup> A possibility in any of the three options described in the text would be to monetize the value of the existing portfolio through a program of individual or securitized loan sales. A preliminary estimate of the proceeds from, e.g., selling sovereign loans with the most concessional terms (the largest part of the existing portfolio), suggests that it would be unlikely to produce more than 40%-50% of the face value of the individual public-sector loans (an indication of the extent of the concessionality in existing CTF operations, of course).

- CTF is unique by being an operationally nimble and the only “pure-play green” market actor with an MDB-origination model underpinning it.
- CTF’s business model effectively engages the proven characteristic of its MDB partners, as well as the other elements of the MDB franchise that distinguish these cooperative institutions from, e.g., profit-maximizing commercial banks, and that have proven effective in reassuring private investors concerning the willingness and ability of even very poor emerging-market obligors to make good on their financial commitments to the MDBs of which they are members.
- Option 3 would complement, with very little incremental transaction cost, the other components of the evolving climate finance “architecture”.
- Meeting CTF’s overriding priority – efficient use of scarce public resources to attract large-scale pools of capital into activities mitigating and adapting to climate change – requires a full array of structuring and pricing options for the delivery of project and program financing and risk mitigation.

24. What would Option 3 look like in practice? Annex 4 provides a basic description of Option 3 finances. Compared with CTF activities to date, there would be several differences:

- Portfolio characteristics:** Under Option 3, a much larger part of CTF’s financing would go for activities of the kind that currently comprise the smallest part of the CTF portfolio: funding and credit enhancements targeted to specific tranches of project finance, where CTF has more flexibility to optimize the scale and terms of its engagement to achieve the greatest catalytic impact while meeting its capital and operating costs.
- Capital structure:** In addition to Contributors’ equity contributions and loans, CTF would, as appropriate and necessary, borrow from Contributors or in public or private market transactions to fund its reserves and investments. It could, for example, seek an investment-grade credit rating with a view to optimizing the tradeoff between improved terms for its borrowing and the nature and scale of its operations.<sup>4</sup>
- Pricing:** CTF would exercise flexibility in pricing the financing and credit enhancement it provides, taking into account the particular circumstances of the countries in which its activities take places as well as the economics of the projects in which it participates, all with a view to generating returns sufficient to cover its capital and operating costs while realizing on the “concessionality” it can offer as a consequence of Contributors’ equity

---

<sup>4</sup> The “steady-state” model for CTF operations under Option 3 assumes the Fund is managed consistent with the requirements for a single-A investment grade credit rating. In the view of the team and the Trustee’s risk management team, in the current market environment the slightly lower financing costs associated with higher investment-grade ratings (double-A or triple-A) would not adequately compensate for the incremental constraints on CTF’s financial management necessary to achieve those higher ratings.

contributions (and its ability to leverage that equity) and the franchise value of the MDBs with which it co-invests.

- d) **Self-sustainability:** Under Option 3, CTF's finances would be managed for sustainability, i.e., such that retained earnings would provide the foundation for appropriate growth without the need for additional equity capital subscription.

25. **The legal framework.** As previously noted, Option 3 would not require material changes to CTF's legal framework: In its existing operations, CTF already has made use of the financial toolkit contemplated under Option 3, and its implementation would require relatively modest changes to the provisions in the CTF Governance Framework, Standard Provisions, Public Sector Terms and Private Sector Terms. The Standard Provisions, for example, provide for contributions in the form of debt, while the definition of "contributor" covers "any country" and its agencies and gives the Trustee and the TFC authority to qualify other entities as "contributors". On the other hand, the Principles would require amendment to provide for CTF to receive debt contributions on other than the IDA-type terms currently specified. No changes would be required for any of the operational activities contemplated under Option 3; again, CTF has used these tools (loans, guarantees, equity investments, etc.) in its operations to date. It would, of course, continue to ring-fence its existing three debt contributors' loans as at present; future debt contributions (borrowings) would not be subject to this provision. Annex 5 considers CTF's legal framework in more detail.

#### IV. CTF Opportunities: Contributions from the MDBs

26. As noted above, central to the CTF value proposition is that it relies on the extensive expertise, experience and fiduciary standards of its MDB partners to identify opportunities and ensure responsible, cost-effective implementation. As part of the Working Group agenda, the CIF Administrative Unit has worked closely with the MDBs in developing the approach recommended herein, and encouraged them to bring forward their best ideas for ways in which CTF could best contribute to accelerating the climate-related work that represents an increasing share of their own work programs. This aspect of the Working Group effort continues.

