

CLIMATE INVESTMENT FUNDS

SREP/SC.19/3

May 9, 2018

Meeting of the SREP Sub-Committee

Washington, DC

Wednesday, June 6, 2018

Agenda 3

SREP SEMI-ANNUAL OPERATIONAL REPORT

PROPOSED DECISION

The SREP Sub-Committee reviewed the document, SREP/SC.19/3, *SREP Semi-Annual Operational Report*, and welcomes the progress that has been made in advancing the work of the SREP in the pilot countries.

The Sub-Committee appreciates the analysis conducted by the CIF Administrative Unit, in collaboration with the MDBs, on achievements, resource availability, pipeline review, and portfolio updates.

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1 Introduction

1. This report provides an update on the status of the Scaling Up Renewable Energy in Low Income Countries Program (SREP), the portfolio of SREP-funded programs and projects under the endorsed investment plans and SREP Private Sector Set-Aside (PSSA), and related activities. This report covers the period from July 1 to December 31, 2017. Some strategic information such as that related to the SREP resource availability is provided as of March 31, 2018 to facilitate discussion and decision-making during the upcoming meeting.
2. The following annexes are included in this report: Annex 1: Resource availability, Annex 2: Expected project submission for the remaining pipeline, and Annex 3: Overview of SREP portfolio by country. In addition, SREP country portfolios have been updated and are available in a separate information document¹.

2 Strategic issues

2.1 Overview of SREP implementation

3. As of December 31, 2017, the SREP Sub-Committee has endorsed investment plans for 20 pilot countries with a total indicative allocation of USD 763.5 million and seven project concepts under the PSSA with an indicative allocation of another USD 92.4 million.
4. The overarching expected results² under the 20 endorsed investment plans and PSSA include an estimated 6,778 gigawatt hours (GWh) of electricity to be generated annually from renewable energy sources (equivalent to the annual electricity production of Armenia) and new or improved access to clean, modern energy services for 17.4 million people (approximately the population of Malawi). The total estimated greenhouse gas (GHG) emissions to be avoided are approximately 5.4 million tons CO₂e/yr.
5. Of this, the expected results from projects approved by the SREP Sub-Committee and projects in the sealed pipeline include an estimated 6,345 GWh of renewable energy electricity to be generated annually, new or improved energy access for 15.9 million people, and total estimated GHG emissions to be avoided of 5.2 million tons CO₂e/yr.
6. Progress of implementation varies among the pilot countries. Overall, about 74 percent of the funding under the sealed pipeline has been approved by the SREP Sub-Committee, with countries that joined the SREP earlier reaching a higher approval rate than those that joined later. Figures 1 and 2 show trends in SREP funding approvals by the SREP Sub-Committee and implementing MDBs over time. (Table 3 in Section 3 contains country-specific approval

¹ Available at <https://www.climateinvestmentfunds.org/event/srep-sub-committee-meeting-wednesday-june-6-2018>

² Including projects in the sealed and reserve pipelines.

rates.) Total approval rate, including the 5 projects approved by the SREP Sub-Committee after the current reporting period, is at 81 percent³.

Figure 1: SREP funding approvals by the Sub-Committee by fiscal year (with projections for FY18-FY20)

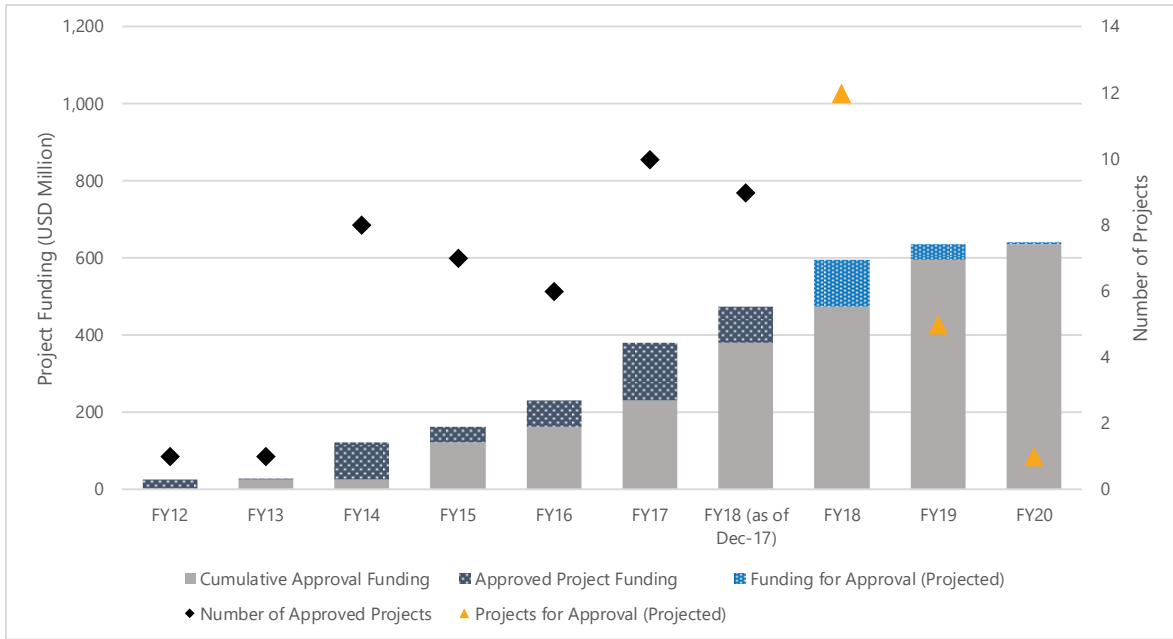
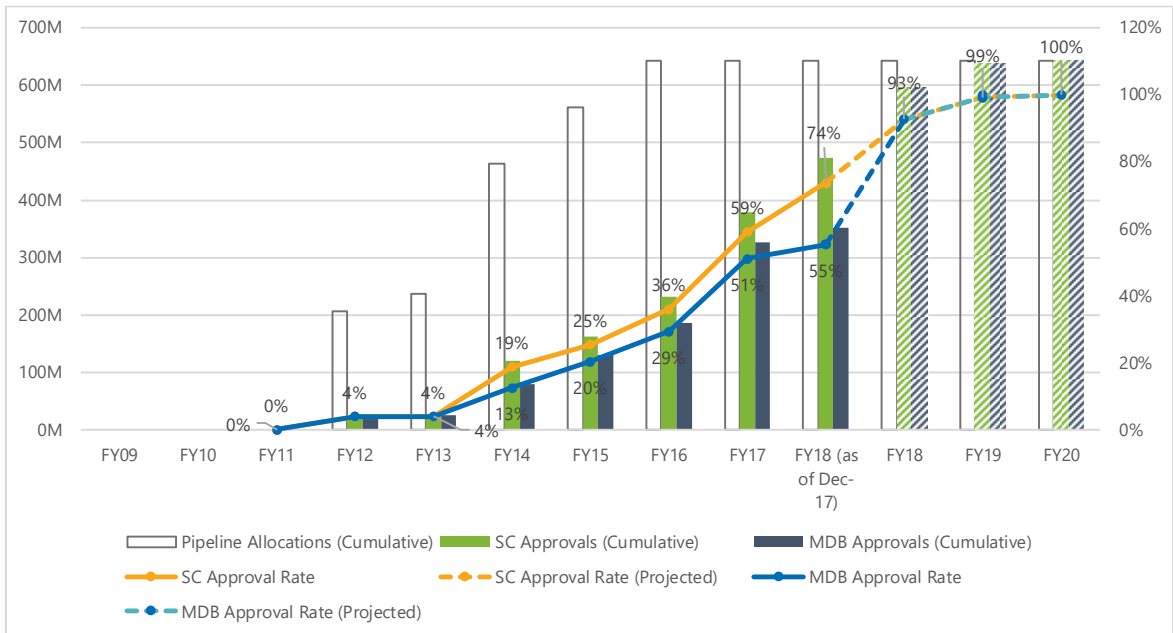


