

CLIMATE INVESTMENT FUNDS

CTF/TFC.14/4
November 4, 2014

Meeting of the CTF Trust Fund Committee
Washington D.C.
November 17, 2014

Agenda Item 4

**PROPOSAL FOR A SPECIFIC TARGET FOR THE
MARGIN BETWEEN PROJECTED CTF NET INCOME AND PROJECTED LOAN LOSSES**

PROPOSED DECISION

The CTF Trust Fund Committee reviewed the document, *Proposal for a Specific Target for the Margin between Projected CTF Net Income and Project Loan Losses* (document CTF/TFC.14/4), and agrees to set the target for the margin (the “Margin”) between the projected CTF Net Income and the projected losses on outgoing CTF financial products¹ by establishing [*Option A*: [USD] as the amount of the excess of the projected CTF Net Income over the potential losses] *or* [*Option B*: [] as the minimum ratio between the margin amount and the potential losses] *or* [*Option C*: [] as the maximum ratio between the potential losses and the projected CTF Net Income].

The Committee further agrees on the following process for monitoring the Margin:

- a) The Committee requests the Trustee, together with the MDBs and the CIF Senior Risk Management Officer, once appointed, to monitor the Margin [based on the assumptions used in the CTF cash flow model maintained by the Trustee and to make available such information on the Risk Dash Board on a periodic basis].
- b) The Committee further requests the CIF Senior Risk Management Officer to inform the Committee if the target for the Margin in paragraph 1 above is reached and to prepare, in consultation with the MDBs and the Trustee, a paper to propose the list of possible corrective actions for consideration by the Committee at its subsequent meeting.
- c) The Committee agrees [that the target level of the Margin and the accompanying measures may be re-assessed as necessary from time to time] *or* [to re-assess the target level of the Margin and the accompanying measures at the November 2015 Committee meeting].

¹ Details on the calculation of the CTF Net Income and losses on outgoing CTF financial products are as set forth in the Principles regarding Contributions to the Clean Technology Fund, attached to the Contribution and Loan Agreements/Arrangements between the CTF contributors and the Trustee.

I. INTRODUCTION

1. At the CTF Trust Fund Committee meeting in Jamaica in June 2014, the Committee agreed to set a target for the margin between projected CTF Net Income² and projected loan losses³ (“margin”). Further, the Committee requested that the Trustee, in consultation with the CIF Administrative Unit and MDBs, propose a specific target and an outline of how and when such a target might be achieved for consideration by the Committee at its meeting in November 2014. The rationale for such a target is to give the Committee ‘early warning’ that *projected* CTF Net Income might not be sufficient to cover *potential losses*. This early warning would enable the Committee to consider actions to mitigate such an event. It should be noted however, that such target would not translate into a cash set-aside to cover potential losses.

2. In accordance with the Principles regarding Contributions to the Clean Technology Fund (the Principles),⁴ the Trustee is required to periodically review accumulated loss amounts and report to the CTF Trust Fund Committee if the Trustee determines that loan contributors’ pro-rata share of the loss amount is likely to exceed loan contributors’ pro-rata share of the CTF Net Income. In such event, “the Trustee will propose to the Trust Fund Committee all possible actions that may be taken so that there will be sufficient funds available to repay the loan contributors loans in accordance with their terms.”

3. It is important to note that as of June 30, 2014, there were no actual losses reported on the CTF loans implemented by the MDBs. In addition, the cumulative CTF Net Income since inception of the CTF to June 30, 2014 totaled USD 35 million.

4. This paper presents the analysis of the changes in the CTF Net Income in excess of potential losses. Section II of this note provides background on the events that led the CTF Committee to consider the setting of a target for the projected margin (or excess) between the projected CTF Net Income and projected loan losses. Section III discusses the changes in the assumptions for the financial components that impact projections of CTF Net Income and potential losses that happened since inception of the CTF. Section IV proposes options to set a target level of the projected CTF Net Income excess over that is needed to cover potential losses (“margin”). This section also suggests the menu of possible actions the CTF Trust Fund Committee may consider should the level of the *projected* CTF Net Income excess over the *potential losses* fall below the projected target.

