



CLIMATE INVESTMENT FUNDS

Risk Report of the CTF and SCF

December 15, 2017



CTF CLEAN
TECHNOLOGY
FUND



FIP FOREST
INVESTMENT
PROGRAM



PPCR PILOT PROGRAM
FOR CLIMATE
RESILIENCE



SREP SCALING UP RENEWABLE
ENERGY IN LOW-INCOME
COUNTRIES PROGRAM

Overview



1. Highlights

2. Risk Assessments

- CTF
- FIP
- PPCR
- SREP

3. Next Steps



1. Highlights

1. A 5-year reserve for administrative expenses is now included in the program-level resource availability calculations, allocated according to the requirements in the Contribution Agreements. This has resulted in a severe negative impact (USD 41 million) on the FIP's Available Resources
 2. CTF's available resources increased substantially to USD 422 million from a deficit of USD 40 million in March due to the implementation of CTF's pipeline management and cancelation policy.
 3. In May 2017, the UK encashed GBP 240 million of promissory notes it contributed to the CTF causing a significant decline in CTF's currency risk exposure.
 4. In July 2017, the UK encashed GBP 64 million of promissory notes it contributed to the SREP causing a significant decline in SREP's currency risk exposure.
 5. In June 2017, a payment default occurred relating to a private sector project involving less than USD 0.5 million of CTF funds.
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2. Assessment of Key Risks



1. Implementation Risk – CTF and SCF
2. Currency Risk via Promissory Notes – CTF and SCF
3. Resource Availability Risk – CTF and SCF
4. Credit Risk - CTF



Risk Assessments - CTF

CTF Key Risk Exposures – Implementation Risk



“The risk that, after a project becomes effective, it is not implemented in a timely manner”

The CIF AU flags a project for implementation risk if the project meets at least one of the following two criteria.

- I. The project has been Effective for 36 months, but has disbursed < 20% of approved funds.
- II. The project is within 15 months of Closing (i.e. the date by which all of the CIF program/subprogram’s funds are to be disbursed), but has disbursed < 50% of approved funds.



CTF – Implementation Risk – Projects flagged for first criterion

CTF’s risk score for implementation risk remains **High**

Changes from December 31, 2016, to June 30, 2017

- 4 projects vs. 3 as of December 31, 2016
- USD 408M vs. USD 355M as of December 31
- 2 currently flagged projects were also flagged as of December 31, 2016
 - One Wind Energy Plan
 - Eskom CSP
- 1 project flagged as of December 31, 2016, (Distribution Efficiency Project in Vietnam) has increased disbursements > 40% and is no longer flagged

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Effectiveness date | Months since Effectiveness |
|------------------------------------------------------------------------------------------|--------------|------|----------------------|------------------------------------------|-------------|-------------------|---------------------------|--------------------|----------------------------|
| Strategic Public Transportation Systems (SETP) Program | Colombia | IDB | 20.0 | 3.2 | 15.9% | Sep-11 | 70.0 | Jan-14 | 41.2 |
| One Wind Energy Plan | Morocco | AfDB | 125.0 | 20.3 | 16.2% | Jun-12 | 61.0 | Dec-12 | 54.4 |
| Market Transformation through Introduction of Energy Efficient Electric Vehicles Project | Philippines | ADB | 13.1 | 0.2 | 1.8% | Dec-12 | 55.0 | Dec-13 | 43.0 |
| Eskom Renewable Support Project - CSP | South Africa | AfDB | 50.0 | - | 0.0% | May-11 | 74.0 | Sep-11 | 69.2 |
| | | IBRD | 200.0 | - | 0.0% | Oct-11 | 69.0 | Jul-12 | 59.2 |

CTF – Implementation Risk – Projects flagged for second criterion



Changes from December 31, 2016, to June 30, 2017

- 4 projects vs. 3 as of December 31, 2016
- USD 545M vs. USD 475M as of December 31
- All 3 projects flagged as of December 31, 2016 are still flagged now
 - Wind Power Development Project
 - One Wind Energy Plan
 - Eskom CSP

