Climate Investment Funds

SREP/SC.16/3
November 10, 2016

Meeting of the CTF Trust Fund Committee
Washington DC
Tuesday, December 6, 2016

Agenda 3

SREP OPERATIONAL AND RESULTS REPORT

PROPOSED DECISION

The SREP Sub-Committee reviewed document SREP/SC.16/3, *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. The Sub-Committee encourages MDBs and the SREP pilot countries to take all possible measures to expedite the implementation of projects and the disbursement of funds.

The Sub-Committee welcomes the results that have been achieved so far and encourages the MDBs to continue providing information on expected and actual results of SREP.

Contents

1 Introduction

1. Following guidance by the Sub-Committee of the Scaling up Renewable Energy in Low Income Countries Program (SREP), this Operational & Results Report (ORR) is the first of its kind combining the previously separate Semi-Annual Report and Results Report.

2. The report covers the period from January 1, to June 30, 2016, from an operational perspective, and it reports SREP results over a one-year period[1].

3. This report identifies key strategic issues for the SREP, in section 2; provides a status update on the portfolio of SREP-funded programs and projects under endorsed investment plans and the SREP Private Sector Set-Aside (PSSA), and related activities, in section 3; and reports on the results from MDB approved projects (until December 31, 2015), in section 4.

4. Also included in this report are the following annexes: Annex 1: Resource availability; Annex 2: Expected project submission for the remaining pipeline; Annex 3: Projects exceeding 24 months in the pipeline; Annex 4: SREP projects reporting and summary of results; Annex 5: List of Sub-Committee Approved projects; Annex 6: List of projects pending Sub-Committee Approval. In addition, SREP country portfolios have been updated and are available in a separate information document.

2 Strategic issues

2.1 Overview of SREP implementation

5. As of June 30, 2016, the SREP Sub-Committee has endorsed investment plans for 19 pilot countries, with total indicative endorsed allocations of USD 745 million and seven project concepts under the PSSA, with an indicative endorsed allocation of another USD 92.4 million, as Total SREP endorsed indicative funding is USD 838.9 million. Map 1 shows the 27 SREP pilot countries.

6. The overarching expected results under the 19 endorsed investment plans and PSSA include an estimated 6,686 gigawatt hours (GWh) electricity to be generated annually—equivalent to the annual electricity production of Armenia—and new or improved access to 17.3 million people—approximately the population of Malawi.

7. Although the SREP is still at an early stage of implementation, this report shows for the first time actual results on the core indicators (electricity output and people benefited with

[1] Depending on the MDB, the report covers the period from January 1, 2015 to December 31, 2015 or July 1 2015 to June 30 2016. Since the reporting is done on an annual basis, the abbreviation RY, or Reporting Year, is used to capture this annual period

improved energy access) for a small group of investment projects. In addition, other projects with primary focus on capacity building have reported significant progress.

Map 1. SREP pilot countries

Highlighted in green, the eight countries without investment plans endorsed.

8. Progress of implementation varies among pilot countries. Overall, about 32 percent of the funding under the endorsed investment plans and PSSA has been approved by the Sub-Committee, with countries that joined earlier reaching a higher approval rate than those that joined later. Figures 1 and 2 show trends in SREP funding approvals by the Sub-Committee over time. Table 3 in Section 3 contains country-specific approval rates.

Figure 1: SREP funding approvals by the Sub-Committee

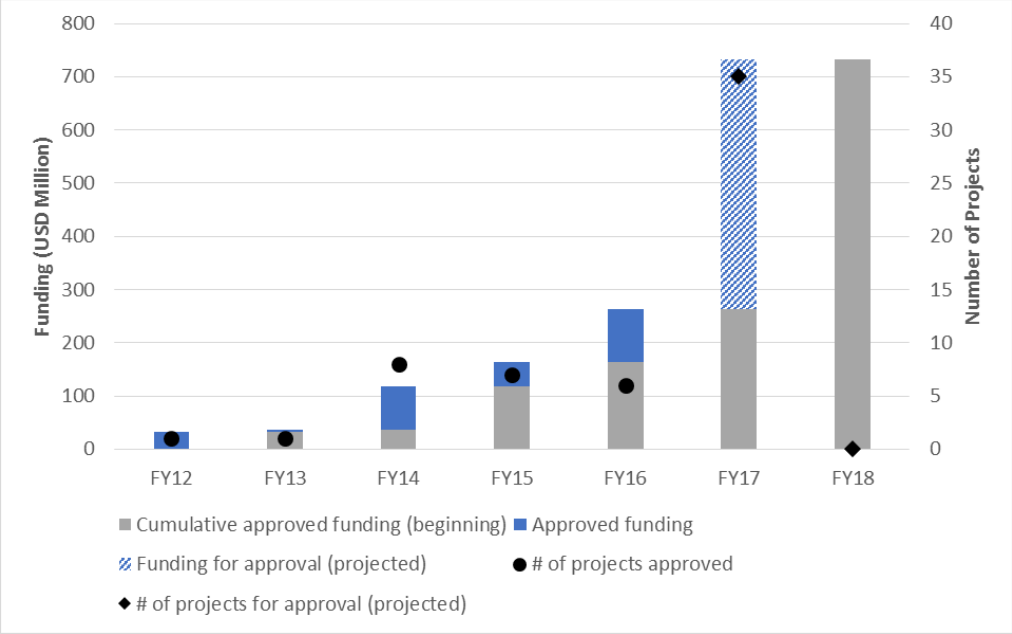
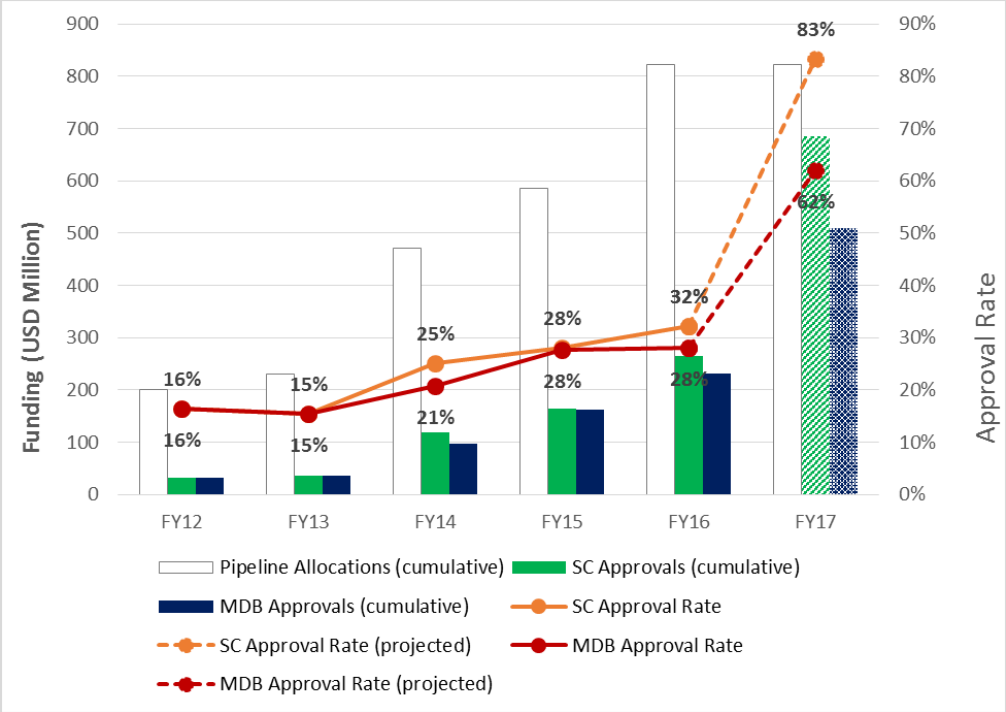


Figure 2: SREP funding approval rate by fiscal year



9. The SREP is designed to tackle a challenging development goal in the most challenging and poor countries in the world through renewable energy technologies. These technologies are still relatively new and have higher upfront costs to these countries. In 60 percent of the projects experiencing delays in submission to the Sub-Committee, the delays occur at the project design phase or are related to government approval processes.

2.2 Resource availability

10. As of June 30, 2016, the pipeline includes a total of USD 555 million of projects and programs (including MPIS) to be submitted for approval by the Sub-Committee (see Table 1 and Annex 1).

11. The SREP's currency risk exposure to fluctuations in the value of the GBP has impacted the program's available resources. Between May 31 and June 30, the GBP experienced a decline in value of over 8 percent causing a commensurate decline in the value of the GBP 241.3 million unencashed promissory notes. During this period, unrealized currency related losses in the value of these promissory notes increased to USD 51.2 million, from USD 25.1 million.

12. As indicated in Table 1 and Annex 1, expected funding available for programming was approximately USD 404 million. With a remaining pipeline of USD 555 million plus projected administrative costs of USD 43 million, total over-programming would reach USD 194 million. If the currency reserves are not needed to address declines in the value of the

unencashed promissory notes, and the outstanding pledges are received, total over-programming amount would decline to approximately USD 120 million.

Table 1. SREP resource availability schedule summary (in USD million as of June 30, 2016)

Unrestricted Fund Balance (A)		**404.06**
Anticipated Commitments (FY17-FY21)		
Program/Project Funding and MPIS Costs		554.9
Projected Administrative Budget	a/	42.6
Total Anticipated Commitments (B)		**597.5**
Available Resources (A - B)		**(193.5)**
Potential Future Resources (FY17-FY21)		
Pledges	b/	2.4
Release of Currency Risk Reserves	c/	48.8
Projected Investment Income	d/	22.4
Total Potential Future Resources (C)		**73.6**
Potential Available Resources (A - B + C)		**(119.8)**

a/ Projected administrative budget includes resources for administrative services provided by the CIF Administration Unit, Trustee and MDBs.

b/ This amount represents the USD equivalent of SEK 20 million.

c/ 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.

d/ Investment income on undisbursed funds across all SCF subprograms as projected by the Trustee, and notionally allocated by the CIF Administrative Unit to each subprogram according to the proportion of total Projected Administrative Budget associated with the corresponding program/subprogram.

