

CLIMATE INVESTMENT FUNDS

SREP/SC.18/3
December 5, 2017

Meeting of the SREP Sub-Committee
Washington, DC
Thursday, December 14, 2017

Agenda 4

SREP OPERATIONAL AND RESULTS REPORT

PROPOSED DECISION:

The SREP Sub-Committee reviewed document SREP/SC.18/3, *SREP Operational and Results 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 and results, resource availability, pipeline review, and portfolio updates.

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1 Introduction

1. Following guidance by the Sub-Committee of the Scaling Up Renewable Energy in Low Income Countries Program (SREP), this Operational and Results Report (ORR) is the second of its kind combining the previously separate Semi-Annual Operational Report and Annual Results Report. From an operational perspective, this report covers the period from January 1 to June 30, 2017.¹ For results reporting, it covers a one-year period (RY2017)².
2. This report identifies key strategic issues for the SREP; provides a status update on the portfolio of SREP-funded programs and projects under the endorsed investment plans, the SREP Private Sector Set-Aside (PSSA), and related activities; and reports on the results from MDB-approved projects (as of December 31, 2016). More detailed information on resource availability, pipeline, portfolio, and results are provided in the annexes. Country-level information and updates will also be provided in a separate information document, *SREP Country Portfolios*.

2 Strategic issues

2.1 Overview of SREP implementation

3. As of June 30, 2017, the SREP Sub-Committee has endorsed investment plans for 19 pilot countries with a total indicative allocation of USD 745 million and seven project concepts under PSSA with an indicative allocation of another USD 92.4 million.
4. The overarching expected results under the 19 endorsed investment plans and PSSA include an estimated 6,686 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 17.3 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. The expected results from projects approved by the Sub-Committee and projects in the sealed pipeline include an estimated 6,049 gigawatt hours (GWh) of renewable energy electricity to be generated annually, new or improved energy access for 12.6 million people, and total estimated GHG emissions to be avoided of 5.1 million tons CO₂e/yr.
6. Although SREP programs are at various stages of design and implementation, tangible results on the ground are emerging. Some investment projects have reported actual results on the core indicators (electricity output and people benefited with improved energy access), while others have demonstrated significant progress toward achieving results on the ground. The qualitative progress is summarized in the results section. In addition, projects with a primary focus on capacity building have also reported significant achievements.

¹ Some updates beyond the reporting period, such as funding approvals by the Sub-Committee, are also provided.

² Depending on the MDB, the report covers the period from January 1, 2016 to December 31, 2016 or July 1 2016 to June 30, 2017. Since the reporting is done on an annual basis, the abbreviation RY, or Reporting Year, is used to capture this annual period.

7. Progress of implementation varies among the pilot countries. Overall, about 49 percent³ of the funding under the endorsed investment plans and PSSA 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 rates.) Total approval rate, including the six projects approved by the SREP Sub-Committee after the current reporting period, is at 60 percent⁴.

Figure 1: SREP funding approvals by the Sub-Committee by fiscal year⁵

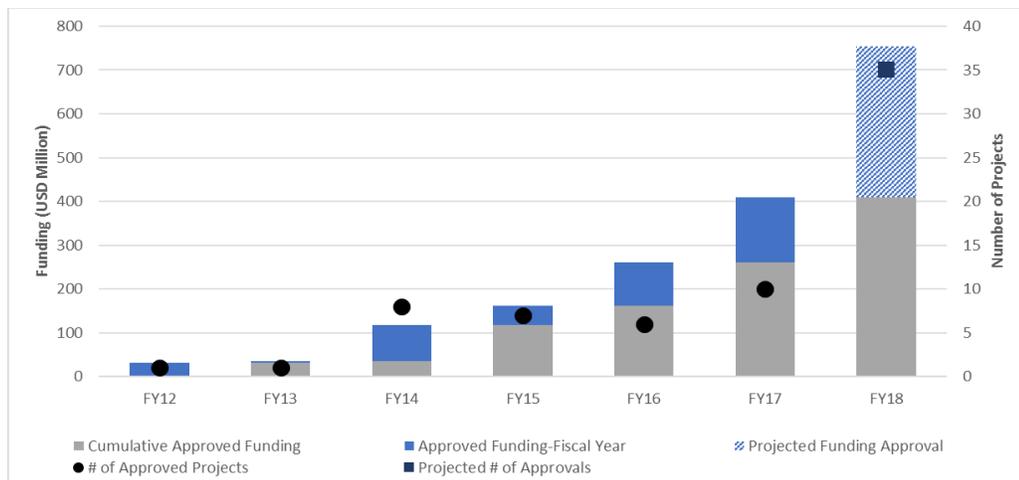
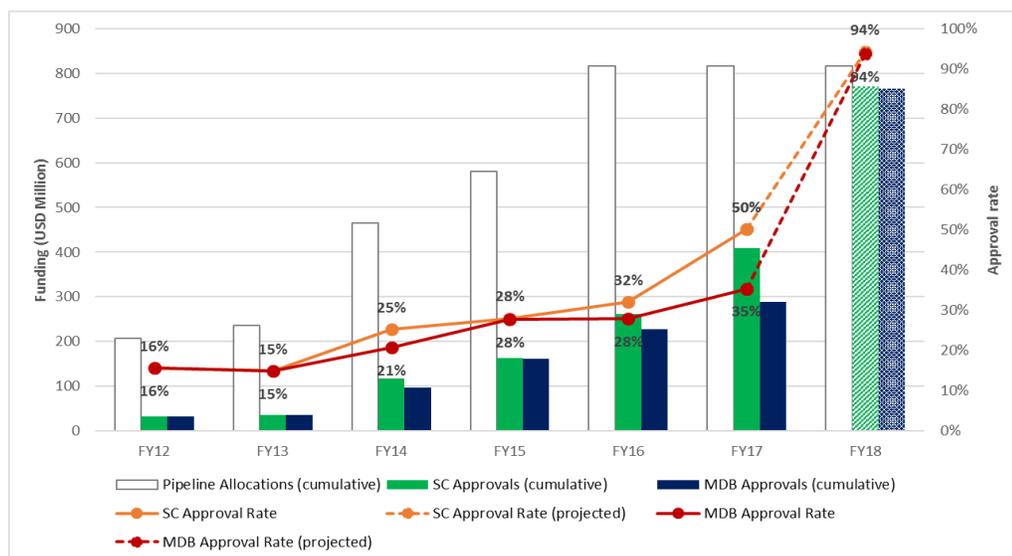


Figure 2: SREP funding approval rate by fiscal year



³ Approval rate relative to the total indicative allocation (USD 837.4 million).

⁴ Approval rates mentioned consider also projects in the reserve pipeline. “Effective” approval rates are actually higher (against the sealed pipeline).

⁵ FY 18 projection includes reserve pipeline for which funding may not be available.

2.2 Resource availability

8. Following consultations between the CIF Administrative Unit and Trustee, two new line items have been added to the SCF program-level calculations of available resources:
- A. **Administrative Expense Reserve:** At the CIF's inception, investment income was anticipated to exceed administrative expenses. However, due to low interest rates and declining trust fund balances investment income has been and will continue to be insufficient to cover the estimated SCF administrative expenses.
 - (i) The June 2017 Trustee Report incorporated three years of estimated administrative expenses of the CIF Administrative Unit, MDBs, and Trustee, but this was reported at the SCF Trust Fund level and not reflected in the available resources of the three SCF programs.
 - (ii) The CIF Administrative Unit and Trustee deem it prudent now to set aside the equivalent of a five-year administrative expenses reserve (net of forecasted investment income) to meet the need for resources for the operations of the CIF Administrative Unit, MDBs, and Trustee as they continue to ensure the implementation of the SCF programs into the future. The impact of this reserve is reflected in the current Trustee report.
 - (iii) In accordance with the SCF Contribution Agreements, administrative expenses must be allocated to all SCF Programs on a pro rata basis based on the fund balance in each SCF Program. These expenses must be paid with grant resources. Given the existing funding situation in the SCF programs, by FY22 the FIP is expected to be the only program with a fund balance. The pro-rata allocation requirement will therefore impact the FIP disproportionately going forward, as it will be required to fund all SCF administrative expenses for as long as it remains the only program with an outstanding fund balance.
 - (iv) The SREP has been apportioned USD 9.9 million of a total USD 53.1 million of the SCF administrative expenses for FY19-23.
 - B. **Country Programming Reserve:** An estimated allocation, for the approved FY18 and projected FY19-23 Country Programming budget amounts, has been added to the Trustee report. SREP has reserved USD 2.9 million for country programming for FY18-23.
9. As of September 30, 2017, SREP had an unrestricted fund balance after reserves of USD 176 million (USD 54 million grant and USD 122 million non-grant). Total anticipated commitments were USD 258 million, including projects and programs (and MPIS⁶) in the sealed and reserve pipeline (see Table 1 and Annex 1). Assuming the release of currency risk reserves amounting to USD 36 million, the MDB Committee agreed to a sealed pipeline that includes: (i) all projects scheduled for submission by January 2018, and (ii) six projects scheduled for submission from February to June 2018 that were already included in the previous sealed pipeline⁷.

