

CLIMATE INVESTMENT FUNDS

CTF/TFC.22/3
January 8, 2019

Meeting of the CTF Trust Fund Committee
Ouarzazate, Morocco
Thursday, January 31, 2019

CTF SEMI-ANNUAL OPERATIONAL REPORT

PROPOSED DECISION

The Trust Fund Committee reviewed document CTF/TFC.22/3, *CTF Semi-Annual Operational Report*, and welcomes the progress that has been made in advancing the work of CTF.

The Committee requests the CIF Administrative Unit and the MDBs to continue to monitor the projects and programs for which CTF funding has been approved, including those that are stalled and whose funding could be made available for future CTF programming.

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1 Introduction

1. This report provides an update on the status of the Clean Technology Fund (CTF), the portfolio of the CTF-funded programs and projects under the endorsed investment plans, the Dedicated Private Sector Programs (DPSP), and related activities. It also covers key strategic issues, such as the latest progress made on CTF 2.0 and resource availability. This report covers the period from January 1 to June 30, 2018.¹
2. The following annexes are included in the report: Annex 1: Updated DPSP III Pipeline; Annex 2: Resource availability schedule and Annex 3: List of fully disbursed projects/programs.

2 Strategic issues

3. A decade ago, global leaders recognized the enormity of the climate change challenge and responded by establishing CTF in 2008 to provide scaled-up financing to contribute to the demonstration, deployment, and transfer of low-carbon technologies with a significant potential for long-term greenhouse gas (GHG) emission savings. CTF started out with USD 4.5 billion pledges and contributions, 12 country investment plans and a regional program. During 10 years of operation, CTF resources have grown to USD 5.6 billion, with programming covering 15 country investment plans, one regional program (Concentrated Solar Power in the Middle East and North Africa), and three phases of the DPSP.
4. As of June 30, 2018, USD 5 billion had been approved by the Trust Fund Committee for 130² projects and programs.³ Delivery of CTF has continued to grow steadily in terms of funding and project approvals, disbursements, and reported results on the ground.
5. According to the latest Results Report,⁴ 85 projects (totaling USD 4.7 billion) are resulting in over 11 million tCO₂ in GHG emission reductions annually; a mobilization of over USD 18 billion in co-financing so far, and have contributed already to almost 5 gigawatts (GW) of installed renewable energy generation capacity, around 4,400 gigawatt hours (GWh) in annual energy savings, and over 487,000 passengers per day using low carbon public transit.

¹ In order to provide the Trust Fund Committee with the latest information on the status of available resources, the resource availability figures are based on data as of September 30, 2018. Other recent updates are also provided as much as possible.

² Includes 18 proposals submitted under DPSP III Business Development Facility (BDF).

³ The figures are net of cancellations.

⁴ See 2018 CTF Results Report for further details.

2.1 New financing modalities

6. The call for action against climate change, one of the most challenging issues of our lifetimes, has never been more urgent. The most recent [Intergovernmental Panel on Climate Change](#) (IPCC) report⁵ has warned that the world is not on track to meet the target of limiting global warming to 1.5°C, and that a major, unprecedented transformation will be required to achieve that goal.
7. From droughts in Africa and coastal flooding in East Asia, to desertification in the Middle East, severe heat in Europe, and imperiled ecosystems in Latin America, the adverse impacts of climate change do not spare any region or income level—although the poor are particularly vulnerable.
8. The same report also presents key pathways that can be adopted to meet these ambitious goals under a variety of assumptions. The pre-requisite is the global leadership’s willingness and commitment to do so.
9. Financing will need to follow the political backing as new, previously untapped sources of funding will need to be identified especially due to the existing resource constrained environment resulting from competing domestic priorities.
10. At the Trust Fund Committee meeting in May 2015, the Committee requested the CIF Administrative Unit, working with the MDBs, the Trustee and in consultation with Committee members, to present the TFC with options for alternative financing models and increasing resource availability in the CTF. In November 2015, the CIF Administrative Unit, in collaboration with the MDBs and the Trustee, presented a proposal that explored the most efficient approach to build on CTF’s financial and operational strength, experience, and unique “MDB-collective” business model to increase the scale and broaden the range of the capital engaged.
11. The Committee requested the CIF Administrative Unit, in collaboration with the MDBs and the Trustee, to further explore detailed modalities, including legal and institutional changes required, to strengthen the current business model of CTF in mobilizing additional capital from public and private sources and deploy its resources efficiently and effectively for enhanced mitigation actions in developing countries.
12. After 10 years of operations and the value of the loan assets created (USD 4.5 billion), CTF now has an opportunity to leverage its initial contributions to continue providing concessional climate finance for both public and private sector investments. The new financing modality being proposed is an investment vehicle to leverage the existing CTF loan assets and investment operations. It has received strong indicative investment grade credit rating assessments from both S&P and Moody’s and could monetize the current value of CTF assets by raising an estimated **USD 5 billion of new debt from institutional investors in**

⁵ [Global warming of 1.5°C \(IPCC, 2018\)](#)

the capital markets over 10 years. It would combine the current portfolio of CTF investment operations with this next phase of climate finance investments and manage them together. While a new vehicle would be created to issue bonds in the capital markets, CTF decision making, governance, and administration would remain relatively consistent. The vehicle proposed has been structured under the assumption that no additional contributions are required, but the availability of additional contributions would enable increasing the level of concessionality for CTF 2.0 operations and thus enhance the potential transformational impact.

13. Since the last update provided to the Trust Fund Committee, the CIF Administrative Unit has continued to conduct detailed due diligence with the key stakeholders, including the MDBs and the Trustee through September and October 2018, in order to prioritize remaining issues and concerns. These consultations have facilitated further refinement of both financial and business models, which have been updated in light of the various feedback. The CTF 2.0 Technical Proposal has been revised to reflect comments received from key stakeholders and it now includes the following:

- *Refinements to the MDBs' liabilities:* under CTF 2.0 have been made to address feedback received from the legal counsel from the Trustee and the MDB teams;
- *Private sector portfolio composition:* based on feedback from the private sector arms of the MDBs, the CTF 2.0 base case portfolio has been amended to allow for subordinated debt instruments to be offered for 50 percent of the CTF 2.0 private sector portfolio. This change was made to address the concerns of reduced transformational impact expected under the original CTF 2.0 indicative terms. The financial analysis has demonstrated that subordinated debt could be accommodated with slight changes to the margins to reflect the higher risk.
- *The cash flow financial analysis and the risk-adjusted capital analysis:* were updated with 2017 audited financial information from the implementing entities and the Trustee and revised to address requests on deployment of subordinated instruments, interest rate sensitivity, and fair value impacts on cash flow, profitability, and capital.

14. To address CTF 2.0 accounting considerations, a draft pro-forma set of financial statements and disclosures for the CTF issuing entity have been completed and shared with each of the MDBs. Active consultation with all key stakeholders, including the Trustee, MDBs and Deloitte (auditor of the World Bank and many of the MDB implementing entities) are currently underway to explore the most efficient way to compile the CTF Issuer financial statements, taking into consideration information-sharing concerns of the MDBs as well as expected audit requirements.

15. Further dedicated consultations are also being undertaken with the various relevant departments within the World Bank, including Trustee, Treasury, Accounting, among others, to reflect specific considerations, and a revised proposal, incorporating the resultant inputs and refinements will be presented to the Trust Fund Committee as soon as possible.

