CLIMATE INVESTMENT FUNDS

CTF-SCF/TFC.10/6
April 12, 2013

Joint Meeting of the CTF and SCF Trust Fund Committees
Washington D.C.
April 29-30, 2013

Agenda Item 7

INTERIM PROPOSAL RELATED TO THE USE OF LOCAL CURRENCY LOANS FOR PRIVATE SECTOR PROJECTS UNDER THE CTF TRUST FUND

PROPOSED DECISION

The joint meeting of the CTF and SCF Trust Fund Committees welcomes document CTF-SCF/TFC.10/6, *Interim Proposal Related to the Use of Local Currency Loans for Private Sector Projects under the CTF Trust Fund* and:

a) notes the MDBs' request to commence negotiation with their clients on the possibility of utilizing local currency loans under CTF private sector projects and programs approved by the CTF Trust Fund Committee in the following countries for which financing agreements with clients have not yet been signed:

   i. Colombia, USD 5 million, implemented by IDB;

   ii. Mexico, USD 42 million, implemented by IDB;

   iii. Philippines, USD 10 million, implemented by IFC;

   iv. South Africa, USD 42.5 million, implemented by AfDB;

   v. Thailand, USD 44 million, implemented by ADB, and USD 50 million implemented by IFC; and

   vi. Vietnam, USD 28 million, implemented by IFC.

b) agrees that for the two year period from May 1, 2013 to May 1, 2015 , CTF resources in the amount of up to [USD 100 million][USD 150 million][USD 221.5 million] may be utilized to provide local currency lending to the projects and programs in those countries noted in (a) above and that any currency exchange losses related to such local currency lending will be borne by the CTF Trust Fund;

c) [agrees that [USD X million] of CTF resources should be reserved to generate investment income to help offset potential losses related to repayments of local currency loans due to foreign exchange rates fluctuations under the arrangement described in paragraph (b) above];

   or

   [agrees that it is not necessary to reserve any CTF resources to generate investment income to help offset potential losses related to repayments of local currency loans due to foreign exchange rates fluctuations under the arrangement described in paragraph (b) above;]

d) [requests the CIF Administrative Unit and the MDB Committee to agree upon the allocation of the funding available for local currency lending among the programs and projects in the countries noted in (a) above, basing such allocation on readiness/needs of the projects and programs] [1]

e) requests the CIF Administrative Unit to include in the semi-annual operational reports to the CTF Trust Fund Committee updates from the MDBs on the allocation and utilization of the local currency lending;

f) requests the Trustee to coordinate with the Contributors to the CTF Trust Fund to amend the Contribution and Loan Agreements/Arrangements to include provisions for sharing of losses or gains due to foreign exchange rate fluctuations on the outgoing loans; and

g) agrees that if the MDBs require additional amounts to be deployed in local currency above the [USD 100 million][USD 150 million][USD 221.5 million] allocation, the MDBs may present proposals to the CTF Trust Fund Committee for approval of additional local currency lending on a case-by-case basis. These proposals should include a full analysis of local currency needs for specific project(s) and/or program(s) and potential additional losses.

[1] This paragraph would not be required if USD 221.5 million is approved under paragraph (b), since there would be sufficient resources to cover all projects and programs listed in paragraph (a).

I. INTRODUCTION

1. At its meeting in November 2012, the joint meeting of the CTF and SCF Trust Fund Committees (the "Joint Meeting") requested the Trustee to work with the MDBs to prepare a proposal for an interim measure to facilitate local currency lending in CTF and SCF private sector projects and programs pending the development of the Enterprise Risk Management Framework. The Trustee was requested to base its quantitative analysis on the following information, to be disaggregated for the CTF and SCF Trust Funds, to allow the Committees to take an informed decision on this issue:

a) the maximum amount that can be allocated to the MDBs to use for local currency lending;

b) the amount of the foreign exchange reserve to cover potential foreign exchange losses; and

c) projections of the number and size of potential local currency loans.

2. In the course of the research, analysis and discussions with MDB focal points, it was reiterated that there are significant differences in financial risks, risk tolerance and complexity in the CTF and SCF Trust Funds arising from the different financial structures of each of the Trust Funds. In order to provide the necessary space for the respective Trust Fund Committees to discuss and make independent decisions on the local currency issue, it was determined that it would be beneficial to separate the proposals for each Trust Fund. Therefore, the SCF and CTF interim proposals for authorizing local currency lending are being presented in separate documents.

3. This document presents the proposal for the CTF Trust Fund. Section II elaborates the rationale for separating the proposals for the CTF and SCF Trust Funds. Section III discusses the summary background of the discussion to date on local currency lending in the CTF Trust Fund. Section IV discusses the approach taken to develop an interim proposal for local currency lending under the CTF Trust Fund. Section V presents the analysis of the proposed amounts for local currency lending. Further, this section presents information on the amount that could be set aside to help mitigate the risk of potential losses due to lending in local currency. Section VI presents an illustrative example of how losses related to the local currency lending would be shared among CTF contributors. Finally, Section VII outlines the approach to address a longer-term solution for local currency lending.