⁶ MDB Project Implementation Services

⁷ See Annex 2 in June 2017 SREP Semi-Annual Operational Report

https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/srep_17_3_sar.pdf

Table 1. SREP resource availability schedule summary
(USD million, as of September 30, 2017)

		Total	Grant	Non-Grant
Unrestricted Fund Balance		189.1	66.8	122.2
Proposed FY18 Country Programming Budget		(1.5)	(1.5)	
Projected Country Programming Budget reserve FY19-23		(1.4)	(1.4)	-
Admin Expenses-Reserve for FY 19-23 (net of estimated investment income)		(9.9)	(9.9)	-
Unrestricted Fund Balance after reserves (A)		176.3	54.1	122.2
Anticipated Commitments (FY18-FY21)				
<i>Program/Project Funding and MPIS Costs</i>			112.1	145.6
Total Anticipated Commitments (B)	(1)	257.7	112.1	145.6
Available Resources (A - B)			(58.0)	(23.4)
Potential Future Resources (FY18-FY21)				
<i>Release of Currency Risk Reserves</i>	(2)	35.6	-	35.6
Total Potential Future Resources (C)		35.6	-	35.6
Potential Available Resources (A - B + C)		(45.8)	(58.0)	12.2

(1) Includes both sealed and reserve pipeline.

(2) 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.

2.3 Pipeline management measures

10. At its meeting in June 2016, the SREP Sub-Committee requested the CIF Administrative Unit, working with the MDBs and the Trustee, to prepare a pipeline management policy for the SREP, with the objective of expediting the implementation of projects and the disbursement of funds, taking into account the circumstances of SREP pilot countries.
11. In December 2016, the SREP Sub-Committee reviewed the *Pipeline Management Policy for SCF Programs (SREP)*⁸ and provided initial comments and feedback. In February 2017, a virtual intersessional meeting of the SREP Sub-Committee was held to review the *SREP Pipeline Management Policy* and the SREP Sub-Committee requested the CIF Administrative Unit to provide an updated combined (grant and non-grant) sealed pipeline in the revised proposal.
12. In June 2017, the *SREP Pipeline Management Policy*⁹ was approved through decision by mail. Key elements of the policy include the following:

⁸ SREP/SC.16/4. Pipeline Management Policy for SCF Programs (SREP).

http://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/srep_16_4_pipeline_management_policy_for_scf_programs_srep_final1.pdf

⁹ SREP Pipeline Management Policy. https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/srep_pipeline_management_policy_june_2_2017_key_document.pdf

- To encourage the remaining SREP pilot countries and MDBs to complete investment plans, up to USD 10 million in Project Preparation Grants (PPGs) are set aside for these countries to access upon request once their investment plans are endorsed. If their projects cannot enter the sealed pipeline due to resource constraints, they will be placed in the reserve pipeline.
- If a project in the sealed pipeline fails to be submitted to the SREP Sub-Committee for funding approval as scheduled, it will lose priority to receive funding. It may become part of a new sealed pipeline during the next round of pipeline update if sufficient resources are available.
- Projects in the reserve pipeline may become part of the sealed pipeline in the future if projects in the current sealed pipeline get delayed in submission or if additional resources become available to the SREP.
- For MDB board approval, the following timeframes and measures will be applied:
 - i. For public sector projects, MDB board approval must be obtained within nine months after SREP Sub-Committee approval.
 - ii. For private sector stand-alone projects or programs (i.e., without sub-projects), MDB board approval must be obtained within 24 months. For private sector programs with sub-projects, MDB board approval must be obtained within 36 months for all sub-projects.
 - iii. These deadlines will be applicable unless otherwise specified in the project proposals approved by the SREP Sub-Committee.

13. The proposed measures of the pipeline management and cancellation policy have been instrumental in accelerating the pace of submission of projects to the SREP Sub-Committee. During the reporting period, 13 projects were submitted to the SREP Sub-Committee, of which six were approved and six additional projects were approved after the reporting period. Most notably, 10 projects were scheduled for submission in May 2017, and all 10 projects were submitted by the deadline.

14. Annex 2 provides an updated combined (grant and non-grant) sealed pipeline of projects that matches the current available SREP resources as of September 30, 2017. 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.

3 Status of the SREP portfolio

3.1 Portfolio overview and updates

15. As of June 30, 2017, total funding approved by the SREP Sub-Committee reached USD 410 million¹⁰ for 33 projects and programs, including three projects under PSSA (see Table 2 for overview and Annex 4 for breakdown by country). This amount accounts for 49 percent of the total indicative allocations under the endorsed investment plans and PSSA. These projects are expected to leverage a total of USD 2.1 billion in co-financing (with a 1 to 5.1 co-financing ratio) from recipient governments, MDBs, private sector, and bilateral agencies. Detailed information on co-financing

¹⁰ Total approved project funding=project funding+ IPPGs + PPGs

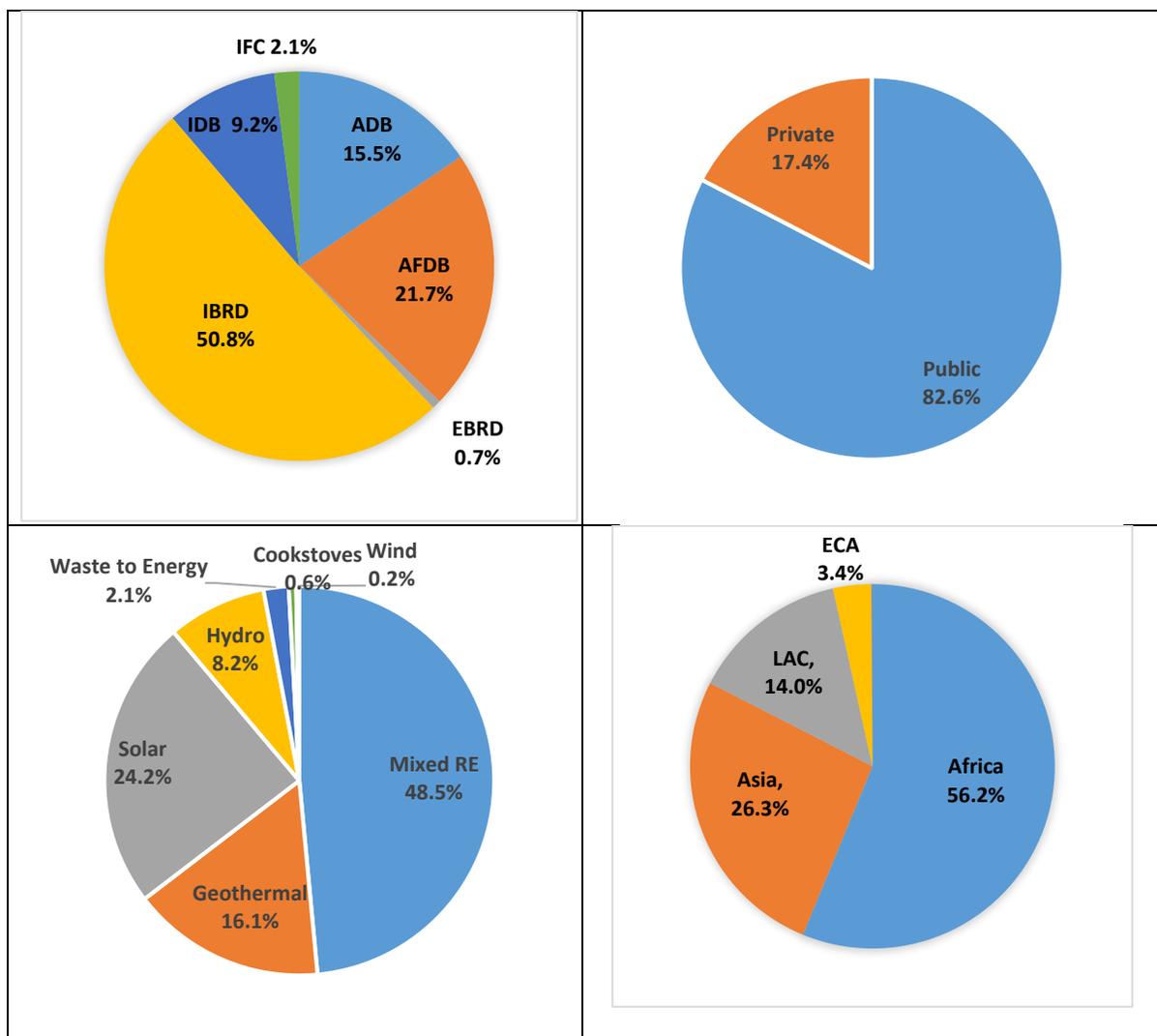
breakdown by project is included in the *SREP Country Portfolios* information document. Figure 3 breaks down the SREP portfolio by MDB, region, sector, and technology.