Figure 2: SREP funding approval rate by fiscal year (with FY18-FY20 projections)



³ Approval amounts mentioned are against the sealed pipeline.

2.2 Resource availability

Decisions by the SCF Trust Fund Committee

7. At the December 11, 2017 meeting, the Strategic Climate Fund (SCF) Trust Fund Committee, reviewed the *Report of the Trustee on the Financial Status of the SCF* and noted that the investment income of the SCF Trust Fund is not currently expected to be sufficient to cover the costs of the projected level of Administrative Services by the CIF Administrative Unit, MDBs, and the Trustee. The Committee requested the CIF Administrative Unit, working in collaboration with the MDBs and the Trustee, to undertake a full analysis to explore possible options for financing administrative expenses, costs reductions, and attribution of administrative expenses among the SCF programs. The Committee also decided to pause the approval of any funding within the SCF, other than that of project preparation grants, until such time that the Committee had reviewed the analysis requested and decided on a way forward.
8. At the intersessional meeting held on March 8, 2018, the SCF Trust Fund Committee considered proposals for addressing the shortfall in the SCF Trust Fund set out in the document entitled *Long-term SCF Administrative Costs and Funding Options* developed by the CIF Administrative Unit, the MDBs, and the Trustee. The Committee decided on a means to apportion administrative costs between SCF programs and agreed that reflows from SCF loans may be used to finance the potential shortfall of grant resources to cover administrative costs after they become available in each program. The Committee further agreed that the pause in approval of SCF funding be lifted.
9. More specifically, the SCF Trust Fund Committee agreed to allocate a portion of the available grant resources from each of the SCF programs to finance estimated administrative costs from FY19 to FY28 as follows:
 - USD 11.6 million from the FIP
 - USD 10.6 million from the PPCR
 - USD 31.6 million from the SREP

Resource availability for the SREP

10. Based on the decisions of the SCF Trust Fund Committee, the Trustee and the CIF Administrative Unit have updated the resource availability for each of the SCF programs. As of March 31, 2018, the SREP had an unrestricted fund balance after reserves of USD 159.9 million (USD 48.3 million grant and USD 111.6 million non-grant). Total anticipated commitments were USD 226 million, including projects and programs (and MPIS⁴) in the sealed and reserve pipeline (see Table 1 and Annex 1).

⁴ MDB Project Implementation Services

Table 1. SREP resource availability schedule summary
(USD million, as of March 31, 2018)

		Total	Grant	Non-Grant
Unrestricted Fund Balance		191.5	79.9	111.6
Admin Expenses-Reserve (includes Country programming budget/Learning and Knowledge exchange reserve) and for FY 19-28 (net of estimated investment income and reflows as of SCF Committee Decision March 8, 2018)	(1)	(31.6)	(31.6)	
Unrestricted Fund Balance after reserves (A)		159.9	48.3	111.6
Anticipated Commitments (FY18-FY21)				
<i>Program/Project Funding and MPIS Costs</i>		226.0	99.6	126.4
Total Anticipated Commitments (B)	(2)	226.0	99.6	126.4
Available Resources (A - B)		(66.1)	(51.3)	(14.8)
Potential Future Resources (FY18-FY21)				
<i>Release of Currency Risk Reserves</i>	(3)	37.4	4.2	33.2
Total Potential Future Resources (C)		37.4	4.2	33.2
Potential Available Resources (A - B + C)		(28.7)	(47.1)	18.4

(1) The amount of this reserve is estimated by the CIF Administrative Unit and Trustee using the 10-year forecast of the Administrative Budget less the 10-year estimate of Investment Income and reflows. Pro-rata estimates across three SCF programs are based on the 22% fixed pro rata share of the SREP's cash balance as at December 31, 2017 approved by the committee on March 8, 2018. The decision reads as "allocate USD 31.6 million from the available grant resources in the SREP Program Sub-Account to finance estimated Administrative Costs from FY19 to FY28, such that the projected, indicative amount of approximately USD 59.6 million in SREP grant resources remains available for allocation to SREP projects."

(2) Includes both sealed and reserve pipeline.

(3) 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.

11. Assuming the release of currency risk reserves amounting to USD 37.4 million, the MDB Committee has agreed to propose an updated sealed pipeline of projects that matches the current available SREP resources as of March 31, 2018 (see Annex 2). It also includes a reserve pipeline and a list of projects that are not under active development. The sealed pipeline will be kept under review and will be presented to the SREP Sub-Committee periodically.

2.3 Stocktaking review of SREP M&R system

12. The SREP Sub-Committee in December 2017 requested the CIF Administrative Unit to update the SREP results framework to better capture interim results generated in the SREP portfolio. A stocktaking review of the SREP monitoring and reporting (M&R) system was

undertaken in the spring of 2018 to examine ways of enhancing the effectiveness and usefulness of the system and to address the challenges faced during implementation from 2014 to 2017.

In particular, due to the nature of the SREP's programming, significant progress on the two core indicators only occurs near or at project/program completion. This has generated an interim data gap throughout the implementation of the SREP, as few projects in the portfolio have reached completion, and a significant portion now focus largely on pre-investment and/or enabling activities that fall outside the purview of the core indicators.

13. The resulting report⁵ identifies the following key constraints of the SREP M&R system, as well as recommendations to resolve them:

- Bridging the gap of intermediary results by shifting weight of core and co-benefit indicators within the SREP results framework
- Increasing the reporting frequency of finance leveraged
- Specifying suitable reporting for geothermal and other upstream projects
- Clarifying requirements for energy access
- Addressing challenges in aggregating and harmonizing certain indicators
- Taking better advantage of MDB results reporting already occurring within their institutional arrangements

3 Status of the SREP portfolio

3.1 Portfolio overview and updates

14. As of December 31, 2017, total funding approved by the SREP Sub-Committee reached USD 502.4 million⁶ for 39 projects and programs, including four projects under PSSA (see Table 2 for overview and Annex 4 for breakdown by country). This amount accounts for 74 percent of the SREP sealed pipeline. These projects are expected to leverage a total of USD 2.6 billion in co-financing (with a 1 to 5.1 co-financing ratio) from recipient governments, MDBs, private sector, and bilateral agencies⁷. Figure 3 breaks down the SREP portfolio by MDB, region, sector, and technology.