2.2 Resource availability

16. The CIF Administrative Unit, in consultation with the MDBs and the Trustee, has regularly updated the pipeline and other necessary commitments to estimate the available resources for commitment. As of September 30, 2018, out of the USD 520 million for DPSP III endorsed by the Trust Fund Committee in December 2017, USD 158 million has been approved, leaving USD 362 million expected to be approved over the coming months. See Annex 1 for the updated DPSP III pipeline.

17. Based on the information from the Trustee and the remaining pipeline of DPSP III, the resource availability schedule has been updated (see Table 1 and Annex 2).

Table 1: Resource availability schedule (as of September 30, 2018, in USD million)

Unrestricted fund balance (A)	a/	351.60
<i>Less: Anticipated commitments</i>		
Program/ project funding and MPIS costs		362.46
Total anticipated commitments (B)		362.46
Available resources (A-B)		(10.86)
<i>Add: Potential future resources (FY19-23)</i>		
Release of currency risk reserves	b/	101.16
Total potential future resources (C)		101.16
Potential available resources (A - B + C)		90.30

Source: Trustee Report

a/ Unrestricted fund balance is based on the balance ending in September 30, 2018.

b/ Amounts withheld to mitigate over-commitment risk resulting from the effects of currency exchange rate fluctuations on the value of outstanding non-USD denominated promissory notes.

18. As of September 30, 2018, the MDBs have informed the Trustee and the CIF Administrative Unit about a number of cancellations of funding approved by the Trust Fund Committee for a total of USD 90 million (see Section 3.3). The CIF Administrative Unit is working with the MDBs to identify additional stalled projects and programs for which funding has been approved by the Trust Fund Committee as well as those that fail to meet the deadlines per the CTF Pipeline Management and Cancellation Policy. This will likely result in additional cancellations, and the released resources may be made available for further programming. A further update on cancellations and resource availability will be provided to the Trust Fund Committee at the upcoming Trust Fund Committee meeting in January 2019.

3 Status of the CTF

3.1 Portfolio overview and trends

19. The CTF portfolio and pipeline consists of 130 projects and programs⁶ from 15 country investment plans and a regional MENA CSP program, and three phases of DPSP, totaling USD 5 billion in CTF funding (see Table 2⁷). Implementation of investment plans and DPSP has been advancing steadily as is evident through the increased amount of funding approved by the MDB Board as well as increased disbursement since last reporting.

Table 2: Overview of CTF portfolio (as of June 30, 2018)

	Approved funding		Disbursement
	Committee	MDB	
CTF Funding (in \$M)	4,999	4,636	2,213
Number of projects	130	98	82

* Funding figures are net of any cancelations

** Funding approved divided by Indicative Allocation

*** DPSP I: Oct-13; DPSP II: Jun-14

**** DPSP III, incl. BDF: Dec-17

3.2 Portfolio updates

20. Investment plans: During the current reporting period (January 1 to June 30, 2018), there were no new CTF investment plans or revised investment plans submitted for endorsement.

Trust Fund Committee approvals: Figures 1 and 2 show trends of CTF funding approvals by the Trust Fund Committee, net of cancelations, by fiscal year.

⁶ Includes 18 proposals submitted under DPSP III Business Development Facility (BDF).

⁷ Figures are net of *cancelled* funding and projects no longer under development.

Figure 1: Funding approvals by Trust Fund Committee by fiscal year (as of June 30, 2018)

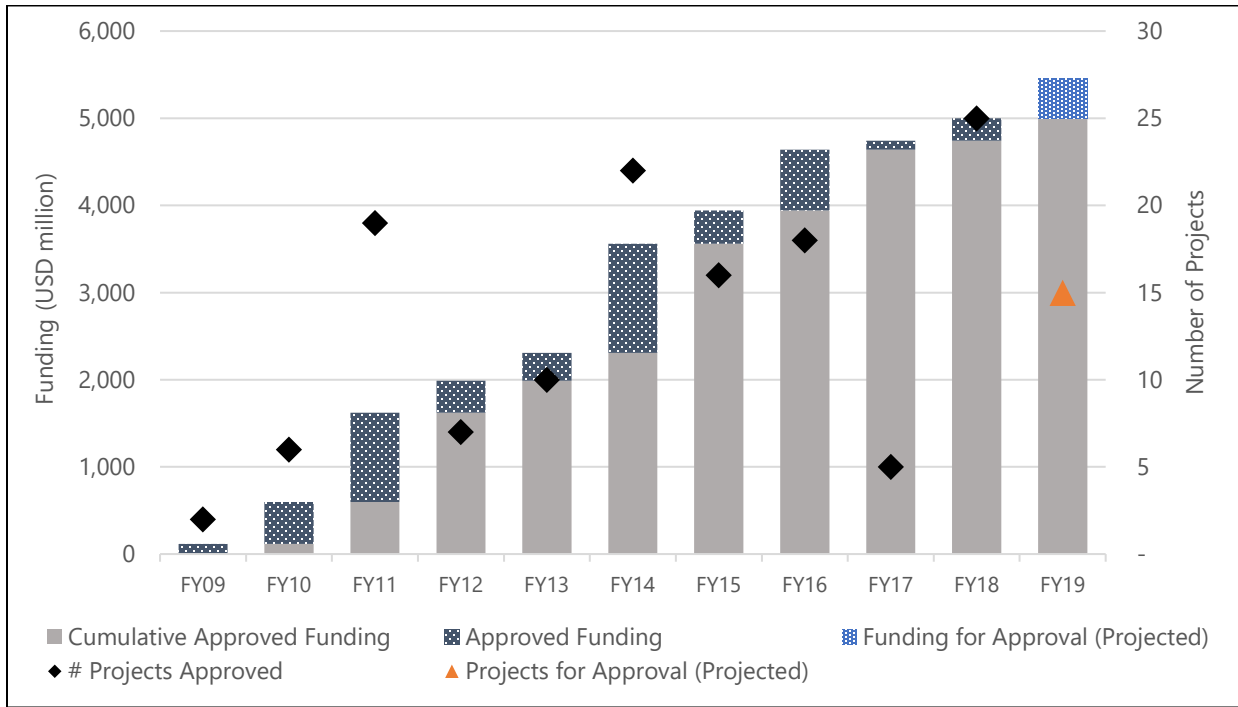
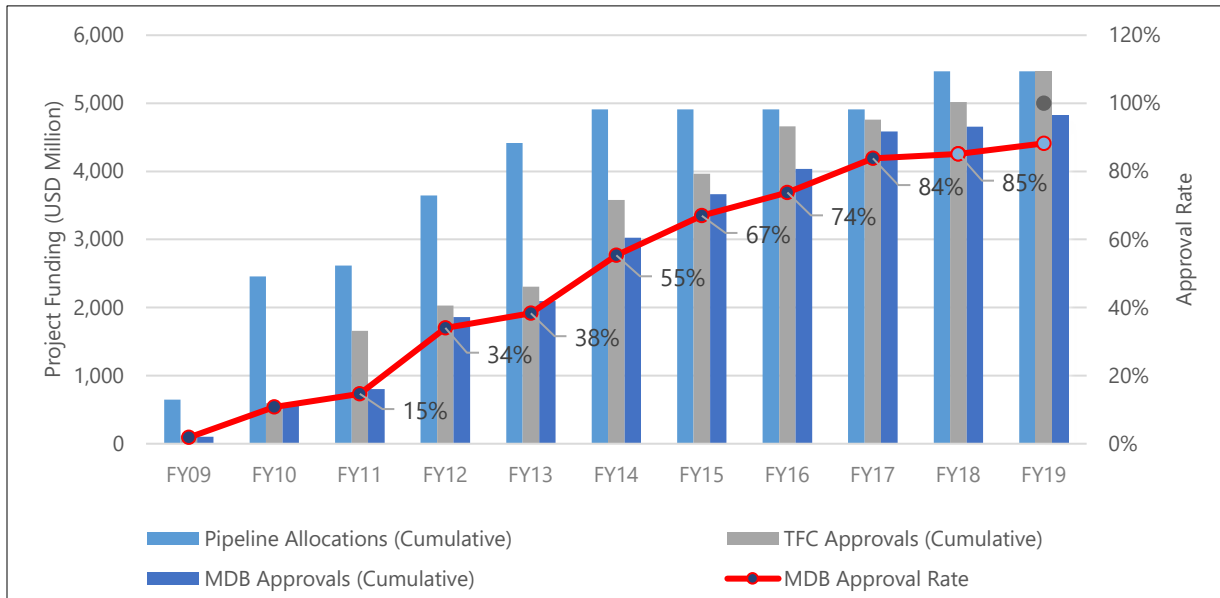