Table 2. Overview of SREP portfolio (as of June 30, 2017)

	Indicative pipeline allocation			Approved funding		Disbursement
	TOTAL	IP	PSSA	Sub-Committee	MDB	
SREP funding (USD million)	811.4*	723.78	85.54	410	288.73	50.4
Number of projects	66	60	6	33	25	18

* Includes USD 2.10 IPPGs

Figure 3. SREP Sub-Committee-approved funding by MDB, region, sector, and technology
(As of June 30, 2017)



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

16. Table 3 presents the status by country of the 19 endorsed investment plans and PSSA concepts along with the rates of funding approvals. It should be noted that eight of the 19 countries received endorsement of their investment plans since May 2015. For the first group of six countries, the average funding approval rate is 66 percent.

Table 3: Endorsement of investment plans and PSSA concepts
(USD million, as of June 30, 2017)

	Country/Region	Endorsement date	Indicative allocation	Approved funding	Funding approval rate	
First set of countries	Ethiopia	Mar-12	50.0	29.7	59%	
	Honduras	Nov-11 ¹⁾	30.0	9.7	32%	
	Kenya	Sep-11	50.0	32.9	66%	
	Maldives	Oct-12	30.0	25.9	86%	
	Mali	Nov-11	40.0	20.3	51%	
	Nepal	Nov-11 ²⁾	40.0	39.8	100%	
Second set of countries	Armenia	Jun-14	40.0	14.0	35%	
	Liberia	Oct-13	50.0	50.0	100%	
	Mongolia	Nov-15	30.0	15.3	51%	
	Pacific Region	May-15	2.0	2.0	100%	
	Solomon Islands	Jun-14	14.0	7.4	53%	
	Tanzania	Sep-13	50.0	15.5	39%	
	Vanuatu	Nov-14	14.0	14.0	100%	
Third set of countries	Bangladesh	Nov-15	75.0	1.20	2%	
	Cambodia	Jun-16	30.0	2.0	7%	
	Ghana	May-15	40.0	1.5	4%	
	Haiti	May-15	30.0	19.6	65%	
	Nicaragua	May-15	30.0	7.5	25%	
	Uganda	Nov-15	50.0	4.2	8%	
	Rwanda	Nov-15	50.0	50.0	100%	
	Sub-total for IPs			745.0	362.5	49%
	PSSA 1st	13-Nov	59.6	40.0	67%	
	PSSA 2nd	15-Oct	32.8	5.5	17%	
Sub-total for PSSA			92.4	45.5	49%	
TOTAL (IPs +PSSA)³⁾			837.4⁴⁾	408.0	49%	

Notes:

1) Revised endorsement date is Apr-17

2) Revised endorsement date is May-15

3) This total does not include IPPG for the pilot countries (USD 1.8 million)

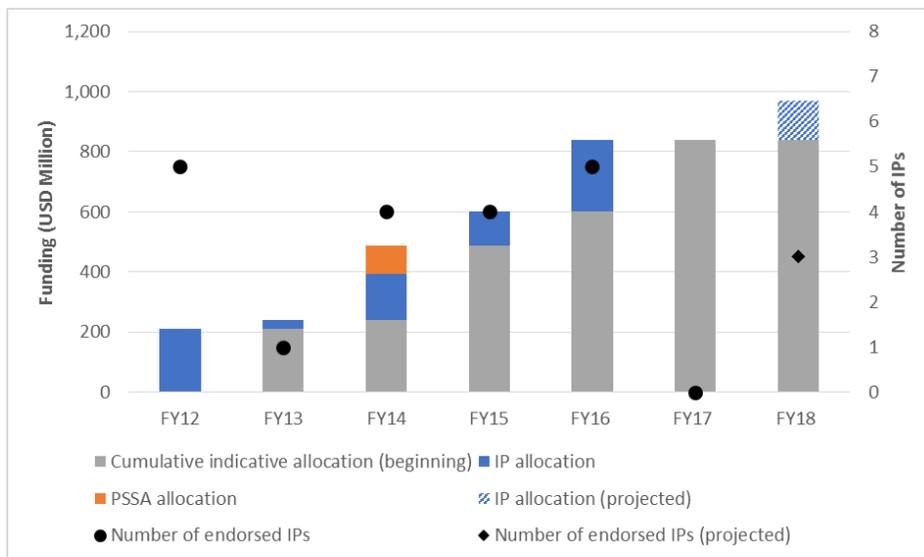
4) The difference with the pipeline figure in Table 2 (USD 811.4 million) is due to unutilized funding

3.1.1 Investment Plans

17. During the current reporting period, no new investment plans were submitted for endorsement to the Sub-Committee. A joint mission was held in Lesotho on May 15-17, 2017. After the reporting period, a scoping mission was held in Kiribati on August 7-10, 2017.

18. For the remaining eight SREP pilot countries that have not submitted investment plans for endorsement, Lesotho has submitted its investment plan for endorsement at the upcoming meeting on December 14, 2017. Kiribati, Madagascar and Zambia expect to submit in June 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



19. During the current reporting period, the Honduras investment plan revision was approved by the SREP Sub-Committee (see Box 1). After the reporting period, the Cambodia investment plan revision was also approved.

Box 1: Honduras shifts SREP focus to on-grid transmission and off-grid solutions for the most isolated



The revision of the SREP investment plan for Honduras proposes reallocation of resources to support two priority components of the plan:

- Off-grid component (ERUS): The Government of Honduras will create a Universal Energy Access Program (PAUE) to build on the institutional platform offered by the Social Fund for Electric Power Development (FOSODE). While FOSODE is now a sustainable mechanism to extend the electricity grid to reach communities that currently lack access to electricity, it lacks resources to provide renewable energy options for the most isolated communities.
- On-grid component: Honduras has experienced accelerated development of grid-connected renewable energy capacity (partly with the support of SREP and CTF resources). In the current context, transmission has become a bottleneck for additional development of renewables. Therefore, resources previously allocated to renewable generation and policy development have been reallocated to focus on this strategic priority.

3.1.2 Sub-Committee approvals

20. During the current reporting period, the following projects were approved by the SREP Sub-Committee for a total of USD 112 million in SREP funding (see Table 4), bringing the total approved SREP funding to USD 410 million. Approvals included Rwanda’s Renewable Energy Fund, the largest SREP investment to date at USD 49.7 million (see Box 2).

Table 4: SREP Sub-Committee-approved projects and programs
(January 1 to June 30, 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
Liberia	IP	Renewable energy for Electrification in Eastern Liberia Project-Stand-Alone PV	AfDB	23.50
Mongolia	IP	Upscaling Rural Renewable Energy – Solar PV	IBRD	12.40
Rwanda	IP	Renewable Energy Fund	IBRD	49.74
Vanuatu	IP	Rural Electrification Project	IBRD	6.77
TOTAL APPROVAL				112.03

21. After the reporting period, six projects submitted by June 2017 were approved by the Sub-Committee, as of September 30, 2017 (see Table 5).

Table 5: SREP Sub-Committee-approved projects and programs
(July 1 to September 30, 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

Box 2: Rwanda Renewable Energy Fund to power off-grid renewable energy market



SREP financing: USD 49.74 million

Implementing agency: IBRD

Objective: Support the implementation of the Rural Electrification Strategy, catalyzing private sector investments in off-grid renewable energy access

The Government of Rwanda (GoR) has an ambitious target to increase access to electricity to 70 percent by 2018, including 22 percent through off-grid solutions. The high cost of reaching rural households through the grid, together with low residential electricity consumption levels, have affected financial sustainability of grid-extension investments. GoR is promoting off-grid and mini-grid solutions as an alternative, but significant private sector investments are needed to reach the 2018 target.

The Rwanda Renewable Energy Fund, the largest project of the SREP portfolio at USD 49.7 million implemented by IBRD, will facilitate private sector participation in off-grid electrification through a financial intermediary facility. The facility will address financial barriers to private sector entry and help to improve the investment environment so the market can expand. The facility will serve as a pilot that would eventually be scaled-up to become the Rural Electrification Fund, which GoR envisions as the main channel to direct funds and technical assistance to the off-grid market.

Based on preliminary consultations with energy sector stakeholders, it is expected that the facility will mainly support financing of standalone solar systems suppliers and mini-grid developers. It will be sufficiently flexible to adapt to future strategic needs and priorities of the market.