⁵ Available at <https://www.climateinvestmentfunds.org/event/srep-sub-committee-meeting-wednesday-june-6-2018>

⁶ Total approved project funding=project funding+ IPPGs + PPGs

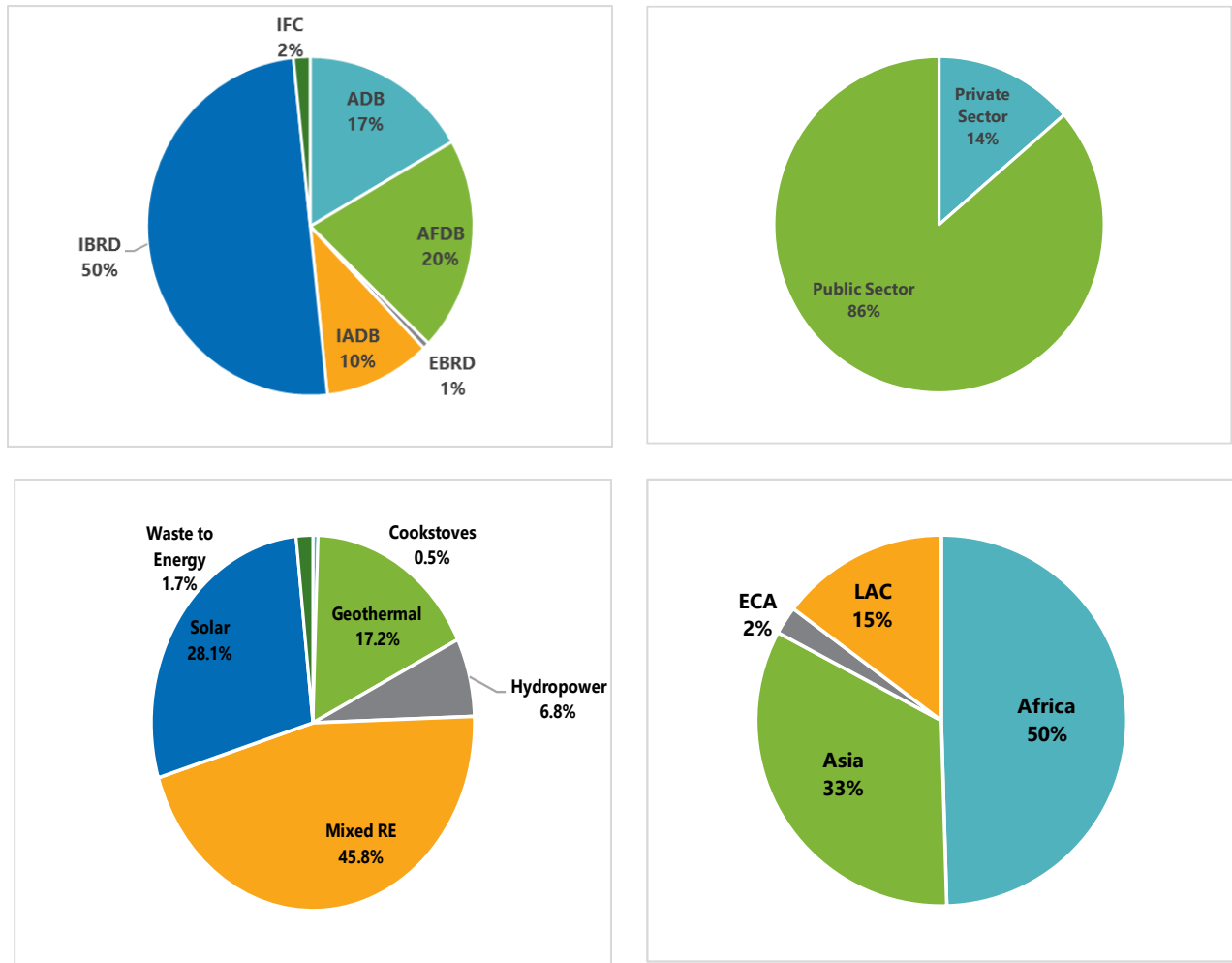
⁷ Detailed information on co-financing breakdown by project is included in the *SREP Country Portfolios* information document Available at <https://www.climateinvestmentfunds.org/event/srep-sub-committee-meeting-wednesday-june-6-2018>

Table 2. Overview of SREP portfolio (as of December 31, 2017)⁸

	Indicative pipeline allocation				Approved funding		Disbursement
	TOTAL	IP	PSSA	IPPG	Sub-Committee	MDB	
SREP funding (USD million) *	792.4	705.1	85.2	2.1	502.4	381.6	66.0
Number of projects	67	61	6		39	31	19

* Note: Includes Project Preparation Grants (PPGs)

Figure 3. SREP Sub-Committee-approved funding by MDB, region, sector, and technology (as of December 31, 2017)



Note: Mixed RE refers to projects considering multiple renewable energy technologies

⁸ Not including projects cancelled or dropped.

15. Table 3 presents the status by country of the 20 endorsed investment plans and PSSA concepts along with the rates of funding approvals. It should be noted that nine of the 20 countries received endorsement of their investment plans since May 2015.

Table 3: Endorsement of investment plans and PSSA concepts
(USD million, as of December 31, 2017)

	Country/Region	Endorsement date	Indicative allocation	Approved funding	% Approval ¹	
First set of countries	Ethiopia	Mar-12	50.0	29.7	59.4%	
	Honduras	Nov-11 ²	30.0	22.9	76.4%	
	Kenya	Sep-11	50.0	32.5	65.0%	
	Maldives	Oct-12	30.0	25.7	85.7%	
	Mali	Nov-11	40.0	19.7	49.3%	
	Nepal	Nov-11 ³	40.0	39.5	98.8%	
Second set of countries	Armenia	Jun-14	40.0	13.7	34.2%	
	Liberia	Oct-13	50.0	50.0	100%	
	Mongolia	Nov-15	30.0	15.1	50.3%	
	Pacific Region	May-15	2.0	1.9	96%	
	Solomon Islands	Jun-14	14.0	6.6	47.4%	
	Tanzania	Sep-13	50.0	37.2	74.4%	
	Vanuatu	Nov-14	14.0	13.8	98.4%	
Third set of countries	Bangladesh	Nov-15	75.0	52.4	69.9%	
	Cambodia	Jun-16	30.0	1.95	6.5%	
	Ghana	May-15	40.0	1.5	3.8%	
	Haiti	May-15	30.0	19.6	65.4%	
	Nicaragua	May-15	30.0	7.5	25%	
	Uganda	Nov-15	50.0	4.2	8.4%	
	Rwanda	Nov-15	50.0	49.7	99.5%	
	Lesotho	Dec-17	18.5	1.5	8.1%	
	Sub-total for IPs			763.5	446.7	58.5%
	PSSA 1st	13-Nov	59.6	48.1	80.6%	
PSSA 2nd	15-Oct	32.8	5.5	16.8%		
Sub-total for PSSA			92.4	53.6	58%	
TOTAL (IPs +PSSA)⁴			855.9	500.3	58.5%	