² CTF Net Income refers to (i) net investment income, (ii) interest received on outgoing CTF loans in excess of 0.75 per cent, excluding those received from Higher Risk Profile Financial Products, (iii) guarantee fees in excess of 0.75 percent, excluding those received from Higher Risk Profile Financial Products and (iv) any reflows in excess of 0.75 per cent, after deducting the original principal amount, received from financial products other than loans, guarantees and Higher Risk Profile Financial Products.

³ Excluding losses from Higher Risk Profile Financial Products.

⁴ The Principles are attached as Appendix A to Annex [1] (Standard Provisions Applicable to the Clean Technology Fund) to the CTF Contribution and Loan Agreements/Arrangements between the Trustee and the CTF contributors.

II. BACKGROUND

5. In 2008, when the CTF was negotiated and designed, market conditions were more favorable than they are today. The analysis of the CTF cash flow projections conducted at the time took into account the conservative projected investment income rates available at that time, assumptions on types of outgoing financing lending terms (mostly public sector loans) and timing of allocations, as well as the assumptions on the potential loss rates (5% for all types of financing⁵).

6. The analysis showed that any possible losses on the outgoing loans would be fully covered by CTF Net Income by the Recalculation Date.⁶ Moreover, the analysis showed that there would be approximately USD 226 million of CTF Net Income exceeding what would be needed to cover potential losses, providing a comfortable “cushion” to prevent Contributors from sharing losses.⁷ It is important to note that the Contributors agreed to the principles that if there were to be a shortfall in the actual CTF Net Income, they would share the losses not covered by CTF Net Income as described in the Principles.

III. IMPACT OF FINANCIAL COMPONENTS ON PROJECTED CTF NET INCOME AND POTENTIAL LOSSES

7. As the CTF portfolio matured and market conditions changed, assumptions in the CTF cash flow projections were changing as well. Between December 2008 and December 2013, significant changes in market conditions led to a decrease in projected investment income rates (from 2% to 0.75% annually) earned on the CTF undisbursed cash balances. At the same time while changes in the projected distribution of the portfolio between public and private sector are expected to lead to additional projected income from the interest over 0.75%, the same changes can be expected to increase the potential loss rates when compared to projections in 2008. All of these shifts may mean that the potential capacity of projected CTF Net Income to cover potential losses is reduced.

⁵ Projected loan loss rate used for IDA credits based on historical performance.

⁶ Recalculation Date means the date falling two years and one month prior to the final maturity date of each loan contribution.

⁷ The Standard Provisions Applicable to the Clean Technology Fund (the “Standard Provisions”) and the Principles, attached to the Contribution and Loan Agreements/Arrangements between the Trustee and the CTF contributors, provide for equitable sharing of losses on outgoing loans and other financial products by all contributors. It was further agreed that losses on all outgoing loans and other financial products from the CTF will be shared by all contributors in proportion to their overall contributions to the CTF (excluding the portion, if any, used for outgoing grants and Higher Risk Profile Financial Products) and covered from the CTF Net Income first. If, at the Recalculation Date (a) the cumulative amount of losses exceeds (b) the cumulative CTF Net Income, the last or last two years of repayments to loan contributors will be adjusted for their share of the difference between (a) and (b). Specific formula on how the losses and the CTF Net Income are to be calculated was and included in the Principles (Section 2.1).

8. By mid-2014, the Trustee and MDBs worked together to refine assumptions in the CTF cash flow model related to (a) the distribution of the CTF portfolio between different financial products available under the CTF, (b) financing terms for these financial products, including expected loan interest, guarantee fees and returns on other financial products, and (c) potential loss rates for each financial product, based on their actual portfolio and projects in the pipeline. The refinements and the adjustments to the CTF cash flow model as of June 30, 2014 resulted in the following projections: CTF Net Income (USD 231 million) will exceed potential CTF loss amount (USD 112 million) by USD 119 million at the Recalculation Date (June 30, 2028).