II. RATIONALE FOR SEPARATING THE PROPOSALS

4. One of the key differences between the CTF Trust Fund and the SCF Trust Fund is that the CTF Trust Fund allows for loan contributions in addition to grant and capital contributions. Thus, the CTF Trust Fund has liabilities to loan contributors and therefore must meet semi-annual debt service obligations, which is not the case for the SCF Trust Fund. Consequently, in the CTF Trust Fund, potential losses on local currency loans due to exchange rate fluctuations could impact the CTF Trust Fund's ability to repay loan contributors any time up to the maturity

of the loan contributions. Under the SCF Trust Fund, the financial impact of potential losses due to exchange rate fluctuations on local currency loans would be limited to the calculated final shares of the SCF grant and capital contributors at the close of the SCF Trust Fund.

5. Given this fundamental difference between the two Trust Funds, different financial risk management and monitoring measures have been in place for each of the CIF Trust Funds. For instance, in the CTF Trust Fund, the following risk monitoring measures have been put in place: (a) maintaining a minimum liquidity reserve in order to ensure debt service payments to loan contributors can be met; (b) preparing quarterly projections on project repayments and possible loan loss rate scenarios on the overall portfolio to monitor the ability of the CTF Trust Fund to cover debt service payments to loan contributors; (c) simulating the loan loss/default sharing mechanism to determine the overall impact on the loan payout to loan contributors; and (d) keeping track of actual project interest rates to ensure that within the aggregate amount that is on-lent, there is at least an amount equal to the incoming loan contributions that is on-lent at equal or less concessional terms.

6. These measures are critical to the financial management and risk monitoring of the CTF Trust Fund. Therefore, the analysis needed to develop a proposal for the CTF Trust Fund is more complex than what is needed for the SCF Trust Fund. Based on this, it was determined that it would be beneficial to separate the proposals for each Trust Fund. The proposal for local currency lending in the SCF was approved by the Joint Committee in February 2013.[2]

III. BACKGROUND OF THE LOCAL CURRENCY DISCUSSION

7. In November 2011, the MDBs presented a paper titled, Climate Investment Funds: Lessons Learned from Private Sector Interventions through MDB Intermediaries (document CTF-SCF/TFC.7/CRP.1) to the Joint Meeting outlining a series of lessons drawn from its experience implementing CTF programs. As part of the learning from the MDBs during the early years of CTF operations, it has become increasingly evident that the type of private sector projects requiring financing from the CTF would benefit from lending in local currency (matching the currency of project revenues). This is in part due to the nature of eligible projects (e.g., “projects that wouldn’t otherwise happen without concessional finance”), and the inability of those projects to bear the foreign exchange rate risk of borrowing in hard currencies, such as dollars or Euros.[3] The MDBs discussed the needs for local currency lending both informally and formally with the Trust Fund Committees of both the CTF and the SCF. During the November

[2] Proposal Related to the Use of Local Currency Loans under the SCF Trust Fund, January 15, 2013

[3] The purpose of CIF funding to the private sector is to “catalyze investments that are not otherwise happening in the market” by providing concessional finance. MDBs structure such funds alongside their own mostly in the form of concessional loans and guarantees/risk mitigation facilities. Such concessionality is meant to address risk and cost barriers that prevent projects and investment from happening, and thus are meant, in practical terms, to fill the financing gap that results from those barriers. This flexibility underscores the purpose of the CIF’s additionality (beyond business as usual) and is fundamental to catalyzing investments that wouldn’t otherwise happen. CTF holds the funds received from contributors in two currencies (US dollars and Euros) and funding decisions by the CTF Trust Fund Committee are made and the funds are transferred to MDBs in these two currencies respectively. Under each of the CIF fund’s current frameworks, the risk of any foreign exchange losses would have to be borne by the MDBs, as the MDBs are required to return the reflows from the borrowers to the Trustee in the same currency in which the program/project was approved (i.e. in US dollars or Euros). This is in due to the inability at this time of the Trustee to hedge currencies. The paper “Estimated Cost of Hedging for Local Currency for CIF Trust Funds”, CTF-SCF/TFC.9/CRP.3, November 2, 2012, which outlines possible costs and other issues related to the implementation of a hedging strategy, was presented and discussed at the Joint Meeting.

2011 Joint Meeting, the MDBs were requested to prepare a paper for discussion on instruments that could enhance the effectiveness of CIF funding.