3.1.3 MDB approvals

22. During the reporting period, the MDBs approved the following project for USD 25 million in SREP funding, bringing the total MDB approved SREP financing to USD 289 million:

- Mali (PSSA), Segou Solar PV Project, USD 25.0 million (AfDB).

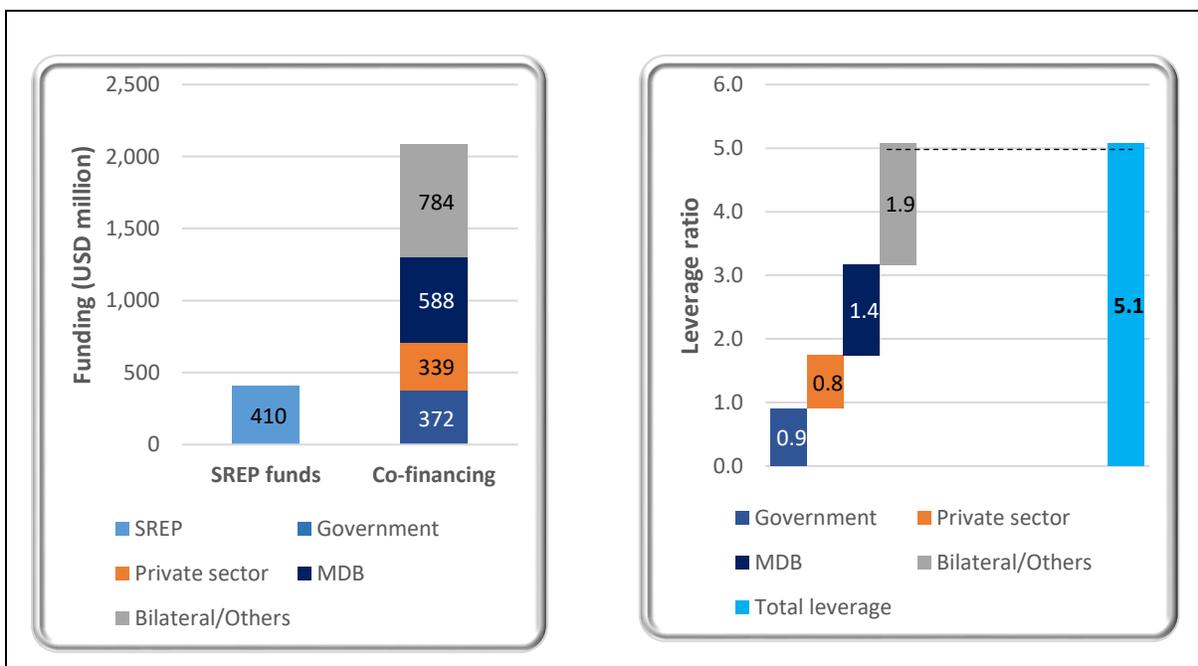
23. After the reporting period, another project received MDB approval:

- Vanuatu (IP), Energy Access Project, USD 7.0 million (ADB).

3.2 Co-financing

24. The 33 projects approved by the Sub-Committee (USD 410 million) as of June 30, 2017, are expected to mobilize over USD 2.1 billion in co-financing from governments, MDBs, bilateral, and other sources. This represents a leverage ratio of 1 to 5.1, meaning for every USD 1 invested by the SREP, another USD 5.1 is invested by other financiers. As shown in Figure 7, MDBs and bilateral/others represent the largest sources of co-financing, followed by governments and private sector.

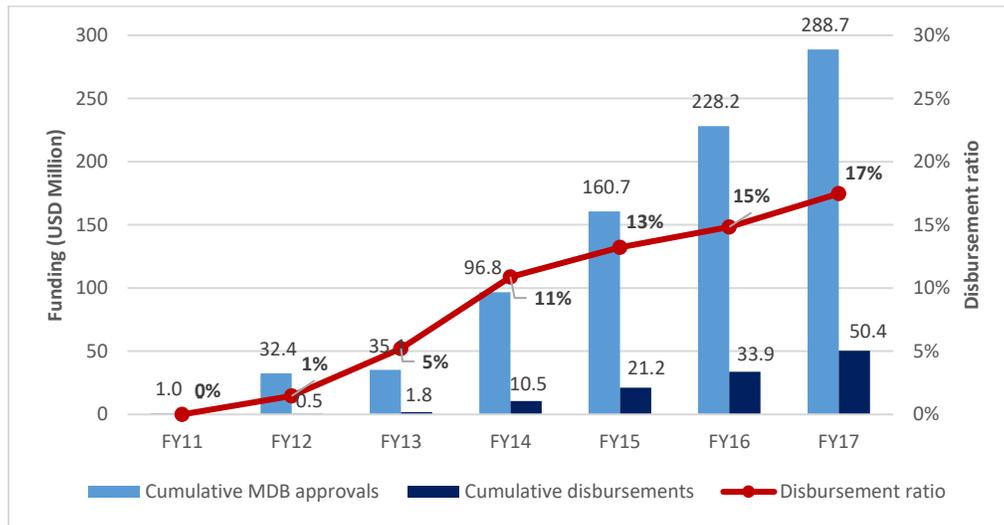
Figure 7: SREP co-financing by source and ratio (as of June 30, 2017)



3.3 Disbursement

25. Disbursements under the SREP were USD 5.6 million during the reporting period, reaching USD 50.4 million in total. Figure 8 shows the disbursement trend over time. Out of the 25 MDB approved projects, 18 are disbursing.

Figure 8: SREP disbursement trend by fiscal year



4 Cross-cutting themes

4.1 Gender

26. The portfolio of projects approved by the SREP Sub-Committee from January 1 to June 30, 2017 was assessed regarding program progress on gender quality at entry. The three gender scorecard indicators regarding presence of sector-specific gender analysis, women-specific activities, and sex-disaggregated indicators were reviewed for each project. SREP performance on the three gender indicators was strong relative to the historical baseline. For SREP projects approved during the reporting period, sector-specific gender analysis was undertaken in 100 percent of the projects (compared to baseline of 47 percent), 67percent of projects hosted specific activities aimed at women (baseline of 40 percent), and 100 percent of projects had sex-disaggregated indicators (compared to baseline of 80 percent). See Boxes 3 and 4 for two project examples.

Box 3. Women’s energy access in Liberia: Case of the Renewable Energy Project

Less than 2 percent of households in Liberia have access to electricity services, one of the lowest rates globally. The Renewable Energy Project aims to provide a source of reliable, sustainable, and affordable power in the region to reduce the cost of electricity by 60 percent, as well as dependence on electricity imports. The project will support the development of the run-of-river Gbedin Falls Hydropower Plant with a total capacity of 9.34 MW to provide an average of 56.4 GWh per year to Nimba County. This advancement is expected to encourage more households, firms, and institutions to connect to the national grid, thus reducing use of self-generation and domestic wood fuel. Household expenditures on fuel will fall as improved health outcomes simultaneously rise, particularly for women and children.

The Government of Liberia is committed to gender equality and approved a National Gender Policy in 2009. This project will include strong gender components in environmental and social assessments and involve women in the decision-making process regarding rural electrification. The project aims to raise women’s awareness regarding electrification and to promote their active participation in the construction and maintenance of the hydropower plant, including access to training opportunities.

Box 4. Ensuring women’s meaningful participation and benefit from rural electrification in Vanuatu

Only 30 percent of Vanuatu’s population has access to electricity. The lack of a grid network (only four of 65 inhabited islands have grids) and high connection costs for those grids that are in place have resulted in low access rates, particularly in rural areas. The Rural Electrification Project aims to support increased access to affordable electricity services in dispersed off-grid areas of the country. This will be accomplished by subsidizing the retailer cost of solar home systems and micro-grids, and by subsidizing a household service connection and household wiring to a mini-grid through the ongoing Improved Electricity Access Project.

Improving access to electricity promotes gender equality because it reduces women and girls’ time poverty directly. Improving access to electricity helps reduce women’s time poverty directly. Household electrification, and use applications such as lighting, help extend the number of working hours, and allow for use of time-saving devices such as water pumps, food processing equipment, and modern cooking solutions. This can reduce the time women spend on water, fuel collection, and household care activities, and enable greater flexibility in allocation of time among paid, unpaid work, and leisure, which eases the time burden on women and contributes to women’s empowerment.

Women’s participation in the design phase will be ensured by organizing meetings at times convenient to women and men, and conducting separate meetings where required. Communication methods and information campaigns will also be targeted to reach women. The project also includes installation of pre-paid meters for mini-grids where feasible, allowing consumers to control consumption and thus expenditures. The project will ensure that both women and men receive information about how to access, use, read, and manage the pre-paid meters.