9. Table 1 and Figure 1 below demonstrate how the financial components mentioned above changed over time. They also show the corresponding cumulative impact of those changes on the ability of CTF Net Income to cover potential losses. In simple terms, as the margin increases, the risk that contributors will have to bear actual losses reduces. As the margin decreases, the risk that contributors will have to bear actual losses increases. Annex A presents detailed explanations of the impact of different financial components on the CTF Net Income and losses.

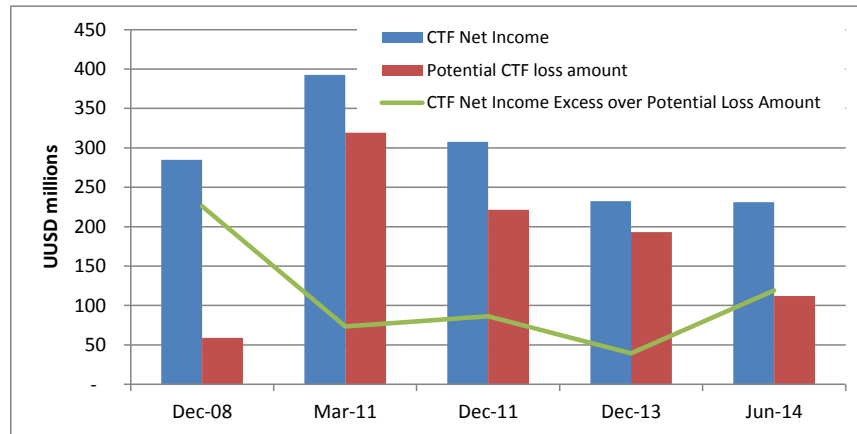
Table 1. Financial Components of CTF Net Income and Potential Losses ^{a/ b/}
(in USD millions)

	As Projected in				
	Dec-08	Mar-11	Dec-11	Dec-13	Jun-14
CTF Net Income	285	392	308	232	231
Investment Income	355	426	321	259	272
<i>Assumption on Investment Income Return Rate, %</i>	<i>2.00</i>	<i>2.00</i>	<i>1.25</i>	<i>0.75</i>	<i>0.87</i>
<i>Assumption on Average CTF Cash Balance (Jan 2009 - June 2028)</i>	<i>906</i>	<i>1,818</i>	<i>1,331</i>	<i>1,753</i>	<i>1,670</i>
Budget Expenses	(70)	(63)	(74)	(77)	(96)
Interest Received on outgoing loans and guarantee fees in excess of 0.75%	-	29	60	50	55
Potential CTF loss amount	59	319	221	193	112
Average Loss rates, %					
<i>Public sector</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
<i>Private Sector</i>	<i>N/A</i>	<i>10</i>	<i>10</i>	<i>11</i>	<i>6</i>
CTF Net Income Excess over Potential Loss Amount	226	73	86	39	119
as % of potential losses	384%	23%	39%	20%	106%
Potential Losses to CTF Net Income Ratio	21%	81%	72%	83%	48%

a/ Calculated for the period from CTF inception through the Recalculation Date of June 30, 2028

b/ Note that Budget Expenses assumptions in June 2014 model have been adjusted to include longer period than was used in the earlier projections.