27. At this stage, three MDBs – IBRD, IADB and AfDB – have submitted suggestions, each of which focuses on a key component of the CTF financial toolkit:

- a) **Risk mitigation products.** IBRD has offered detailed suggestions for ways in which CTF can more effectively deploy its capital in risk-specific or comprehensive guarantees to complement MDB financing for CTF-qualified projects and activities. MDBs have deployed CTF guarantees, of course, but they have been a modest part of CTF activity notwithstanding their substantial catalytic impact. The IBRD inputs show a disciplined way forward to much more extensive use of guarantees.

- b) **Monetizing existing CTF assets** (to create additional headroom). IADB has explored in more detail options for loan sales or other refinancing of existing CTF assets, focusing in particular ways to mitigate the loss associated with sales of assets originated on concessional terms.
  - c) **Pooled securitization of CTF assets.** AfDB has suggested another approach to monetizing existing assets that could mitigate some of the loss associated with sale of concessional assets, while broadening engagement by institutional investors. By pooling and securitizing CTF assets in individual financing vehicles, CTF could bring liquidity and diversification value to sub-portfolios of its assets, thereby improving the price and other terms it could receive on the disposition of these assets. There is ample MDB precedent for this approach in IFC and elsewhere; again, CTF's ability to rely on collaboration with its MDB partners is a major advantage.
28. Obviously, the foregoing proposals will require further detailed analysis before submission to the Committee. On the other hand it should be noted that the basic CTF business model has sufficient flexibility so that the financial toolkit can be enhanced without adding materially to administrative costs. And, as or more importantly, the Trustee and the CIF Administrative Unit have at their disposal internal expertise in financial risk management to ensure that these enhancements can be incorporated without moving CTF outside the risk parameters adopted by its members.

## V. Conclusion

29. With the international community shortly to gather in Paris to discuss the way forward in tackling climate change, and the strong emphasis on the capacity of public sector resources – when used efficiently – to unlock massive investment from the pool of global savings, CTF provides an especially unique model for a way to ground this effort in the MDBs' existing institutional capacity. The business model works, the basic financial toolkit is adaptable to the varying needs of major institutional investors and a modest incremental investment from Contributors can put CTF on a self-sustaining financial basis. In our view it is therefore important to seize this opportunity.

**VI. ANNEX 1: KEY FINANCIAL INDICATORS**  
*(Per entities' latest annual financial statements)*

	CTF	IDA	IBRD	IFC	CAF	IFAD
Debt/equity (equity=paid-in capital plus retained earnings; does not include derivative liabilities used for hedging)	0.39	0.07	4.1	2.1	2.8	.044
Administrative expenses/total assets	0.21 <sup>5</sup>	1.09	0.51	1.74	0.38	2.13
Return (loss) on equity (%)	.013	(1.12)	(2.5)	6.20	1.57	(10.5)
Liquidity/6-mo forward cash requirements (policy, approximate)	1.0	1.5	1.0	2.7	2	1.2 -

<sup>5</sup> Includes CTF administration and MDB expenses.

VII. ANNEX 2: CTF FINANCIAL STATEMENTS (PRO FORMA)

CTF BALANCE SHEET END-FY/CY2014 (USD millions)

<b>Assets</b>		<b>5,749</b>	
Cash and liquid investments		2,486	
Loans outstanding, of which		2,360	
Interest-bearing	416		
Non-interest bearing (may carry an annual administrative fee)		2,016	
Less: Provision for losses on loans and guarantees losses (IDA/IFC basis)		-72	
Interest, administrative and other fees receivable, of which			15
Interest receivable	7		
Fees receivable on loans	1		
Other (principal)	7		
Contributions receivable, of which		888	
Capital contributions receivable	869		
Grant contributions receivable		19	
Committed loans receivable			
Other assets			
<b>Liabilities and equity</b>		<b>5,749</b>	
Liabilities		1,130	
Of which:			
Borrowings	1,032		
Fees and expenses payable	3		
Grants committed	94		
Other (Loan interest payable)		1	
Equity		4,619	
Of which:			
Paid-in contributions, of which	4,234		
Capital contributions*	1,520		
Grant contributions*	2,714		
Other contributions*			
Committed contributions, of which		888	
Capital contributions	869		
Grant contributions		19	
Retained earnings	-503		