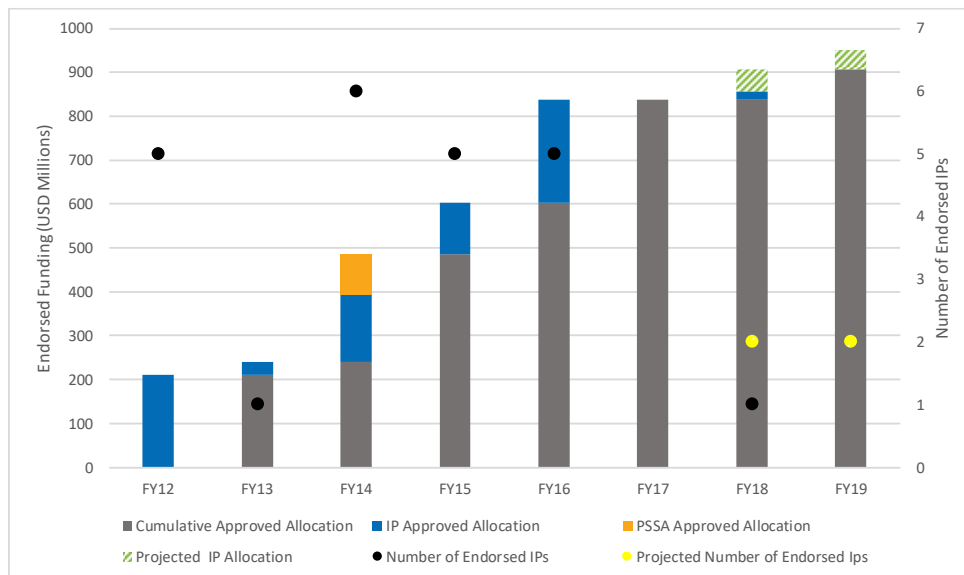
Notes:

1. Approval amounts mentioned are against the indicative allocation
2. Revised endorsement date is April 2017
3. Revised endorsement date if May 2015
4. This total does not include IPPG for pilot countries (USD 2.1 million)

3.1.1 Investment plans

16. The SREP Sub-Committee endorsed one new investment plan at its meeting in December 2017: Investment Plan of Lesotho, for an indicative allocation of USD 18.5 million in SREP funding.
17. For the remaining seven SREP pilot countries that have not presented investment plans for endorsement, Madagascar is expected to do so at the upcoming SREP Sub-Committee meeting on June 6, 2018. Zambia and Kiribati (with a scoping mission held on August 7-10, 2017) expect to have investment plans ready for submission by December 2018. The investment plan submission dates for Benin, Malawi, and Sierra Leone are yet to be determined. As for Yemen, due to continued security issues, no progress has been made to further the preparation of its SREP investment plan. See Figure 4 for trends in SREP investment plan endorsement.

Figure 4. Trends in endorsement of SREP investment plans by fiscal year



18. During the current reporting period, the Cambodia investment plan revision was endorsed by the SREP Sub-Committee (see Box 1).

Box 1: Cambodia revises SREP investment plan to focus on public private partnerships in solar



The SREP Sub-Committee endorsed the revised SREP Investment Plan of Cambodia in August 2017. The revision of the plan is based on the Government of Cambodia’s change in strategy for the power generation subsector, shifting from negotiated power purchase agreements (PPAs) to a competitive tendering system. This change in strategy was informed by the following:

- Tendering the 10 MW Bavet solar project
- A grid integration study and preliminary feasibility study for the national solar parks program supported by ADB
- Learning from other countries experiences in utility-scale solar development centered on tendering approaches
- Readiness for developing a national solar program

The changes in Cambodia’s investment plan will support rapid expansion of solar power in a systematic manner via a public-private partnership model and will result in more renewable energy capacity and output than in the original investment plan.

3.1.2 Sub-Committee approvals

19. During the current reporting period, six projects were approved by the SREP Sub-Committee for a total of USD 95.81 million in SREP funding (see Table 4), bringing the total approved SREP funding to USD 502.4 million. Approvals included Tanzania’s Geothermal Energy Development (see Box 2). After the reporting period, 5 projects were approved by the Sub-Committee (see Table 5).

Table 4: SREP Sub-Committee-approved projects and programs
(July 1 to December 31, 2017)

Country	IP/PSSA	Project title	MDB	SREP funding (USD million)
Bangladesh	IP	Scaling Up Renewable Energy	IBRD	29.25
Bangladesh	IP	Power System Efficiency Improvement Project – Additional Financing - Off Grid Solar PV: Solar Irrigation	ADB	22.22
Honduras	IP	Grid-Connected RE Development Support-Transmission	IDB	7.50
Honduras	IP	ERUS Universal Energy Access Program	IDB	6.80
Nepal	PSSA	ABC Business Models for Off-Grid Energy Access	IBRD	7.61
Tanzania	IP	Geothermal Energy Development	AfDB	22.43
TOTAL APPROVAL				95.81

Table 5: SREP Sub-Committee-approved projects and programs
(January 1 to April 30, 2018)

Country	IP/PSSA	Project title	MDB	SREP funding (USD million)
Solomon Islands	IP	Renewable Energy Access Project	IBRD	7.10
Honduras	IP	Strengthening the RE Policy and Regulatory Framework (FOMPIER) – Phase 2	IDB	0.83
Cambodia	IP	National Park Program	ADB	14.00
Mali	IP	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)	AfDB	8.70
Mongolia	IP	Upscaling Rural Renewable Energy	ADB	14.60
TOTAL APPROVAL				45.23

Box 2: Tanzania’s geothermal energy development



SREP funding: USD 21.7 million

Implementing agency: AfDB

Objective: Fund the exploratory test drilling to confirm the availability of geothermal resources for power generation at Ngozi site and the installation of the steam gathering system

The SREP can play a key role in establishing geothermal power in Tanzania by helping the country to de-risk the exploration phase of geothermal resources on the Ngozi site. The success of the project could lead not only to the installation of a power plant with an estimated installed capacity of 100 MW for the national grid, but also to the creation of conditions that facilitate the development of other geothermal sites in the country.