**Figure 1. Changes in the Cushion between CTF Net Income and Potential Losses ^{a/}
(in USD millions)**



a/ Calculated for the period from CTF inception through the Recalculation Date of June 30, 2028

IV. TARGET PROJECTED MARGIN BETWEEN THE CTF NET INCOME AND LOSS AMOUNT

10. From December 2008 to December 2013, as assumptions were adjusted to better reflect market conditions, the projected excess of projected CTF Net Income over what is needed to cover potential losses has fluctuated between USD 226 million and USD 39 million as presented in Table 1 above. As of June 30, 2014, based on adjustments made to the assumptions of average loss rates to better reflect the actual loss rates of the MDBs portfolios, the projected CTF Net Income exceed potential CTF loss amount by USD 119 million. *The increase in the margin between December 2013 and June 2014 is mainly due to lower loss rate assumptions by MDBs based on their actual portfolio and projects in the pipeline.*

11. Projections of the margin between CTF Net Income and potential losses depend on the assumptions used in the CTF cash flow model. The assumptions in the latest version of the model resulted from analysis by the MDBs of their portfolio of CTF projects. The Committee should consider its comfort level of the assumptions used in the model to guide their discussions in setting a target for the projected margin between the CTF Net Income and loss amount. In setting such target, the Committee could take into consideration the level of losses the Committee collectively is willing to bear—without diminishing the CTF’s ability to meet its strategic goals and not impact the pipeline.

What could be an appropriate target for the margin between the projected CTF Net Income and potential loss amount?

12. A target could be developed based on the historical data presented in Table 1 as well as on the Committee’s collective comfort level with the assumptions used in the CTF cash flow model. The Committee may consider setting the target by establishing:

- a) Option A: a minimum dollar amount of the excess of the projected CTF Net Income over the potential losses (e.g. in the range of USD 80-100 million) – current projected excess is USD 119 million;

- b) Option B: a minimum ratio between the margin amount and potential losses (e.g. over 20-25 percent) – current projected margin equals to 106% of the potential loss amount; or
- c) Option C: a maximum ratio between the potential losses and projected CTF Net Income (e.g. between 60 and 70 percent) – current projected ratio between the potential losses and projected CTF Net Income is 48%.

13. It should be noted that none of the options proposes to set aside cash or provision for the losses. Rather, they suggest the trigger for an ‘early warning’ that *projected* CTF Net Income might not be sufficient to cover *potential* losses.

14. The Trustee together with the CIF Senior Risk Management Officer, once on board, will continue to monitor the financial components presented in Section III. The target level of the excess amount of the projected CTF Net Income over potential losses may be re-assessed from time to time and adjusted as needed depending on the decision of the Committee.

How and when the projected target can be achieved?

15. How and when the projected target can be achieved depends on the methodology for setting the target and the level. However, it is important to reiterate that the target could provide a point of reference or an ‘early warning’ for the Committee to consider corrective actions.

16. Should the actual amount fall below the target selected by the Committee, or if a steady decrease of the margin is observed over time, the following actions could be considered:

- a) changing the investment management strategy;⁸
- b) adjusting funding allocation decisions going forward;
- c) setting up a floor for the pricing of loans and guarantees for private sector projects and/or revising the terms for public sector concessional loans; and
- d) limiting the use of financial products associated with higher potential loss rates.

17. The details of the implementation of these actions would be developed by the CIF Senior Risk Management Officer in consultations with the Trustee and the MDBs.

⁸ See “CIF Trust Funds: Options for Increasing Investment Income, CTF/TFC.14/Inf.4

Annex I: Analysis of the Financial Components that Impact Calculation of Losses to be Shared by Contributors

1. There are several financial components that impact CTF Net Income—most of which are related to market conditions. On the other hand, the potential loss amount is mostly affected by decisions taken by the Committee on (i) the types of financial products approved and (ii) the approved amounts for such products. Each financial product has a corresponding potential loss rate which reflects the different dimensions of risk of the underlying instrument(s) used for the project. The list below presents the financial components of CTF Net Income and potential losses and explains their impact on these items.