8. In May 2012, the Joint Meeting reviewed the document entitled, Proposal for Additional Tools and Instruments to Enhance Private Sector Investments in the CIF (document CTF-SCF/TFC.8/8), which outlined a number of proposals that could further enhance CIF effectiveness with the private sector, including the use of local currency lending. The Joint Meeting recommitted to the fundamental principles of providing concessional funding for private sector investments with appropriate levels of subsidy elements when market gap is demonstrated. Further, the Joint Meeting recommitted to allowing tools and instruments that could match their delivery expectations and result in positive and catalytic change. The Joint Meeting also requested that the CIF Administrative Unit, in collaboration with the MDB Committee, prepare a detailed proposal as to how to facilitate the use of local currencies in CIF-funded private sector projects and programs.[4]

9. In November 2012, the MDB Committee, in collaboration with the CIF Administrative Unit, presented a paper to the Joint Meeting entitled Use of Local Currencies in CIF Projects (document CTF-SCF/TFC.9/7) which outlined a proposal on how, and under what circumstances, the MDBs may be allowed to deploy CTF and SCF funding in local currencies for private sector projects and programs. During the same meeting, a proposal to develop a comprehensive Enterprise Risk Management Framework for the CTF and SCF Trust Funds was presented to the Joint Meeting. In connection with the discussion about the use of local currency lending, the Joint Meeting requested the Trustee to work with the MDBs to prepare a proposal for an interim measure to facilitate local currency lending in CTF and SCF private sector projects and programs pending the development of the Enterprise Risk Management (ERM) Framework.

10. In January 2013, and in parallel to the development of an interim proposal for the use of local currency lending in the CTF Trust Fund, a working group was convened following the decision of the Joint Meeting, of MDB representatives, the Trustee and the CIF Administrative Unit to begin work on an ERM Framework for the CIFs. The tasks of the Working Group, as set forth in the decision of the Joint Meeting, are to:

a) identify priority risks to be addressed under the risk management framework;

b) clarify what information is currently being gathered to manage those risks;

c) undertake consultations with all interested members of the CTF and SCF Trust Fund Committees to ascertain their risk sensitivities;

d) recommend at which level of the CIF such risks should best be monitored and managed; and

[4] Some members of the Joint Committee have also requested that a Risk Management Framework be in place prior to enabling MDBs to transact in local currencies, in part so that they can more fully understand the risk to the overall portfolio if such instruments are used.

e) prepare recommendations, for review and approval by the joint meeting, as to which risks should be a priority focus and the way forward for implementing a risk management framework.

11. The ERM working group will report back to the Joint Meeting at its next meeting in May 2013 on the above tasks undertaken by the working group. It is expected that the issue of lending in local currency will be more fully discussed in the context of a longer-term proposal during the discussion of the ERM Framework for the CIFs.

12. Notwithstanding the ongoing work by the ERM working group, the MDB Committee recognizes the importance of maximizing the ability of the MDBs to deploy CTF funding as quickly as possible, while supporting transformative projects. In the period leading up to a discussion on a longer-term solution for monitoring and managing risks associated with foreign exchange rate movements of local currency loans, the MDBs believe that an interim proposal on the use of local currency lending is critical to guard against the risk that private sector projects could drop out of the current pipeline if local currency lending is not approved in due course.

13. Following the November 2012 meeting, the MDBs provided to the Trustee an estimate of the possible demand for local currency lending for private sector CTF projects and programs pending the development of the ERM Framework.

14. Four MDBs have confirmed that they anticipate making use of local currency lending in the CTF Trust Fund in six countries whose private sector projects and programs have already been approved by the CTF Trust Fund Committee. The MBDs estimate that projects for a total amount of USD 221.5 million may require local currencies for lending. The MDBs' estimates for each country are listed in Table 1 below. The MDBs expect to be in a position to start negotiating the use of local currency loans with these clients immediately and conclude the respective financing agreements for the programs within the next 24 months. If a decision is taken to allow local currency lending and for the CTF Trust Fund to bear the potential losses, the MDBs will notify the Trustee that they have utilized local currency lending when submitting the final terms of the respective projects to the Trustee. The Trustee will present this information on a cumulative basis in the Trustee report.

Table 1: MDB Estimates of Local Currency Needs in Approved CTF Private Sector Programs

		Local Currency Needs for Already Approved Programs (in USD millions)					
Country	**Ccy**	**ADB**	**AfDB**	**EBRD**	**IDB**	**IFC**	**Total**
Colombia	COP	-	-	-	5.00	-	5.00
Mexico	MXN	-	-	-	42.00	-	42.00
Philippines	PHP	-	-	-	-	10.00	10.00
South Africa	ZAR	-	42.50	-	-	-	42.50
Thailand	THB	44.00	-	-	-	50.00	94.00
Vietnam	VND	-	-	-	-	28.00	28.00
Total							**221.50**

IV. DEVELOPING AN INTERIM PROPOSAL FOR LOCAL CURRENCY LENDING

15. To develop an interim proposal for the maximum amount that can be allocated to the MDBs to use for local currency lending, the Trustee carried out a quantitative analysis on three scenarios using CTF cash flow projections. Three amounts for local currency lending were analyzed in the scenarios, including the amount proposed by the MDBs as shown in Table 1. The analysis took into account the following elements/assumptions:

a) MDB estimates of amounts and currencies of possible demand for local currency lending under the CTF Trust Fund as shown in Table 1;

b) current information as well as assumptions on loan loss rates on public and private sector loans (due to defaults or non-payment);

c) most current information from the MDBs on the current and projected private sector loan terms and pricing;

d) updated information on inflows from contributors to the CTF Trust Fund;

e) projected investment income; and

f) the potential impact of local currency lending on the ability of the Trustee to repay loan contributions in full, taking into account the provisions of the Principles regarding Contributions to the CTF.