13. As of June 30, 2016, there are sufficient resources to support funding commitment until February 2017, assuming that all projects in the pipeline will be submitted for funding approval.

14. There are still eight SREP pilot countries that have not submitted their investment plans for endorsement. Benin, Lesotho, Madagascar, Malawi, Sierra Leone, and Zambia expect to complete and submit their investment plans for endorsement at the Sub-Committee meeting in June 2017. Development of SREP investment plans in Kiribati and Yemen has been put on hold.

15. The total indicative allocations for these countries amount to USD 295 million. According to the prior agreement of the Sub-Committee, investment plans from the new countries will be endorsed regardless of funding availability, but for the purpose of pipeline entry, up to

30 percent over-programming will be applied to the SREP pipeline.

16. Given the current resource availability situation, there is no more headroom in over-programming agreements to allow new projects in the pipeline. Additional resources would be needed to allow projects of the remaining new countries without endorsed investment plans to enter the pipeline.

17. At its meeting in June 2016, the SREP Sub-Committee requested the CIF Administrative Unit to present an assessment as to whether and how Project Preparation Grants (PPGs) could be provided for endorsed investment plans for which implementation funding may not be available.

18. Total PPGs for SREP projects (approved projects + projects in the pipeline) accounts for USD 27.9 million, being the median USD 0.70 million per project and USD 1.5 million per country. Assuming similar figures for the remaining new countries, estimated PPG needs total USD 9.5 million[2].

2.3 Pipeline management measures

19. In conjunction with the analysis, the SREP, jointly with other Strategic Climate Funds (SCF) Programs, propose a more rigorous pipeline management approach. At its meeting in June 2016, the SCF Program Sub-Committees encouraged the multilateral development banks (MDBs) and the pilot countries to take all possible measures to expedite the implementation of projects and the disbursement of funds.

20. The Sub-Committees requested the CIF Administrative Unit, working with MDBs and the Trustee, to prepare a pipeline management policy for the SCF Programs, taking into account the nature of programs and projects. The Committees further requested that the pipeline management policy should consider, inter alia, issues related to readiness criteria, over-programming as relevant, and cancellation.

21. A pipeline management policy paper has been prepared in response to the Sub-Committee's request and is expected to be presented to the Sub-Committee for consideration before or by the Sub-Committee meeting in December 2016.

2.4 Private sector engagement

22. At its meeting in June 2016, the SREP Sub-Committee requested the CIF Administrative Unit to explore modifications to the SREP private sector mechanisms in order to increase the mobilization of private sector investments in SREP pilot countries.

23. A new programming approach, the Enhanced Private Sector Program (EPSP), is being proposed for SREP going forward. It draws on six years of experience and lessons learned

[2] USD 1.5 million per country x 6 = USD 9 million for countries that are actively preparing their IPs + USD 0.5 million for Kiribati

from the SREP, as well as those from the Clean Technology Fund (CTF) and its Dedicated Private Sector Programs (DPSP).The proposed EPSP offers more flexibility to countries and MDBs and emphasizes engaging the private sector to capture market opportunities.

24. A paper with the proposed EPSP is expected to be presented at the SREP Sub-Committee in December 2016.

3 Status of the SREP portfolio

3.1 Portfolio overview and updates

25. As of June 30, 2016, total funding approved by the Sub-Committee reached USD 263.9 million[3] for 23 projects and programs, including two projects under PSSA (see Table 2). This amount accounts for 32 percent of the total indicative allocations under the endorsed investment plans and PSSA. These projects are expected to leverage a total of USD 1.9 billion in co-financing (with a 1 to 7.3 co-financing ratio) from the governments, MDBs, private sector, and bilateral agencies. Detailed information on co-financing breakdown by project is included in the *SREP Country Portfolios* document.

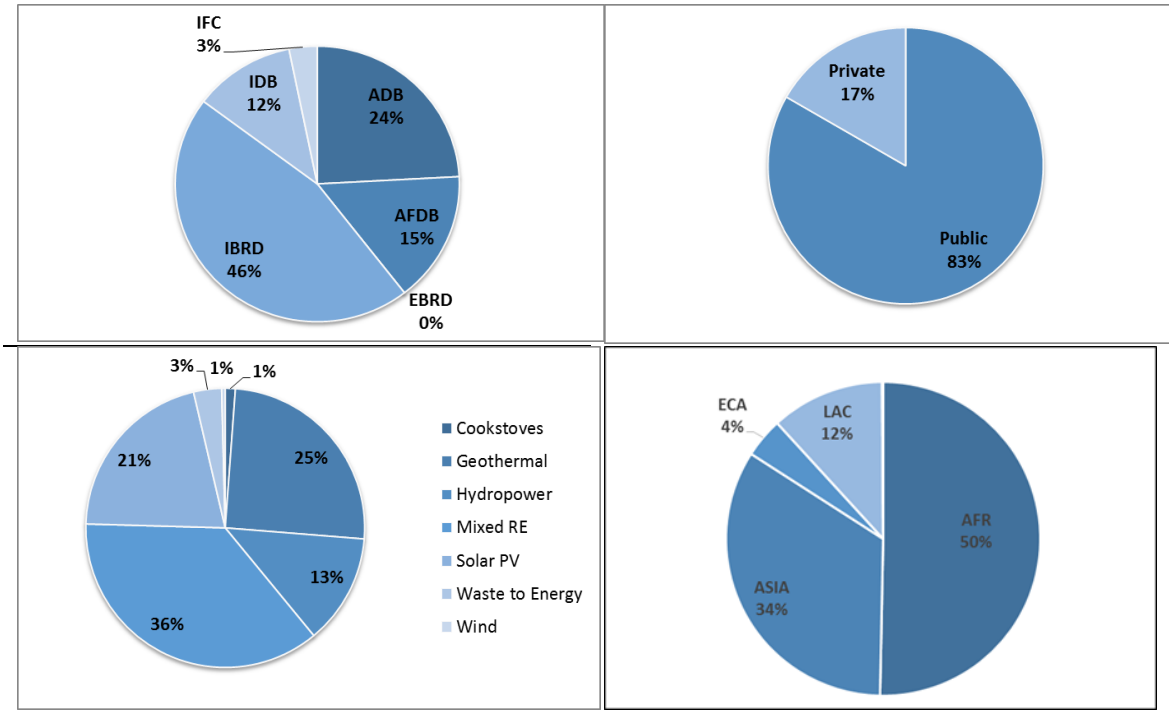
Table 2. Overview of SREP portfolio (as of June 30, 2016)

	Indicative Pipeline Allocation			Approved funding		Disbursement
	TOTAL	IP	PSSA	Committee	MDB	
SREP Funding (in USD million)	822.2	736.6	85.6	263.9	230.7	33.5
Number of projects	68	62	6[a/]	23	21	15

a/ Kenya Climate Venture Facility Project dropped from the pipeline in May 2016

[3] Total Approved Project Funding=Project Funding+ IPPGs + PPGs

Figure 3. SREP Sub-Committee approved funding by MDB, region, sector, and technology



Note: EBRD share is 0.3% of the portfolio; Mixed RE refers to projects considering multiple renewable energy technologies.

26. Figure 3 provides an overview of SREP portfolio by MDB, region, sector, and technology. Capacity building/enabling environment projects accounts roughly for 4 percent of the approved funding. Some of these projects are highlighted in Section 4.3.4

27. Table 3 presents the status by country of the 19 endorsed investment plans and the 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 in May and November 2015 and June 2016, affecting the overall approval rate (32 percent). Considering just the first 11 investment plans endorsed, the average funding approval rate is 57% percent.

Table 3: Endorsement of investment plans and Private Sector Set-Aside concepts
(USD million, as of June 30, 2016)

Country	Endorsement Date	Indicative Pipeline Funding	Committee Approvals	% Approvals
Armenia	27-Jun-14	39.82	10.82	27%
Bangladesh	11-Nov-15	75.00	2.20	3%
Cambodia	17-Jun-16	30.00	2.00	7%
Ethiopia	10-Mar-12	50.00	29.70	59%
Ghana	13-May-15	40.00	1.51	4%
Haiti	14-May-15	30.00	0.00	0%
Honduras	1-Nov-11	23.14	10.32	45%
Kenya	8-Sep-11	47.50	32.94	69%
Liberia	31-Oct-13	50.00	26.50	53%
Maldives	31-Oct-12	29.91	25.91	87%
Mali	1-Nov-11	40.00	20.25	51%
Mongolia	11-Nov-15	30.00	1.80	6%
Nepal	7-May-15[1]	39.80	39.80	100%
Nicaragua	1-Nov-11	30.00	0.00	0%
Pacific Region	11-May-15	2.00	2.00	100%
Rwanda	11-Nov-15	49.96	1.06	2%
Solomon Islands	27-Jun-14	13.97	7.42	53%
Tanzania	11-Sep-13	50.00	15.45	31%
Uganda	11-Nov-15	50.00	4.18	8%
Vanuatu	18-Nov-14	14.00	8.05	58%
Sub Total for IPs		**735.10**	**241.90**	**33%**
PSSAs		85.60	20.50	24%
IPPGs		1.50	1.50	100%
Total (IP+PSSA+IPPGs)		**822.20**	**263.90**	**32%**