Moreover, it can help to mitigate high dependency on expensive fossil fuels and climate-vulnerable hydro-based power generation. In Tanzania, climate change is a main driver of water shortages that impact hydro-energy generation capacity, complicate sector planning, and eventually lead to power shortages.

3.1.3 MDB approvals

20. During the reporting period, the MDBs approved three projects (see Table 6) for USD 26.4 million in SREP funding, bringing the total MDB-approved SREP financing to USD 382 million.

Approvals included two Haitian projects that are working together to expand up-take of renewable energy on- and off-grid solutions (see Box 3).

**Table 6: SREP MDB-approved projects and programs
(July 1 to December 31, 2017)**

Country	IP/PSSA	Project title	MDB	SREP funding (USD million)
Haiti	IP	Renewable Energy and Access for All	IBRD	8.62
Haiti	IP	Renewable Energy for the Metropolitan Area	IBRD	11.00
Vanuatu	IP	Rural Electrification Project	IBRD	6.77
TOTAL APPROVAL				26.4

Box 3: Haiti’s Renewable Energy Access for All and Renewable Energy for the Metropolitan Area



SREP funding: USD 19.6 million (total for the two projects)

Implementing agency: IBRD

Objective: Scale up renewable energy investments in Haiti to expand and improve access to electricity for Haitian households, businesses, and community services

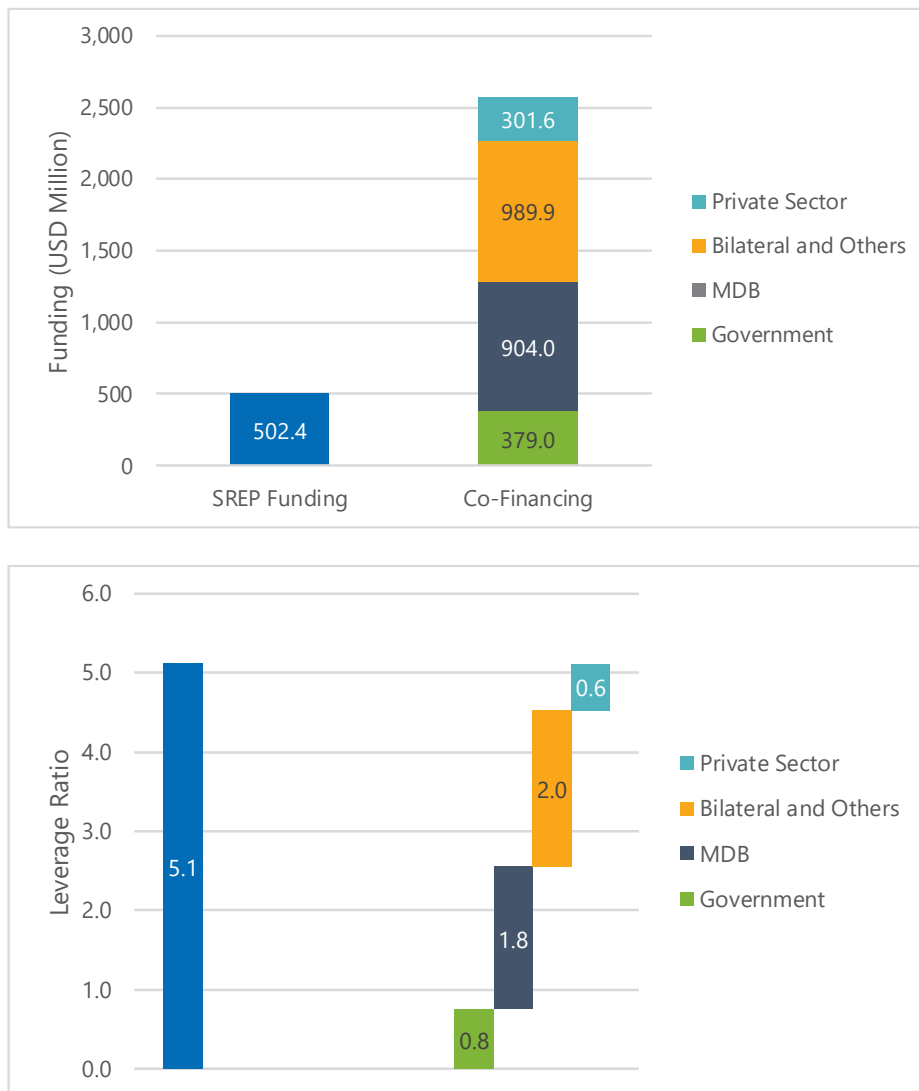
SREP grant funding will be critical to enable Haiti to leapfrog into the adoption of renewable technologies for household consumption, productive uses, and provision of community services. The demonstration effect of project activities will increase the attractiveness of similar investments to private sector investors and donors interested in on- and off-grid renewable electrification in Haiti.

- **SREP Renewable Energy for the Metropolitan Area Project** focuses on grid-connected, distributed renewable energy. It aims to demonstrate the feasibility of using renewable energy to provide reliable and affordable electricity services in Electricité d’Haïti (EDH) grid-connected areas for future replication and scale up. The project will support the construction of a 5 to 12 MW solar PV plant plus battery storage facility to hybridize two to three EDH grids currently running on diesel power.
- **Renewable Energy and Access for All Project** focuses on off-grid distributed renewable energy, with a view to support private sector solutions (e.g., municipal grids, standalone systems for productive and community uses, and solar home systems for households) in areas not served by EDH.

3.2 Co-financing

21. The 39 projects approved by the Sub-Committee (USD 502.4 million) as of December 31, 2017, are expected to mobilize over USD 2.6 billion in co-financing from governments, MDBs, bilateral, and other sources. This represents a leverage ratio of 1 to 5.1 (mostly driven by large ratios from geothermal projects), meaning for every USD 1 invested by the SREP, another USD 5.1 is invested by other financiers. As shown in Figure 5, MDBs and bilateral/others represent the largest sources of co-financing, followed by governments and private sector.