Figure 2: Funding approval rate by fiscal year (as of June 30, 2018)



21. As shown in Figures 1 and 2, the Trust Fund Committee has approved all the projects in the pipeline as of June 30, 2017 that were developed based on the country investment plans and DPSP I and II. Table 3 shows the final approvals by country.

Table 3: CTF funding approval (as of June 30, 2018)

Country	Original Endorsement Date	Revision Date	Indicative Allocation* (USD million)	Final Amount Approved (USD million)
Chile	May-12	Oct-13	200.0	166.8
Colombia	Mar-10	May-13	150.0	150.0
Egypt	Jan-09	Nov-12	300.0	151.7
India	Nov-11	Aug-15	775.0	775.0
Indonesia	Mar-10	Jun-15	400.0	400.0
Kazakhstan	Mar-10	May-13	200.0	127.4
MENA-CSP	Dec-09	Jun-14	750.0	495.4
Mexico	Jan-09	May-13	500.0	500.0
Morocco	Oct-09	Feb-14	150.0	149.8
Nigeria	May-12	Jun-14	250.0	32.2
Philippines	Dec-09	Aug-12	250.0	137.8
South Africa	Oct-09	Jun-15	500.0	490.0
Thailand	Dec-09	Feb-12	300.0	110.5
Turkey	Jan-09	Nov-12	390.0	332.7
Ukraine	Mar-10	Aug-13	350.0	295.8
Vietnam	Dec-09	Oct-13	250.0	184.0
TOTAL			5,691.2	4,498.9
DPSP I & II **			491.5	430.8
DPSP III ***			520.0	69.5

* Based on the (revised) investment plans and DPSPs endorsed by the Trust Fund Committee

** DPSP I: Oct-13; DPSP II: Jun-14

*** DPSP III, incl. BDF (Business Development Facility): Dec-17

22. A DPSP III pipeline, totaling US 520 million (including the Business Development Facility) was developed and endorsed by the Trust Fund Committee in December 2017. Projects in the remaining pipeline are all under DPSP III. Based on the Committee's decision, these projects need to be submitted for funding approval no later than March 31, 2019.
23. During the current reporting period three proposals, including the Business Development Facility (BDF), were approved by the Trust Fund Committee for a total of USD 70 million (see Table 4).

Table 4: Trust Fund Committee Approvals (as of June 30, 2018)

Country/ Program	Program title	MDB	CTF funding (USD million)
DPSP- Global	DPSP III: Solar Distributed Generation (SDG)	IFC	35.00
DPSP- Brazil	DPSP III: Financial Instruments for Brazil Energy Efficient Cities - FinBRAZEEC	IBRD	20.00
DPSP- Global	DPSP III: Business Development Facility (BDF) Program (PPGs)	Multiple	14.51
TOTAL			69.51

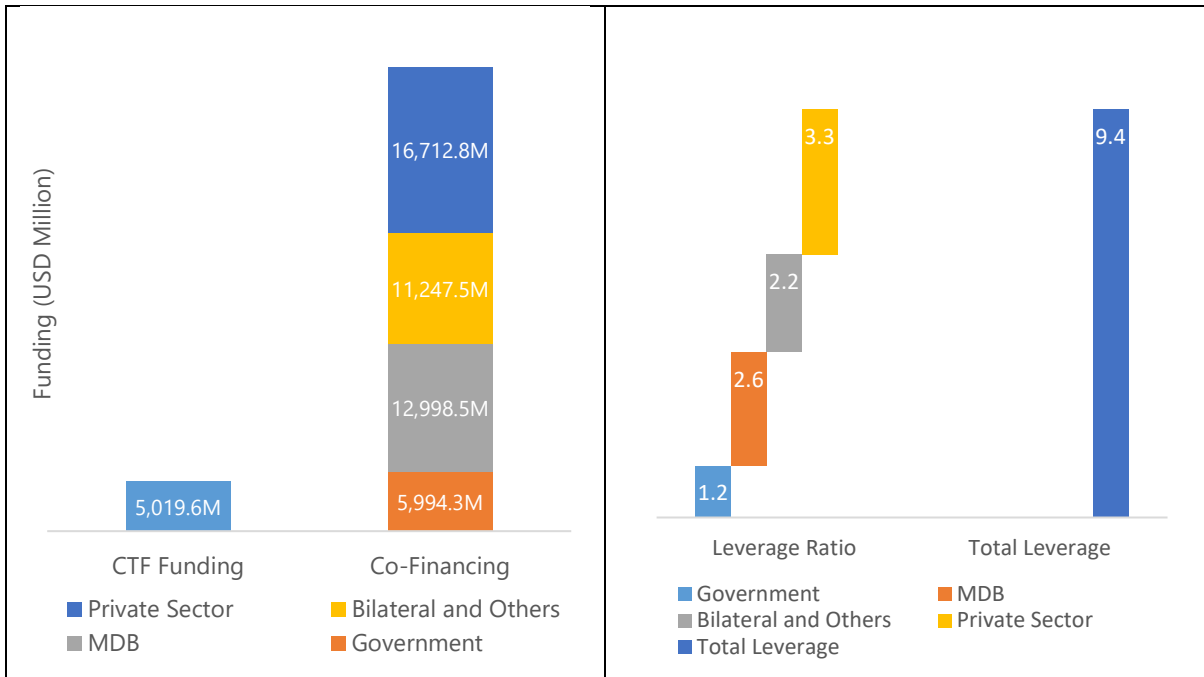
24. Since July 2018, three other projects have been approved under DPSP III for a total of USD 88 million:

- Regional: Innovative Instruments for Investment in Zero-Carbon Technologies (i3-0), IDB, USD 35 million
- Regional: Integrated Renewable Energy and Energy Storage, ADB, USD 38 million
- Ukraine: Finance and Technology Transfer Centre for Climate Change (FINTECC): Agribusiness Waste Residues Window, EBRD, USD 15 million

25. **MDB approvals:** During the current reporting period, one project (Kenya: Concessional Finance Program for Geothermal Generation, AfDB, USD 30 million) under DPSP II was approved by the MDB Board.