4.2 Knowledge management

4.2.1 CIF Evaluation and Learning (E&L) Initiative

27. The CIF Evaluation and Learning (E&L) Initiative issued an initial call for proposals in late 2016 for CIF implementing entities to develop proposals for evaluation and learning that correspond to the strategic learning priorities and quality standards outlined in the E&L Business Plan. A proposal by the World Bank CTF/SREP Focal Point Team was submitted and approved in February 2017 to review the effectiveness of various financing instruments in facilitating the mobilization of private capital to scale up grid-connected solar power in Africa. Since then, a consortium comprising of CPCS (Canada) and Rina Consulting (Spain) was selected to conduct the study, following an international competitive bidding.
28. The following countries have been selected as part of the study: Chile, Morocco, South Africa, Senegal, India, Philippines, and Maldives. Consultations with the various stakeholder groups (MDBs, private investors, government officials) have commenced and will last until the end of November 2017. The first analytical report is expected in December 2017. The findings of the analytical review will inform the selection of the countries and projects for the detailed review and case studies. This study will generate learning throughout FY18 and knowledge be strategically disseminated to the wider CTF and SREP communities.

4.2.2 Other knowledge sharing partnerships

29. **GDI partnership:** The CIF has entered a learning partnership with the Global Delivery Initiative (GDI) 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, the CIF officially joined the GDI partnership as its 40th member. The CIF will conduct six case studies in collaboration with the MDBs using the GDI methodology this year, two of which will be from the SREP portfolio.
30. **Mini-grids knowledge sharing:** A third learning event jointly organized by the CIF and ESMAP will be taking place in Abuja, Nigeria, from December 4-8, 2017. Conclusions and opportunities that emerged from the second SREP mini-grid roundtable held in Myanmar in February 2017 were summarized in the June 2017 SREP Semi-Annual Operational Report¹¹.
31. **Special initiative on Multi-Tier Access Framework:** During the Vienna Energy Forum, the side event “Energy Access Redefined: Emerging Findings from the Global MTF (Multi-Tier Framework) Survey” took place on May 9, 2017. The session provided a preview of how Kenya and Rwanda, the first two countries to have completed the survey, are using the collected data in planning and policy making. Status update on other SREP countries is as follows:
- **Bangladesh:** This nationally representative and government-implemented survey has been supported by MTF-ESMAP since late 2016. Completed data collection is expected by the end of November 2017. Cleaned data should be finalized by December 2017. A pilot focusing on

¹¹ See http://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/srep_17_3_sar.pdf

gathering MTF and poverty data through cell phone surveys has also been implemented.

- **Cambodia:** MTF Cambodia launched in January 2017, and held its kick-off workshop in March 2017. Cambodia MTF data results are expected by the end of December 2017.
- **Ethiopia:** In addition to the nation-wide sample for both rural and urban areas, an oversample of about 700 urban Addis Ababa households was collected. Data collection has been completed and the report is under preparation.
- **Haiti:** The survey is being implemented by government with MTF team support. In addition to the household survey, the initiative will include an expansive enterprise survey.
- **Honduras:** The initiative was launched in September 2016. Results expected to be delivered by the end of January 2018.
- **Kenya:** Data collection is completed and is currently going through analysis by the MTF team. The core MTF and oversampled data will support the World Bank/IDA KOSAP (Kenya Off-Grid Solar Access) project and KEMP (Kenya Energy Management Program), as well as the national utility's slum electrification efforts supported by the World Bank and GPOBA. The enterprise survey is ongoing in collaboration with Rockefeller Foundation, as well as a pilot for remote MTF data gathering.
- **Liberia:** Activities formally launched in March 2017. Results should be completed by January 2018.
- **Nepal:** Household survey data collection began in July 2017 and is 90% complete. Both mini-grid and enterprise survey activities began in October 2017. Final reporting is expected to be delivered by March 2018.
- **Rwanda:** MTF Rwanda has the distinction of being MTF's first executed survey, which began in late June 2016. Data collection was completed in December 2016, and data cleaning and final analysis was completed in August 2017. MTF team has since drafted the diagnostic report for MTF Rwanda. It is currently under review by the Rwandan government, after which it will be published.
- **Uganda:** MTF Uganda began its dialog with the Ugandan government. MTF survey will be used also for impact evaluation of the Electricity for Rural Transformation (ERT)- III project. Ugandan NSO will be responsible for survey implementation. MTF Uganda will include an enterprise survey.
- **Zambia:** Survey activities already finished. Final diagnostic reporting to be delivered by February 2018.

5 Results

5.1 Background

32. This section on SREP results is based on the expected and actual results data reported by 24 MDB-approved projects/programs totaling MDB-approved funding of USD 264 million as of December 31,

2016. To follow is an overview, more details on progress toward results, and an update on enabling environment projects and programs that are not reporting directly on core indicators.

33. The SREP core indicators are identified in the Revised SREP Results Framework¹². Reporting against these indicators is undertaken annually by implementing MDBs, with this being the fourth reporting round. The two core indicators for SREP-funded projects are:
- **Core indicator 1:** Annual electricity output (MWh/yr) from renewable energy as a result of SREP interventions.
 - **Core indicator 2:** Number of people, businesses, and community services benefiting from improved access to electricity and fuels as a result of SREP interventions.
34. The majority of projects and programs are expected to report on at least one of the two core indicators¹³. There are also projects whose primary objective is to strengthen the enabling environment for investments in clean energy and energy access. These projects will contribute indirectly to the achievement of the two core indicators.
35. In addition, all projects and programs report on co-benefit indicators that reflect the broader impact of the SREP-funded interventions in each country. Reporting on co-benefit indicators is not conducted annually. Rather, MDBs report on co-benefits once the information becomes formally available following supervision missions, at mid-term, or upon completion of the project.
36. The following should be noted while reviewing the results:
- *Reporting Year (RY):* The report covers RY2017. Depending on MDB, this means the period from January 1, 2016 to December 31, 2016 or July 1, 2016 to June 30, 2017. The abbreviation RY, or Reporting Year, is used to capture this annual period.
 - *Actuals:* Actual (RY17) refers to the actual results reported by a project for the latest 12-month reporting period. Actual cumulative refers to total actual results since the project started reporting results.
 - *Targets:* Target (Annual), in case of electricity output and GHG emissions reduced, refers to targets expected to be achieved on an annual basis. For other indicators, such as improved energy access, co-financing, and installed capacity, “target” refers to absolute cumulative results expected to be achieved during the course of the project. The words “target results” and “expected results” are used interchangeably. They refer to a mix of targets derived from MDB Board approval documents (for public sector projects) or from SREP Sub-Committee approved documents (for private sector programs).
 - *Co-financing:* Different MDBs take different approaches to reporting on actual co-financing. This includes establishing milestones when MDBs recognize co-financing and identifying the relevant co-financing amounts. While some MDBs report the full amount once a project is approved by the respective board, others do not report until reaching financial close, report is based on annual disbursements by the respective co-financiers or only report the full amount once the project starts operating. In addition, some co-financing figures may not be reported for confidentiality reasons.
 - *GHG reduction:* In 2012, the SREP Sub-Committee decided that SREP projects should measure the co-benefit of avoided GHG emissions. In the absence of country or project-specific baselines,

¹² Revised SREP Results Framework, June 1, 2012

¹³ Revised SREP Results Framework, June 1, 2012, para. 16

the SREP projects can estimate GHG emissions avoided using a simple, common, and transparent proxy-based method (emission equivalent based on diesel-generated electricity, as adopted by the ADB: 793.7 tons CO₂e_q per GWh).

5.2 Overview

37. Table 6 and Figure 9 offer an overview of SREP expected and actual results (cumulative and for the latest 12-month reporting period). Most of the projects in the portfolio are at an early stage of implementation, hence not reporting on all key parameters:

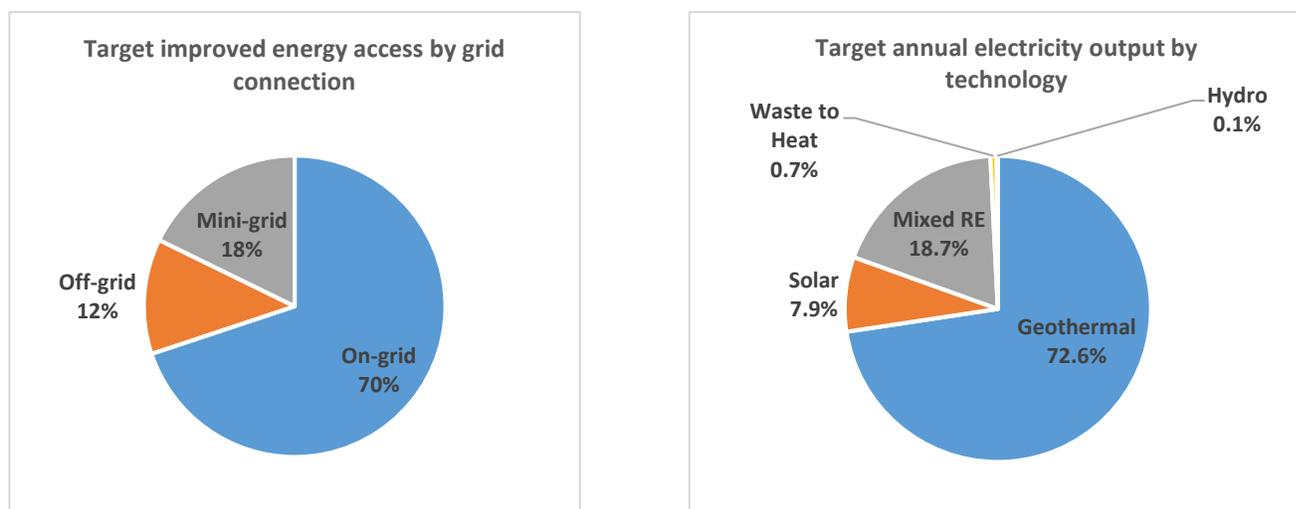
Table 6: SREP results overview
(MDB-approved funding USD 264 million as of December 31, 2016)

	Actual (RY17)	Actual (RY16)	Target
Electricity output (MWh/yr)	1,186	276	3,131,737
Improved energy access (people)	10,600	7,395	5,732,025
Improved energy access (businesses)	-	-	300,722
GHG emissions reduced/avoided (tons CO ₂ eq/yr)	8,537	251.3	2,273,270
Installed capacity (MW)	2.9	0.9	561
Co-financing (USD million)	476	410	1841

Note: GHG reductions / Electricity output: Figures are ANNUAL

Co-financing / Installed capacity / Improved energy access: Figures are CUMULATIVE

Figure 9: SREP expected results breakdown by grid connection and technology



38. **Electricity output:** One sub-project is reporting on actual electricity produced: Invema¹⁴, part of the *Self-Supply RE Guarantee Program* in Honduras, with 1,186 MWh produced and 747 tons of CO₂ equivalent avoided in RY2017. It is the first SREP project in operation since October 2015, with a solar PV installed capacity of 0.9 MW. The *POISED* project in Maldives has installed 2MW of solar PV,

¹⁴ For more on Invema, a recycling center in Honduras with solar rooftop PV, see Box 1 in December 2016 SREP ORR. https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/srep_16_3_orr_final.pdf.

but it is still in the pre-commissioning phase, and generation will be reported during post-commissioning (see Box 5).

39. Compared to RY16, there is a reduction in the installed capacity target due to the Menengai geothermal project in Kenya. Its target was revised after feasibility studies and drilling activities were carried out (see Box 6).
40. As shown in Figure 9, based on the current portfolio, geothermal projects will contribute 73 percent of the targeted electricity production, and 70 percent of targeted energy access improvement is expected to come from on-grid connections. This is because, of the 24 SREP projects participating in results reporting in RY2017, four are large geothermal on-grid projects in Kenya, Ethiopia, Armenia and Nicaragua. The SREP is funding the exploration drilling phase, the riskiest and most critical stage of geothermal power development as it aims to prove the availability of steam resources. Once the power plants are in operation, the projects are expected to report on annual electricity produced and population benefit.
41. **Improved energy access:** Two projects are reporting on actual improved energy access:
 - The South Asia Subregional Economic Cooperation Power System Expansion Project in Nepal, benefitting 6,600 people
 - The Sustainable Rural Energization Program (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination in Honduras, benefitting 4,000 people (3,205 people more from last year).
42. In addition, some investment and infrastructure projects are providing relevant information on progress towards results (see Section 5.5). Others are enabling environment and capacity building projects, not reporting directly on core indicators (see Section 5.6).

5.3 Core Indicator 1: Annual electricity output from renewable energy as a result of SREP interventions

43. The only project reporting on actual electricity produced is *the Self-Supply RE Guarantee Program* in Honduras, with 1,462 MWh produced cumulatively. Annex 3 shows detailed information about all projects targets and actual results.

Box 5: Preparing Outer Islands for Sustainable Energy Development Program (POISED)



Country: Maldives
SREP funding: USD 12.4 million
MDB Approval date: September 2014
Target annual electricity output: 27,600 MWh
Actual results (pre-commissioning phase): 2 MW installed

Photo Credit: Ministry of Environment and Energy

Maldives is a geographically dispersed country with more than 1,000 islands and a population of about 350,000 people. About half the country's population lives in the outer islands. While the Maldives has the unique distinction of being the first and only country in South Asia with 100 percent access to electricity, this achievement has come at a cost. Electricity generation is among the most expensive in the region, requiring heavy government subsidies and complete dependency on imported diesel that must be distributed to each outer island.

The SREP is supporting Maldives to achieve a more reliable, sustainable energy sector by replacing inefficient diesel-based power generation with solar-diesel hybrid mini-grid systems in 160 targeted medium and small islands. By reducing the need for diesel, fuel imports and electricity costs will decline. In parallel, the SREP is helping the government to develop key regulations and capacity building for utilities and regulators to create an effective regulatory environment for the delivery of affordable, reliable, and clean energy.

The SREP project in Maldives will directly benefit the island communities (5,000 households under Phase 1), improving electricity supply at homes and for other productive uses. It is also creating opportunities for women to participate in public consultations, micro-enterprise development, and capacity development. The project will also avoid noise and air pollution and minimize fuel spills that could negatively affect the environment.

5.4 Core Indicator 2: Number of women and men, businesses, and community services benefiting from improved access to electricity and fuels as a result of SREP interventions

44. While actual results for improved energy access to businesses remain at zero, two projects reported progress on improving energy access to people in RY2017:

- The South Asia Subregional Economic Cooperation Power System Expansion Project in Nepal, benefitting 6,600 people cumulatively.

- The Sustainable Rural Energization Program (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination in Honduras, benefitting 4,000 people cumulatively (3,205 people more from last year).

Box 6: Menengai geothermal project



Country: Kenya
 SREP funding: USD 25 million
 MDB approval date: December 2011
 Target people benefitting: 2.5 million
 Current status: Feasibility studies and 36 wells drilled confirm about 150 MW gross

Photo Credit: AfDB

Kenya has huge geothermal potential, estimated at no less than 7,000 MW of generation capacity. Currently, the country's installed capacity is dominated by hydropower, much like its neighbors Tanzania, Uganda, Rwanda and Uganda. All face the effects of climate change, particularly severe droughts, that have proven hydropower generation unreliable.

The Menengai geothermal project is part of Kenya's ambitious plan to increase its geothermal generation capacity from the current 198 MW to 5,530 MW by 2031. Geothermal energy will help diversify Kenya's energy mix away from limited hydropower and expensive thermal and other sources of energy, thereby lowering tariffs and making power more affordable for consumers.

While SREP funding to the project is small relative to the total investment required, the SREP is covering the riskiest and most critical stage of development: exploration drilling to prove the availability of steam resources. By absorbing risk that other financiers are unable or unwilling to bear, the SREP is helping the project advance, mobilizing MDB co-financing, and attracting other investors.

45. Annex 3 shows detailed information about all projects targets and actual results, with a gender breakdown of people benefited. No targets on community services have been identified.

5.5 Working towards results: Update on investment projects

46. The following investment projects have yet to provide actual results on core indicators, but work is in progress.

47. Nepal Extended Biogas

- Pipeline of 205 sub-projects (192 commercial + 13 municipality), of which 169 sub-projects already at feasibility stage.
- 19 biogas plants already completed construction.

48. Maldives ASPIRE

- Pipeline of solar PV sub-projects totaling 4 MW prepared.
- The project agreements for the first 1.5 MW of sub-projects have been signed, and agreement has been reached regarding the allocation of rooftops.
- The Government of Maldives has selected the site, stirring progress from the winning bidder to finalize the JV structure and advance contracts.
- Bidding documents for the other sub-projects are under revision, building on the lessons learned from the initial bid. Adequacy of proposed rooftops is under review.

49. Ethiopia Geothermal Sector Development Project

- The project experienced significant delays initiating drilling works, due to a change in procurement strategy involving the purchase of two rigs for Ethiopia's long-term geothermal sector development as opposed to procuring the services of a drilling contractor with adequate capacity and experience.
- Given the slow progress, the project may be restructured. This decision is pending confirmation of revised implementation approach by the authorities.

50. Kenya Electricity Modernization Project

- Procurement activities for materials, works, and services has been completed substantially and most contracts have been awarded by June 2017. Design of electrification schemes is very advanced and electrification construction works are scheduled to start in July 2017.