1) Revised endorsement date is May-15; Original endorsement date is Nov-11

3.1.1 Investment plans

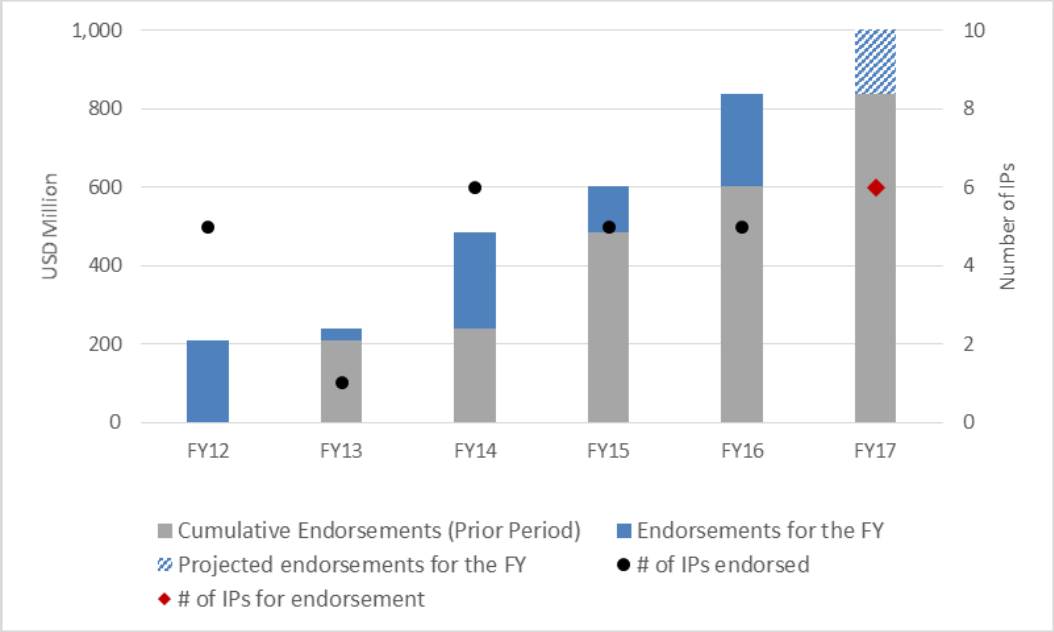
28. The Sub-Committee endorsed one new investment plan at its meeting in June 2016, for Cambodia, with an indicative allocation of USD 30 million in SREP funding.

29. The following missions mentioned were carried out during the reporting period. Mission terms of reference and completion reports are posted on the CIF website:

- Cambodia: programming mission, May 3-6, 2016
- Malawi: scoping mission, April 11-13, 2016
- Sierra Leone: scoping mission, February 23-26, 2016

30. No investment plans will be presented for endorsement at the Sub-Committee meeting in December 2016. Benin, Lesotho, Madagascar, Malawi, Sierra Leone, and Zambia are targeting the submission of their investment plans for endorsement in June 2017 (see Figure 4). Kiribati has not yet identified a lead MDB (ADB or World Bank) to support them to develop a SREP investment plan. The recent change in government structure and turnover of new staff further contributed to the delays in the preparation of the plan. The World Bank continues to suspend missions to Yemen, and therefore the preparation of the SREP investment plan remains on hold.

Figure 4. Trends in endorsement of SREP investment plans



3.1.2 Sub-Committee approvals

31. During the current reporting period, the following projects were approved by the Sub-Committee for a total of USD 35.2 million (see Table 4).

Table 4: Sub-Committee approved projects and programs[4]
(January 1 to June 30, 2016)

COUNTRY	IP/PSSA	PROJECT TITLE	MDB	SC APPROVAL	SREP FUNDING (USD million)
Nepal	IP	South Asia Subregional Economic Cooperation Power System Expansion Project - Additional Co-financing	ADB	Mar-30-2016	20.00
Tanzania	IP	Rural Electrification Expansion Project	IBRD	Apr-14-2016	9.0
Solomon Islands	IP	Solar Power Development Project	ADB	Jun-13-2016	6.2
TOTAL APPROVAL					**35.2**

32. Subsequent to the approval of USD 19 million by the Sub-Committee for the Tanzania Rural Electrification Expansion Project, the Government of Tanzania decided to drop the USD 10 million SREP loan component. Consequently, only the SREP USD 9 million grant remained when the World Bank presented the project for Board approval. The World Bank indicated that the Project Development Objectives (PDO) and the expected results remain unchanged compared with the proposal that was approved by the SREP Sub-Committee. The Government may request the USD10 million loan as additional financing in the future.

3.1.3 MDB approvals

33. During the reporting period, the respective MDBs approved the following projects for a total of USD 34 million in SREP funding (see Table 5).

Table 5: MDB approved projects and programs[5]
(January 1 to June 30, 2016)

COUNTRY	IP/PSSA	PROJECT TITLE	MDB	MDB APPROVAL	SREP FUNDING (USD million)
Tanzania	IP	Rural Electrification Expansion Project	IBRD	Jun-21-2016	9.0
Liberia	IP	Renewable Energy for Electrification in North and Center Liberia Project-Mini Grids	IBRD	Jan-11-2016	25.0
TOTAL APPROVAL					**34**

3.2 Project pipeline tracking

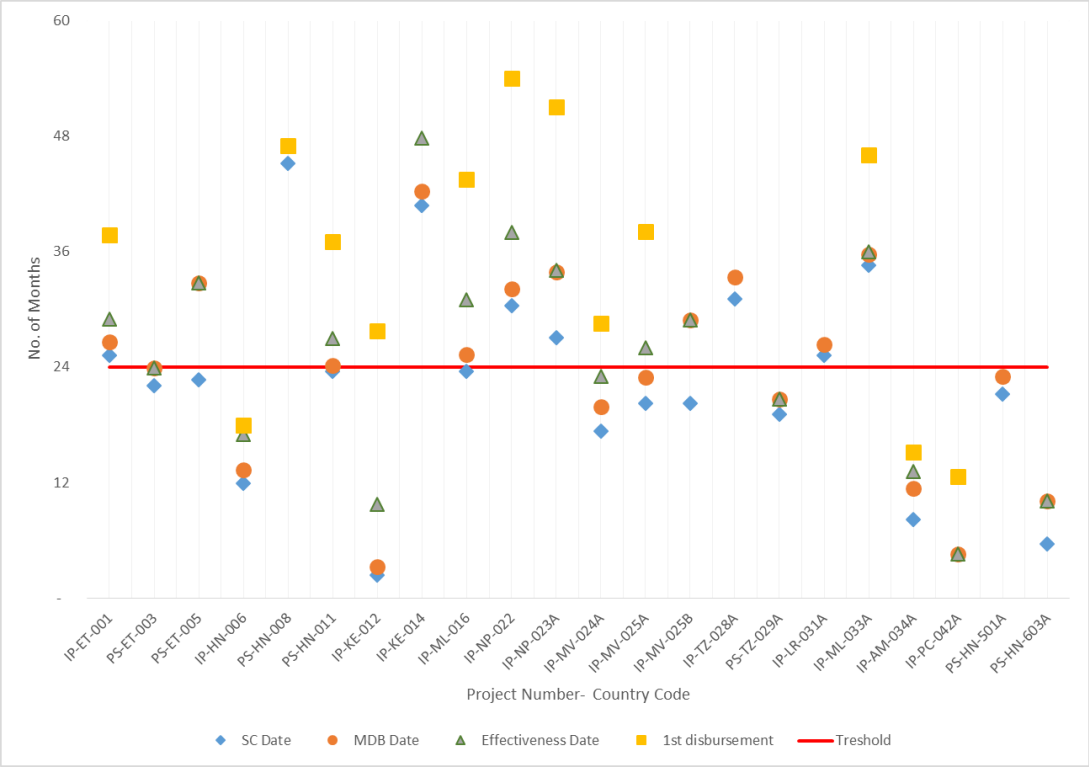
34. The CIF Administrative Unit tracks the status of the endorsed portfolio. The project pipeline tracking allows monitoring project approval delays in two stages: time elapsed between investment plan endorsement and SREP Sub-Committee approval and time elapsed between SREP Sub-Committee approval and MDB approval.

[4] After the cut-off date, the following projects have been approved by the Sub-Committee: Nicaragua: Geothermal Development and Integral Development of Rural Areas Project (IDB); and Armenia: Caucasus Green Economy Financing Facility (GEFF) - SREP Armenia Renewable Energy Grant Support (EBRD).

[5] After the cut-off date, the following projects have been approved by the MDBs: Nicaragua: Geothermal Development and Integral Development of Rural Areas Project (IDB)

35. On average, the 22 projects that have been approved by MDBs have taken 24.6 months between the investment plan endorsement and MDB approval (21.7 months between investment plan endorsement and SREP Sub-Committee approval, and 2.9 months between SREP Sub-Committee approval and MDB approval). Figure 5 illustrates the number of months taken by projects from the point of Sub-Committee approval through MDB approval to effectiveness date (or MDB equivalent) and date of 1st disbursement. See Annex 5 to link projects codes with countries and project titles

Figure 5: SREP Approval Timeline Analysis (Based on SC Approved projects as of 30 June 2016)



36. Of the 45 projects and programs to be submitted for SREP funding approval, 28 have been or will have been in the pipeline for more than 24 months (red) based on the indicative submission dates, eight will be between 18 and 24 months (yellow), and nine for less than 18 months (green). See Table 6 for these data relative to the SREP Traffic Light System (TLS). Figure 6 shows the project pipeline maturity for projects pending SREP Sub-Committee approval.