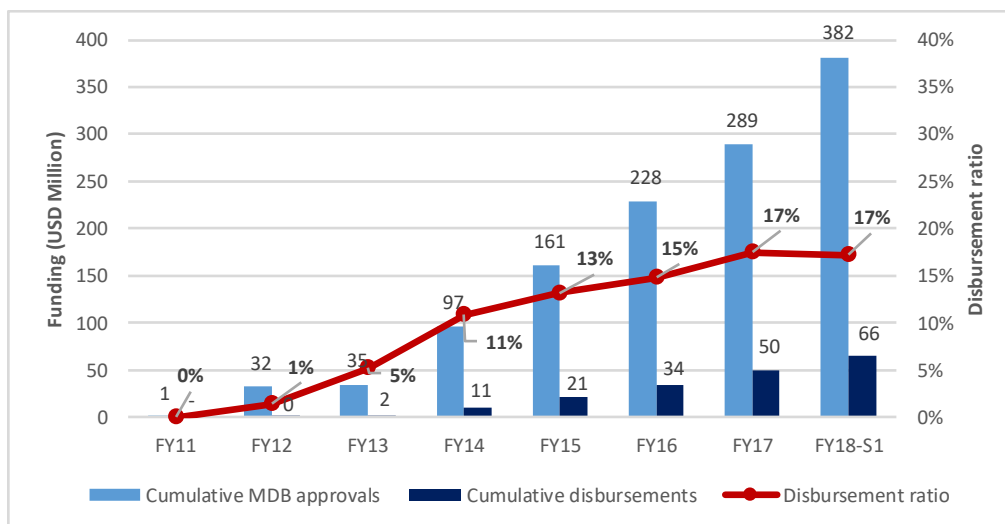
Figure 5: SREP co-financing by source and ratio (as of December 31, 2017)



3.3 Disbursement

22. Disbursements under the SREP were USD 16 million during the reporting period, reaching USD 66 million in total. Figure 6 shows the disbursement trend over time. Out of the 31 MDB-approved projects, 19 are disbursing.

Figure 6: SREP disbursement trend by fiscal year



4 Cross-cutting themes

4.1 Gender

23. The SREP portfolio of investment plans and projects approved by the Sub-Committee from July 1 to December 31, 2017 was reviewed to identify program progress regarding gender quality at entry. The three gender scorecard indicators regarding presence of sector-specific gender analysis, sex-disaggregated indicators, and women-specific activities were reviewed for each investment plan and project. Figures were compared to baseline performance of the SREP portfolio as on June 30, 2014.
24. SREP performance on the three gender indicators was strong during the period. The one SREP investment plan approved during the reporting period scored positively on having sector-specific gender analysis, women-specific activities, and sex-disaggregated indicators in its design. Sector-specific gender analysis and sex-disaggregated indicators were present in 67 percent of SREP projects approved during the period (compared to baselines of 47 percent and 80 percent, respectively). Women-specific activities were present in 83 percent of SREP projects (compared to a baseline of 40 percent). See Box 4 for an example of a project approved during the reporting period.

Box 4: Expanding women’s access to energy, technical training, and employment in Honduras’ energy sector

SREP funding: USD 6.6 million

Implementing agency: IDB

Objective: Support isolated coastal and island regions of Honduras with 1.7 MW capacity of electricity generation through solar system micro-grids and individual systems.

The ERUS Universal Energy Access Program (PAUE) for Honduras will improve energy access for 4,115 households that lie outside the grid in geographically isolated areas and support institutional development in the sector, while expanding women’s technical skills and employment in the energy sector.

The project includes a participation strategy to train women in construction, operation, and supervision of the electricity generation initiatives supported. Gender considerations are also part of the project’s procurement criteria, requiring the executing agency that contracts local firms for operation and maintenance of the domestic photovoltaic systems to prioritize firms that have a significant proportion of women among their workforce.

The project’s gender design elements draw on lessons learned from similar projects where sustainability is enhanced by encouraging early participation of private enterprises and training of local personnel, including women, in the operation and maintenance of the installed electrification systems. Other lessons learned include the importance of facilitating financing connections and meters for rural users, promoting use of electricity for productive purposes to increase program returns, and using domestic electrical appliances that are energy efficient. All have been shown to increase women’s energy access and use, as well as social and economic empowerment.

The project’s key result indicators include measurement of employment generated for women through the project (significant in a country with the lowest female labor force participation rate in Central America, 45 percent for Honduran women compared to 84 percent for Honduran men). There is also a key results indicator regarding women trained in construction, operation, and supervision of the electricity generation projects in isolated areas.

4.2 Risk management

25. The SREP Sub-Committee decided in December 2017 that the CIF Administrative Unit would prepare a standalone SREP Risk Report on a semi-annual basis. Additionally, credit risk will now be assessed for the SREP (and all SCF programs), as this risk has become more relevant to these programs since the SCF Trust Fund Committee decided in March 2018 to permit each SCF program to use reflows to cover administrative costs. Please see the SREP Risk Report⁹ for further details on risk management.

⁹ Available at <https://www.climateinvestmentfunds.org/event/srep-sub-committee-meeting-wednesday-june-6-2018>

4.3 Knowledge management

4.3.1 CIF Evaluation and Learning (E&L) Initiative

26. The recently completed Evaluation of the CIF Programmatic Approach includes findings on the use and relevance of this delivery modality for SREP. It notes that in SREP, providing a predictable resource envelope alongside the strategic investment planning exercise was seen as a main advantage of the programmatic approach. This provided an opportunity to address energy sector-wide challenges and to link resources to strategic planning, which helped bring government and other actors to the table for high-level dialogue. This evaluation also found that robust local stakeholder engagement occurred in SREP investment planning (and across SCF Investment Plans/SPCRs), often continuing into program and project implementation. The Transformational Change Phase I Portfolio Analysis found that scaling strategies and results are generally more rapid and pronounced in projects working to activate private sector investment and market activity, and that SREP investment criteria encourage applicant countries to take a systems perspective in country investment plans and project proposals.
27. An E&L activity implemented through the E&L Call for Proposals by the World Bank CTF/SREP Focal Point Team to review the effectiveness of various financing instruments (namely, 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, delivered early findings in FY18. Among other things, a survey implemented through the project found that private investors prefer to finance the development and infrastructure costs of solar projects provided that payment risk is acceptable or adequately mitigated, rules of the game are transparent (e.g., a clear legal framework and/or bankable contracts), and capital can be raised in local currency or revenues indexed to an international currency to mitigate foreign exchange risk.

4.3.2 Other knowledge sharing partnerships

28. **GDI partnership:** A series of CIF results case studies was launched in fiscal year 2018 in partnership with the Global Delivery Initiative (GDI) to capture and share insights and lessons learned during project implementation that have operational value. These case studies will help illuminate steps taken to produce results and tease out the strategies and solutions devised to address delivery challenges. Two GDI case studies were undertaken for SREP projects: the Kenya Menengai Geothermal Development Project (AfDB) and the Honduras Sustainable Rural Energization Project (IDB). Preliminary findings from the Menengai Geothermal Project case study were presented at the GDI Annual Conference held in Addis Ababa, Ethiopia in March 2018. Key messages of this presentation include:
 - Concessional finance provided by SREP was instrumental to de-risk the geothermal development project and to attract co-financing from other development partners.
 - The provision of a Partial Risk Guarantee (PRG) was necessary to provide a reward-risk ratio sufficient to attract private developers (Independent Power Producers) to invest in the geothermal project.

- Concessional lending program supported by the CIF's Dedicated Private Sector Program (DPSP) was necessary to lower the cost of capital and increase the bankability of the private developers' projects.

Further results from these case studies will be presented in various venues, as well as on the CIF website, as they become available.

