

CLIMATE INVESTMENT FUNDS

CTF/TFC.15/4
April 13, 2015

Meeting of the CTF Trust Fund Committee
Washington D.C.
Tuesday, May 12, 2015

Agenda Item 4

**REVIEW OF MINIMUM THRESHOLD MARGIN BETWEEN CTF PROJECTED NET INCOME AND
PROJECTED LOSSES AS A KEY RISK INDICATOR**

PROPOSED DECISION

The CTF Trust Fund Committee reviewed the document CTF/TFC.15/4, *Review of Minimum Threshold Margin between CTF Projected Net Income and Projected Losses as a Key Risk Indicator*, and requests the CIF Administrative Unit, in collaboration with the Trustee, to:

- i. refine and operationalize the Enterprise Risk Management Dashboard as a reporting tool for key risk metrics by the end of Q2 F2016;
- ii. closely monitor and report on the margin between the CTF's projected net income and projected losses on outgoing CTF financial products¹ on a regular basis via the Enterprise Risk Management Dashboard. The CTF Trust Fund Committee agrees that establishing a target or minimum threshold for the CTF margin is unnecessary at this time; and
- iii. commence stress testing using the CTF's cash flow model to determine the effects of stressed scenarios on the CTF's projected net income and projected losses, and report the results on a quarterly basis through the Enterprise Risk Management Dashboard.

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, as may be amended from time to time.

I. INTRODUCTION

1. The 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. CTF concessional financing focuses on large-scale, country-led projects in renewable energy, energy efficiency and transport, and on larger transactions in a smaller number of countries. The CTF aims to drive down technology costs, stimulate private sector participation, and catalyze transformative change that can be replicated elsewhere.

2. At the June 25, 2014 meeting, the CTF Trust Fund Committee reviewed the *Risk Report of the CTF and SCF Trust Funds* and requested that the Trustee, in consultation with the CIF Administrative Unit and MDBs, propose a specific target for the margin between the CTF's projected net income and projected losses on outgoing CTF financial products (CTF margin), and an outline of how and when such a target might be achieved, for consideration by the Committee at its meeting in November 2014.

3. At the November 17, 2014 meeting, the CTF Trust Fund Committee reviewed the *Proposal for a Specific Target for the Margin between Projected CTF Net Income and Projected Loan Losses* and requested that the CIF Senior Risk Management Officer, once appointed, work with the Trustee, MDBs, and interested Committee members, to propose to the Committee an appropriate methodology and level of such a target at the next Committee meeting. The rationale for establishing the target was to give the Committee 'early warning' that projected CTF net income might not be sufficient to cover potential losses, and theoretically enable the Committee to consider actions to mitigate such an event. Table 1 displays the level of the CTF margin over time.

**Table 1. Financial Components of CTF Net Income and Potential Losses
(USD millions)**

| | As Projected in | | | | | |
|---|-----------------|------------|------------|------------|------------|------------|
| | Dec-08 | Mar-11 | Dec-11 | Dec-13 | Jun-14 | Dec-14 |
| CTF Net Income | 285 | 392 | 308 | 232 | 231 | 183 |
| Investment Income | 355 | 426 | 321 | 259 | 272 | 238 |
| <i>Assumption on Investment Income Return Rate, %</i> | 2.00 | 2.00 | 1.25 | 0.75 | 0.87 | 0.77 |
| <i>Assumption on Average CTF Cash Balance (Jan 2009 - June 2028)</i> | 906 | 1,818 | 1,331 | 1,753 | 1,670 | 1,421 |
| Budget Expenses | (70) | (63) | (74) | (77) | (96) | (108) |
| Interest Received on outgoing loans and guarantee fees in excess of 0.75% | - | 29 | 60 | 50 | 55 | 52 |
| Potential CTF loss amount | 59 | 319 | 221 | 193 | 112 | 111 |
| Average Loss rates, % | | | | | | |
| <i>Public sector</i> | 5 | 5 | 5 | 5 | 5 | 5 |
| <i>Private Sector</i> | N/A | 10 | 10 | 11 | 7 | 10 |
| CTF Net Income Excess over Potential Loss Amount | 226 | 73 | 86 | 39 | 119 | 71 |
| as % of Potential Losses | 384% | 23% | 39% | 20% | 106% | 64% |
| Potential Losses to CTF Net Income Ratio | 21% | 81% | 72% | 83% | 48% | 61% |