Note 1. Loans outstanding are net of reserve against losses

Note 2. Guarantees outstanding: USD 10 million

Note 3. Commitments approved but not yet disbursed a/o 3/31/2015: 2,761

Note 4. "Retained earnings" is a balancing entry representing the difference between assets and liabilities and equity

**CTF INCOME STATEMENT FY/CY2014 (USD millions)**

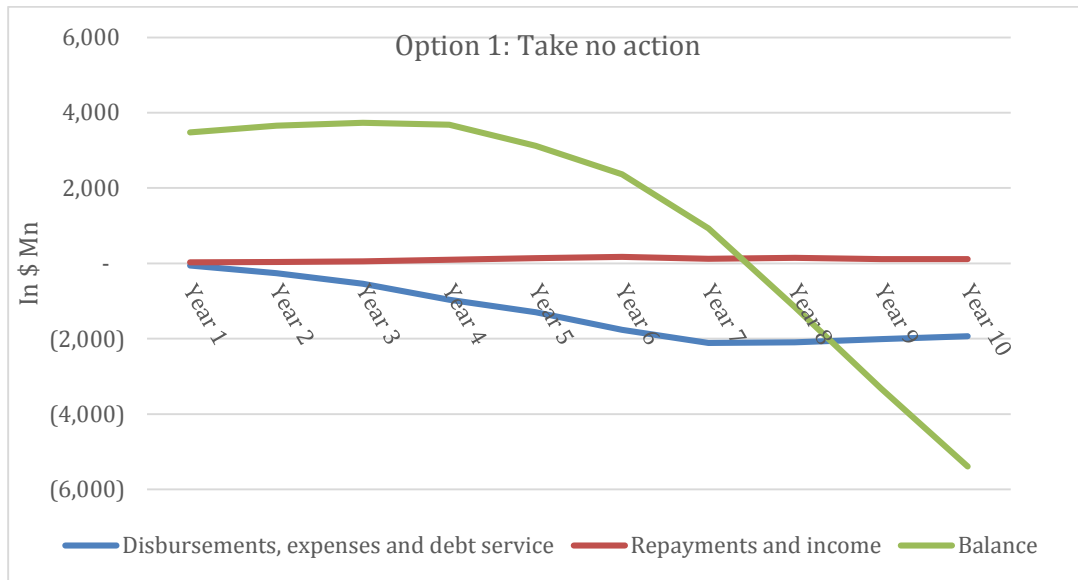
<b>Revenues</b>		<b>37.8</b>
Of which:		
Net investment income	30.5	
Interest on loans outstanding		7.2
Fees		
Interest on grant funds	0.1	
<b>Expenses</b>		<b>37.2</b>
Of which:		
Interest paid		8.2
Administrative expenses	12.4	
Of which:		
CTF administration	6.3	
MDB fees	6.1	
Other, including foreign exchange losses/(gains)	16.6	
<b>Net income</b>		<b>0.6</b>