Table 6: Timeframes for project delivery

TLS Status of Projects and Programs Pending Committee Approval

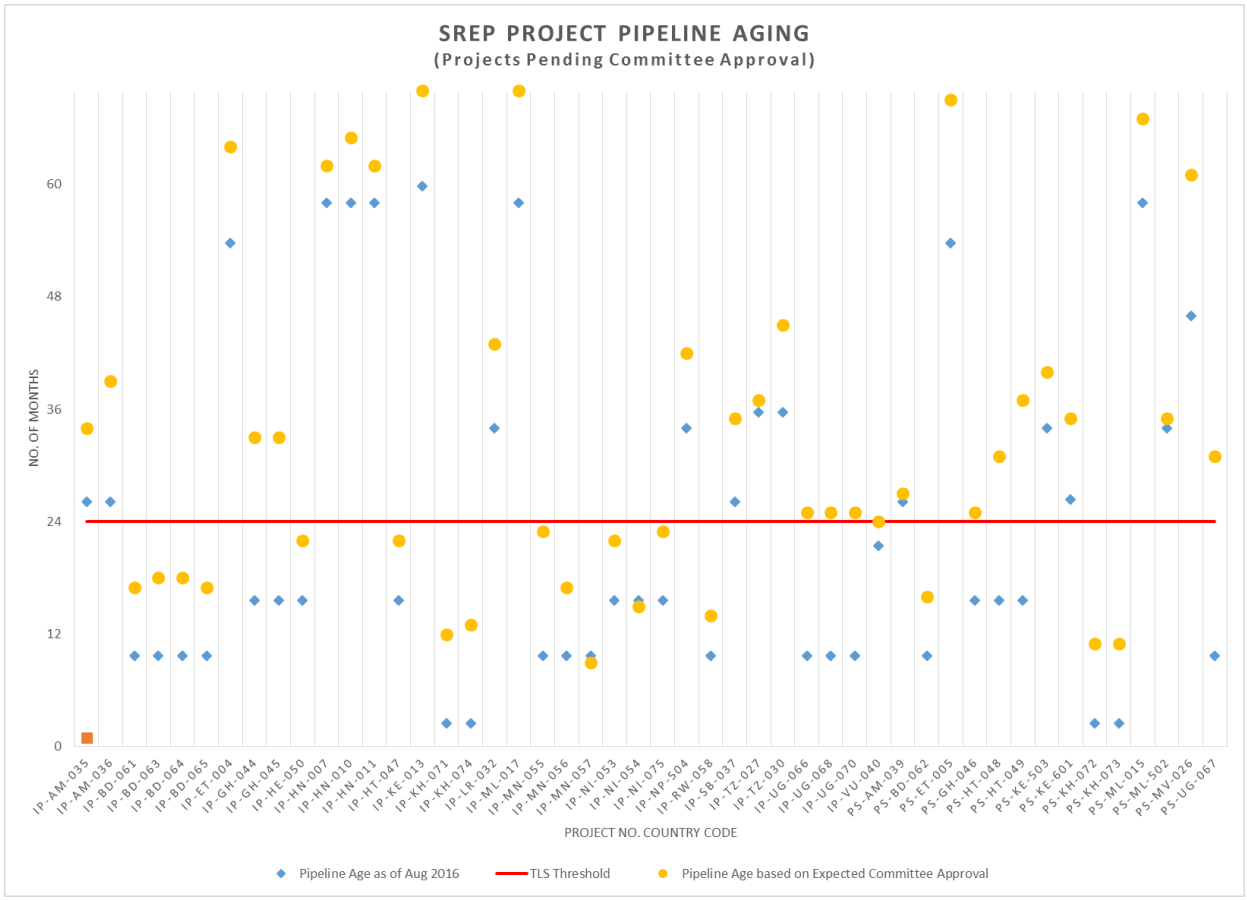
	Less than 18 months (TLS Indicator = GREEN)	Between 18-24 months (TLS Indicator = YELLOW)	More than 24 months (TLS Indicator = RED)
Number of projects*	9	8	28
SREP Funding (USD million)	136.6	96.3	336.8

**Includes two projects with second tranche of funding support.*

TLS Status of Projects and Programs Pending MDB Approval

	Less than 6 months (TLS Indicator = GREEN)	Between 6-9 months (TLS Indicator = YELLOW)	More than 9 months (TLS Indicator = RED)
Number of projects		2	1
SREP Funding (USD M)		26.2	7.0

Figure 6: SREP Project Pipeline Maturity (Projects Pending Committee Approval as of June 2016)



3.2.1 Analysis of project approval delays

37. Following the Sub-Committee's request to include detailed information on the reasons for project approval delays, the CIF Administrative Unit asked the MDBs to report on the status of their delayed projects. This update included the main reason for the delays under eight categories: Natural Disaster/Epidemic; Political or Social Unrest; Government Restructuring; Government Approval Process; Project Design; Safeguards Compliance; MDB Approval/Review Process; and Other. It also included an explanation of these delays and a description of the next steps the MDBs were planning to take to accelerate the approval process.

38. The most common reason used to explain project delays in submission to the Sub-Committee is the delays at the project design phase. Eleven projects in eight countries (Ethiopia, Mali, Tanzania, Liberia, Kenya, Honduras, Vanuatu and Maldives) identified this category as the main reason for the delays. The project design phase includes project design development, recruitment of technical experts, consultations with different stakeholders, negotiations, among other steps.

39. Experience shows that low-income countries need more time for feasibility studies, data collection, and strengthening the Project Implementation Units to finalize the project preparation and submit a proposal to the Sub-Committee for approval. Project examples include:
    - In Liberia, the PPG is ongoing for the *Renewable energy for Electrification in Eastern Liberia Project-Stand-Alone PV*, as the government has not provided the consultants all the data to finalize the feasibility studies. A supervision mission is planned to expedite the project implementation.
    - In Honduras, delays are associated with the evaluation of different alternatives for project design of the *Sustainable Rural Energization (ERUS) Project*. Project design will be discussed and agreed as part of the revision of the Honduras investment plan.
    - In Maldives, the enabling environment remains difficult, creating risks and hurdles to involve private sector project sponsors. IFC continues to pursue a pipeline of projects and explore alternative approaches for the *Waste-to-Energy Thilafushi Program*.

40. Government approval processes also delay project submissions to the Sub-Committee in the case of five projects in three different countries (Kenya, Uganda and Honduras). Project examples include:

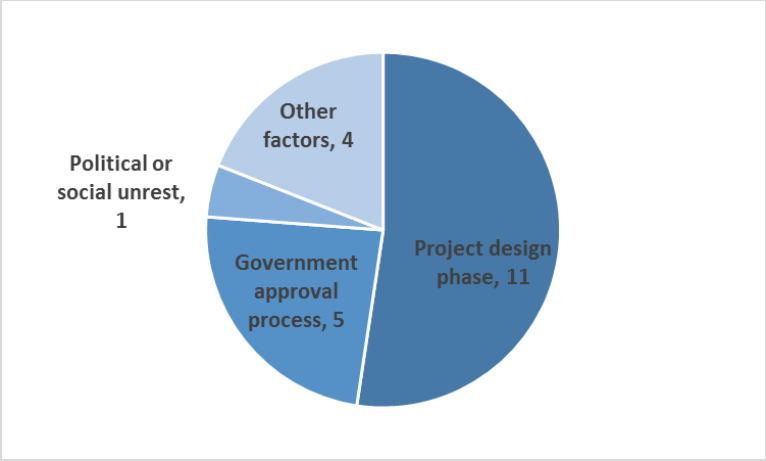
    - In Uganda, the Government has not yet requested AfDB's co-financing for the *130MW Geothermal Development Program.* In addition, national energy sector reprioritization has delayed the *Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net Metering* and the *Wind Resource Map and Pilot Wind Power Development Program.*

- In Honduras, *the Grid-Connected RE Development Support (ADERC) - Transmission Project* has been designed to leverage additional sources, including IDB's and other international resources. As part of the Stand-By Arrangement that Honduras has with the IMF, the amount of money that Honduras can borrow from international financial institutions has been limited. As a result, the loan for the transmission project has been postponed by the Government to 2017.

41. Five other projects identify other factors causing submission delays, and the remaining projects have not clearly stated a reason for the observed delays. Figure 7 breaks down the factors identified. Specific reasons per project and planned remedial actions to expedite project submission can be found in the *SREP Country Portfolios* document.

42. Regarding the MDB approval delays, there is just one project in Vanuatu with more than 9 months pending MDB approval (red zone per the TLS system). The main reason identified by this project is Government restructuring.

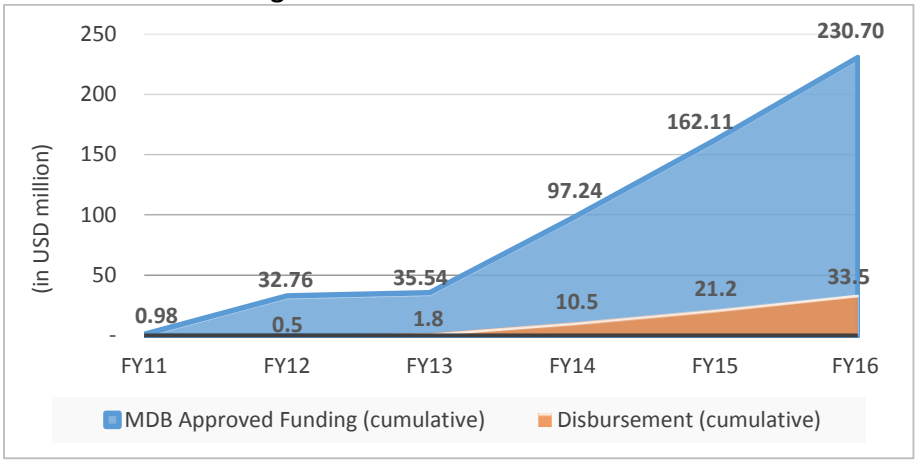
Figure 7: Reasons for delays in projects pending Sub-Committee approval



3.3 Disbursement analysis

43. Disbursements for the SREP were USD 6.59 million during the reporting period. This means that the cumulative disbursement figure grew by 24 percent between January 1 and June 30, 2016, from USD 26.9 million to USD 33.49 million. Figure 8 shows the disbursement trend.