II. ENTERPRISE RISK MANAGEMENT AND IMPROVING THE CTF MARGIN

4. At a high level, risk reflects the possibility of an event occurring which will have an impact on the achievement of objectives, and is measured in terms of the likelihood and severity of the event occurring.
5. Correspondingly, enterprise risk management (ERM) refers to a structured, consistent and continuous process across the whole organization for identifying, assessing, monitoring and responding to opportunities and threats which affect the achievement of its objectives.
6. It is essential for ERM to begin with a clear understanding the enterprise's objectives. Because no two organizations are identical, individual enterprises have unique strategies and objectives, therefore face different types of risk, and have different options available to them for responding to risk. An organization's objectives provide the necessary context and direction for ERM to be successful. Failing to incorporate an organization's objectives into risk management efforts can cause more harm than good, and undermine the ability of an organization to achieve, or even pursue, its objectives.
7. From a risk management perspective, the CTF is unusual because its objectives are so fundamentally different from those of most private sector enterprises. The CTF was established as a trust fund, and, as such, functions differently than an investment fund. The CTF is funded by contributors rather than investors, and, as mentioned above, the CTF was created to provide concessional financing to middle income countries focusing on projects in renewable energy, energy efficiency and transport, rather than to maximize returns for investors.
8. Options for responding to risk generally fall into one of the following categories.
 - a) Risk Avoidance – not undertaking the associated initiative
 - b) Risk Reduction – implementing exposure limits or collateral requirements
 - c) Risk Transfer – obtaining insurance or guarantees
 - d) Risk Acceptance – doing nothing
9. Given that the strategic objectives of the CTF necessitate a significant exposure to the risk of losses, options to avoid, reduce or transfer risk are extremely limited and many traditional risk responses are simply not applicable to the CTF. For example, implementing controls such as minimum credit rating requirements for borrowers or loan guarantee requirements, to minimize or prevent credit losses, would undermine the ability of the CTF to pursue its objectives (e.g., extending concessional loans and loan guarantees to middle income countries and private sector entities for projects in renewable energy, energy efficiency and transport).
10. Failing to keep the CTF's strategic objectives at the forefront of ERM efforts, and instead focusing on goals which conflict with the CTF's objectives, can lead to the

avoidance, transfer or reduction of risk which must instead be accepted if the CTF is to achieve its objectives.

11. This is not to say that contributors should not seek assurance that the CTF is exercising prudent stewardship over the funds it manages. Additionally, contributors must be kept apprised of their exposure to the risk of losses. However, many of the most commonly employed risk mitigants would prevent, rather than assist the CTF in fulfilling its strategic objectives, and may not therefore be applied to the CTF.

III. POTENTIAL USES FOR A MINIMUM CTF MARGIN THRESHOLD

Minimum Margin as a Trigger for Considering Risk Mitigants

12. If we are to manage effectively the risks to which the CTF is exposed, it is essential to identify and develop options proactively for mitigating potential losses in advance of the breach of any thresholds. Efforts to identify risk mitigants should be ongoing. It is likely that most, if not all, identified options would be most prudently implemented as soon as possible, rather than at the time a minimum CTF margin threshold is breached.

13. Presently, no risk mitigants have been identified for consideration that would be implemented most prudently by waiting for a minimum CTF margin threshold to be breached. Until such a potential mitigant has been identified, it would not be worthwhile to use a CTF margin threshold as a trigger for implementing risk mitigants.

Minimum CTF Margin as a Target or Goal

14. Whether a target CTF margin is met, is primarily determined by market conditions beyond the CTF's control (e.g., interest rates, loan recipient defaults and consequent loan losses). It is impossible to eliminate many of the risks to which the CTF must be exposed in order to fulfill its strategic objectives, or for the CTF to guarantee that losses will not exceed the CTF's net income.

15. Focusing on a target, whose achievement is beyond the CTF's control, would add little value and would not serve the purpose of providing an early warning indicator. It would be more worthwhile to focus efforts on proactively identifying and implementing risk mitigants which do not prevent the CTF from achieving its strategic objectives.

Minimum CTF Margin as an Early Warning Indicator that Potential Losses may be Realized

16. The level and direction toward which the CTF margin shifts would be a valid key risk indicator that potential losses may be realized. However, a threshold such as this is usually established as a trigger for closer monitoring, escalation to ensure awareness or decision-making at a higher level authority, or action to address an issue.

17. The CTF margin should be one of the most closely monitored CTF-related metrics, and any prudent measures to maintain the CTF margin at a reasonable level should already have been implemented before it declined to a troubling level. For these reasons, rather than establishing a threshold or target for the CTF margin, it would be most prudent for the CIF Administrative Unit, in collaboration with the Trustee, to begin reporting the margin on a quarterly basis in the Enterprise Risk Management Dashboard. Additionally a clearer understanding of the behavior of the CTF margin under adverse conditions is needed.

IV. THE NEED FOR STRESS TESTING

18. Ideally the CIF Administrative Unit, in collaboration with the Trustee, would examine the behavior of the CTF margin under adverse circumstances based on the observed historical volatility of the CTF margin level, or the CTF margin level during an extreme negative event. Unfortunately, the CTF has not operated for a long enough period for sufficient data to be available to use either of these approaches.

19. Additionally, because the CTF supports clients' expansion into new territories, technologies and business models, the validity of historical data and comparisons would be questionable.

20. In the absence of such data, it would be worthwhile for the CIF Administrative Unit, in collaboration with the Trustee, to use the cash flow model to examine different scenarios based on different assumptions impacting the CTF's net income and projected losses, and determine the CTF margin level under stressed conditions as well as extreme adverse conditions.

21. Stress testing would provide insight into the effects that changes in various risk factors (e.g., rising interest rates, declining equity markets, adverse changes in default and recovery rates) could have on the CTF's net income and potential losses. If the CTF margin did not remain positive under a stressed scenario, this would serve as another valuable early warning indicator.

22. The CIF Administrative Unit, in collaboration with the Trustee should report stress testing results on a quarterly basis in the Enterprise Risk Management Dashboard.