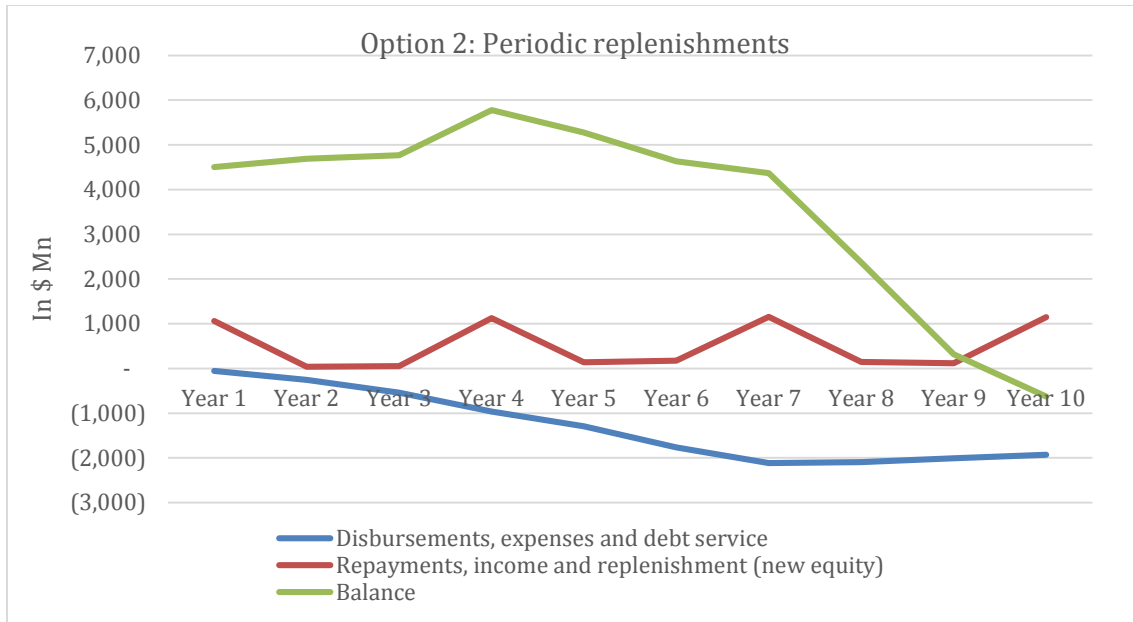
### VIII. ANNEX 3: INDICATIVE CASH FLOW PROJECTIONS (10-yr.)

The following graphs project CTF finances out ten years under the three options described in the text. Projections are indicative based on conservative assumptions, and show disbursements, repayments and CTF's working capital balance (i.e., short term assets minus short-term liabilities) in each scenario.

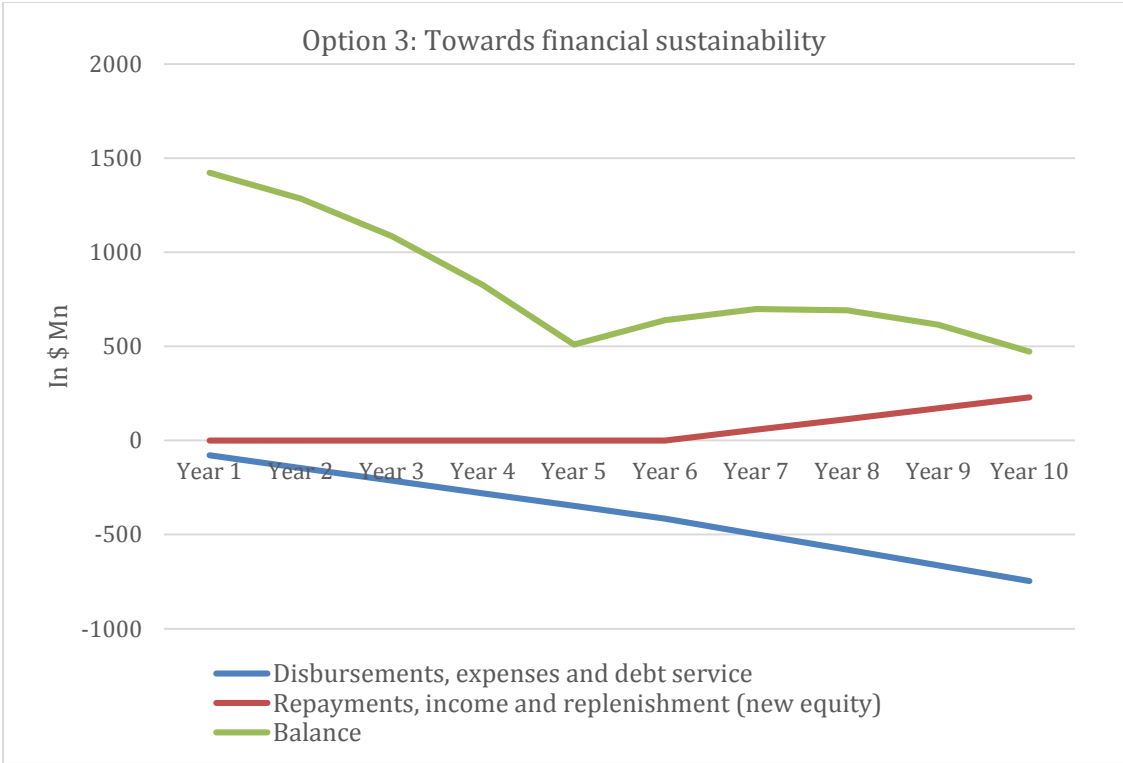
- a) *Option 1* assumes that CTF likely will wind down new commitments once existing commitments have been disbursed, while awaiting reflows to cover administrative expenses and debt service to the three Contributors that have provided it with loan financing.