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Financial closure date | Months before Financial closure |
|--------------------------------------------------------|--------------|------|----------------------|------------------------------------------|-------------|-------------------|---------------------------|------------------------|---------------------------------|
| Strategic Public Transportation Systems (SETP) Program | Colombia | IDB | 20.00 | 3.18 | 15.9% | Sep-11 | 70.0 | Jun-18 | 12 |
| Wind Power Development Project | Egypt | IBRD | 150.00 | 55.57 | 37.0% | Jun-10 | 85.0 | Dec-17 | 6 |
| One Wind Energy Plan | Morocco | AfDB | 125.00 | 20.30 | 16.2% | Jun-12 | 61.0 | Dec-17 | 3 |
| Eskom Renewable Support Project - CSP | South Africa | AfDB | 50.00 | - | 0.0% | May-11 | 74.0 | Dec-18 | 15 |
| | | IBRD | 200.00 | - | 0.0% | Oct-11 | 69.0 | Dec-16 | (6) |

CTF Currency Risk via Promissory Notes



“The risk that fluctuations in currency exchange rates will cause the value of the foreign currency in which a promissory note is denominated, to decline”

| Currency Risk Exposure (Millions) as of September 30, 2017 | | | | | | | |
|------------------------------------------------------------|--------------------------------------|----------------------------------------------|--------------------------------------|----------------------------------------|-----------------|---------------|------------|
| Program/ Subprogram | Original Amount Pledged/ Received | Pledged Amount Outstanding/ Unencashed | Realized Currency Gain/ (Loss) | Unrealized Currency Gain/ (Loss) | Risk Likelihood | Risk Severity | Risk Score |
| CTF | £1,130.00 | £517.07 | (\$47.27) | (\$100.48) | Very Likely | Moderate | High |

In May 2017, the UK encashed GBP 240 million of promissory notes it contributed to the CTF causing a significant decline in CTF’s currency risk exposure. However, this also resulted in a realization of a USD 71 million decline in value of the encashed notes.

CTF Resource Availability Risk



“The risk that the Trustee will not have sufficient resources, under a respective CIF program/subprogram, to commit to fund all projects in the program/subprogram’s pipeline”

| Available Resources as of September 30, 2017 | | | | |
|----------------------------------------------|--------------------------------------------------------------|--------------------|---------------|------------|
| Program/ Subprogram | Available Resources for Projects/Programs (\$Million)* | Risk Likelihood | Risk Severity | Risk Score |
| CTF | \$422.50 | Very Unlikely | Minimal | Low |

CTF’s available resources increased substantially to USD 422 million from a deficit of USD 40 million in March due to the implementation of CTF’s pipeline management and cancelation policy.

CTF Credit Risk – Public Sector Portfolio



| Public Sector CTF Loan Portfolio - Credit Risk (September 30, 2017) | | | | | | | |
|---------------------------------------------------------------------|----------------------|---------------|-----------|---------|-------------|--------------|--------------------|
| Beneficiary Country | Loan Amount | Credit Rating | | | DP | LGD | Expected Loss Rate |
| | | S&P | Moody's | Fitch | | | |
| Colombia | 89,265,000 | BBB(N) | Baa2 | BBB | 1.679% | 55.6% | |
| Egypt, Arab Republic of | 149,750,000 | B- | B3 | B | 22.184% | 61.6% | |
| India | 714,000,000 | BBB- | Baa3(P) | BBB- | 1.679% | 55.6% | |
| Indonesia | 125,000,000 | BBB- | Baa3(P) | BBB-(P) | 1.679% | 57.7% | |
| Mexico | 401,014,000 | BBB+ | A3(N) | BBB+ | 1.679% | 55.6% | |
| Morocco | 633,950,000 | BBB- | Ba1(P) | BBB- | 8.812% | 57.7% | |
| Philippines | 57,201,690 | BBB | Baa2 | BBB-(P) | 1.679% | 55.6% | |
| South Africa | 350,000,000 | BB+(N) | Baa3(N) | BB+ | 8.812% | 57.7% | |
| Turkey | 150,000,000 | BB(N) | Ba1(N) | BB+ | 8.812% | 57.7% | |
| Ukraine | 148,425,000 | B- | Caa2(P) | B- | 35.572% | 61.0% | |
| Vietnam | 177,900,000 | BB- | B1(P) | BB-(P) | 22.184% | 61.6% | |
| Total Exposure | 2,996,505,690 | | | | | | |
| Weighted Average | | | BB | | 8.3% | 57.4% | 4.8% |