MDB estimates for possible demand for local currency lending under the CTF Trust Fund as shown in Table 1

16. The currency composition and total amount of possible local currency loans is critical in assessing the potential level of foreign exchange currency losses related to local currency lending. Table 2 presents the historical worst case losses (WCL) for 10 years, 15 years and 20 years horizon, based on monthly observations.[5] The currencies listed below were provided by the MDBs.

Table 2: Historical Worst Case Losses on Local Currencies Reference Portfolio

Country	**Currency**	**WCL 10y**	**WCL 15y**	**WCL 20y**	Average
Colombia	COP	-76%	-68%	-62%	-69%
Mexico	MXN	-99%	-100%	-100%	-100%
Philippines	PHP	-57%	-50%	-44%	-50%
South Africa	ZAR	-77%	-83%	-92%	-84%
Thailand	THB	-47%	-57%	-55%	-53%
Vietnam	VND	-32%	-48%	n/a	-40%
					-66%

[5] Some currencies may have limited historical data available.

17. In the scenarios presented in Section V, the average historical WCL of 66% for the currencies presented in Table 2 is used as an assumption of the foreign exchange loss.[6] Changes in historical rates are considered to be a good predictor of changes in future exchange rates.[7] While lending in local currency will expose the CTF Trust Fund to potential losses due to foreign exchange rates fluctuations, it can potentially enhance the ability of the projects/borrowers to repay the loans, giving comfort to local banks and mobilizing further private sector funding, and consequently improve the CIF investments. It is also important to mention that the CTF portfolio may also potentially gain from the foreign exchange rates fluctuations as past performance is not a guaranteed measure of future performance.

Assumptions on losses in the overall portfolio

18. At the onset of the CTF, all contributors agreed that contributions to the CTF Trust Fund would be treated in an equitable manner and that any losses on defaults on outgoing loans from the CTF Trust Fund will be shared by all contributors on a pro rata basis proportional to their overall contributions to the CTF (excluding any portion used for outgoing grant funding). This common understanding among contributors as well as the agreed formula for the loan losses provision and sharing among the CTF Trust Fund contributors is reflected in the Principles regarding Contributions to the Clean Technology Fund (the "Principles regarding Contributions to the CTF") attached to the CTF Contribution and Loan Agreements/Arrangements. At that time, potential losses were related only to the defaults or the event of non-payments by the CTF Trust Fund recipients as it was not intended for the CTF Trust Fund to bear any losses related to foreign exchange fluctuations on the outgoing loans.

19. The Principles regarding Contributions to the CTF further provides that losses on defaults or non-payments on the outgoing loans will first be covered to the extent available, by: (a) net investment income on the CTF (calculated as the amount of the Investment Income minus the amount of the Administrative Costs applied against the Investment Income); (b) interest received on outgoing CTF loans in excess of 0.75 percent; (c) guarantee fees in excess of 0.75 percent; and (d) any reflows from any other financial products (other than grants) received in excess of 0.75 percent after deducting the principal amount of funding (collectively "CTF Net Income"). The impact of this concept is taken into account for the scenario analysis and will be discussed further in Section V.

20. The Trustee monitors the actual level of losses on the overall portfolio to date, updates projections on the possible loan loss rates and advises loan contributors if the actual or revised projections result in the reduction of the repayments to the loan contributors.

21. To date, based on the reports from the MDBs, all outgoing loan repayments have been received by the MDBs as scheduled. Looking forward, as a base case scenario, the following assumptions were used: (a) a 5 percent loan loss rate on public sector loans, which is the

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[6] The methodology for estimating foreign exchange losses will continue to be refined in the context of the ERM Framework.

[7] Forward exchange rates were not used for the analysis of potential foreign exchange losses on the local currency loans. The forward exchange rate is determined by a parity relationship among the spot exchange rate and differences in interest rates between two countries, which reflects an economic equilibrium in the foreign exchange market under which arbitrage opportunities are eliminated. Therefore, the forward rate does not include all available information and is not a predictor of future exchange rates.

projected loan loss rate used for the IDA credits; and (b) based on data obtained from the Global Emerging Markets (GEMs) risk database, an 11 percent loan loss rate on private sector loans. The details of the methodology used are presented in Annex 1.

Most current information from the MDBs on the current and projected private sector loan terms and pricing.