- b) *Option 2* contemplates moving CTF into a traditional, IDA-type pattern of periodic replenishments, perhaps supplemented with continuing low-cost borrowing from Contributors. The projections below assume a replenishment of USD 1 billion every three years.



- c) *Option 3* has as its objective transitioning CTF's business to a financially sustainable model in which the majority of its business will support MDB financing for private sector projects on terms that, while still concessional, will have flexibility in pricing and other characteristics (maturity, seniority in the capital structure, etc.) necessary to optimize its catalytic role without requiring repeated further advances from Contributors. This approach contemplates managing CTF finances consistently with an investment grade credit rating in respect of the indicators shown in Annex 1, with an initial subscription from Contributors (the model assumes USD 1 billion) and the potential to leverage equity 2.5x. Assuming its business is 80% private sector and 20% traditional highly-concessional public sector, this should enable CTF to sustain indefinitely at least USD 500 million per year in new commitments on conservative assumptions concerning the pace of disbursements and repayments and the pricing of the financial instruments it deploys to complement MDB project development. A transition to this new approach could be facilitated by sale, where practicable, of existing CTF assets. Assuming a 50% rate of realization on these assets, it is reasonable to project that CTF could raise about USD 750 million in additional equity.



## IX. ANNEX 4: “NEW” CTF FINANCES (SIMPLIFIED)

30. The following is a tentative analysis of CTF finances under the “Option 3” model. Figures are presented for a freestanding “new” CTF with USD 1 billion in Contributors’ equity subscriptions (for which they expect no return). It does not assume any equity contributions by others.

### Assumptions (in USD millions):

#### *Capital*

New Contributors’ subscriptions:	1,000	paid in (no callable capital)
Leverage ratio	2.5x	
Financing costs:		2.6% fixed (10-year UST +0.50%) p.a.
Borrowing:	2,500	
Total capital:	3,500	
Weighted average cost of capital (%):		1.86%
Annual total cost of capital:	65	

## 31. Asset Portfolio

The model assumes a fully-disbursed portfolio comprised 75% private sector operations of the same composition and on the same terms as in the existing pipeline, and 25% in sovereign lending on IDA terms (0.75% annual administrative fee). It assumes that CTF maintains a liquid investment portfolio equal to 20% of total assets. Interest rates are assumed to be those applicable at the present time in CTF’s existing public and private sector portfolios.

Liquidity portfolio:	700	
Private sector operations portfolio:	2,100	
Public sector operations portfolio:	700	
Return on liquidity (3 mos. LIBOR)	0.32%	
Average return on private sector portfolio:	3.20%	
Average return on public sector portfolio:	0.75%	
Weighted average return overall:	2.13%	
Gross revenues p.a. (USD mns)		75

#### *Expenses and net income*

Administrative expenses (% of assets)		0.21% of assets
Administrative expenses (USD mns)	7.4	
Net income (USD mns)		2.6
Return on equity		0.26%

Comment: The foregoing assumptions are conservative, particularly in respect of returns that could be anticipated in the private sector portfolio. Moreover, this “steady state” model does not reflect the other key difference between this option and the existing business, which is that reflow would begin much sooner than for CTF as it currently operates, making it possible to manage cash flows sustainably. Finally, the foregoing includes the simplifying assumptions that all borrowing and lending is in USD, and at fixed rates.