29. **Mini-grids knowledge sharing:** In December 2017, the CIF/SREP, ESMAP, Government of Nigeria, and DFID convened an action learning event on "Upscaling Mini Grids for Low Cost and Timely Access to Electricity" in Abuja, Nigeria, bringing together over 200 participants. As part of this event, the CIF organized an SREP Mini-Grid Roundtable for SREP pilot countries with mini-grids projects to exchange knowledge and collaboratively develop solutions on upscaling mini-grids for low cost and timely access to electricity. The roundtable facilitated deep dive discussions on various themes such as regulations and tariffs, financing, creating demand, technology costs, role of private sector, grid expansion, productive use of energy, and procurement and contract management. SREP country representatives also participated in a week-long series of mini grid events, which included the Nigeria mini-grid roundtable, global mini-grid technical conference, and the Nigeria mini-grid electrification clinics. This event was the last in a series of three learning events organized by the CIF and ESMAP to facilitate ideas and knowledge exchange on mini-grids.
30. **Special initiative on Multi-Tier Access Framework (MTF):** During the SEforALL Energy Forum, the CIF organized a session on May 2, in collaboration with ESMAP, to launch two MTF diagnostic reports, Ethiopia and Rwanda. The session was entitled: *Data that Drives SDG 7: Emerging Findings from the Global Energy Access Survey*, and released new survey evidence on patterns of energy access for these countries. Some of the policy highlights include:
 - Rwanda's greatest challenge is to provide access to at least basic electricity (Tier 1 and above) to households without any access to electricity (Tier 0). Although access to electricity using an off-grid solar solution is only 5.1%, this penetration rate was achieved in a short timeframe. Off-grid solutions are thus a promising approach for providing access to at least basic electricity supply to unelectrified households.
 - Also for Ethiopia, elevating Tier 0 households to gaining at least Tier 1 status is the highest priority. The rapid expansion of smaller solar devices, such as solar lanterns, in rural Ethiopia (close to 11 % of rural households are in Tier 1 thanks to the solar technology) demonstrates the potential for this technology to close the access gaps.
31. Status update on other SREP countries under the MTF is as follows:
 - **Honduras:** Launched in September 2016, MTF Honduras is working on data cleaning and expects to deliver results by the end of June 2018.
 - **Liberia:** MTF Liberia activities began in December 2016 with the data collection starting in March 2017. The data analysis is ongoing and the final report is expected to be completed by June 2018.
 - **Nepal:** A workshop was held in November 2016 to introduce the MTF survey to the Nepalese government and international development stakeholders. The MTF survey was launched in February 2017. Household survey data collection for 6,000 households began in July 2017, and the field work was completed in December 2017. The mini-grid survey was

completed in March 2018, but the enterprise survey continues as does data analysis for the household survey, which is expected to be completed by June 2018.

- **Zambia:** Survey activities occurred from September to November 2017. Following data cleaning, MTF Zambia expects to deliver its final diagnostic reporting by June 2018.

Annex 1: Resource availability

SREP TRUST FUND - RESOURCES AVAILABLE for COMMITMENTS			
<i>Inception through March 31, 2018</i>			
<i>(USD millions)</i>			
	Total	Capital	Grant
	Total		
Donor Pledges and Contributions			
Contributions	762.4	291.1	471.3
Pledges	-	-	-
Allocation of Capital to Grants	a/	(27.9)	27.9
Total Pledges and Contributions	762.4	263.2	499.2
Cumulative Funding Received			
Contributions Received			
Cash Contributions	513.2	41.9	471.3
Unencashed Promissory Notes	b/ 249.2	249.2	-
Allocation of Capital to Grants from Unencashed Promissory Notes	a/	(27.9)	27.9
Total Contributions Received	762.4	263.2	499.2
Other Resources			
Investment Income earned -up to Feb 1, 2016	c/ 9.9		9.9
Other Income	-		
Total Other Resources	9.9		9.9
Total Cumulative Funding Received (A)	772.3	263.2	509.1
Cumulative Funding Commitments			
Projects/Programs	553.0	148.9	404.1
MDB Project Implementation and Supervision services (MPIS) Costs	19.4	-	19.4
Administrative Expenses-Cumulative to 1st Feb 2016	c/ 14.3	-	14.3
Total Cumulative Funding Commitments	586.7	148.9	437.8
Project/Program, MPIS and Admin Budget Cancellations	d/ (43.2)	(30.5)	(12.7)
Net Cumulative Funding Commitments (B)	543.5	118.4	425.1
Fund Balance (A - B)	228.9	144.8	84.1
Currency Risk Reserves	e/ (37.4)	(33.2)	(4.2)
Unrestricted Fund Balance	191.5	111.6	79.9
Future Programming Reserves:			
Admin Expenses-Reserve (includes Country programming budget/Learning and Knowledge exchange reserve) and for FY 19-28 (net of estimated investment income and reflows as of SCF Committee Decision March 8, 2018)	f/ (31.6)		(31.6)
Unrestricted Fund Balance (C) after reserves	159.9	111.6	48.3
Anticipated Commitments (FY18-FY21)			
Program/Project Funding and MPIS Costs	g/ 226.0	126.4	99.6
Total Anticipated Commitments (D)	226.0	126.4	99.6
Available Resources (C - D)	(66.1)	(14.8)	(51.3)
Potential Future Resources (FY18-FY21)			
Release of Currency Risk Reserves	e/ 37.4	33.2	4.2
Total Potential Future Resources (D)	37.4	33.2	4.2
Potential Available Resources (C - D + E)	(28.7)	18.4	(47.1)

a/ Promissory Notes amounting to GBP 19.84 million received as capital contributions are available to finance grants (including administrative costs) according to the terms of the contribution agreements/arrangements. The Promissory Notes are valued as of February 28, 2018 exchange rate.

b/ This amount includes USD equivalent of GBP 177.3 million from the UK.

c/ From Feb 1, 2016, Investment income across all SCF programs has been posted to a notional Admin "account", from which approved Administrative Budget expenses for the Trustee, Secretariat and MDBs are committed. In accordance with the terms of the Contribution Agreements, if amounts in the notional Admin account are not sufficient to cover Administrative Budgets, the shortfall is pro-rated across programs, based on cash balances. The Country Programming budgets are recorded under individual programs.

d/ This refers to cancellation of program and project commitments approved by the committee.

e/ 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.

f/ The amount of this reserve is estimated by the CFAU and Trustee using the 10-year forecast of the Admin Budget less the 10-year estimate of Investment Income and reflows. Pro-rata estimates across three SCF programs are based on the 22% fixed pro rata share of the SREP's cash balance as at December 31, 2017 approved by the committee on March 8, 2018. The decision reads as "allocate USD 31.6 million from the available grant resources in the SREP Program Sub-Account to finance estimated Administrative Costs from FY19 to FY28, such that the projected, indicative amount of approximately USD 59.6 million in SREP grant resources remains available for allocation to SREP projects".