22. Unlike the public sector loans funded by the CTF Trust Fund, private sector projects that are funded by the CTF Trust Fund do not have pre-defined loan terms and pricing, although financial products (e.g., loans, guarantees, etc.) and their "floor prices" are outlined and defined at the time of private sector country program approvals.[8] The terms and the pricing of the private sector loans are finalized during negotiations with the clients. The MDBs report back to the Trustee (under the terms defined in the Financial Procedures Agreement ("FPA") signed between each MDB and the Trustee) on the final loan terms and pricing once the loan agreements are signed with clients. In addition, at the request of the Trustee, the MDBs provide the Trustee with the expected average loan terms for the projects in the pipeline. This allows the Trustee to update the CTF cash flow model with the latest information and determine the level of the potential loan losses that would be covered by the projected investment income and the interest above 0.75% and would therefore not need to be shared by the CTF contributors.

Potential impact of local currency lending on the ability of the Trustee to repay loan contributions in full.

23. Losses or gains on local currency loans can arise when the exchange rate of the loan currency fluctuates against the USD over the life of the loan and at the time of repayment. This results in a higher or lower repayment amount when converted back into USD.

24. If a decision is made to allow local currency lending in the approved CTF private sector programs as shown in Table 1, any losses due to the fluctuations of the local currency would have to be shared among all CTF contributors to maintain the equitable treatment of contributions to the CTF Trust Fund as it was initially agreed, in the same manner as how losses on defaults on outgoing loans from the CTF Trust Fund are shared by all contributors, as described in in the Principles regarding Contributions to the CTF. Annex 2 presents the operational arrangements for recording and managing local currency lending in private sector projects and programs.

[8] In accordance with the provisions of the CTF Financing Products, Terms and Review Procedures for Private Sector Operations paper dated October 24, 2012, the CTF Trust Fund Committee is responsible for approving the range of terms of outgoing CTF financing as outlined at the time of submission of the CTF proposal by the MDB. Such proposal will include a range of terms expected to be offered on the CTF funds as outlined above, recognizing that program proposals may only be able to identify the types of structures contemplated for the various interventions. The final terms will be notified to the Trust Fund Committee once these have been agreed.

25. In the analysis, the potential losses due to foreign exchange fluctuations on the local currency loans were added to the potential losses (from non-payment or defaults) on CTF Trust Fund funded loans.[9]

V. ANALYSIS OF SCENARIOS

26. The purpose of the scenario analysis is to demonstrate the total potential loss amounts and the resulting impact on the loss sharing across CTF contributors. Each scenario uses the same assumptions for: (a) loan loss rates as described in Section IV; and (b) the currency losses based on the historical average worst case losses on the proposed currencies in the reference portfolio as shown in Table 2. The outcome of the three scenarios is presented in Table 3 below.

a) The assumptions for the loan loss rates on public sector loans are based on IDA historical loan loss rates. This assumption was discussed with and agreed to by all CTF contributors at the inception of the CTF.

b) The assumption on the loan loss rate on the private sector loans is based on the GEMs database as described in Annex 1.

c) The assumption on the foreign exchange loss rate is based on historical average worst case losses on local currencies in the reference portfolio as referenced in Table 2.

27. While lending in local currency will expose the CTF Trust Fund to potential losses due to foreign exchange rates fluctuations, it can potentially enhance the ability of the projects/borrowers to repay the loans, giving comfort to local banks and mobilizing further private sector funding, and consequently improve the CIF investments. The portfolio may also potentially gain from the foreign exchange rates fluctuations.

28. **Scenario A: USD 221.5 million as the maximum amount for local currency lending**. This is the amount proposed by the MDBs. The analysis of **Scenario A** shows that potential overall losses could be USD 396 million, of which USD 154 million is potential losses due to foreign exchange rate fluctuations on local currency loans. The potential losses exceeding CTF Net Income [10] would total USD 112 million. This amount would be shared by CTF contributors in accordance with the Principles regarding Contributions to the CTF.

29. **Scenario B: USD 150 million.** This scenario reduces the amount to be used for local currency lending to USD 150 million. Overall potential losses to the CTF portfolio under this

[9] The benefits of allowing local currency lending enhances the ability of the projects/borrowers to repay loans, giving comfort to local banks and mobilizing further private sector funding, and consequently improve the CIF investments.

[10] The Principles regarding Contributions to the CTF further provides that losses on defaults or non-payments on the outgoing loans will first be covered to the extent available, by (a) net investment income on the CTF (calculated as the amount of the Investment Income minus the amount of the Administrative Costs applied against the Investment Income); (b) interest received on outgoing CTF loans in excess of 0.75 per cent; (c) guarantee fees in excess of 0.75 percent; and (d) any reflows from any other financial products (other than grants) received in excess of 0.75 percent after deducting the principal amount of funding (collectively "CTF Net Income").

scenario amount to USD 346 million, of which USD 104 million is due to foreign exchange rate movements on local currency lending. The potential losses under this scenario that would exceed CTF Net Income would total USD 54 million, to be shared by all CTF contributors in accordance with the Principles regarding Contributions to the CTF.

30. **Scenario C: USD 100 million.** This scenario reduces the amount to be used for local currency lending to USD 100 million. Overall potential losses to the CTF portfolio under this scenario amount to USD 312 million, of which USD 69 million is due foreign exchange rate movements on local currency lending. The potential losses under this scenario that would exceed CTF Net Income would total USD 13 million. As in Scenarios A and B, this amount would be shared by all CTF contributors in accordance with the Principles regarding Contributions to the CTF.