## **X. ANNEX 5: LEGAL FRAMEWORK**

32. The terms and conditions for funding to and from the CTF are set forth in the key CTF documents, in particular the Governance Framework for the Clean Technology Fund (the “Governance Framework”) and the Standard Provisions Applicable to the Clean Technology Fund (the “Standard Provisions”). The Standard Provisions form part of all the contribution agreements between the Trustee and CTF contributors. The terms and conditions for funding from the CTF are further elaborated upon in the decisions adopted by the CTF Trust Fund Committee concerning the Financing Products, Terms and Review Procedures for Public Sector Operations (the “Public Sector Terms”) and the Financing Products, Terms and Review Procedures for Private Sector Operations (the “Private Sector Terms”).
33. The Governance Framework establishes, inter alia, the purpose and objectives of the CTF, the types of investments and financing to be provided by the CTF, the CTF governance and organizational structure, and the basis for contributions to the CTF.
34. With respect to financing to be provided by the CTF, the Governance Framework states that the CTF will seek to “provide a range of financial products to leverage greater private sector investment” and that “CTF financing will provide a grant element tailored to cover the identifiable additional costs of the investment necessary to make the project viable, thereby providing the appropriate incentive to facilitate deployment of low carbon technologies at scale. The CTF will utilize a range of concessional financing instruments, such as grants and concessional loans, and risk mitigation instruments, such as guarantees and equity.” The Governance Framework notes that the CTF will seek to provide incentives to engage private sector actions in achieving the CTF’s objectives and recognizes “that funding structures for engaging the private sector will need to be different to the structures it applies for public sector proposal financing.”
35. With respect to funding to be provided to the CTF, the Governance Framework establishes IBRD as the Trustee for the CTF and provides that contributors will make contributions to the CTF by entering into contributions agreements with the Trustee.
36. The Governance Framework does not include any provisions regarding the form or terms of contributions to the CTF. Such provisions are set forth in the Standard Provisions. The Standard Provisions state that:

37. The Trustee may accept Contributions from Contributors in accordance with the provisions of the CTF Standard Provisions and the Contribution Agreement. Contributors may make Contributions in the form of (i) a Grant Contribution, (ii) a Capital Contribution, or (iii) with the consent of all Contributors to the Trust Fund and the Trustee, a Loan. The Contributions shall be subject to the terms set out in the Principles regarding Contributions to the CTF [(the “Principles”), which are attached as an annex to the Standard Provisions].
38. Under the Standard Provisions, Contributors are defined as “any country (including any ministry and agency thereof), or, if agreed by the Trust Fund Committee and the Trustee, such other entity, that provides a Contribution to the Trust Fund”.
39. With respect to Loans to the Trust Fund, the Standard Provisions state that the “Trustee shall administer the Loan in accordance with the CTF Standard Provisions and the Loan Agreement entered into between the Contributor and the Trustee, provided that the Loan Agreement shall include the principal terms of the Loan agreed in writing by all Contributors to the Trust Fund, including the Principles regarding Contributions to the CTF.”
40. The Principles provide that “contributors can provide funding to the Trust Fund as grants, capital contributions and concessional loans with IDA-like terms”. The Principles also provide that there will be no cross subsidies among the contributors.
41. The Principles state that the CTF Trust Fund Committee is responsible for determining the terms of outgoing financing, including financing and terms for the private sector. In so doing, the Committee is to bear in mind the following principle (as well as financial management issues determined by the Trustee):
- Grant contributions may be used to finance grants, concessional loans and other financial products, such as guarantees.
42. Capital contributions may be used to finance concessional loans and other financial products, such as guarantees.
43. Loan contributions may be used to finance loans and other financial products, such as guarantees, on terms no more concessional than the terms of the contributions; provided that, for programs and projects for which the CTF Trust Fund Committee approved allocation of CTF resources after November 1, 2013, loan contributions may not be used to finance equity, subordinated debt/mezzanine instruments with convertible features, convertible grants and contingent recovery grants, contingent recovery loans, first loss guarantees (both single project and portfolio), and any other financial products proposed under programs or projects as agreed in writing by the contributors and the Trustee (collectively, “Higher Risk Profile Financial Products”).