Figure 8: SREP disbursement trend



44. Out of 21 MDB approved projects, 14 are disbursing (four of them are capacity building projects). Two of them (advisory services with IFC on Ethiopia Geothermal Sector Strategy and Regulations and Lighting Ethiopia) are fully disbursed[6].

45. Six projects have deviated from programmed disbursement. Reasons for disbursement delays in these six projects vary: procurement/bidding issues in Maldives and Ethiopia, natural disaster and delays in contract awards in Nepal, Government restructuring and establishment of the project management unit in Honduras. More details on reasons are provided at the *SREP Country Portfolios* document.

4 Results reporting

4.1 Background

46. This section on results reporting is based on 18 MDB-approved projects/programs as of December 31, 2015. It includes a global overview, a results comparison versus previous reporting year and an analysis of core indicators, progress toward results, and enabling environment projects/programs. Considering the early stage of implementation of the SREP portfolio, the report shows for the first time some actual results on core indicators.

47. The SREP core indicators are identified in the Revised SREP Results Framework[7]. Reporting against these indicators is undertaken annually, with 2016 being the third reporting round. The two core indicators for SREP-funded projects are:

[6] IFC disbursements are reported differently in case of (Advisory Services) AS and Investment Services (IS). AS is reported fully disbursed when the funding is approved by IFC; IS is reported fully disbursed when the project is operational.
[7] Revised SREP Results Framework, June 1, 2012

- **Core indicator 1**: Annual electricity output 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 intervention

48. The majority of projects and programs are expected to report on at least one of the two core indicators[8]. 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.

49. 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 available at mid-term or upon completion of the project.

50. The following should be noted while reviewing the results:

- *Reporting Year (RY):* Depending on MDB, the report covers the period from January 1, 2015 to December 31, 2015 or July 1 2015 to June 30 2016. Since the reporting is conducted on an annual basis, the abbreviation RY, or Reporting Year, is used to capture this annual period.

- *Actuals:* Actual (RY16) 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 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. In addition, some co-financing figures may not be reported for confidentiality reasons.

[8] Revised SREP Results Framework, June 1, 2012, para. 16

- *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, 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 CO2eq per GWh).

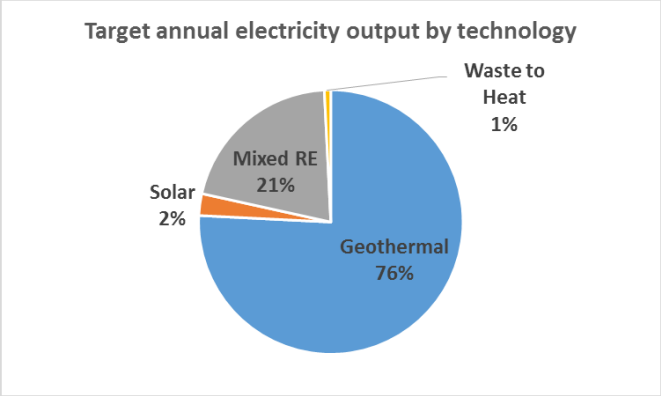
4.2 Global overview

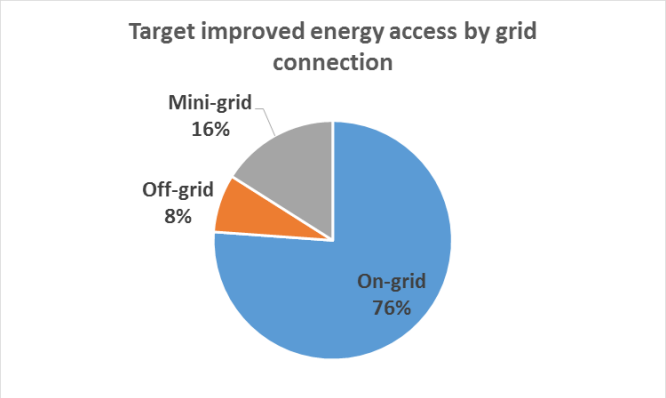
51. Illustration 1 offers an overview of some SREP expected results and actual results (cumulative and for the latest 12-month reporting period). Most of the projects in the portfolio are at an early stage of implementation, hence not reporting on all key parameters:

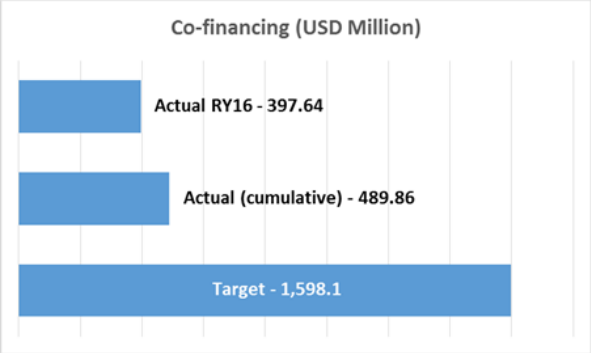
Illustration 1: SREP results global overview (SREP funding USD 168.9 million[9])

	Actual (RY16)	Target
Electricity output (MWh/yr)	276	2,584,369
Improved energy access (people)	7,395	4,922,713
Improved energy access (businesses)	-	300,722
GHG emissions reduced/avoided (tons CO2 eq/yr)	251.3	3,632,829
Installed capacity (MW)	0.9	732.6
Co-financing (USD million)	489.9	1598.1

*GHG reductions/ Electricity output: Targets ANNUAL
*Co-financing/ Installed capacity/ improved energy access: Targets CUMULATIVE







[9] Funding for MDB approved projects, as of December 31, 2015.

52. **Electricity output:** The only project that is reporting on actual electricity produced is the *Self-Supply RE Guarantee Program* in Honduras, with 276 MWh produced and 174 tons of CO_2 equivalent avoided. It is the first SREP project in operation from October 2015, with an solar PV installed capacity of 0.9 MW (see Box 1).

53. The global overview shows a major contribution of geothermal projects to the targeted electricity production. Similarly, 75 percent of targeted energy access improvement is expected to be derived from on-grid connections. This is because three large geothermal on-grid projects in Kenya, Ethiopia, and Armenia are reporting.

54. **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 (see Box 2) and *the Sustainable Rural Energization Program (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination* in Honduras, benefitting 795 people (see Box 3). These projects are described in the section for core indicator 2.

55. **Co-financing:** Ten projects/ programs are reporting co-financing results. Cumulatively, 60 percent of co-financing has come from governments and almost 40 percent from the MDBs, with negligible contributions so far from the private sector, bilaterals and others. Most of the actual RY16 and cumulative co-financing is driven by the Menengai geothermal project in Kenya[10]. This project accounts for 95 percent of total actual cumulative co-financing, considering all projects in the SREP portfolio. This is the only indicator for which actual results were provided in a previous reporting year: RY 2015 actual cumulative co-financing was USD 92.2 million.

56. In addition, some projects are providing relevant information on progress towards results (see Section 4.3.3). Others are enabling environment/capacity building projects, not reporting directly on core indicators (see Section 4.3.4).

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

57. The only project that is reporting on actual electricity produced is *the Self-Supply RE Guarantee Program* in Honduras, with 276 MWh produced. Table 7 shows projects/programs targets related to increased supply of renewable energy. Box 1 highlights the project in Honduras.

[10] The co-financing disbursed for the Menengai Project in Kenya is funding the steam gathering system. This explains why there seems to be a contradiction between actual co-financing figures and capacity installed.

Table 7: Targets of projects/programs related to increased supply of renewable energy

Country	**Project**	**Target** (MWh)
Armenia	Geothermal Exploratory Drilling Project	224,694
Honduras	Self-Supply RE Guarantee Program	45,000
Honduras	Honduras Renewable Energy financing facility	427,000
Kenya	Menengai Geothermal Project	1,182,000
Kenya	Electricity Modernization Project	1,242
Mali	Rural Electrification Hybrid Systems	8,653
Ethiopia	Geothermal Sector Development Project	552,000
Nepal	Extended Biogas Program	20,400
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	25,228
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	27,600
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	32,610
Tanzania	Tanzania Mini-grids project	37,942
Total		2,584,369

Box 1: Self-supply renewable energy guarantee program

Country: *Honduras*
Total funding[1]***:*** *USD 5.5 million*
Annual electricity output target: *45,000 MWh/yr*
Achieved results: *276 MWh/yr*

Photo Credit: Inversiones Materiales S.A. de C.V

This program is in operation since October 2015, and while still in its early phase, it is the first SREP project that has started to deliver actual results on annual electricity output.

Small-scale self-supply renewable energy systems are widely regarded as low-cost cost opportunities to mitigate climate change, but are "still hard to reach" so risk mitigation and technical cooperation resources are needed to support first movers.

The program aims to provide risk-sharing instruments (first-loss guarantees mainly, and co-financing resources in certain cases) for loans from the IDB Group and/or other financial institutions, improving the credit profile of the projects and allowing their implementation through access to appropriate finance.

The IDB Group expects to support approximately USD 40 million of investment in self-supply renewable energy projects. These will help establish local engineering capacity, catalyze the development of supply chains for equipment procurement, and demonstrate the market potential (biogas, small-scale biomass and solar PV) to local financial institutions.

It may also support new business models such as third-party finance of projects within companies' facilities. The program will directly support at least 10 companies to supply their own renewable energy.

4.4 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

58. Only 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 and the Sustainable Rural Energization Program (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination in Honduras, benefitting 795 people. Boxes 2 and 3 highlight these projects.

59. Actual results for businesses are still all zero. Table 8 does not show targets for community services benefited, as they have not been identified by any of the projects reporting. Regarding the people benefited, a breakdown by gender can be found in Annex 4.