Table 3: Scenarios for Local Currency Lending

Overall Portfolio Size ($ billion) a/	4.8		
Projected loan loss rates for public sector loans	5%		
Projected loan loss rates for private sector loans	11%		
Loan Losses on the overall portfolio ($ million) (A)	242		
	Scenario A MDBs' Proposal	Scenario B	Scenario C
Amount to be used for local currency lending ($ million)	222	150	100
Projected Local Currency FX losses	66%	66%	66%
Local Currency FX losses ($ million) (B)	154	104	69
Total Potential Losses ($ million) (A) + (B)	**396**	**346**	**312**
CTF Net Income ($ million) b/	284	293	299
Losses not covered by CTF Net Income ($ million)	112	54	13

a/ This figure represents approved projects plus projects/program currently in the pipeline.
b/ The CTF Net Income comprises the sum of: (a) net investment income on the CTF (calculated as the amount of the Investment Income minus the amount of the Administrative Costs applied against the Investment Income), plus (b) interest (service charge) received on outgoing loans financed from the Trust Fund in excess of 0.75 percent, plus (c) guarantee fees received in excess of 0.75 percent, plus (d) any reflows from any other financial products (other than grants) received in excess of 0.75 percent after deducting the principal amount of funding.

VI. LOSS SHARING CALCULATION FOR CTF CONTRIBUTORS

31. The Principles regarding Contributions to the CTF provides that losses on defaults or non-payments on the outgoing loans will first be covered to the extent available by CTF Net Income. Any loss amount not covered by CTF Net Income would have to be shared by all contributors in proportion to their contribution (excluding any portion used for grants).

32. Table 4 details an illustrative table of the pro-rata sharing by donors of the losses that may not be covered by CTF Net Income under each of the scenarios presented in Table 3 without taking any extra steps to mitigate those losses.

Table 4: Illustrative pro-rata sharing of losses not covered by CTF Net Income (in $ million)

in $ million		Scenario A MDBs' Proposal	Scenario B	Scenario C
Amount to be used for local currency lending		222	150	100
Total Potential Losses		**396**	**346**	**312**
CTF Net Income		284	293	299
Losses not covered by CTF Net Income		**112**	**54**	**13**
Donor	**% Share**			
Australia	2%	1.9	0.9	0.2
Canada	4%	4.7	2.2	0.5
France	6%	6.3	3.0	0.7
Germany	13%	14.4	6.9	1.7
Japan	22%	24.5	11.7	2.9
Spain	2%	2.6	1.2	0.3
Sweden	2%	1.8	0.8	0.2
United Kingdom	20%	22.8	10.9	2.7
United States	29%	32.9	15.7	3.8
Total Losses not covered by CTF Net Income	**100%**	**112**	**54**	**13**

VII. Option to Offset Potential Losses

33. In order to help offset all potential losses including those due to lending in local currency, the Joint Meeting can opt to reserve a cash cushion that would help generate CTF Net Income. This reserve amount would be in addition to the existing foreign exchange reserve that provides a buffer against commitments already made by the Trustee against non-USD promissory notes.[11]

34. However, the potential investment income generated from this reserve will have to be weighed against the fact that reserving funds would decrease the amount of resources available to be committed and transferred to MDBs to finance projects and programs in the CTF Trust Fund pipeline.[12]

35. The reserve amount needed to generate sufficient CTF Net Income to cover all potential losses including those due to lending in local currency is estimated[13] to range from USD 80 million in Scenario C to USD 660 million in Scenario A as shown in Table 4. The reserve amount would not be available for programming until the loan contributions are repaid to the CTF contributors (approximately in year 2031). Therefore, a decision to opt for a reserve may take into account the trade-off between earning additional investment income and reducing funding available for programming.

[11] Commitments by the Trustee to the MDBs are made on the basis of cash and promissory note balances. The portion of commitments made on the basis of promissory notes is subject to foreign exchange risk until the promissory note is received and the proceeds are converted into USD.
[12] In the context of this paper, this reserve constitutes a withholding of funds from commitment.
[13] The estimates for the reserve are based on the CTF cash flow model projections

36. Once a reserve is introduced in each of the scenarios presented in Table 3, potential losses and the CTF Net Income will change. The reserve is not available for commitment. Therefore, since less funds are used for lending, potential losses are correspondingly lower. At the same time, since the cash balance is higher, CTF Net Income will be higher.

Table 4: Reserve to offset potential losses in each scenario[14]

in $ million	Scenario A MDBs' Proposal	Scenario B	Scenario C
Proposed amount to be used for local currency lending	222	150	100
Total Potential Losses	**391**	**344**	**311**
Proposed Reserve	660	320	80
CTF Net Income	392	345	312
Losses not covered by CTF Net Income	0	0	0

VIII. LOCAL CURRENCY LENDING BEYOND MAY 2013

37. The longer term arrangement for local currency lending under the CTF will be reviewed in May 2013 as a part of the CTF risk assessment to be carried out under the ERM Framework, as approved at the Joint Committee in November 2012.