51. Armenia Geothermal Exploratory Drilling Project

- Two slim exploratory wells drilled to a depth of around 1,000 meters.
- Drilling of the second slim well (B2) was completed on November 28, 2016 at a depth of 1,682 m. The highest measured temperature at the bottom of the well was near 125°C.
- The Government of Armenia will make the final decision on further commercial development of the site after completing the estimation of the costs of geothermal power generation at the site and gauging the interest of the market.

52. Tanzania Mini-Grids Project

- The development of the technical standards and specifications in close collaboration with the Government Advisory working group and the Industry-Developers working group is ongoing. The standards will facilitate mini-grid project development that meets supply quality and reliability standards. The project is also supporting groups of companies and individual project developers and financial institutions in the sector, with a view to address the barriers that limit private sector participation in the sector and unlock commercial resources necessary to create a sustainable mini-grid market based on business fundamentals.
- A Mini-grid Information Portal was developed and launched, with training conducted for official host (the Rural Energy Agency) and moderator (the Energy and Water Regulatory Authority).
- A mini-grid developers and installers database was developed that includes more than 80 developers and 60 installers and suppliers already active in Tanzania.
- IFC has also identified mini-grid projects and developers operating in the broader East Africa region that will be used for the benchmarking work.
- The project has completed Phase I, which, by design, was a preparatory phase to increase awareness, facilitate development of standards and regulations, and improve access to

information on mini-grids opportunities, component suppliers, and financing available. As such, the project has not yet generated tangible results along the SREP core indicators/benefits. These are expected to come during the Phase II of implementation.

53. Renewable Energy for Electrification in North and Center Liberia Project – Mini-grids (RREA)

- RREA has been working in the procurement of the main contracts as well as supervising the feasibility studies for the mini-grid in Lofa County. However, there is a delay of 11 months with respect to the timeframe agreed during project preparation for contracting of the Owner’s Engineer to oversee construction of the mini-grid in Lofa County. The procurement process for construction of the mini-grid in Lofa County is expected to be launched in early 2018.

5.6 Enabling environment projects

54. There are six MDB approved SREP projects whose primary objective is to strengthen the enabling environment for investments in clean energy and energy access. These projects will contribute indirectly to the achievement of the two SREP core indicators. Progress of two of these projects is detailed here:

55. Geothermal Sector Strategy and Regulations, Ethiopia

- The project was able to achieve results in terms of supporting the Ethiopian government in developing a geothermal strategy that has subsequently been used to guide various actions and activities to develop the market for geothermal energy in the country. More specifically, the IFC team transformed the geothermal strategy into a road map that was shared with the authorities and development partners, including USAID, the EU and JICA who later provided support for activities identified in the strategy and road map.
- In addition, the project supported the development of licensing regulations, resulting in a draft that is ready to be promulgated by the authorities.
- The first ever power purchase agreement with an independent power producer in Ethiopia’s energy sector was signed during the project, although not directly attributable. It is anticipated that most of project's direct and indirect impacts will be observed near or after project completion (estimated for 2019).

Box 7: Lighting Ethiopia

A large majority of Ethiopia's population live in rural areas, yet the national grid covers only about 25 percent of households, 90 percent of which are in urban areas. Off-grid households predominantly rely on kerosene for lighting, a dangerous and expensive fuel that accounts for 5 percent of household expenditure. The lack of clean and affordable lighting options also hinders development of small and medium sized enterprises and delivery of public services including health, security, and education.

The overall project goal of the IFC's Lightning Ethiopia program, funded by SREP with USD 1.6 million, is to increase access to better, cleaner, and safer off-grid lighting for four million people in Ethiopia. By the end of 2016, nearly a million of households have purchased units of quality assured solar products. The project continues undertaking an extensive outreach and awareness campaign, and to date, the Above the Line campaigns (ATL: TV and Radio) reached over three million people and the Below the Line campaigns (BTL: exhibition, market /roadshows and development group meetings) reached several hundreds of thousands of people. Feedback from consumers about the awareness campaign has been positive. It was determined that product demonstrations and roadshows are the most effective mechanism in educating last mile end-users.

The project continues to focus on market regulatory issues. A mandatory quality standard (based on the Lighting Global Quality Framework) for imported off-grid solar lanterns was developed and adopted. Standards for solar home systems are also being developed. These standards are a vital foundation for many other regulatory measures.

Beyond the major market barriers, the program is undertaking a number of activities to support the efforts of private sector players in the market more broadly. Over a hundred solar products retailers and distribution partners are involved in the development of the consumer education campaign and are fully engaged in the implementation of the campaign. Dozens of technicians have been trained to provide after sale services. Several business partnerships have been created.

56. Promoting the Scaling Up of Renewable Energy in Mali (PAPERM)

- PAPERM aims to improve the policy, legal, regulatory and institutional framework for the scaling-up of renewable energy investments in Mali by strengthen the capacities of stakeholders; promoting knowledge management, communication, and advocacy for renewable energy development; and improving the sub-sector's monitoring and evaluation system.
- After a slow start, most of project activities are under implementation. Around 90 percent of the project outputs are on track to meet the targets set for the end of the reporting year.
- The implementation processes are satisfactory and should lead to the expected results with appropriate measures and remedies. The Project Implementation Unit recruited missing experts and is advancing on contract negotiations, which will lead to an increase the disbursement rate.
- The project has been able to improve the country's RISE profile; seven renewable energy projects have been approved since 2015; 79.8 USD million have been allocated to renewable energy projects.

5.7 New developments in Results field

57. Between October 2017 and April 2018, the CIF Administrative Unit plans to undertake a stocktaking review of the SREP results framework to assess the effectiveness, relevance, and learning aspects of the CIF's monitoring and reporting (M&R) system for SREP. The review is motivated by a number of shortcomings already identified in the SREP results framework in relation to how the SREP portfolio has developed over time. The review will consider the design and implementation of the M&R results framework, as well as the usefulness of the core indicators and co-benefit indicators.

Annex 1: Resource availability

SREP TRUST FUND - RESOURCES AVAILABLE for COMMITMENTS				
<i>Inception through September 30, 2017</i>				
<i>(USD millions)</i>				
		Total	Capital	Grant
Donor Pledges and Contributions				
Contributions		750.5	279.1	471.3
Pledges		-		
Total Pledges and Contributions		750.5	279.1	471.3
Cumulative Funding Received				
Contributions Received				
Cash Contributions		513.2	41.9	471.3
Unencashed Promissory Notes	a/	237.3	237.3	-
Total Contributions Received		750.5	279.1	471.3
Other Resources				
Investment Income earned -up to Feb 1, 2016	b/	9.9		9.9
Other Income		-		
Total Other Resources		9.9		9.9
Total Cumulative Funding Received (A)		760.4	279.1	481.2
Cumulative Funding Commitments				
Projects/Programs		543.5	151.8	391.7
MDB Project Implementation and Supervision services (MPIS) Costs		19.1	-	19.1
Administrative Expenses-Cumulative to 1st Feb 2016	b/	14.2	-	14.2
Total Cumulative Funding Commitments		576.9	151.8	425.1
Project/Program, MPIS and Admin Budget Cancellations	c/	(41.2)	(30.5)	(10.7)
Net Cumulative Funding Commitments (B)		535.7	121.3	414.4
Fund Balance (A - B)		224.6	157.8	66.8
Currency Risk Reserves	d/	(35.6)	(35.6)	
Unrestricted Fund Balance		189.1	122.2	66.8
Future Programming Reserves:				
Proposed FY18 Country Programming Budget		(1.5)		(1.5)
Projected Country Programming Budget reserve FY19-23	e/	(1.4)		(1.4)
Admin Expenses-Reserve for FY 19-23 (net of estimated investment income)	f/	(9.9)		(9.9)
Unrestricted Fund Balance (C) after reserves		176.3	122.2	54.1
Anticipated Commitments (FY18-FY21)				
Program/Project Funding and MPIS Costs	g/	257.7	145.6	112.1
Total Anticipated Commitments (D)		257.7	145.6	112.1
Available Resources (C - D)		(81.4)	(23.4)	(58.0)
Potential Future Resources (FY18-FY21)				
Pledges		-		
Contributions not yet paid		-		
Release of Currency Risk Reserves	d/	35.6	35.6	
Total Potential Future Resources (D)		35.6	35.6	
Potential Available Resources (C - D + E)		(45.8)	12.2	(58.0)

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

b/ 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 fund balances. The Country Programming budgets are recorded under individual programs.

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

d/ 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.

e/ Effective from the September 2017 reporting period, the Trustee has added a reserve to provide for country programming budget for five years. The amount of this reserve is estimated by the CIFAU.

f/ Effective from the September 2017 reporting period, the Trustee has added a reserve to cover Admin Expenses as Admin expenses are expected to exceed investment income significantly going forward. The amount of this reserve is estimated by the CIFAU and Trustee using the 5-year forecast of the Admin Budget less the 5-year estimate of Investment Income. Pro-rata estimates across three SCF programs are based on projected fund balances, per the terms of the Contribution Agreements.