g/ Includes both sealed and Reserve pipeline

Annex 2: SREP pipelines

IP/ PSSA	COUNTRY	PROJECT TITLE	MDB	Public/ Private	Grant (USD million)	Non-Grant (USD million)	MPIS Balance	SUBMISSION DATE
SEALED PIPELINE								
		PPGs for remaining SREP countries that have not submitted their IPs			8.50			Apr-18
IP	Armenia	Development of Utility-Scale Solar PV	IBRD	Public		26.00	0.44	Mar-18**
IP	Cambodia	National Park Program	ADB	Public	3.00	11.00	0.28	Mar-18*
IP	Mongolia	Upscaling Rural Renewable Energy	ADB	Public	14.60		0.21	Mar-18*
IP	Mali	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)	AfDB	Public	8.70		0.35	Mar-18*
IP	Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	Private		5.00		May-18
IP	Haiti	Off-Grid Electricity	IFC	Private	0.50			May-18
IP	Haiti	Off-Grid Electricity Services for productive, Social and Household Uses Project	IFC	Private	0.20	6.80	0.44	May-18
IP	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including technical assistance)	IFC	Private	0.50	15.00		Jun-18
IP	Ghana	Utility-scale Solar PV/Wind Power Generation	IFC	Private		10.00	0.45	Jun-18
IP	Lesotho	Distributed RE Solutions	IBRD	Public	4.00	8.00	0.42	Jun-18
IP	Cambodia	Private Sector Solar Development - Utility Scale/Parks	ADB	Private		5.00	0.14	Sep-18
PSSA	Kenya	Kopere Solar Park	AfDB	Private		11.60	0.18	Sep-18
IP	Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility	IFC	Private		2.00		Dec-18
IP	Cambodia	Policy Support and Public Awareness	ADB	Public	3.00			Jan-19
PSSA	Kenya	Olkaria IV Geothermal Power Plant	AfDB	Private		20.00		Mar-19
IP	Lesotho	On-Grid RE Technologies	AfDB	Public		5.00		Jun-20
		SUBTOTAL			43.00	125.40	3.16	
RESERVE PIPELINE								
IP	Cambodia	Private Sector Solar Development - Rooftop Solar	ADB	Private	5.00	1.00	0.14	Dec-18

IP	Nicaragua	Integral Development of Rural Areas Project	IDB	Private	7.50			Mar-19
IP	Ghana	RE Mini-Grids and Stand Alone Solar PV Systems	AFDB	Public	16.60		0.20	Jun-20
IP	Ghana	Solar PV Based Net Metering with Battery Storage	AFDB	Public	11.89		0.20	Jun-20
IP	Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small-Scale Solar PV Net Metering	AFDB	Public	7.10		0.08	Jun-20
IP	Uganda	Wind Resource Map and Pilot Wind Power Development Program	AFDB	Public	4.93		0.08	Jun-20
		SUBTOTAL			53.01	1.00	0.69	
			TOTAL		96.01	126.40	3.85	

NOT UNDER ACTIVE DEVELOPMENT

IP	Maldives	Waste-to-Energy Thilafushi	IFC	Private	4.00	-		n/a
IP	Kenya	Menengai Geothermal Project	AfDB	Public	10.50	4.50		n/a
IP	Uganda	130MW Geothermal Development Program	IFC	Private	2.00	-		n/a
IP	Uganda	130MW Geothermal Development Program	AFDB	Public	4.30	27.50	0.21	n/a
IP	Mali	Solar PV IPP	AFDB	Private	-	11.05	0.20	n/a
IP	Ethiopia	Assela Wind Farm Project	AfDB	Public	18.30	-	0.28	n/a
IP	Bangladesh	Off-Grid Solar PV-Mini Grids	ADB	Public	5.00	-	0.21	n/a
IP	Nicaragua	Geothermal Development Project***	IBRD	Public	7.71	7.29	0.30	n/a
IP	Kenya	Climate Venture Facility (KCFV)	IBRD	Public	0.80	6.80		n/a

*Approved

** Submitted March 2018

***Project is pursuing MDB Board approval with own MDB IDA funding and without SREP support

Annex 3: Overview of SREP portfolio with a breakdown by country

	Indicative Pipeline Funding	COMMITTEE APPROVALS	% APPROVAL	MDB approvals	% approval (vs Total Funding)	% approval (vs Committee Approvals)	Disbursements ¹
First Set of Countries							
Ethiopia	50.0	29.7	59%	29.7	59%	100%	9.8
Honduras	49.2	43.4	88%	29.9	61%	69%	3.6
Kenya	64.5	32.9	51%	32.9	51%	100%	16.0
Maldives	29.7	25.7	87%	25.7	87%	100%	6.6
Mali	64.5	44.7	69%	44.7	69%	100%	4.3
Nepal	47.1	47.1	100%	39.5	84%	84%	2.6
	305.1	223.6	73%	202.4	66%	100%	42.9
Second Set of Countries							
Tanzania	37.2	37.2	100%	15.5	42%	42%	5.8
Liberia	50.0	50.0	53%	26.5	53%	53%	3.7
Armenia	39.7	13.7	34%	10.7	27%	79%	9.0
Solomon Islands	13.2	6.6	50%	6.6	50%	100%	0.7
Vanuatu	13.8	13.8	100%	13.8	100%	100%	0.2
Yemen	0.3	0.3	100%	0.3	100%	100%	0.1
Mongolia	29.7	15.1	51%	15.1	51%	100%	1.4
Pacific Region	1.9	1.9	100%	1.9	100%	100%	0.4
	185.7	138.6	75%	90.4	49%	56%	21.3
Third Set of Countries							
Bangladesh	67.9	52.4	77%	1.0	1%	2%	0.4
Cambodia	30.00	2.0	7%	2.0	7%	100%	0.3
Ghana	40.00	1.5	4%	1.5	4%	100%	0.0
Haiti	28.6	19.6	69%	19.6	69%	100%	0.0
Kiribati	0.30	0.30	100%	0.3	100%	100%	0.02
Lesotho	18.80	0.30	100%	0.3	100%	100%	0.3
Madagascar	0.30	0.30	100%	0.3	100%	100%	0.1
Malawi	0.30	0.30	100%	0.3	100%	100%	0.0
Nicaragua	15.00	7.5	50%	7.5	50%	100%	0.0
Rwanda	49.7	49.7	100%	49.7	100%	100%	0.5
Sierra Leone	0.3	0.30	100%	0.30	100%	100%	0.0
Uganda	50.0	4.2	8%	4.2	8%	100%	0.0
Zambia	0.30	0.30	100%	0.30	100%	100%	0.1
	301.5	140.2	47%	88.7	29%	63%	1.6
TOTAL	792.4	502.4	63%	381.6	48%	76%	65.8