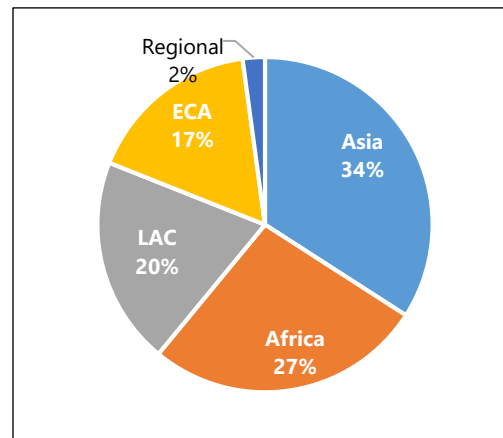
26. **Co-financing:** USD 5 billion CTF funding approved by the Trust Fund Committee is expected to mobilize over USD 46 billion in co-financing from private and public sectors, MDBs, bilateral, and other sources. That represents a leverage ratio of 1 to 9.4, meaning for every USD 1 invested by CTF, over USD 9 is invested by other sources of finance. As shown in Figure 3, the private sector is the largest source of co-financing with over USD 16 billion (1:3.3) in CTF leverage, followed by MDBs (1:2.6) and bilateral/other sources (1:2.2). For details on *actual* co-financing figures, refer to the 2018 Results Report and Section 4.1: Results of this report.

Figure 3: Co-financing by source and ratio (as of June 30, 2018)



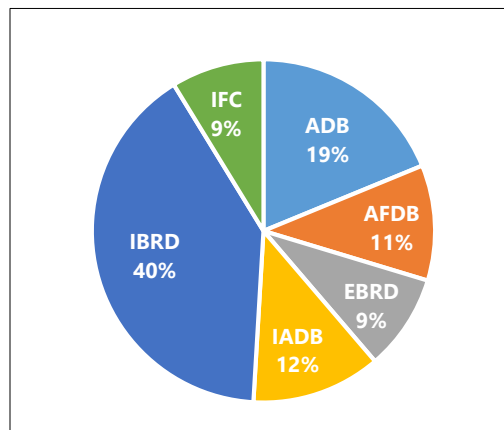
27. Regions: Asia has the largest share of CTF-approved funding, accounting for over a third, followed by Africa accounting for over a quarter of the portfolio. Latin America and the Caribbean and Europe and Central Asia account for 20 percent and 17 percent, respectively (see Figure 4).

Figure 4: Trust Fund Committee-approved CTF funding by region



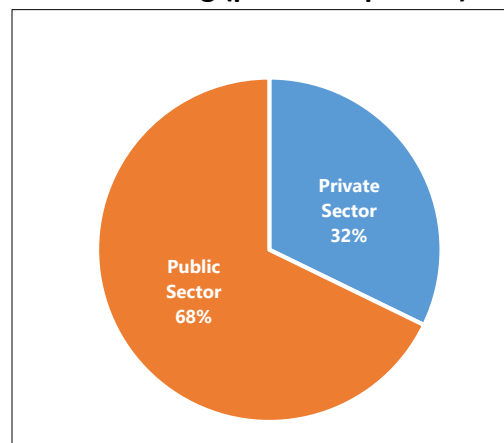
28. MDB shares: As illustrated in Figure 5, the World Bank Group (IBRD and IFC) accounts for close to half of the total approved funding. It is followed by ADB (19 percent), IADB (12 percent), and EBRD (9 percent).

Figure 5: Trust Fund Committee-approved CTF funding by MDB



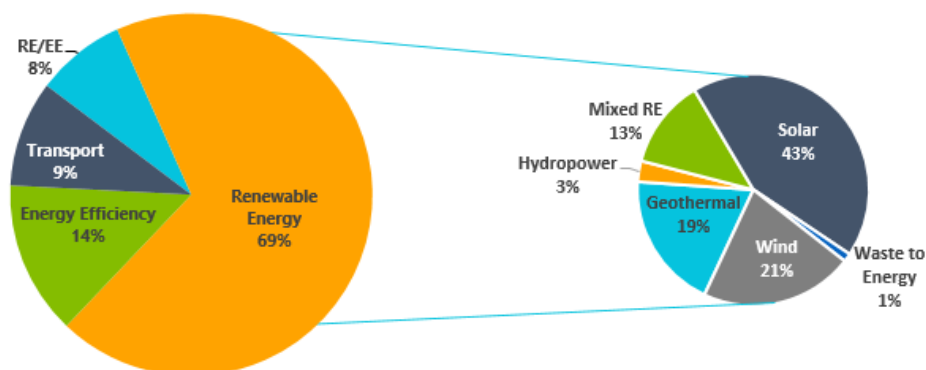
29. Private vs. public sectors: Overall, the public arms of the MDBs accounts for over two-thirds of the Trust Fund Committee-approved funding, while the private sector accounts for the remaining one-third (see Figure 6).

Figure 6: Trust Fund Committee-approved CTF funding (public vs. private)



30. Sector and technology: Renewable energy accounts for roughly two-thirds of the Trust Fund Committee-approved CTF funding. Energy efficiency, including investments in smart grids, accounts for 14 percent of the portfolio, and sustainable transport around 10 percent. Of the renewable technologies, solar accounts for half of the portfolio, followed by geothermal (19 percent), mixed renewables, and wind (see Figure 7).

Figure 7: Trust Fund Committee-approved CTF funding by technology (as of June 30, 2018)



3.3 Funding cancellations

31. As of September 30, 2018, the following projects/sub-projects totalling USD 90 million in approved funding were submitted for cancellation by various MDBs (see Table 5). Reasons for cancellation are provided in the table below.

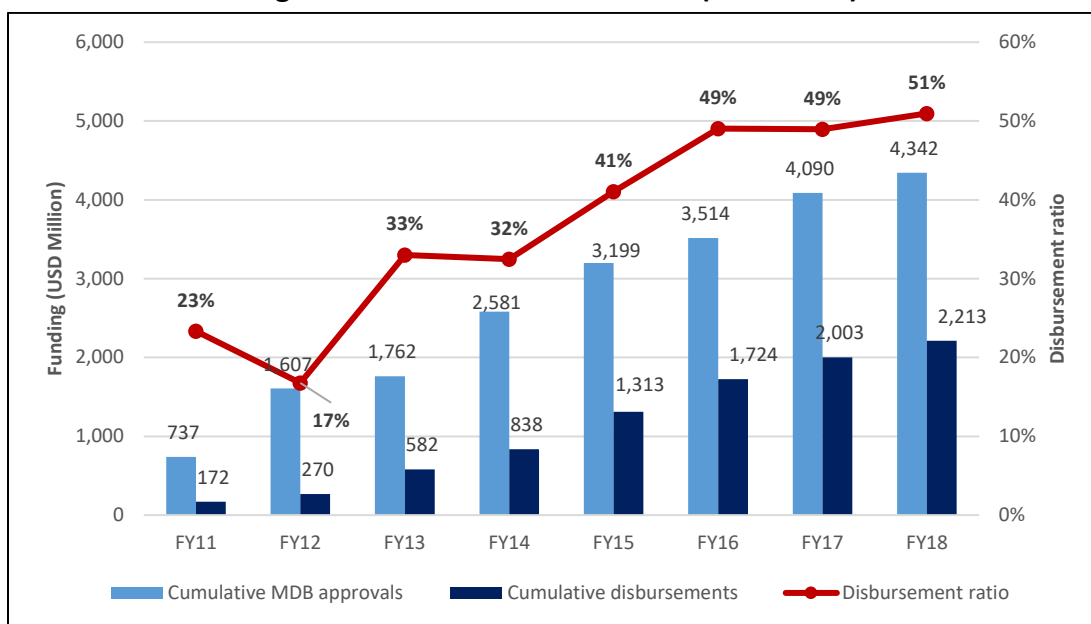
Table 5: CTF project cancellations (as of September 30, 2018)

Country	Program title	MDB	Canceled amount (USD million)	Reason for cancellation
India	Rajasthan Renewable Energy Transmission Investment	ADB	5.0	Result of savings due to currency depreciation and also due to lower than estimated costs of certain components.
Kazakhstan	Renewable Energy Finance Facility (KAZREFF)	EBRD	1.0	Project did not proceed to financial close.
South Africa	Program: Redstone CSP- Sustainable Energy Acceleration Program Expansion	IFC	56.58	Project delayed significantly due to uncertain political environment. Earlier in 2018, the government revived the REIPPP process, allowing the Redstone project (among others) to proceed. The new, emerging project, however, had a slightly different structure and economics and no longer required CTF support.
Thailand	Northeastern Thailand Wind Power Project	ADB	18.90	Project now proceeding without ADB assistance, and sponsors are utilizing supplier finance to ensure key project milestones are met.
Turkey	Program: Financial Innovation for Renewable Energy (FIRE)	IFC	8.48	Lack of actively moving pipelines.
TOTAL			89.95	

3.4 Disbursements

32. As of June 30, 2018, MDBs have disbursed close to USD 2,213 million for 80 projects/ programs. Total CTF disbursements and the disbursement rate (i.e., disbursement as a percentage of MDB approvals) during this period have shown an increasing trend, showing progress in implementation on the ground (see Figure 8).

