



Risk Report for the Clean Technology Fund (CTF)

June 6, 2018

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- i. Implementation Risk
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Highlights

- 2 of the 4 loans which have experienced payment defaults (EUR 2 million and EUR 5.6 million), are no longer in default.
- 2 loans remain in default (EUR 15.5 million, and USD 12 million).
- Eskom Renewable Support Project CSP involves USD 250 million of CTF funds. IBRD and other financiers have agreed on an action plan to address a number of governance and compliance issues facing Eskom. Eskom developed an alternative proposal to replace the original CSP component that seeks to install battery storage capacity alongside new investments in renewable energy projects.
- The unrealized decline in the value of CTF's unencashed promissory notes decreased to USD 66 million from USD 100 million.

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’s risk score for implementation risk remains **High** because seven projects representing USD 567M of approved funding have been flagged for this risk.

Implementation Risk – Projects flagged under first criterion

Changes since June 30, 2017:

- 7 projects are flagged vs. 4 as of June 30, 2017
- USD 567M vs. USD 408M as of June 30

Project Title	Country	MDB	MDB approved funding	Cumulative disbursement (as of Dec 2017)	% disbursed	Effectiveness date	Months since Effectiveness
Eskom Renewable Support Project - CSP	South Africa	IBRD	200.0	-	0.0%	Jul-12	66
		AFDB	50.0	-	0.0%	Sep-11	75
Market Transformation through Introduction of Energy Efficient Electric Vehicles Project	Philippines	ADB	13.1	0.2	1.8%	Dec-13	49
One Wind Energy Plan	Morocco	AFDB	125.0	20.3	16.2%	Jul-14	43
Geothermal Financing and Risk Transfer Facility	Mexico	IDB	54.3	0.7	1.2%	Oct-14	40
Second Urban Infrastructure Project (UIP-2)	Ukraine	IBRD	50.0	3.0	6.0%	Nov-14	38
District Heating Energy Efficiency Project	Ukraine	IBRD	50.0	2.7	5.5%	Nov-14	38
Cebu Bus Rapid Transit Project	Philippines	IBRD	25.0	-	0.0%	Dec-14	37

Implementation Risk – Projects flagged under first criterion

The following 3 projects which had been flagged as of June 30, 2017 are still flagged now

1. Eskom CSP (South Africa) USD 250M
2. Market Transformation through Introduction of Energy Efficient Electric Vehicles (Philippines) USD 13M
3. One Wind Energy Plan (Morocco) USD 125M

The 4th project which had been flagged as of June 30, 2017 [Strategic Public Transportation Systems (SETP) Program – Colombia USD 20M] has increased disbursements substantially to almost 30% and is no longer flagged.

Implementation Risk – Projects flagged under first criterion

Cebu Bus Rapid Transit Project – Philippines (USD 25M)

- ❖ The Transportation Secretary and the Presidential Assistant recommended to cancel this project as they maintain that a Light Rail Transit (LRT) is a more viable solution for Cebu's traffic congestion.
- ❖ A group of Cabinet secretaries then agreed, on April 25th, to hire technical service consultants to review the project.

Implementation Risk – Projects flagged under second criterion

Changes since June 30, 2017:

- 2 projects are flagged vs. 4 as of June 30, 2017
- USD 263M vs. USD 545M as of June 30

Project Title	Country	MDB	MDB approved funding	Cumulative disbursement (as of Jun 2017)	% disbursed	Financial closure date	Months before Financial closure
Eskom Renewable Support Project	South Africa	IBRD	200.0	-	0.0%	Dec-18	12
		AFDB	50.0	-	0.0%	Dec-18	12
Market Transformation through Introduction of Energy Efficient Electric Vehicles Project	Philippines	ADB	13.1	0.2	1.8%	Jun-18	6

Currency Risk

- Currency Risk exposure remains **High**.
- Between September 30, 2017 and March 31, 2018, the GBP appreciated 4.6% against the USD.
- Unrealized decline in the value of the outstanding promissory notes decreased to USD 66 million from USD 100 million

Currency Risk Exposure (Millions) as of March 31, 2018							
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)	(\$65.70)	Very Likely	Moderate	High

Credit Risk – Payment Defaults

2 of 4 loans no longer experiencing payment defaults

1. Rokytné Biogas project – missed a repayment in January 2018, but is now current with all payments
2. Ivankiv project – began experiencing payment defaults in 2015. The loan was restructured with the maturity extended by 2 years and it is no longer experiencing payment defaults.