CTF Credit Risk – Public & Private Sector Portfolio Summary

| Loan Portfolio Credit Risk Exposure (as of September 30, 2017) | | | | | | | | | |
|----------------------------------------------------------------|-----------------------|-------------------------------------------|----------------------------------------------------|-------------------------------------------------|---------------------------------|--------------------------------------------------|---------------------------------------------------------------|----------------------------------|--------------------------------------------------------|
| Sector | Portfolio Risk Rating | Total Committed Loans (MM USD equivalent) | Estimated Probability of Default (PD) ⁵ | Estimated Loss Given Default (LGD) ¹ | Expected Loss Rate ² | Expected Losses (MM USD equivalent) ³ | Actual Losses and Provisions ⁴ (MM USD equivalent) | # of Defaulted or Impaired Loans | Actual Losses and Provisions vs. Total Committed Loans |
| Public | BB ⁵ | 2,968.0 | 8.3% | 57.4% | 4.8% | 142.5 | 0 | 0 | 0% |
| Private | B+ ^{7,8} | 1,018.0 | 19.5% | 52.5% | 10.2% | 102.2 | 19.5 | 3 | 1.9% |

1. LGDs are based on the Portfolio Risk Rating's mapping to the LGD associated with Moody's credit rating equivalent as published in Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2015 (i.e. LGD = 1 - Average Sr. Unsecured Bond Recovery Rate from the period of 1982-2015)

2. Expected Loss Rate = PD x LGD, and does not take into account any correlations between the performance of loans within the portfolio

3. Expected Losses are in addition to Actual Losses

4. Includes portions of loans which have been written down

5. Derived based on the mapping of the portfolio's Estimated PD to the corresponding rating agency credit rating as published in *Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2015*

6. Represents the weighted average PD (weighted by loan amount) associated with the external rating agency credit rating assigned to each recipient (in the case of split ratings, the PD associated with the lowest of Moody's and S&P ratings is used) as of September 30, 2017. 5-year Average Cumulative Issuer-Weighted Global Default Rates from the period of 1983-2015 as published in *Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2015* are used.

7. Based on internal credit ratings or PDs assigned to their respective private sector CIF loans by reporting MDBs (EBRD, IDB and IFC), weighted by loan amount. The resulting credit rating for the combined portfolio of private sector CTF loans originated and serviced by these three MDBs is then applied to the entire portfolio of private sector CTF loans.

8. Methodologies used to calculate credit ratings and PDs may differ between MDBs, as well as between a given MDB and the external rating agencies.

9. Information pertaining to Committed Loans is obtained from the Trustee.

In June 2017, a payment default occurred relating to a private sector project involving less than USD 0.5 million of CTF funds.



Risk Assessments - FIP





FIP – Implementation Risk – Projects flagged for both criteria

Changes from December 31, 2016, to June 30, 2017

- FIP's risk score for implementation risk is **Medium**.
- 1 project flagged under both criteria

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Effectiveness date | Months since Effectiveness |
|------------------------------------------------------------------------------------|---------|-----|----------------------|------------------------------------------|-------------|-------------------|---------------------------|--------------------|----------------------------|
| Forest Information to Support Public and Private Sectors in Management Initiatives | Brazil | IDB | 16.5 | 1.8 | 11.0% | Dec-13 | 42.6 | Jun-14 | 36.7 |

- The 3 projects flagged as of December 31, 2016, are no longer flagged:
 - Gazetted Forests Participatory Management Project for REDD+ (PGFC/REDD+) (Brazil) – increased disbursements > 20%
 - Financing Low Carbon Strategies in Forest Landscapes (Mexico) – extended financial closure date to 01/2020
 - Forests and Climate Change Project (Mexico) – significantly increased disbursements > 70%

FIP Currency Risk via Promissory Notes



“The risk that fluctuations in currency exchange rates will cause the value of the foreign currency in which a promissory note is denominated, to decline”

| Currency Risk Exposure (Millions) as of September 30, 2017 | | | | | | | |
|------------------------------------------------------------|--------------------------------------|----------------------------------------------|--------------------------------------|----------------------------------------|-----------------|---------------|------------|
| Program/ Subprogram | Original Amount Pledged/ Received | Pledged Amount Outstanding/ Unencashed | Realized Currency Gain/ (Loss) | Unrealized Currency Gain/ (Loss) | Risk Likelihood | Risk Severity | Risk Score |
| FIP | £223.00 | £179.60 | \$1.48 | (\$37.26) | Very Likely | Severe | High |