Figure 8: CTF disbursement trend (2011-2018)



33. **Fully disbursed projects:** Thirty-seven projects/programs equivalent to USD 1,352 million in CTF commitments have fully disbursed (see Annex 3), two-thirds of which are public sector projects and the remaining private sector. This also reflects the CTF portfolio distribution between these two sectors. These 37 projects tended to use swiftly disbursing financial mechanisms, including guarantees⁸, technical assistance, and a development policy loan to India.

34. Among those projects that have fully-disbursed, some have reached closure and an Implementation Completion Report (ICR) or Project Completion Report (PCR) for the project has been prepared. These documents are designed to satisfy accountability needs and provide lessons from completed operations. In some cases, an independent review of an ICR is also completed⁹.

35. There were six projects for which at least one of these completion documents was shared with the CIF Administrative Unit. Among these documents, at least two common themes

⁸ Guarantee projects are regarded as “100% disbursed” once the financial products become effective.

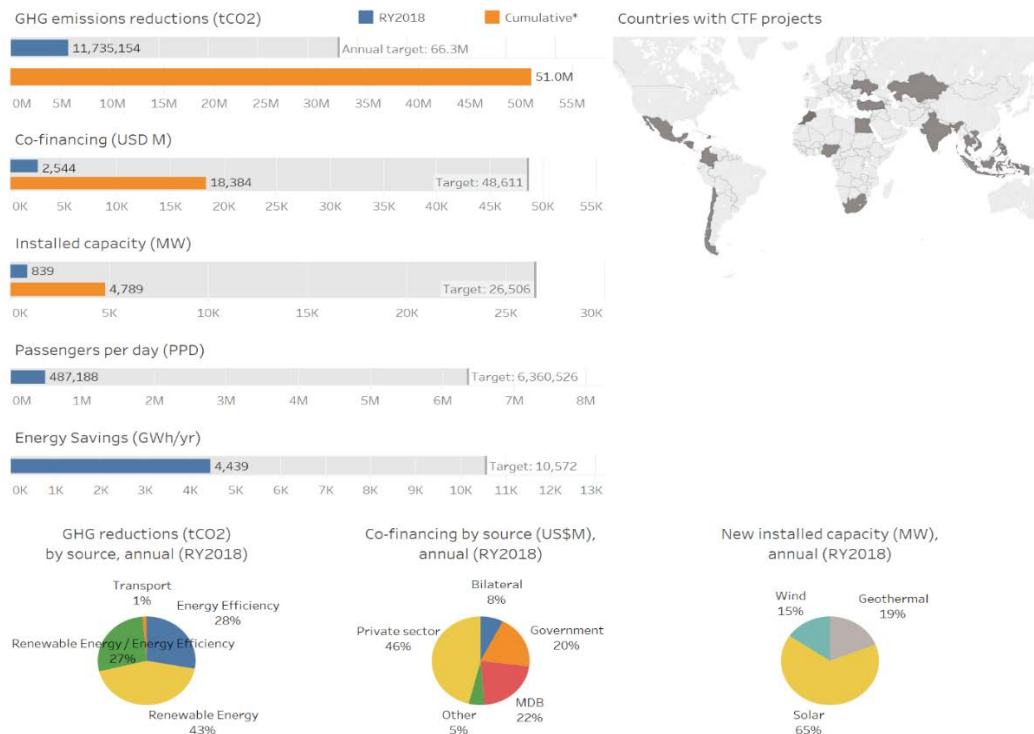
⁹ Includes the following projects: India Development Policy Loan to Promote Inclusive Green Growth and Sustainable Development in Himachal Pradesh (IBRD); Mexico Efficient lighting and appliance (IBRD); Turkey Private sector RE and EE (IBRD)

emerged: **need for strong policy/institutional support** on the partner side and **need for monitoring and evaluation (M&E) support** on the international financial intermediary (IFI) side. Completion documents for four of the six projects specifically mentioned the need for technical cooperation and capacity building around M&E activities and suggested the need for an institution responsible for ensuring consistent M&E design, standards, and activities across IFIs and borrowers. Three of six projects cited strong government support—in the form of supporting policies and institutions that were implemented or created prior to project commencement—as a reason for success. The current 2018 CTF Results Report summarizes lessons in further detail and can be referred to for further details.

4 Results

36. As illustrated in Figure 9, 85 projects (totaling USD 4.7 billion¹⁰) are reporting results, and have mobilized a cumulative total of over USD 18 billion in co-financing from a variety of sources. These investments are resulting in over 11 million tCO₂ in GHG emission reductions annually and have already resulted in almost 5 GW of installed renewable energy generation capacity, around 4,400 GWh in annual energy savings, and over 487,000 passengers per day using low carbon public transit.

Figure 9: Summary of 2018 CTF Results Report



¹⁰ Based on MDB-approved projects included for reporting results.

Note: RY2018 is the most recent, one-year reporting period and refers either to July 1, 2017-June 30, 2018 or January 1, 2017-December 31, 2017, depending on the reporting cycle of the individual MDB.

5 Cross-cutting themes

5.1 Gender

37. The CTF portfolio of projects approved during the reporting period was reviewed to identify program performance regarding gender quality at entry. The three gender scorecard indicators (i.e., presence of sector-specific gender analysis, women-specific activities, and sex-disaggregated indicators) were reviewed for each project.
38. CTF performance on the three gender indicators was satisfactory for the projects approved during the reporting period. Sector-specific gender analysis, women-specific activities, and sex-disaggregated indicators were present in 50 percent of CTF projects approved, compared to June 2014 (baseline) figures of 32 percent, 29 percent, and 18 percent respectively. The *DPSP III: Business Development Facility (BDF)* was not reviewed against the gender scorecard indicators as it is an umbrella facility designed to finance MDBs, as well as some country partners, in their preparation of upcoming operational projects for CTF funding approval. This is in contrast to regular operational projects implemented in-country, of the sort typically assessed during gender scorecard indicator reviews.

Box 1: Enhancing women’s mobility and participation in formal energy sector employment in Brazil

The Financial Instruments for Brazil Energy Efficient Cities Project (FinBRAZEEC), implemented by the World Bank, blends USD 20 million of CTF funding with other sources to establish a syndicated loan facility that will leverage private debt on a limited recourse finance basis for urban energy efficiency projects, such as lightbulb replacement and equipment retrofit in Brazil. The dedicated finance mechanisms of the project allow for some targeting of social objectives alongside the larger GHG emissions reductions goals being served.