2 loans continue to experience payment defaults

Loan Amount	Currency	Missed Interest Payments		Missed Principal Payments		Default Interest
		Date	Amount	Date	Amount	
15,500,000	EUR	03/2015-03/2018	1,909,418		-	143,525
12,065,953	USD	8/1/2017	245,688	8/1/2017	96,528	
		2/1/2018	245,029	2/1/2018	90,495	9,150

Credit Risk – Public Sector Portfolio

- The weighted average credit rating of the public sector loan portfolio is double-B
- Expected losses declined to 4.4% from 4.8%

Public Sector CTF Loan Portfolio - Credit Risk Exposures as March 31, 2018								
Beneficiary Country	Loan Amount	Weakest Rating	Credit Rating			PD	LGD	Expected Portfolio
			S&P	Moody's	Fitch			Loss Rate
Colombia	89,265,000	BBB-	BBB-	Baa2	BBB	2.3%	56.5%	
Egypt, Arab Republic of	149,750,000	B-	B-	B3	B	28.1%	62.1%	
India	714,000,000	BBB-	BBB-	Baa2	BBB-	2.3%	56.5%	
Indonesia	125,000,000	BBB-	BBB-	Baa3	BBB	2.3%	56.5%	
Mexico	369,514,000	BBB+	BBB+	A3(N)	BBB+	1.2%	56.5%	
Morocco	633,950,000	BB+	BBB-	Ba1	BBB-	5.5%	58.8%	
Philippines	57,201,690	BBB	BBB	Baa2	BBB	1.5%	56.5%	
South Africa	350,000,000	BB	BB	Baa3	BB+	6.3%	58.8%	
Turkey	150,000,000	BB	BB	Ba2	BB+	6.3%	58.8%	
Ukraine	148,425,000	CCC	B-	Caa2	B-	39.0%	62.5%	
Vietnam	177,900,000	B+	BB-	B1	BB-	17.3%	62.1%	
Total Exposure	2,965,005,690							
Weighted Average			BB			7.5%	58.3%	4.389%

Credit Risk – Total Portfolio

The weighted average credit rating of the private sector loan portfolio is between “B” and “B+”.

Loan Portfolio Credit Risk Exposure (as of 3/31/2018)									
Sector	Portfolio Risk Rating	Total Committed Loans (MM USD equivalent) ⁹	Estimated Probability of Default (PD) ⁶	Estimated Loss Given Default (LGD) ¹	Expected Loss Rate ²	Expected Losses (MM USD equivalent) ³	Notional Amount of Loans Experiencing Payment Defaults ⁴ (MM USD equivalent)	# of Defaulted or Impaired Loans	Actual Losses and Provisions vs. Total Committed Loans
Public	BB ⁵	2,965.0	7.5%	58.3%	4.4%	130.1	0	0	0%
Private	B+ ^{7,8}	985.4	19.5%	52.5%	10.2%	97.6	31.2	2	3.2%

1. LGDs are based on the Portfolio Risk Rating's mapping to the Recovery Rate associated with Moody's credit rating equivalent as published in Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2016 (i.e. LGD = 1 - Average Sr. Unsecured Bond Recovery Rate from the period of 1983-2016).

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. See Table 4 for actual amounts of missed payments.

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, 1920-2016

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 Fitch, Moody's and S&P ratings is used) as of March 31, 2018. 5-year Average Cumulative Issuer-Weighted Global Default Rates from the period of 1983-2016 as published in Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2016 are used.

7. Based on internal credit ratings or PDs assigned to their respective private sector CTF 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 administered 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 provided by the Trustee.

Credit Risk – Eskom

- Eskom is the primary off-taker in South Africa and its ability to perform has implications for the broader CTF renewable energy portfolio.
- Eskom is facing governance, internal control and compliance challenges including severe allegations of wrongdoing against Eskom management.
- Eskom recently replaced its Board and the World Bank and other financiers have been following up on an action plan for Eskom which includes measures on Audit qualification and Compliance Reporting. They are satisfied with Eskom's progress in addressing their concerns and continue to monitor the situation closely
- Between January 26 and March 28, 2018, Moody's downgraded Eskom twice to "B2," and in April Eskom's acting CFO acknowledged that the entity is facing going-concern challenges.

3. Next Steps

1. Implement information sharing protocols and processes for Fraud Risk
2. Formally propose risk tolerance levels for TFC approval
3. Investigate reporting aggregate private sector exposure to Implementation Risk
4. Investigate reporting Interest Rate Risk exposure incurred via private sector lending
5. Stress test expected credit losses associated with CTF's loan portfolio
6. Collaborate with the MDBs to report on possible or actual incidents of sexual exploitation or abuse.

Questions