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								
IP	Solomon Islands	Renewable Energy Access Project	IBRD	Public	7.05	-	0.26	Nov-17*
		PPGs for remaining SREP countries that have not submitted their IPs			10.00			
IP	Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	Private		5.00		Nov-17
IP	Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER) – Phase 2	IDB	Public	0.83			Nov-17*
IP	Armenia	Development of Utility-Scale Solar PV	IBRD	Public	-	26.00	0.44	Nov-17
IP	Cambodia	National Park Program	ADB	Public	3.00	11.00	0.28	Nov-17
IP	Mongolia	Upscaling Rural Renewable Energy	ADB	Public	14.60	-	0.21	Nov-17
IP	Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility	IFC	Private	-	2.00		Dec-17
IP	Haiti	Off-Grid Electricity	IFC	Private	0.50	-		Dec-17
IP	Mali	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)	AFDB	Public	8.70	-	0.35	Jan-18
IP	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including technical assistance)	IFC	Private	0.50	15.00		Feb-18
IP	Ghana	Utility-scale Solar PV/Wind Power Generation	IFC	Private	-	10.00	0.45	Feb-18
IP	Cambodia	Private Sector Solar Development - Utility Scale/Parks	ADB	Private		5.00	0.14	Mar-18
IP	Haiti	Off-Grid Electricity Services for productive, Social and Household Uses Project	IFC	Private	-	7.00	0.44	Jun-18
PSSA	Kenya	Kopere Solar Park	AfDB	Private	-	11.60	0.18	Jun-18
PSSA	Kenya	Olkaria IV Geothermal Power Plant	AFDB	Private		20.00		Jun-18
RESERVE PIPELINE								
IP	Cambodia	Private Sector Solar Development - Rooftop Solar	ADB	Private	5.00	1.00	0.14	Feb-18
IP	Kenya	Menengai Geothermal Project	AFDB	Public	10.50	4.50	-	Mar-18
IP	Ghana	RE Mini-Grids and Stand Alone Solar PV Systems	AFDB	Public	16.60	-	0.20	Jun-18
IP	Ghana	Solar PV Based Net Metering with Battery Storage	AFDB	Public	11.89	-	0.20	Jun-18
IP	Cambodia	Policy Support and Public Awareness	ADB	Public	3.00	-		Jun-18

IP	Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net Metering	AFDB	Public	7.10	-	0.08	Jun-18
IP	Uganda	Wind Resource Map and Pilot Wind Power Development Program	AFDB	Public	4.93	-	0.08	Jun-18
NOT UNDER ACTIVE DEVELOPMENT								
IP	Maldives	Waste-to-Energy Thilafushi	IFC	Private	4.00	-		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	Nicaragua	Integral Development of Rural Areas Project	IDB	Public	7.50	-		n/a
TOTAL					153.00	163.94	4.63	

*Submitted for approval

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

Annex 3. SREP projects reporting and summary of results on core indicators

Country	Project title	SREP funding (USD million)	MDB	Annual Electricity Production (MWh/yr)		New or improved energy access					Annual GHG emissions reduced/avoided (tons of CO2 equivalent)	
				Actual	Target	Women		Men		Target Businesses	Actual	Target
						Actual	Target	Actual	Target			
Armenia	Geothermal Exploratory Drilling Project	8.85	IBRD	0	224,694	n.a.	n.a.	n.a.	n.a.	n.a.	0	166,000
Ethiopia	Geothermal Sector Development Project	24.5	IBRD	0	552,000	0	550,000	0	550,000	n.a.	0	438,122
Ethiopia	Geothermal Sector Strategy and Regulations*	1.5	IFC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ethiopia	Lighting Ethiopia*	2	IFC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Honduras	Strengthening the RE Policy and Regulatory Framework(FOMPIER)*	0.85	IDB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	2.95	IDB	n.a.	n.a.	1,976	187,500	2,024	187,500	300	7,790	74,532
Honduras	Self-Supply RE Guarantee Program	5.5	IDB	1,186	45,000	n.a.	n.a.	n.a.	n.a.	n.a.	747	40,000
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB	0	427,000	n.a.	n.a.	n.a.	n.a.	22	0	285,000
Kenya	Menengai Geothermal Project	25	AfDB	0	1,182,000	0	1,250,000	0	1,250,000	300,000	0	734,650
Kenya	Electricity Modernization Project	7.5	IBRD	0	1,242	0	10,125	0	10,125	n.a.	0	986
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini-grids	25.0	IBRD	0	4,000	0	74,400	0	75,600	n.a.	0	3,174
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	IBRD	0	32,610	0	19,303	0	19,303	n.a.	0	25,833
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	0**	27,600	0	15,410	0	15,410	n.a.	0**	40,000
Mali	Rural Electrification Hybrid Systems	15.4	IBRD	0	8,653	0	343,224	0	337,776	n.a.	0	6,868
Mali	Promoting the Scaling Up of Renewable Energy in Mali*	1.5	AfDB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mongolia	TA-Strengthening Renewable Energy Regulations*	1.2	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	11.8	ADB	0	25,228	2,409	75,689	4,191	67,661	n.a.	0	18,000

Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project- Additional Co-financing	20.0	ADB	0	32,850	0	137,505	0	129,495	n.a.	0	26,280
Nepal	Extended Biogas Program	7.9	IBRD	0	20,400	n.a.	n.a.	n.a.	n.a.	400	0	16,970
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC	7.5	IDB	0	-	0	n.a.	0	n.a.	n.a.	0	87,139
Pacific Region	Sustainable Energy Industry Development Project*	1.9	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Solomon Islands	Solar Power Development Project	6.6	ADB	0	3,100	0	2,922	0	3,078	n.a.	0	840
Tanzania	Tanzania Mini-grids project	4.95	IFC	0	88,000	0	55,000	0	55,000	n.a.	0	200,000
Tanzania	Rural Electrification Expansion Project	9.0	IBRD	0	142,000	0	155,000	0	155,000	n.a.	0	112,000
Total				1,186	3,131,737	4,385	2,876,078	6,215	2,855,948	300,722	8,537	2,273,270

*capacity-building projects; n.a: not applicable

** The project is still on pre-commissioning phase, with installed capacity of 2 MW, the electricity output is about 400 MWh generated. Generation will be measured and GHG savings will be determined during post-commissioning.

Annex 4: 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
First Set of Countries							
Ethiopia	50.00	29.70	59%	29.70	59%	100%	5.90
Honduras	43.73	30.18	69%	30.18	69%	100%	3.28
Kenya	79.54	32.94	41%	32.94	41%	100%	14.15
Maldives	29.90	25.90	87%	25.90	87%	100%	5.51
Mali	65.00	45.25	70%	45.25	70%	100%	1.75
Nepal	47.80	39.80	83%	39.80	83%	100%	2.40
	315.97	203.77	64%	203.77	64%	100%	32.98
Second Set of Countries							
Tanzania	40.00	15.45	39%	15.45	39%	100%	2.38
Liberia	50.00	50.00	53%	26.50	53%	53%	3.52
Armenia	39.97	13.97	35%	10.97	27%	79%	8.52
Solomon Islands	13.91	7.36	53%	7.36	53%	100%	0.66
Vanuatu	14.00	14.00	52%	0.23	2%	2%	0.23
Yemen	0.30	0.30	100%	0.30	100%	100%	0.10
Mongolia	29.91	15.31	6%	2.91	10%	19%	0.54
Pacific Region	2.00	2.00	100%	2.00	100%	100%	0.18
	190.08	118.38	62%	65.72	35%	56%	16.13
Third Set of Countries							
Bangladesh	74.95	1.20	2%	1.20	2%	100%	0.31
Cambodia	30.00	2.00	7%	2.00	7%	100%	0.28
Ghana	40.00	1.51	4%	1.51	4%	100%	-
Haiti	28.62	19.62	69%				-
Kiribati	0.30	0.30	100%	0.30	100%	100%	-
Lesotho	0.30	0.30	100%	0.30	100%	100%	0.20
Madagascar	0.30	0.30	100%	0.30	100%	100%	0.05
Malawi	0.30	0.30	100%	0.30	100%	100%	-
Nicaragua	30.00	7.50	25%	7.50	25%	100%	-
Rwanda	50.00	50.00	100%	1.06	2%	2%	0.44
Sierra Leone	0.30	0.30	100%	0.30	100%	100%	-
Uganda	50.00	4.18	8%	4.18	8%	100%	-
Zambia	0.30	0.30	100%	0.30	100%	100%	0.06
	305.37	87.80	29%	19.24	6%	22%	1.34
TOTAL	811.42	409.96	51%	288.73	36%	70%	50.45