38. The ERM framework will provide the Joint Meeting with the appropriate tools to gauge whether they are willing to take on local currency lending risks while looking at other financial, strategic and operational risks and establish clear risk tolerances and triggers to monitor risks at all levels, from individual projects to a portfolio level. Assessment of top priority risks, risk tolerances and risk mitigation responses will allow the Joint Meeting to make an informed decision to determine an amount of local currency lending that would meet the objectives of the CTF.

39. Additional options for managing risks related to local currency lending are being explored with MDBs. MDBs may also present options for managing local currency lending risks for specific projects on a case-by-case basis for consideration by the CTF Trust Fund Committee.

[14] Annex 3 presents scenarios with alternative reserve amounts and corresponding potential loss sharing across donors.

Annex 1: Loan loss rate methodology for private sector projects

To assess the expected loss on CTF private sector loans, in the absence of CTF portfolio specific data, the GEMs Credit Data Consortium[15] database was used as a relevant point of reference. The primary purpose of the database is to provide pooled data on credit default rates from the projects funded by the participating organizations and the recovery rates of defaulted projects. As the database is a collection of data from several institutions the results are a superior representation of the entire market than any individual institution of the Consortium alone, which is a good proxy for the developing client base of the CTF.

The database comprises of sovereign, public and private counterparts across different loan types. The analysis below relies exclusively on the private counterparts as the objective is to find data relevant to the CTF private sector loans. The private counterpart database is composed of 4,810 counterparts who registered 869 events of defaults over a 24 year period up to the end of 2011. The GEMs Credit Data can be broken by sectors and regions. However, as CTF projects are likely to cover a broad range of regions, the entire set of data was used to conduct the calculations.

The GEMs Credit Data considers two types of cohort:[16] static and dynamic. The composition of a given static cohort is kept unchanged during all the observation years while dynamic cohorts are continuously adjusted to reflect matured, defaulted and withdrawn counterparts. The dynamic cohort approach only considers contracts at risk therefore the default risk accuracy is improved because the contracts with an early maturity date do not adjust the default rate downwards for long-term contracts. As CTF private sector loans are likely to have long maturities, it seemed more appropriate to rely on dynamic cohort data.

Among other information, the GEMs Credit Data provide cumulative default rates by rating[17]. The CTF counterparts are likely to span a range of rating similar to the range displayed in the database as many implementation agencies of the CTF participate in the Consortium. An arithmetic mean is used to compute the expected default rate of a loan over its 15 years life. The probability of default is 42%.

The probability of default does not represent the expected loss however. In most cases of default a significant part of the debt is recovered by the creditor. To measure the real loss to the creditor, the loss given default, in present value terms, has to be taken into account. The GEMs Credit Data provide this ultimate economic loss per currency of outstanding balance at default. Unfortunately Loss Given Default figures are not disaggregated by ratings. Therefore one has to assume that the loss given default is the same across the rating spectrum of private counterparts.

[15] The GEMs Credit Data Consortium, originally established as a joint effort by the International Finance Corporation (IFC) and the European Investment Bank (EIB), is a comprehensive database of credit risk information relating to emerging market operations. Today the Consortium members are EIB, IFC, EBRD (European Bank for Reconstruction and Development), AfDB (African Development Bank), ADB (Asian Development Bank), FMO (Netherlands Development Finance Corporation), IADB (Inter-American Development Bank), OPIC (Overseas Private Investment Corporation) and BSTDB (Black Sea Trade and Development Bank).

[16] A cohort is constituted by gathering all counterparts of a given rating ad active at the beginning of the year.

[17] Ratings range from Ba1 to Ca-C according to the shared rating scale of the Consortium.

The Simple Average Recovery Rate Results, as a simple average was used to compute the probability of default over different ratings, is 74%. The loss given default is thus 26%.
With the combination of these two figures, a 42% probability of default (PD) and a 26% loss given default (LGD), the expected loss can be computed. The loans of the GEMs Credit Data Consortium which have similar characteristics to CTF private sector loans have an 11% expected loss (EL).[18]

The relevance of the methodology can be monitored regularly over the life of CTF private sector loans. The shortcomings of the method used to assess the expected loss on CTF private sector loans have been exposed above (simple average rather than weighted average, lack of country-specific data, lack of loss given default rates per rating, etc.). On the positive side however, one should underline the breadth of the GEMs Credit Data, the availability of data on long term loans, the institutions that the CIF and the GEMs Credit Data Consortium share as implementation agencies. These factors make the methodology a valuable one to assess the expected loss on CTF private sector loans, which should be monitored though.