- a) CTF Net Income comprises: investment income, interest and fees, reduced by administrative budget.
 - i. *The investment income* generated from investments of the undisbursed cash balance of the CTF Trust Fund. The higher the investment income rate of return, the greater the overall projected CTF Net Income may be.⁹
 - ii. *The interest and fees received on outgoing CTF loans and guarantees in excess of 0.75 per cent and reflows in excess of 0.75 per cent, after deducting the original principal amount, received from other outgoing CTF financial products*¹⁰ are considered a gain and as such will increase the projected CTF Net Income. The higher the amount of outgoing CTF loans, guarantees and other financial products with the interest rates or returns above 0.75 per cent, the greater will be the projected overall CTF Net Income.
 - iii. *The Administrative budget* is considered an expense item and therefore reduces gross income.
- b) Potential loss amount is a combination of the loss rates on specific financial products¹¹ and *the composition of the CTF financial products* in the portfolio. The higher the amounts allocated to financial products with higher potential loss rates, the greater will be the overall potential loss amount.

2. If CTF Net Income rises, ceteris paribus, the margin between CTF Net Income and potential losses will rise as well. However, if changes in both CTF Net Income and the potential losses are perfectly correlated, the margin will remain constant.

⁹ It is important to note that depending on the investment management strategy, higher projected investment income rate may be accompanied by increased volatility and higher risk of losses.

¹⁰ All excluding Higher Risk Profile Financial Products.

¹¹ *Ibid.*

Annex II: Projected CTF Net Income and Potential Losses
(loss rate assumptions based on the information provided by MDBs in August 2014)^{a/}

<i>in USD millions</i>	Cash Flow Model Update as of June 30, 2014
CTF Net Income	231
Investment Income	272
<i>Assumption on Investment Income Return Rate, %</i>	<i>0.87</i>
<i>Assumption on Average CTF Cash Balance (Jan 2009 - June 2028)</i>	<i>1,670</i>
Budget Expenses	(96)
Interest Received on outgoing loans and guarantee fees in excess of 0.75%	55
Potential CTF loss amount	112
Average Loss rates, %	
<i>Public sector</i>	<i>5%</i>
<i>Private Sector Average</i>	<i>6%</i>
<i>Senior Loans</i>	<i>5%</i>
<i>Mezzanine with income participation</i>	<i>11%</i>
<i>Guarantees</i>	<i>4%</i>
CTF Net Income Excess/Shortfall over Potential Loss Amount	119
<i>as % of potential losses</i>	<i>106%</i>
<i>Potential Losses to CTF Net Income Ratio</i>	<i>48%</i>

a/ Calculated for the period from CTF inception through the Recalculation Date of June 30, 2028

Annex II: Additional Scenarios of Projected CTF Net Income and Potential Losses
(loss rate assumptions provided by Germany)^{a/}*

in USD millions

	Scenarios proposed by Germany		
	Adjusted base scenario	Downside 1	Downside 2
CTF Net Income	223	216	209
Investment Income	268	264	260
<i>Assumption on Investment Income Return Rate, %</i>	<i>0.87</i>	<i>0.87</i>	<i>0.87</i>
<i>Assumption on Average CTF Cash Balance (Jan 2009 - June 2028)</i>	<i>1,623</i>	<i>1,597</i>	<i>1,570</i>
Budget Expenses	(96)	(96)	(96)
Interest Received on outgoing loans and guarantee fees in excess of 0.75%	51	48	45
Potential CTF loss amount	180	282	384
Average Loss rates, %			
<i>Public sector</i>	5%	10%	15%
<i>Private Sector Average</i>	14%	19%	24%
<i>Senior Loans</i>	11%	16%	21%
<i>Mezzanine with income participation</i>	25%	30%	35%
<i>Guarantees</i>	10%	15%	20%
CTF Net Income Excess/Shortfall over Potential Loss Amount	43	(66)	(175)
<i>as % of potential losses</i>	24%	-23%	-46%
<i>Potential Losses to CTF Net Income Ratio</i>	81%	131%	184%

a/ Calculated for the period from CTF inception through the Recalculation Date of June 30, 2028

*Note: these assumptions have not been validated by the Trustee or MDBs and may not represent the actual risk level of the CTF portfolio of projects managed by MDBs.