44. The Principles provide that loan contributors “will provide loans to the CTF at 0.75% interest, 20 years maturity and 10 years grace on principal repayments” and that the loan agreements for such loans will provide for a reduction in principal payments during the last two years of the loan in cases of losses on outgoing CTF financial products, with the amount of such reduction being calculated in the manner described in the Principles.
45. The Principles are reflected in the Public Sector Terms. The Public Sector Terms specify the terms for outgoing CTF loans. They permit harder term concessional loans (20 year maturity, with 10 year grace and a service charge of 0.75%) and softer term concessional loans (40 year maturity, with 10 year grace and 0.25% service charge).
46. In addition to concessional loans, the Public Sector Terms also authorize the provisions of grants and guarantees. Guarantee support can be provided either in the form of loan guarantees covering debt service defaults or in the form of contingent finance disbursed upon underperformance of a low carbon technology and where such risk is not commercially insurable at reasonable cost. The charge for either type of guarantee is set at 0.1% of the amount of the support provided. The CTF does not require a counter-guarantee from the country in which the project guaranteed is located.
47. The Public Sector Terms also include principles applicable to the concessional loans to be made by the MDBs from the CTF. They provide that the MDBs will administer the CTF loans in accordance with the MDB’s policies and procedures, subject to the understanding that the MDB’s measures regarding non-payment on the CTF loans will be based on the principles set forth in the Public Sector Terms, including:
  - a) The CTF loan agreement will, unless otherwise agreed between the MDB and CTF Trust Fund Committee, include suspension, cancellation and acceleration events like those included in the MDB’s own lending operations, including optional cross-suspension and cross-acceleration clauses between the CTF loan and the MDB co-financing loan.
  - b) The determination to suspend or cancel the CTF loan will be made by the MDB on the same basis as applied by the MDB for its own loans.
  - c) If the MDB co-financing loan is suspended or cancelled prior to the full disbursement of the CTF loan, the MDB will at the same time, unless otherwise agreed with the relevant contributors, suspend or cancel the undisbursed amount of the CTF loan.
  - d) If the CTF loan has been fully disbursed, a payment default on the CTF loan would not generally trigger acceleration of the MDB co-financing loan or suspension or acceleration of other MBD loans, although the MDB will have the option to do so at its own discretion.
  - e) There will not be any sharing of payment proceeds received or mandatory cross-default clauses between the CTF loan and MDB co-financing loan or any other MDB loans.

48. The Private Sector Terms are not as prescriptive as the Public Sector Terms on the terms and conditions of the financing to be provided from the CTF for private sector projects. They state that “CTF investments which go directly into private sector programs or projects through MDBs must give the MDBs the flexibility to structure the project in such a way that the CTF funds can clearly address and overcome the barriers that prevent transformation.” The annex to the Private Sector Terms provides examples of the type of financing that might be provided, including concessional interest rate loans and loans with performance incentives, subordinated debt and mezzanine financing, guarantees and insurance, risk sharing instruments, and equity. The annex is not intended to be comprehensive or restrictive. It should be noted, however, that the Private Sector Terms have not yet been revised to reflect the limitations in the Principles on Higher Risk Profile Financial Products (as noted above).

## **XI. ANNEX 6: CTF FINANCIAL INSTRUMENTS**

In order to ensure the sound financial management of the CTF its financing products and terms are based on the following principles regarding contributions to the CTF<sup>6</sup>:

- a) Contributors can provide funding to the trust fund as grants, capital contribution and concessional loans with IDA-like terms.
- b) There will be no cross subsidies among the contributors.
- c) Outgoing financing from the CTF can be no more concessional than incoming financing.
  - Grant contributions may be used to finance grants, concessional loans and other financial products, such as guarantees.
  - Capital contributions may be used to finance concessional loans and other financial products, such as guarantees; and
  - Loan contributions may be used to finance loans and other financial products, such as guarantees, on terms no more concessional than the terms of the contributions; provided that, for programs and projects for which the CTF Trust Fund Committee approved allocation of CTF resources after November 1, 2013, loan contributions may not be used to finance equity, subordinated debt/mezzanine instruments with convertible features, convertible grants and contingent recovery grants, contingent recovery loans, first loss guarantees (both single project and portfolio), and any other financial products proposed under programs or projects as agreed in writing by the contributors and the Trustee (collectively, “Higher Risk Profile Financial Products”).
- d) The CTF cannot blend financing from grant and capital contributions with financing from loan contributions unless it is on terms no more concessional than the terms of the loan contributions or supports separate parts of a project (for example, grants for technical assistance and concessional loans for investment financing).