Table 8: Targets of projects/programs related to improved energy access

Country	Project	Target people	Target businesses
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	375,000	300
Kenya	Menengai Geothermal Project	2,500,000	300,000
Kenya	Electricity Modernization Project	20,250	n.a.
Mali	Rural Electrification Hybrid Systems	681,000	n.a.
Ethiopia	Geothermal Sector Development Project	1,100,000	n.a.
Nepal	Extended Biogas Program	n.a	400
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	143,350	n.a.
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	30,820	n.a.
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	38,605	n.a.
Tanzania	Tanzania Mini-grids project	33,688	n.a.
Total		4,922,713	300,700

n.a.: not applicable

Box 2: South Asia Sub regional Economic Cooperation Power System Expansion Project

Country: *Nepal*
Total funding: *USD 11.8 million*
Target people benefited: *143,350*
Achieved results: *6,600*

Photo Credit: ADB

The project will scale up electricity access using renewable energy-based mini-grids systems, and ensure sustainable operations through capacity development. The project is providing access to electricity and facilitating productive end uses of energy at the "bottom of the pyramid" in rural locations, which are well beyond the "last mile" of the grid.

About 1,500 households, or 6,600 people, are already benefiting from installation of lighting and mobile radio charging system, displacing diesel and gasoline use in generator sets and kerosene for lighting.

Two packages have been awarded for lighting and mobile/radio charging systems (USD 0.09 million) and wind mast (USD 0.037million). Draft bidding documents for one sample mini hydro subproject and one solar/wind hybrid subproject are being finalized. Gender highlights for this project are described in Section 5.

Box 3: Sustainable Rural Energization Program (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination

Country: *Honduras*
Total funding: *USD 2.95 million*
Target people benefited: *375,000*
Achieved results: *795*

Photo credit: Fundación VIDA/Profogones

The program will benefit rural communities, providing high-efficiency, wood burning cook stoves for 70,000 households, which will reduce consumption and cost of firewood for project beneficiaries by 60 percent, and improve living standards.

The first cook stoves were delivered on December 18, 2015, so figures are still low in the reporting period.

In addition to convenience and reduced wood consumption, the cook stoves will provide health benefits, particularly for women and children who are presently exposed to harmful smoke and gases produced by inefficient burning of firewood in traditional stoves. Women and children will also spend less time collecting and processing firewood, which will increase opportunities to work, attend school, or participate more actively in community affairs.

The program will generate experience in providing models for mass distribution of improved stoves that will be replicable in the other Central American countries.

4.5 Working towards results: geothermal projects

60. In Kenya, the Menengai Geothermal project aims to meet Kenya's rapidly increasing demand for power by developing the Menengai steam field for 400 MW power. However, a recent feasibility study concluded that the actual well potential of the site for sustainable production is about of 150 MW gross for 25 years at a total mass extraction flow rate of 1,180 tons/h.

61. Thirty-two wells have been drilled and 54 people have been trained on drilling technologies, geoscience, donor procurement, and finance. The Government of Kenya via is planning first-stage development of 100 MW power generation by end 2016. Given the overall progress of the project, this objective is expected to be achieved.

Photos Credit: AfDB

62. In Ethiopia, two geothermal wells have been drilled and tested under the *Geothermal Sector Development Project*. The preparation of Aluto site is ongoing, with the construction of storage warehouses, a water reservoir, and access roads. The project will confirm geothermal capacity for power generation, but the construction of the power plant is not within the scope of this project.

4.6 Enabling environment projects

63. There are five MDB approved 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.

64. *Geothermal Sector Strategy and Regulations, Ethiopia:* The government of Ethiopia moved ahead with the design of a new public sector institution that will lead the development of the sector and has also proceeded with the drafting of the primary legislation (law) that will provide the high-level framework for the development of the sector. These developments indicate the full endorsement of the geothermal strategy developed by IFC in the first phase of the project and that the government is fully committed.

65. The second phase of the project (i.e., the implementation of the activities that were outlined during the development of the strategy, in phase 1) was started in earnest with the finalization of the selection of consultants to support this work and the kick-off workshop taking place in December 2015. The key individuals were present, including representatives from the Ministry of Water, Industry and Energy (MoWIE) and Ethiopian Electric Power (EEP). The kick-off workshop was very useful in providing an overview of the key issues to be addressed by the regulations and their relative priorities, and to provide additional feedback to the government regarding the geothermal proclamation/law.

66. *Lighting Ethiopia:* Sale of quality assured solar products in this reporting period was 416,782 units. This represents an increase on the previous reporting period but, given expected fluctuations in the market, this increase should not be viewed as a reliable trend.

67. The project continues to focus on market spoilage and regulatory issues. During this period, a mandatory quality standard (based on the Lighting Global Quality Framework) for off-grid solar products was developed and adopted. This standard is a vital foundation for all other regulatory measures.

68. 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. The solar products distribution partners are involved in the development of the consumer education campaign and will be fully engaged in the implementation of the campaign. Trained technicians are being used to train retailers that can then be linked to the solar product companies or their local partners.

69. *Tanzania Mini-grids project:* The project was officially launched in October 2015. The launch event was a success with more than 70 participants from the public and private sectors attending.

Preliminary steps were initiated for the technical standards and specifications for mini-grids in Tanzania. The standards will facilitate mini-grid project development that meets supply quality and reliability standards. This is necessary to create the business environment that will allowing for the necessary conditions for the private sector to develop and implement mini-grid projects.

70. An advisory working group composed of key points of contact in government institutions was created. The main purpose of the advisory group is to facilitate decision-making among key stakeholders, avoid the duplication of efforts and support the quick preparation and adoption of the technical standards and specifications for mini-grids in Tanzania, as well as the development of the information hub.

71. 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 that is expected to take place in the next reporting

period. In addition, the team has started to identify investors/financiers interested (or potentially interested) in the mini-grid space in Tanzania.

72. *Strengthening the Renewable Energy Policy and Regulatory Framework Program (FOMPIER), Part I, Honduras:* the technical cooperation is currently being redesigned, taking into account the changes in the legal system due to the implementation of the Power Sector Framework Law. The program will support the preparation and implementation of new regulation in accordance with the new law. It will also support the government in its effort to continue increasing the share of renewable energy considering the wind and solar capacity that has already been achieved.

5 Cross-cutting themes

5.1 Gender

73. The SREP portfolio of investment plans and projects approved by the Sub-Committee from January 1 to June 30, 2016 was assessed regarding program progress on gender "quality at entry." The assessment used three scorecard indicators regarding presence of 1) sector-specific gender analysis, 2) gender-disaggregated indicators, and 3) women-specific activities were reviewed for each investment plan and project. Figures were compared to baseline performance of the SREP portfolio as of June 30, 2014.

74. SREP performance on the three gender indicators was strong relative to the historical baseline. The single SREP investment plan approved during the reporting period included sector-specific gender analysis, gender-disaggregated indicators, and activities specifically targeted at women (compared to baselines respectively of 64 percent, 72 percent, and 45 percent). In the case of SREP projects approved during the period, sector-specific gender analysis was undertaken in 100 percent of the projects. These also all have gender-disaggregated indicators and specific activities aimed at women (compared to baselines of 47 percent, 80 percent and 40 percent respectively).

75. ADB has completed a gender review of its CIF portfolio across CTF, PPCR, and SREP.[11] The review found good levels of gender mainstreaming across the programs, though noted that in some cases the gender co-benefits and women-targeted activities were not directly linked to the main climate action objectives of the projects. The review called for preparation of technical guidance on gender in key sectors. The CIF Administrative Unit is now preparing these sector-specific guidance notes. For example, a note on gender and renewable energy livelihoods has also been prepared by CIF Administrative Unit, for final publication by December 2016. This note highlights key sector entry points and good practices in gender mainstreaming across the project cycle.

[11] https://www-cif.climateinvestmentfunds.org/sites/default/files/knowledge-documents/gender-climate-finance.pdf

Box 4: Gender highlights from SREP projects approved from January to June 2016

The South Asia Subregional Economic Cooperation Power System Expansion Project: Rural Electrification through Renewable Energy, supported by ADB, fosters development of mini-grid renewable energy systems, both mini-hydroelectric power plants, and mini-grid solar or solar/wind hybrid systems in Nepal. It also funds capacity development of the Alternative Energy Promotion Center (AEPC), which has a strong rural livelihoods outreach and technology transfer mandate supporting productive uses of energy, particularly among women, including those from low income tiers, ethnic minority groups and female-headed households.

The project targets 20 percent of electricity generated being consumed by productive uses of energy, e.g., in agriculture and rural enterprise. The project has a Gender Action Plan which outlines activities to ensure gender mainstreaming. The mini-grid component will provide technical training on construction, O&M, and customer service, of which 40 percent participation is intended for women. Community-based organizations will be mobilized for social and environmental community development, ensuring participation of women and disadvantage groups and support to the implementation of AEPC Social Mobilization Guidelines on Women's Empowerment.

End-user awareness raising activities of newly-electrified households will target women consumers, with a focus on energy-related livelihood opportunities and safe and efficient use of energy. Women's small enterprise development will be supported through a business incubator program, with a target of at least 30 percent increase in female-owned enterprises. Project impacts on reducing women's time poverty will also be assessed through baseline and ex post surveys on water and fuel collection times, and time spent by women on productive and leisure activities.

The Tanzania Renewable Energy for Rural Electrification project, supported by the World Bank, seeks to increase electricity access in rural areas and scale up renewable energy in rural areas, including with strengthened institutional capacity. Project preparation has included baseline surveys around energy access rates of male and female-headed households. They find that in rural areas, there is no gender disparity in access rates between household types likely due to low access rates overall. Urban areas do show such a disparity. The project is designed to support and monitor these trends to ensure that increased rural energy access rates do not lead to gender disparities in connections to the grid, Small Power Producer (SPP) grids, solar photovoltaics (PV), and other energy equipment uptake. Awareness raising and outreach in this regard is planned, in line with the Rural Energy Agency's goals around gender equality.