The probability of default changes over the life of a loan. The cumulative default rate by rating used in the calculation aggregates the risk of default in each given year of a 15 years loan. If the portfolio of CTF private sector loans were to prove more or less resistant over the maturity of its different loans than the loans in the GEMs Credit Database, the probability of default and the loss given default could be amended to reflect the actual risk of its portfolio. Indeed the GEMs Credit Database provides marginal default rates, the risk of a counterpart to be in default in one year if it was not in default before. The comparison between the marginal default rates of the GEMs Credit Database and the marginal default rates of CTF market loans as they mature will be a good check for the methodology proposed.

An 11% expected loss is neither the maximum possible loss, nor the maximum expected loss with a set level of confidence. It is a figure that illustrates the risk associated with the CTF private sector loans. It does not prescribe a determined amount of provisioning or, in the case of CTF, a determined amount of the reserve to be set aside. That decision depends on the risk appetite of the CTF Trust Fund Committee members.

[18] EL = PD * LGD

Annex 2: **Monitoring and Reporting on Local Currency Lending in the CTF Trust Fund**

Losses or gains on local currency loans can arise when the exchange rate of the loan currency fluctuates against the USD over the life of the loan and at the time of repayment. This results in a higher or lower repayment amount when converted back into USD. The following is the agreed process to monitor and report on local currency loans to track aggregate losses or gains.

i. Following the approval of the joint meeting of the CTF and SCF Trust Fund Committees of the proposal set forth in this paper, the CIF Administrative Unit and the MDB Committee will determine which approved private sector projects and programs will be allocated a USD amount to be used in local currency lending;
ii. The MDB negotiates with clients loan terms in local currency;
iii. The MDB notifies the Trustee that they have utilized local currency lending when submitting the final terms of the respective programs to the Trustee;
iv. The Trustee flags the program for local currency lending;
v. Following the procedures for the relevant MDB, upon receipt of transferred funds from the Trustee, the MDBs or the client converts the USD amounts disbursed from the CTF Trust Fund into local currency;
vi. Repayments from the borrower to the MDB will occur in the currency of the loan, will follow the terms and procedures of the relevant MDB and are governed by the agreements between the borrower and the MDB;
vii. At the point in time that the MDB is obligated to return the funds to the CTF trust fund, the MDB will return all proceeds received by borrowers to the CTF Trust Fund in the equivalent USD amount of the total local currency proceeds collected from the financing, and in accordance with the FPA; and
viii. Any net losses exceeding the amount covered by the CTF Net Income due to foreign exchange rate fluctuations will be shared by all contributors to the CTF, including loan contributors, on a pro-rata basis proportional to their overall contributions to the CTF (excluding any portion used for grant funding), in the same manner in which losses on defaults on outgoing loans from the CTF are shared by all contributors pursuant to the Standard Provisions Applicable to the Clean Technology Fund and the Principles regarding Contributions to the Clean Technology Fund, attached to the Contribution and Loan Agreements/Arrangements between the Trustee and the CTF contributors. Gains related to repayments of local currency loans due to foreign exchange rate fluctuations will form part of the reflows returned from the MDBs to the CTF Trust Fund. Net losses incurred due to the use of local currency lending will be taken into account at the Recalculation Date for any adjustment on loan contribution repayments. When the CTF Trust Fund is liquidated, the balance of funds remaining in the Trust Fund will be returned to the grant and capital Contributors as provided in the Standard Provisions Applicable to the Clean Technology Fund.

Annex 3: Alternative Reserve Scenarios

The reserve amounts presented in Table A, correspond to half of the reserve amounts presented in Table 4. The reserve amounts range from USD 55 million in Scenario C to USD 330 million in Scenario A. These reserve amounts partially offset potential losses under each scenario.

Table A: Alternative reserve scenarios to *partially* offset potential losses

in $ million	Scenario A MDBs' Proposal	Scenario B	Scenario C
Proposed amount to be used for local currency lending	222	150	100
Total Potential Losses	**394**	**345**	**311**
Proposed Reserve	330	160	40
CTF Net Income	338	319	305
Losses not covered by CTF Net Income	55	26	6

The resulting losses not covered by the CTF Net Income would be shared by all contributors in proportion to their contribution (excluding any portion used for grants). Table B presents the loss sharing by donors of the losses presented in Table A.

Table B: Illustrative pro-rata sharing of losses not covered by CTF Net Income in the alternative reserve scenarios

in $ million		Scenario A MDBs' Proposal	Scenario B	Scenario C
Amount to be used for local currency lending		222	150	100
Total Potential Losses		**394**	**345**	**311**
Proposed Reserve		330	160	40
CTF Net Income		338	319	305
Losses not covered by CTF Net Income		**55**	**26**	**6**
Donor	**% Share**			
Australia	2%	0.9	0.4	0.1
Canada	4%	2.3	1.1	0.2
France	6%	3.1	1.5	0.3
Germany	13%	7.1	3.4	0.8
Japan	22%	12.1	5.7	1.3
Spain	2%	1.3	0.6	0.1
Sweden	2%	0.9	0.4	0.1
United Kingdom	20%	11.3	5.3	1.2
United States	29%	16.2	7.7	1.7
Total Losses not covered by CTF Net Income	**100%**	**55**	**26**	**6**