The project has been designed to reduce gender gaps in two key areas: 1) reducing constraints to women’s mobility via provision of improved public street lighting for safety, and 2) addressing women’s low participation in the energy sector workforce through technical support and incentives. The project has a dedicated Gender Action Plan to achieve its objectives in both street safety and inclusive workplace topic arena, as well as specific indicators monitoring performance.

Brazil ranks fifth globally in rates of violence against women. A recent national survey found that one-quarter of female respondents had suffered gender-based violence in the past year (40 percent of this on the street), with the number rising to three-quarters of women under the age of 24 who reported having been victimized in public spaces at least once. Improved street lighting, particularly when targeted to areas of high crime and assaults against women, can greatly enhance women’s safety and mobility.

There is well-documented occupational sex segregation and lower rates of labor force participation by women, especially in industry. Notably, women represent just 16.7 percent of workers in the energy sector. Global trends, however, suggest that renewable energy employment, is slowly attracting a greater share of women than conventional energy sub-sectors (about 35 percent in 2017, compared to women’s 20-25 percent participation in the non-renewable workforce). To this end, the project will provide technical assistance to participating firms and offer incentives to encourage female employment and expanded use of gender policies and practices in relation to recruitment and retention, pay equity, promotions and anti-harassment measures.

Following best practice, the project has a dedicated Gender Action Plan to achieve its objectives in both street safety and inclusive workplace areas, as well as specific gender indicators monitoring performance outcomes, such as *increased perception of safety among men and women in pilot targeted areas; reduced victimization of men and women (by type of crimes); number of IEE winning ‘Pro-Gender Equity Seal of Approval’ for gender-responsive standards in workplace recruitment and retention; sex-disaggregated employment numbers in EE businesses.*

5.2 Knowledge management

39. **GDI partnership:** CIF has entered into a learning partnership with the Global Delivery Initiative (GDI)¹¹ as part of an effort to showcase CIF project-level results and lessons learned. The GDI is a collaborative effort to create an evidence base of delivery know-how that can be used to inform development practice and improve implementation. The GDI and its partners support practitioners on the ground to adapt to dynamic contexts and solve persistent delivery challenges. In October 2017, CIF officially joined the GDI partnership as its 40th member.
40. Based on inputs received from the MDBs, and with the objective of showcasing a spread of CIF technologies and regions, the CIF Administrative Unit conducted six case studies in collaboration with the MDBs using the GDI methodology during 2018, one of which is funded by CTF Theppana Wind Power Project in Thailand.
41. The GDI case study showcased two main delivery challenges that the Theppana project encountered, and was able to overcome successfully. The first challenge was the gap in available project financing. Wind power is characterized by high up-front costs and uncertainty about annual energy production and sales, given the variability of wind speeds. In view of the revenue risks involved, commercial banks were reluctant to provide loans with the longer-than-usual tenor needed to amortize the high initial investments of the project. This challenge was eased by de-risking the investment. Financing provided by the ADB and CTF increased confidence in the Theppana project and improved its bankability.
42. The second delivery challenge focused on the lack of suitable regulations for wind energy within the project framework. A required first step towards implementation was obtaining the necessary permits and licenses and securing a power purchase agreement. The project faced delays during the licensing process, largely due to licensing institutions' unfamiliarity with wind power infrastructure. The project addressed this delivery challenge by adjusting to some of the construction requirements to wind mills. Although wind towers are tall, thanks to discussions between the project team and the institutions involved, they are no longer considered "buildings" where people work or live.
43. The most direct outcome from the Theppana project is that it led to the development of the larger 90 MW Subyai wind project. The Theppana project demonstrated the importance and viability of public-private partnership modalities for commercial scale wind power development. Also, the development of legislation and policy related to the renewable energy sector in Thailand has been key to increasing the share of renewable energy in the country. Projects like Theppana and Subyai have helped to enhance private investors' confidence in wind power in Thailand, increasing the total installed wind capacity in Thailand from 7.3 megawatts (MW) in 2011 to 630 MW as of 2017. Today, Thailand has a

¹¹ More information is available on the Global Delivery Initiative website at www.globaldeliveryinitiative.org

local banking market that is familiar with lending to the renewable energy sector and the country has become a leader in promoting renewable energy in Southeast Asia.

44. The Art of Knowledge Exchange: During July to December 2018, CIF embarked on an initiative to capture and share the rich experiences and good practice examples of knowledge exchange activities among CIF countries/projects, MDBs, and stakeholders. These activities include south-to-south knowledge exchanges, regional dialogues, thematic-focused learning events, pilot countries meetings, knowledge fairs, workshops, and other various knowledge exchange and learning instruments that have been used strategically and effectively to enhance the development impact of CIF projects and investments.
45. A new publication entitled *The Art of Knowledge Exchange: A Results-Focused Planning Guide for Climate Change Practitioners* will be launched at the CIF@10 capstone event in Ouzarzate, Morocco in January 2019. It builds on an earlier publication by the World Bank Group, and serves as both a guidebook and a toolkit for enhancing knowledge exchange at the national, regional, and global levels. It was produced to meet demand from CIF recipient countries for capacity building on knowledge exchange and learning, as well as in-country knowledge exchange activities. The guide provides tools to help knowledge brokers play a more effective role in facilitating knowledge exchange and learning when designing and implementing CIF projects. It reflects the experiences of various CIF partners, MDBs, government officials, and other practitioners who have successfully integrated knowledge exchange into larger change processes. It also features the free augmented reality mobile app, Blippar, that enables CIF partners and others to access the guide online from around the world using their smart phones. The guidebook includes a case story of the CTF geothermal dialogues organized by the CIF and Climate Policy Initiative in 2015/16 and the knowledge exchange example of the MENA CSP Knowledge and Innovation Program.
46. Rooftop solar in India: India has ambitious renewable energy goals, and is also the largest recipient of CTF funding of which solar is an integral part. CIF, in collaboration with PricewaterhouseCoopers Pvt Ltd, carried out a study on rooftop solar in India and produced a knowledge product entitled [*Rooftop solar in India: Looking back, looking ahead*](#). Key findings include the following:
 - Reduction in interest rates: With the availability of concessional funds, the lending rate to the borrowers reduced by about 1.5 to 2 percent, thereby supporting larger deployment.
 - Improved capacity addition: With the current available lines of credit (USD 625 million and USD 500 million through ADB and IBRD), additional capacity of about 1.8 GW of rooftop solar PV can be achieved.
 - Socio-economic benefit: Increased deployment as a result of availability of concessional funds, is expected to create about 50,000 additional jobs.
 - Environmental benefits: With rooftop solar clean energy installations, about 1.7million tons of CO2 emissions can be saved per year with additional deployment.

47. The study was released at the event “Under the Indian Sun”, as part of the CIF@10 mission in August 2018 in New Delhi, India. It was organized in collaboration with the World Bank, ADB, and PwC to highlight CTF’s work in both the utility scale and rooftop solar sectors of the country. The event was well attended with over 50 relevant stakeholders from the public and private sectors, including project developers, financiers, and MDBs, making for insightful panel discussions and fruitful networking.