The Solomon Islands, the Solar Power Development Project, supported by ADB, will increase renewable energy generation in five of the country's eight grids, replacing existing diesel generation with solar power hybrid grids, including battery storage. A Gender Action Plan has been prepared, which includes women's participation in project consultations and in project-related employment and training (including on the job and course accreditation in the areas of construction, solar power plant operation, and financial management). Gender awareness training program among project staff will be provided to enhance their capacity and integrate gender perspectives into project operations. Beneficiary data from the project will be gender-disaggregated.

5.2 Knowledge management

5.2.1 Update on knowledge sharing on mini-grids

76. A five-day roundtable event was organized in Nairobi from May 23 to 27, 2016, by the CIF and the World Bank's Energy Sector Management Assistance Program (ESMAP) on "Upscaling Mini-Grids for Least Cost and Timely Access to Electricity." The event brought together more than 200 representatives from 29 countries to discuss ways to scale up mini grids as one of the solutions to meet energy demand in their countries.

77. This was the first time the SREP African countries (eight SREP African countries with a total 17 SREP governmental representatives) had the opportunity to gather in person to share the status of their activities supporting mini-grids. Several countries were at the very beginning of the SREP process, while others were already implementing their mini-grid projects. The roundtable provided an excellent forum for peer-to-peer learning. Three main themes were discussed:

- **Regulatory Framework to Support Mini-Grids**: The most pressing issue for most participants was tariff regulation for retail sales or wholesale sales to the utility.
- **What Happens When the Grid Arrives?:** Participants acknowledged that, in order to attract private investment, governments need to provide certainty about compensation for the value of assets or continued operation of the mini-grid system under viable wholesale or retail rates.
- **Building the Ecosystem for Mini Grid Markets and strengthening Local Capacity:** to accelerate deployment and maximize the economic benefits of mini grid deployment, SREP countries should strive to create an ecosystem to build local capacity, e.g., local development and construction capacity, business management skills, manufacturing, commercial lenders, among others.

78. A second roundtable is planned in Myanmar during the first week of February 2017 and will expand participation to bring together all SREP countries with ongoing or planned mini-grid activities.

5.2.2 Update on the special initiative on Multi-Tier Access Framework

79. The special initiative, in partnership with ESMAP, as one of the tools to measure progress toward reaching the goal of universal access to modern energy services, is targeting at least ten SREP pilot countries. The current list includes Bangladesh, Cambodia, Ethiopia, Haiti, Honduras, Liberia, Kenya, Nepal, Rwanda, Tanzania, Uganda, and Zambia.

80. Work has started already on the ground with surveys being carried out in Rwanda and Kenya. Data availability for these countries is expected by February 2017. The procurement phase has been concluded in Honduras, Ethiopia, Bangladesh and Liberia where the survey

preparation will be starting soon and data are expected by May/June 2017. Procurement phase has been initiated in Nepal and dialogue is ongoing with Zambia and Cambodia

Annex 1: Resource availability

SREP TRUST FUND - RESOURCES AVAILABLE for COMMITMENTS *Inception through June 30, 2016* *(USD millions)*		As of June 30, 2016
Cumulative Funding Received		
Contributions Received		
Cash Contributions		407.8
Unencashed Promissory Notes	a/	334.5
Total Contributions Received		742.3
Other Resources		
Investment Income		10
Other Income		-
Total Other Resources		9.9
Total Cumulative Funding Received (A)		**752.2**
Cumulative Funding Commitments		
Projects/Programs		299.0
MDB Project Implementation and Supervision services (MPIS) Costs		15.0
Cumulative Administrative Expenses		13.6
Total Cumulative Funding Commitments		327.6
Project/Program Cancellations	b/	(28.2)
Net Cumulative Funding Commitments (B)		**299.4**
Fund Balance (A - B)		**452.9**
Currency Risk Reserves	c/	**(48.81)**
Unrestricted Fund Balance (C)		**404.06**
Anticipated Commitments (FY17-FY21)		
Program/Project Funding and MPIS Costs		554.9
Projected Administrative Budget	d/	42.6
Total Anticipated Commitments (D)		**597.5**
Available Resources (C - D)		**(193.5)**
Potential Future Resources (FY17-FY21)		
Pledges	e/	2.4
Funding Provisional Account		-
Contributions not yet paid		-
Release of Currency Risk Reserves	c/	48.8
Projected Investment Income	f/	22.4
Total Potential Future Resources (D)		**73.6**
Potential Available Resources (C - D + E)		**(119.8)**

a/ This amount includes USD equivalent of GBP 241.3 million from The UK and USD 9 million from The Netherlands.

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

c/ 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.

d/ Projected administrative budget includes resources for administrative services provided by the CIF AU, Trustee and MDBs.

e/ This amount represents the USD equivalent of SEK 20 million

f/ Investment income on undisbursed funds across all SCF subprograms as projected by the Trustee, and notionally allocated by the CIF AU to each subprogram according to the proportion of total Projected Administrative Budget associated with the corresponding program/subprogram.

Annex 2: Expected project submission for the remaining pipeline

IP/ PSSA	COUNTRY	PROJECT TITLE	MDB	Public/ Private	Grant	Non-Grant	SC Expected Submission Date
PSSA	Mali	Segou Solar Park	AfDB	Private	-	25.00	Oct-16
IP	Vanuatu	Rural Electrification Project	IBRD	Public	5.95	-	Dec-16
IP	Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	Public	4.00	-	Dec-16
IP	Honduras	Sustainable Rural Energization(ERUS)-Part II: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	IDB	Public	0.52	-	Dec-16
IP	Rwanda	Renewable energy Fund	IBRD	Public	21.40	27.50	Jan-17
IP	Bangladesh	Off-Grid Solar PV-Mini Grids	ADB	Public	5.00	-	Jan-17
IP	Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	Public	24.00	-	Jan-17
IP	Tanzania	Geothermal Development	AFDB	Public	24.30	0.25	Feb-17
IP	Nicaragua	Geothermal Development Project	IBRD	Public	8.25	6.75	Mar-17
IP	Armenia	Development of Utility-Scale Solar PV	IBRD	Public	-	9.00	Mar-17
IP	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including technical assistance)	IFC	Private	0.50	15.00	Mar-17
PSSA	Kenya	Kopere Solar Park	AfDB	Private	-	11.60	Mar-17
IP	Haiti	Renewable Energy and Access for All	IBRD	Public	13.00	-	Mar-17
IP	Haiti	Renewable Energy for the Metropolitan Area	IBRD	Public	8.00	-	Mar-17
IP	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including resources assessment)	IBRD	Public	1.75	26.25	Apr-17
IP	Bangladesh	Development Support to Waste-To-Energy	IBRD	Public	0.30	-	Apr-17
IP	Nicaragua	Integral Development of Rural Areas Project	IDB	Public	7.50	-	Apr-17
IP	Mongolia	Upscaling Rural Renewable Energy - Solar PV	IBRD	Public	12.40	-	Apr-17
IP	Honduras	Sustainable Rural Energization (ERUS)	IBRD	Public	8.31	-	Abr-17
PSSA	Nepal	ABC Business Models for Off-Grid Energy Access Nepal	IBRD	Public	6.00	2.00	May-17
IP	Ghana	Utility-scale Solar PV/Wind Power Generation	IFC	Private	-	10.00	Jun-17
IP	Cambodia	Accelerating Solar Power through Private Sector (Rooftop Solar Systems and Utility-scale Solar Farm)	ADB	Private	3.00	11.00	Jun-17
IP	Cambodia	Biomass Power Project	ADB	Private	-	5.00	Jun-17
PSSA	Kenya	Olkaria IV Geothermal Power Plant	AFDB	Private	0.4	20.00	Jun-17
IP	Kenya	Menengai Geothermal Project	AFDB	Public	10.50	4.50	Jun-17

IP	Solomon Islands	Renewable Energy Access Project	IBRD	Public	6.55	-	Jun-17
IP	Tanzania	Rural Electrification Project	IBRD	Public	-	10.00	Jun-17
IP	Liberia	Renewable energy for Electrification in Eastern Liberia Project-Stand-Alone PV	AFDB	Public	23.50	-	Jun-17
IP	Mali	Solar PV IPP	AFDB	Private	-	11.05	Jun-17
IP	Cambodia	Solar Energy Development (Solar Home Systems and Solar Mini-grids)	ADB	Public	5.00	1.00	Jul-17
IP	Ethiopia	Assela Wind Farm Project	AfDB	Public	18.30	-	Jul-17
IP	Cambodia	Policy Support and Public Awareness	ADB	Public	3.00	-	Aug-17
IP	Mali	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)	AFDB	Public	8.70	-	Sep-17
IP	Mongolia	Upscaling Rural Renewable Energy	ADB	Public	14.60	-	Oct-17
IP	Armenia	Development of Utility-Scale Solar PV	ADB	Public	-	17.00	Oct-17
IP	Uganda	130MW Geothermal Development Program	AFDB	Public	4.30	27.50	Dec-17
IP	Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net Metering	AFDB	Public	7.10	-	Dec-17
IP	Uganda	Wind Resource Map and Pilot Wind Power Development Program	AFDB	Public	4.93	-	Dec-17
IP	Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility	IFC	Private	-	2.00	Dec-17
IP	Maldives	Waste-to-Energy Thilafushi	IFC	Private	4.00	-	Dec-17
IP	Haiti	RE for the Port-Au-Prince Metropolitan Area	IFC	Private	2.00	-	Dec-17
IP	Ghana	RE Mini-Grids and Stand Alone Solar PV Systems	AFDB	Public	16.60	-	Feb-18
IP	Ghana	Solar PV Based Net Metering with Battery Storage	AFDB	Public	11.89	-	Feb-18
IP	Haiti	Off-Grid Electricity Services for productive, Social and Household Uses Project	IFC	Private	-	7.00	Jun-18
IP	Uganda	130MW sGeothermal Development Program	IFC	Private	2.00	-	Jun-18