FIP Resource Availability Risk



- Admin Expense Reserve allocated according to the projected Fund balance of each SCF program
 - By FY22 the FIP is expected to be the only program with a fund balance
 - FIP will be required to fund all SCF administrative expenses for as long as it remains the only program with an outstanding fund balance
 - Must be paid with grant resources

| Available Resources as of September 30, 2017 | | | | |
|----------------------------------------------|--------------------------------------------------------------|--------------------|---------------|------------|
| Program/ Subprogram | Available Resources for Projects/Programs (\$Million)* | Risk Likelihood | Risk Severity | Risk Score |
| FIP | (\$87.6) | Likely | Severe | High |

*Available Resources for Projects/Programs represent Unrestricted Fund Balance for Project/Program Commitments less Total Anticipated Commitments, as reflected in Annex A.

- USD 37 million of the current shortfall can be attributed to declines in the value of the FIP's promissory notes
- A further USD 36 million can be attributed to the 15% currency reserve requirement



Risk Assessments - PPCR



PPCR – Implementation Risk – Projects flagged for first criterion

PPCR's risk score for implementation risk remains **High**

Changes from December 31, 2016, to June 30, 2017

- 7 projects vs. 7 as of December 31, 2016
- USD 116M vs. USD 95M as of December 31
- Of the 7 projects flagged as of December 31, 2016, 6 are still flagged now
 - Mainstreaming Climate Resilience into Development Planning (Cambodia) – increased disbursements > 20% and is no longer flagged

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Effectiveness date | Months since Effectiveness |
|---------------------------------------------------------------------------------|---------------------|------|----------------------|------------------------------------------|-------------|-------------------|---------------------------|--------------------|----------------------------|
| Enhancement of Flood and Drought Management in Pursat Province | Cambodia | ADB | 9.8 | 1.7 | 17.8% | Dec-12 | 54.6 | Jun-14 | 36.3 |
| Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation | Cambodia | ADB | 9.5 | 1.3 | 13.5% | Jun-13 | 48.1 | Nov-13 | 43.6 |
| GMS Southern Economic Corridor Towns Development Project | Cambodia | ADB | 9.4 | 0.7 | 7.7% | Dec-12 | 54.7 | Apr-13 | 50.8 |
| Climate Information Development and Forecasting Project (PDIPC) | Niger | AFDB | 13.0 | 1.8 | 13.8% | Sep-12 | 57.0 | Aug-13 | 47.0 |
| Water Resources Mobilization and Development Project (PROMOVARE) | Niger | AFDB | 22.0 | 4.3 | 19.7% | Sep-12 | 57.0 | Aug-13 | 47.0 |
| Enhancing Climate Resilience for West Coast Road Project | South Pacific-Samoa | IBRD | 14.8 | 1.4 | 9.3% | Dec-12 | 54.4 | Apr-13 | 50.2 |
| Private Sector Support to Climate Resilience in Zambia | Zambia | AFDB | 38.0 | 3.4 | 9.1% | Oct-13 | 44.4 | Jun-14 | 37.0 |

PPCR – Implementation Risk – Projects flagged for second criterion



Changes from December 31, 2016, to June 30, 2017

- 3 projects vs. 4 as of December 31, 2016
- USD 23M vs. USD 48M as of December 31
- 1 project (Building Capacity for Climate Resilience – Tajikistan) flagged as of December 31, 2016 is still flagged now.
- Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation (Cambodia) – extended financial closure date to 03/2020 and no longer flagged
- Provincial Roads Improvement Project - Climate Proofing of Roads (Cambodia) – extended financial closure date to 12/2018 and no longer flagged
- Roads & Bridges Management and Maintenance Project - APL2 (Mozambique) – disbursements increased significantly from 6% to almost 60% of MDB approved funding

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Financial closure date | Months before Financial closure |
|----------------------------------------------------------|---------------------|------|----------------------|------------------------------------------|-------------|-------------------|---------------------------|------------------------|---------------------------------|
| Building Capacity for Climate Resilience | Tajikistan | ADB | 6.0 | 2.5 | 41.5% | Jun-12 | 60.9 | May-17 | (1.6) |
| Environmental Land Management and Rural Livelihoods - AF | Tajikistan | IBRD | 2.0 | 0.2 | 10.0% | Jun-15 | 24.0 | May-18 | 10.0 |
| Enhancing Climate Resilience for West Coast Road Project | South Pacific-Samoa | IBRD | 14.8 | 1.4 | 9.3% | Dec-12 | 54.4 | Aug-18 | 14.0 |