5.2.1 Evaluation and Learning (E&L) Initiative

48. Many E&L activities are providing findings and lessons learned related to CTF. Some of these activities include an independent evaluation, supporting evidence synthesis and learning workshops on transformational change in the CIF context, analyzing the role of the CIF programmatic approach in catalyzing sector-wide results, assessing the impact of concessional finance in leveraging increased private investment in key renewable energy markets, and exploring synergies and complementarities with other climate funds.
49. The report, [Evaluation of the CIF Programmatic Approach](#)¹², has been completed, published, and disseminated widely. It finds that the CIF Programmatic Approach allowed CTF countries and MDBs to be more effective in linking public and private sector investments through a coordinated approach, and that a predictable, flexible, and scaled-up finance envelope allowed the MDBs and governments to develop and implement more transformative and innovative projects.
50. Emerging findings from an independent evaluation and evidence synthesis on *Transformational Change in the CIF*¹³ are also demonstrating the value of the CIF business model in taking a systems approach and laying the foundations for transformative change. CTF’s role in providing risk-bearing capital alongside technical assistance and incentives for policy and regulatory work is found to be a critical factor in helping many countries to further develop and scale-up their renewable energy and energy efficiency markets. Early findings and lessons for future programming were presented and discussed with a range of CIF and external stakeholders at a Transformational Change Learning Partnership workshop in October 2018. The final reports will be launched in January 2019.
51. Other activities implemented through the E&L Call for Proposals are also yielding results and confirming the value-add of CTF in key markets. A study being conducted by Bloomberg New Energy Finance (BNEF), expected to be released in January 2019, is evaluating the role of CTF concessional financing in overcoming investment barriers and helping scale-up low carbon technologies. It analyzes both past experience and the potential role of future concessional finance in key markets.

¹² [Evaluation of the Climate Investment Funds’ Programmatic Approach](#). ICF, 2018 (also see a [Summary Brief](#)).

¹³ The transformational change independent evaluation and evidence synthesis are being implemented by ITAD and the Overseas Development Institute (ODI).

52. The World Bank CTF/SREP Focal Point Team is finalizing an E&L study on the effectiveness of various financing instruments (including grants, concessional loans, and contingent financing, and where applicable, equity) in facilitating the mobilization of private capital for the scale-up of grid connected solar power.
53. Other activities include a study on opportunities and mechanisms for financing the scale-up of rooftop solar for the SME sector in India and country-level lessons learned and experiences regarding complementarity and synergies amongst international climate funds. These will be finalized and released in early 2019.

Annex 1: Updated DPSP III Pipeline

Country	Project Title	Public/ Private	MDB	Sector	Project Status	Expected TFC Submission Date	Non- Grant (USD M)	Grant (USD M)	MPIS (USD M)	TOTAL (USD M)
BEGINNING DPSP III APPROVED AMOUNT										
Global	BDF Program	Public		RE+/EE	TFC Approved		-	13.82	0.69	14.5
Brazil	DPSP III: Financial Instruments for Brazil Energy Efficient Cities - FinBRAZECC	Public	IBRD	EE	MDB Approved		20.0	-	-	20.0
Global	DPSP III: Solar Distributed Generation (SDG)	Private	IFC	RE+	TFC Approved		32.2	2.0	0.8	35.0
Regional	DPSP III: Integrated Renewable Energy and Energy Storage	Private	ADB	RE+	TFC Approved		38.0	-	-	38.0
Regional	DPSP III: Innovative Instruments for Investment in Zero-Carbon Technologies (I3-0)	Private	IADB	RE+/EE	TFC Approved		32.0	1.6	1.4	35.0
Ukraine	DPSP III: Finance and Technology Transfer Centre for Climate Change (FINTECC): Ukraine Agribusiness Waste Residues Window	Private	EBRD	RE+	TFC Approved		14.6		0.5	15.0
Ukraine	Sustainable Urban Transport	Private	IFC	ST/RE+/EE	Submitted	Nov-18	24.0	-	0.6	24.6
Global	Battery Storage Program (3 countries)	Private	IFC	RE+	Sealed	Dec-18	10.0	-	0.5	10.5
India	Transforming India through EE	Public	ADB	EE	Sealed	Dec-18	46.0	2.0	-	48.0
Indonesia	Geothermal Power Generation Investment Project	Public	IBRD	RE+	Sealed	Dec-18	75.0	-	-	75.0
Kenya	Asset-Backed Distributed Generation Program	Private	AfDB	RE+	Sealed	Mar-19	20.0	-	-	20.0
Nigeria	Utility-Scale Solar IPP Program	Private	AfDB	RE+	Sealed	Mar-19	24.0	-	-	24.0
Regional (Turkey, Ukraine, Kazakhstan, Egypt, Morocco and Tunisia)	High Impact Climate Technologies for the Corporate Sector	Private	EBRD	EE	Sealed	Dec-18	51.5		1.5	53.0
Honduras	Flexibilization of existing generation capacity to accommodate variable RE: Energy storage in existing hydro reservoirs	Public	IDB	RE+	Sealed	Feb-19	18.0	-	-	18.0
Jamaica	Improving urban transportation efficiency in Montego Bay	Public	IDB	ST	Sealed	Feb-19	4.0	1.0	-	5.0
Mexico	Developing the Distributed Energy Financing Market in Mexico	Public	IDB	RE+	Sealed	Feb-19	9.0	1.0	-	10.0
Regional	Regional Off-grid Electrification Program (ROGEP)	Public	IBRD	RE+	Sealed	Jan-19	67.3	7.5	0.3	75.0
Bangladesh	Utility-scale Solar Development / Kaptai Floating Solar Program	Public	ADB	RE+	Reserve	Feb-19	25.0	-	-	25.0
Armenia	Early Stage Geothermal Development Programme (PLUTO) Regional Expansion	Private	EBRD	RE+	Reserve	Mar-19	5.0	1.0	-	6.0
Chile	Guarantee/Fund for Distributed Energy Resources and Energy Efficiency	Public	IBRD	EE	Reserve	Mar-19	40.0	-	-	40.0
Colombia	Columbia Clean Energy Development Project	Public	IBRD	RE+/EE	Reserve	Mar-19	50.0	-	-	50.0
Indonesia	Geothermal power mainstream program	Private	ADB	RE+	Reserve	Mar-19	20.0	-	-	20.0
Mexico	Green housing and infrastructure services for Mexican households	Public	IDB	EE	Reserve	Mar-19	30.0	-	-	30.0
Morocco	Scaling Up Solar Power Projects - Commercial Financing	Public	IBRD	RE+	Reserve	Mar-19	50.0	-	-	50.0
Nigeria	Nigeria Rural Electrification Agency	Public	AfDB	RE+	Reserve	Mar-19	20.0	-	-	20.0
Nigeria	Nigeria Climate Innovation Center	Public	IBRD	RE+	Reserve	Mar-19	5.0	-	-	5.0
Philippines	Renewable Energy Fund	Public	IBRD	RE+	Reserve	Mar-19	100.0	-	-	100.0
Regional (Turkey and Kazakhstan)	Gas Sector Energy Efficiency	Public/Private	EBRD	EE	Reserve	Mar-19	18.0	2.0	-	20.0
Vietnam	Accelerated Utility Scale Solar Program / Floating Solar	Public	ADB	RE+	Reserve	Mar-19	50.0	-	-	50.0
Vietnam	Scaling up Energy Efficiency for Industrial Enterprises in Vietnam	Public	IBRD	RE+/EE	Reserve	Mar-19	145.0	-	-	145.0
Turkey	Energy Efficiency in Public Buildings	Public	IBRD	EE	Reserve	Mar-19	45.0	5.0	-	50.0

Annex 2: Resource availability schedule (as of September 30, 2018)