---

<sup>6</sup> Clean Technology Fund Financing Products, Terms, and Review Procedures for Public Sector Operations (also valid for Private Sector operations)



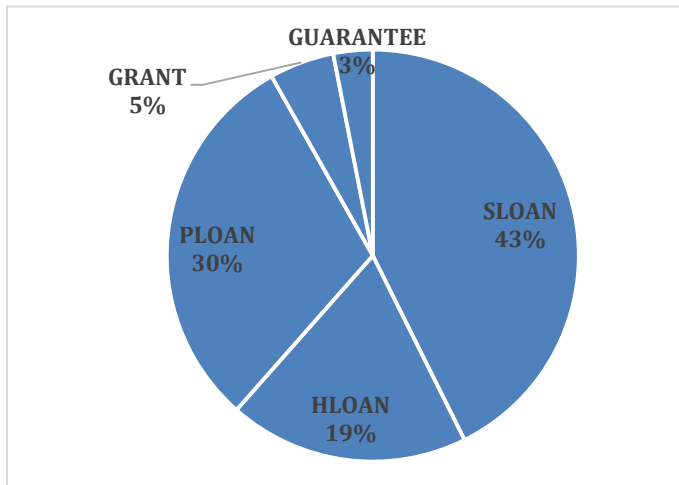
- e) The Trust Fund Committee is responsible for determining the terms of outgoing financing (bearing in mind principle c) and other financial management issues as determined by the Trustee), including financing and terms for the private sector.
- f) All sources of funds will be co-mingled for administrative and investment purposes. Sources of funds comprise:
- Funding from contributors, as described in principle above;
  - Investment income earned on the undisbursed balance of the CTF;
  - Investment income returned from MDBs;
  - Service charges/interest payments on outgoing loans and guarantee fees;
  - Principal repayments on outgoing loans; and
  - Reflows from MDBs related to unused guarantee funds, grant and loan funds and administrative budget.
- g) The Trustee will keep records and report on the amount received for each source of funds on an aggregated basis.

The following financial products have been employed under the CTF:

*Table 1: CTF Financial Products*

<b>Public / Private</b>	<b>Financial Product</b>	<b>Product Types</b>
Public	Grant	Standard
	Loan	Harder/ Softer Terms Concessional Loan Convertible grants/Contingent recovery grants
	Guarantee	First Loss Guarantees (project/ portfolio) Second loss Guarantees (project/ portfolio)
Private	Grant	Standard
	Loan	Senior Loan, USD or EUR Senior Loan in local currency hedged Contingent recovery loan Convertible grants/Contingent recovery grants Subordinated debt (straight debt)
	Equity	Standard Subordinated debt (income participation) Subordinated debt (with convertible features)
	Guarantee	First Loss Guarantees (project/ portfolio) Second loss Guarantees (project/ portfolio) Guarantees (with foreign exchange risk)

Graph 1: Share of instruments (based on approved funding)



Over 90% of the funding has been approved as loans followed by grants and guarantees. Of the loans, close to half has been for soft loans and around one-third has been private sector loans. In the graph: HLOAN refers to Harder Terms Concessional Loans, SLOAN refers to Softer Terms Concessional Loans and PLOAN refers to Private Sector Loans.

Table 2 below summarizes the amount of co-financing that has been mobilized by each product type.

Table 2: Co-financing mobilized by instrument type

Financial product type	Approved funding	Co-financing					TOTAL	Leverage ratio
		Government	Private Sector	MDBs	Bilaterals	Others		
SLOAN	1,795	1,823	3,946	3,398	3,835	379	13,381	7.5
HLOAN	794	2,792	3,015	3,714	123	1,547	11,191	14.1
PLOAN	1,275	575	4,958	2,929	1,131	2,673	12,266	9.6
GRANT	214	1	400	376	-	293	1,069	5.0
GUARANTEE	130	-	730	44	1	12	787	6.1
<b>TOTAL</b>	<b>4,208</b>	<b>5,191</b>	<b>13,048</b>	<b>10,461</b>	<b>5,090</b>	<b>4,904</b>	<b>38,694</b>	<b>9.2</b>

Lastly, based on the level of risk embedded in the structure of the product, these products are grouped as follows:

*Group 1*

- a) Senior loans in USD or EUR
- b) Senior loans in local currency hedged
- c) Subordinated debt / mezzanine instruments with income participation (both straight debt, i.e. fixed return and variable income participation)
- d) Second loss Guarantees (both single project and portfolio)

*Group 2*

- a) Equity
- b) Subordinated debt / mezzanine instruments with convertible features
- c) Convertible grants and contingent recovery grants
- d) Contingent recovery loans

e) First loss Guarantees (both single project and portfolio)

While *group 1* products are included in the CTF Net Income and loss sharing calculation, *group 2* products are excluded.