PPCR Currency Risk via Promissory Notes



“The risk that fluctuations in currency exchange rates will cause the value of the foreign currency in which a promissory note is denominated, to decline”

| Currency Risk Exposure (Millions) as of September 30, 2017 | | | | | | | |
|------------------------------------------------------------|--------------------------------------|----------------------------------------------|--------------------------------------|----------------------------------------|-----------------|---------------|------------|
| Program/ Subprogram | Original Amount Pledged/ Received | Pledged Amount Outstanding/ Unencashed | Realized Currency Gain/ (Loss) | Unrealized Currency Gain/ (Loss) | Risk Likelihood | Risk Severity | Risk Score |
| PPCR | £361.00 | £9.78 | (\$50.10) | (\$2.20) | Very Likely | Minimal | Low |

PPCR Resource Availability Risk



“The risk that the Trustee will not have sufficient resources, under a respective CIF program/subprogram, to commit to fund all projects in the program/subprogram’s pipeline”

| Available Resources as of September 30, 2017 | | | | |
|----------------------------------------------|--------------------------------------------------------------|--------------------|---------------|------------|
| Program/ Subprogram | Available Resources for Projects/Programs (\$Million)* | Risk Likelihood | Risk Severity | Risk Score |
| PPCR | \$11.8 | Very Unlikely | Minimal | Low |

*Available Resources for Projects/Programs represent Unrestricted Fund Balance for Project/Program Commitments less Total Anticipated Commitments, as reflected in Annex A.



Risk Assessments - SREP

SREP – Implementation Risk



One project with material funding has been flagged under the first criterion. This is the first SREP project with material funding to be flagged for implementation risk.

| Project Title | Country | MDB | MDB approved funding | Cumulative disbursement (as of Jun 2017) | % disbursed | MDB approval date | Months since MDB approval | Effectiveness date | Months since Effectiveness |
|--------------------------------------|---------|------|----------------------|------------------------------------------|-------------|-------------------|---------------------------|--------------------|----------------------------|
| Rural Electrification Hybrid Systems | Mali | IBRD | 15.2 | 0.8 | 5.6% | Dec-13 | 42.6 | Jun-14 | 36.4 |

No SREP projects were flagged under the second criterion

SREP's risk score for implementation risk is **Medium**.

SREP Currency Risk via Promissory Notes



“The risk that fluctuations in currency exchange rates will cause the value of the foreign currency in which a promissory note is denominated, to decline”

Currency Risk Exposure (Millions) as of September 30, 2017

| Program/ Subprogram | Original Amount Pledged/ Received | Pledged Amount Outstanding/ Unencashed | Realized Currency Gain/ (Loss) | Unrealized Currency Gain/ (Loss) | Risk Likelihood | Risk Severity | Risk Score |
|------------------------|--------------------------------------|----------------------------------------------|--------------------------------------|----------------------------------------|-----------------|---------------|------------|
| SREP | £268.00 | £177.30 | (\$15.29) | (\$40.42) | Very Likely | Severe | High |

In July 2017, the UK encashed GBP 64 million of promissory notes it contributed to the SREP causing a significant decline in SREP’s currency risk exposure. However, this also resulted in a realization of a USD 16 million decline in value of the encashed notes.

SREP Resource Availability Risk



“The risk that the Trustee will not have sufficient resources, under a respective CIF program/subprogram, to commit to fund all projects in the program/subprogram’s pipeline”

| Available Resources as of September 30, 2017 | | | | |
|----------------------------------------------|--------------------------------------------------------------|--------------------|---------------|------------|
| Program/ Subprogram | Available Resources for Projects/Programs (\$Million)* | Risk Likelihood | Risk Severity | Risk Score |
| SREP** | (\$81.4) | Very Unlikely | Minimal | Low |

*Available Resources for Projects/Programs represent Unrestricted Fund Balance for Project/Program Commitments less Total Anticipated Commitments, as reflected in Annex A.

**SREP's resource availability is based on both the sealed and reserve pipelines.

3. Next Steps



1. Formally propose risk tolerance levels for TFC approval
 2. Investigate reporting aggregate private sector exposure to Implementation Risk
 3. Investigate reporting Interest Rate Risk exposure incurred via private sector lending for CTF
 4. Investigate assessing and monitoring Fraud/Corruption Risk
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