<i>Inception through September 30, 2018</i>	<i>(USDeq. millions)</i>
Cumulative Funding Received	USD-eq. Million
Contributions Received	
Cash Contributions	4,769.52
Unencashed promissory notes	a/ 674.39
Total Contributions Received	5,443.91
Other Resources	
Investment Income	191.14
Other income	b/ 11.86
Total Other Resources	202.99
Total Cumulative Funding Received (A)	5,646.90
Cumulative Funding Commitments	
Projects/Programs	5,567.23
MDB Project Implementation and Supervision services (MPIS) Costs	42.56
Cumulative Administrative Expenses	82.20
Total Cumulative Funding Commitments	5,691.98
Admin Budget Cancellations	c/ (5.54)
Project/Program, MPIS Cancellations	d/ (618.63)
Net Cumulative Funding Commitments (B)	5,067.81
Fund Balance (A - B)	579.10
Country Programming Budget reserve FY19-23	e/ (1.51)
Learning and Knowledge Exchange & Special Initiative Budget (Multi-Year)	f/ (1.33)
Currency Risk Reserves	g/ (101.16)
Unrestricted Fund Bal. for Trustee Commitments- Projects/Programs and Admin (C)	475.10
Net investment income available for Admin Budget commitments and loan losses (D)	123.50
Unrestricted Fund Balance for Project/Program commitments (E = C - D)	351.60
Anticipated Commitments for Projects/Programs (FY18-FY21)	
Program/Project Funding and Fees- CTF DPSP III (Total Approved USD 520m)	362.46
Total Anticipated Commitments (F)	362.46
Available Resources for Projects/Programs (G = E -F)	(10.86)
Potential Future Resources (FY18-FY21)	
Contributions not yet paid	-
Pledges	-
Release of Currency Risk Reserves	g/ 101.16
Total Potential Future Resources (H)	101.16
Potential Available Resources for Projects/Programs (G+H)	90.30
Potential Net Future Resources for Admin Expenses and Loan Losses	
Projected Investment Income from September 2018 to FY23 (I)	h/ 81.08
Projected Administrative Budget (FY20-23) (J)	i/ 34.94
Potential Net investment income available for Admin Expenses and Loan losses (K= I -J)	46.14
Potential Available Resources for Admin Expenses and Loan Losses (D + K)	j/ 169.64

Source: Trustee Report

- a/ This amount represents USD equivalent of GBP 517.07 million.
- b/ Return of funds other than reflows due to be returned to the Trust Fund pursuant to the Financial Procedures Agreements consistent with the pertinent CTF funding approved by the CTF Trust Fund Committee.
- c/ The admin budget cancellations include the unused admin budget refunds, Country Programming Budget revisions/cancellations by MDBs, Trustee and CIFAU.
- d/ Cancellation of program and project commitments approved by the committee.
- e/ The amount of USD 0.1 million approved by TFC in June 2018 for the multi-year country programming budget and the balance in reserve estimate provided by CIFAU for the period FY19 - FY23.
- f/ The multi-year Learning Knowledge Management Budget of USD 0.46 million & Special Initiative Budget of USD 0.27 million approved by the TFC in June 2018 and the multi-year special initiative budget for CTF 2.0 of USD 0.59 million approved by TFC in June 2017, yet to be committed by the Trustee.
- g/ Amounts withheld to mitigate over-commitment risk resulting from the effects of currency exchange rate fluctuations on the value of outstanding non-USD denominated promissory notes.
- h/ Investment income on undisbursed funds as projected by Trustee through the cash flow model assuming a stable investment environment, steady pace of cash transfers and encashment of un-encashed promissory notes.
- i/ FY19 Budget commitment approved by TFC on June 2018 was USD 8.36 million for Administrative services. There was also approval for a multi-year initiative for 0.84 million. The amount approved for FY19 Administrative Services was extrapolated for 5 years. Projected administrative budget includes resources for administrative services provided by the CIF AU, Trustee and MDBs.
- j/ Losses on outgoing CTF Financial Products will be shared by all contributors on a pro-rata basis and covered to the extent available from the Net income (net investment income, interest and guarantee fees received in excess of 0.75%).

Annex 3: Fully disbursed projects/programs (as of June 30, 2018)

Country	Public/ Private	Project title	MDB	CTF Funding (\$m)
Chile	Private	Concentrated Solar Power Project	IDB	0.47
Chile	Private	Large-Scale Photo-Voltaic Program	IDB	16.00
Chile	Private	Geothermal Risk Mitigation Program	IDB	27.70
Colombia	Public	Technological Transformation Program for Bogota's Integrated Public Transport System	IDB	39.95
Colombia	Private	Sustainable Energy Finance Program	IFC	1.07
Colombia	Private	Sustainable Energy Finance Program	IFC	5.40
Honduras	Private	Utility-Scale Solar PV Sub-Program	IFC	19.50
India	Public	Grid-Connected Rooftop Solar Program	IBRD	5.00
India	Public	DPL to Promote Inclusive Green Growth and Sustainable Development	IBRD	100.00
India	Public	Partial Risk Sharing Facility for Energy Efficiency	IBRD	25.00
Indonesia	Private	Private Sector Geothermal Energy Program	ADB	149.25
Kazakhstan	Private	Renewable Energy Financing Program	IFC	1.20
MENA-CSP	Public	Ouarzazate I Concentrated Solar Power Project	AfDB	100.00
MENA-CSP	Public	Noor II and III Concentrated Solar Power Project	AfDB	119.00
MENA-CSP	Public	Ouarzazate I Concentrated Solar Power Project	IBRD	97.00
MENA-CSP	Public	Noor II and III Concentrated Solar Power Project	IBRD	119.00
Mexico	Public	Efficient Lighting and Appliances Project	IBRD	50.00
Mexico	Public	Renewable Energy Program, Proposal III	IDB	0.54
Mexico	Private	Energy Efficiency Program, Part 1	IDB	1.68
Mexico	Public	Renewable Energy Program, Proposal III	IDB	70.00
Mexico	Public	"Ecocasa" Program (Mexico Energy Efficiency Program Part II)	IDB	49.51
Mexico	Private	Energy Efficiency Program, Part 1	IDB	20.00
Mexico	Private	Private Sector Wind Development	IFC	0.10
Mexico	Private	Private Sector Wind Development	IFC	15.00
Nigeria	Private	Line of Credit for Renewable Energy and Energy Efficiency Projects	AfDB	1.25
Philippines	Private	Sustainable Energy Finance Program	IFC	0.80
Philippines	Private	Sustainable Energy Finance Program	IFC	2.65
South Africa	Private	Sustainable Energy Acceleration Program	AfDB	41.50
South Africa	Private	Sustainable Energy Acceleration Program	IFC	35.69
South Africa	Private	Energy Efficiency Program	IFC	1.77
South Africa	Private	Sustainable Energy Acceleration Program	IFC	35.19
Thailand	Private	Renewable Energy Accelerator Program	IFC	0.50
Thailand	Private	Renewable Energy Accelerator Program	IFC	1.03
Thailand	Private	Sustainable Energy Finance Program (TSEF)	IFC	3.75
Turkey	Private	Private Sector Sustainable Energy Financing Facility (TurSEFF)	EBRD	2.40
Turkey	Private	Private Sector Sustainable Energy Financing Facility (TurSEFF)	EBRD	40.00
Turkey	Private	Private Sector Sustainable Energy Financing Facility (TurSEFF) – Ext.	EBRD	5.75
Turkey	Public	Private Sector Renewable Energy and Energy Efficiency Project	IBRD	100.00
Turkey	Private	Commercializing Sustainable Energy Finance Program	IFC	20.00
Ukraine	Private	Renewables Direct Lending Facility	EBRD	26.46
Ukraine	Private	Novoazovsk Wind Project	EBRD	20.58
Ukraine	Private	Renewable Energy Program	IFC	0.20
Vietnam	Private	Sustainable Energy Finance Program (VSEF)	IFC	3.00
TOTAL				1,374.90