Annex 3: Projects exceeding 24 months in the pipeline

COUNTRY	PROJECT TITLE	MDB	IP Endorsement	Targeted SC Approval Date	IP to Committee Approval
Kenya	Menengai Geothermal Project[12]	AFDB	Sep-11	Jun-17	70
Mali	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)	AFDB	Nov-11	Sep-17	70
Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility	IFC	Mar-12	Dec-17	69
Mali	Solar PV IPP	AFDB	Nov-11	Jun-17	67
Honduras	Sustainable Rural Energization (ERUS)	IBRD	Nov-11	Abr-17	65
Ethiopia	Assela Wind Farm Project	AfDB	Mar-12	Jul-17	64
Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	Nov-11	Dec-16	61
Honduras	Sustainable Rural Energization(ERUS)-Part II: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	IDB	Nov-11	Dec-16	61
Maldives	Waste-to-Energy Thilafushi	IFC	Oct-12	Dec-17	61
Tanzania	Rural Electrification Project	IBRD	Sep-13	Jun-17	45
Liberia	Renewable energy for Electrification in Eastern Liberia Project-Stand-Alone PV	AFDB	Oct-13	Jun-17	43
Nepal	ABC Business Models for Off-Grid Energy Access Nepal	IBRD	Oct-13	May-17	42
Tanzania	Geothermal Development	AFDB	Sep-13	Feb-17	41
Kenya	Kopere Solar Park	AfDB	Oct-13	Mar-17	40
Armenia	Development of Utility-Scale Solar PV	ADB	Jun-14	Oct-17	39
Haiti	Off-Grid Electricity Services for productive, Social and Household Uses Project	IFC	May-15	Jun-18	37
Mali	Segou Solar Park	AfDB	Oct-13	Oct-16	35
Kenya	Olkaria IV Geothermal Power Plant	AFDB	Jun-14	Jun-17	35
Solomon Islands	Renewable Energy Access Project	IBRD	Jun-14	Jun-17	35
Ghana	RE Mini-Grids and Stand Alone Solar PV Systems	AfDB	May-15	Feb-18	33
Ghana	Solar PV Based Net Metering with Battery Storage	AfDB	May-15	Feb-18	33
Armenia	Development of Utility-Scale Solar PV	IBRD	Jun-14	Mar-17	32
Haiti	RE for the Port-Au-Prince Metropolitan Area	IFC	May-15	Dec-17	31
Uganda	130MW Geothermal Development Program	IFC	Nov-15	Jun-18	31
Ghana	Utility-scale Solar PV/Wind Power Generation	IFC	May-15	Jun-17	25
Uganda	130MW Geothermal Development Program	AFDB	Nov-15	Dec-17	25
Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net Metering	AFDB	Nov-15	Dec-17	25
Uganda	Wind Resource Map and Pilot Wind Power Development Program	AFDB	Nov-15	Dec-17	25

[12] Originally an IBRD project, it is in the AfDB pipeline since 2015

Annex 4. 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				
				Actual	Target	Women		Men		Target Businesses
						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.
Ethiopia	Geothermal Sector Development Project	24.5	IBRD	0	552,000	0	550,000	0	550,000	n.a.
Ethiopia	Geothermal Sector Strategy and Regulations*	1.5	IFC	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.
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.
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	2.95	IDB	n.a.	n.a.	393	187,500	402	187,500	300
Honduras	Self-Supply RE Guarantee Program	5.5	IDB	276	45,000	n.a.	n.a.	n.a.	n.a.	n.a.
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB	0	427,000	n.a.	n.a.	n.a.	n.a.	22
Kenya	Menengai Geothermal Project	25	AfDB	0	1,182,000	0	1,250,000	0	1,250,000	300,000
Kenya	Electricity Modernization Project	7.5	IBRD	0	1,242	0	10,125	0	10,125	n.a.
Mali	Rural Electrification Hybrid Systems	15.4	IBRD	0	8,653	0	343,224	0	337,776	n.a.
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.
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.
Nepal	Extended Biogas Program	7.9	IBRD	0	20,400	n.a.	n.a.	n.a.	n.a.	n.a.
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	IBRD	0	32,610	0	19,303	0	19,303	n.a.
Maldives	Preparing Outer Islands for Sustainable Energy Development Program(POISED)	12.7	ADB	0	27,600	0	15,410	0	15,410	n.a.
Pacific Region	Sustainable Energy Industry Development Project*	1.9	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tanzania	Tanzania Mini-grids project	4.95	IFC	0	37,942	0	33,688	0	33,688	n.a.

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

Annex 5: List of projects approved by the Sub-Committee[13]

Project code	Country	Project title
IP-ET-001	Ethiopia	Geothermal Sector Development Project (GSDP)
PS-ET-003	Ethiopia	Geothermal Sector Strategy and Regulations
PS-ET-005	Ethiopia	Lighting Ethiopia
IP-HN-006	Honduras	Strengthening the Renewable Energy Policy and Regulatory Framework Program (FOMPIER), Part I
PS-HN-008	Honduras	Grid-Connected RE Development Support (ADERC)
PS-HN-011	Honduras	Sustainable Rural Energization (ERUS) – Part I & III: Promoting Sustainable Business Models for Clean Cook stoves Dissemination
IP-KE-012	Kenya	Menengai Geothermal Development Project
IP-KE-014	Kenya	Electricity Modernization Project
IP-ML-016	Mali	Rural Electrification Hybrid Systems
IP-NP-022	Nepal	South Asia Sub-regional Economic Cooperation Power System Expansion Project: Rural Electrification Through Renewable Energy
IP-NP-023	Nepal	Biogas Extended Program
IP-MV-024	Maldives	Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program
IP-MV-025	Maldives	Preparing Outer Island Sustainable Electricity Development Project
IP-MV-025	Maldives	Technical Assistance: Capacity Development of the Maldives Energy Authority
IP-TZ-028	Tanzania	Rural Electrification Expansion Project
PS-TZ-029	Tanzania	Mini-Grids Project
IP-LR-031	Liberia	Renewable Energy for Electrification in North and Center Liberia Project-Mini Grids
IP-ML-033	Mali	Project for Scaling Up Renewable Energy in Mali
IP-AM-034	Armenia	Geothermal Exploratory Drilling Project (GEDP)
IP-PC-042	Pacific Region	Sustainable Energy Industry Development Project
PS-HN-501	Honduras	Strengthening of the ADERC H-REFF in Honduras
PS-HN-603	Honduras	Self-Supply Renewable Energy Guarantee Program

[13] As analyzed in figure 5

Annex 6: Projects Pending Sub-Committee Approval[14]

PS-AM-039	Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support
IP-AM-035	Armenia	Development of Utility-Scale Solar PV
IP-AM-036	Armenia	Development of Utility-Scale Solar PV
IP-BD-061	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including resources assessment)
PS-BD-062	Bangladesh	Grid Connected Renewables: Investment in Utility-scale solar, wind and rooftop solar (including technical assistance)
IP-BD-063	Bangladesh	Off-Grid Solar PV-Mini Grids
IP-BD-064	Bangladesh	Off-Grid Solar PV-Solar Irrigation
IP-BD-065	Bangladesh	Development Support to Waste-To-Energy
IP-KH-071	Cambodia	Solar Energy Development (Solar Home Systems and Solar Mini-grids)
PS-KH-072	Cambodia	Accelerating Solar Power through Private Sector (Rooftop Solar Systems and Utility-scale Solar Farm)
PS-KH-073	Cambodia	Biomass Power Project
IP-KH-074	Cambodia	Policy Support and Public Awareness
IP-ET-004	Ethiopia	Assela Wind Farm Project
PS-ET-5B	Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility
IP-GH-044	Ghana	RE Mini-Grids and Stand Alone Solar PV Systems
IP-GH-045	Ghana	Solar PV Based Net Metering with Battery Storage
PS-GH-046	Ghana	Utility-scale Solar PV/Wind Power Generation
IP-HT-047	Haiti	Renewable Energy and Access for All
PS-HT-048	Haiti	RE for the Port-Au-Prince Metropolitan Area
PS-HT-049	Haiti	Off-Grid Electricity Services for productive, Social and Household Uses Project
IP-HT-050	Haiti	Renewable Energy for the Metropolitan Area
IP-HN-007	Honduras	Grid-Connected RE Development Support(ADERC)-Transmission
IP-HN-010	Honduras	Sustainable Rural Energization(ERUS)
PS-HN-011	Honduras	Sustainable Rural Energization(ERUS)-Part II: Promoting Sustainable Business Models for Clean Cookstoves Dissemination
IP-KE-013	Kenya	Menengai Geothermal Project
PS-KE-503	Kenya	Kopere Solar Park
PS-KE-601	Kenya	Olkaria IV Geothermal Power Plant
IP-LR-032	Liberia	Renewable energy for Electrification in Eastern Liberia Project-Stand-Alone PV
PS-MV-026	Maldives	Waste-to-Energy Thilafushi
PS-ML-015	Mali	Solar PV IPP
IP-ML-017	Mali	Development of Micro/Mini Hydroelectricity for Rural Electrification in Mali (PDM-Hydro)
PS-ML-502	Mali	Segou Solar Park
IP-MN-055	Mongolia	Upscaling Rural Renewable Energy
IP-MN-056	Mongolia	Upscaling Rural Renewable Energy - Solar PV

[14] As of August 2016, and as analyzed in figure 6

IP-MN-057	Mongolia	TA-Strengthening Renewable Energy Regulations
IP-NP-504	Nepal	ABC Business Models for Off-Grid Energy Access Nepal
IP-NI-053	Nicaragua	Geothermal Development Project
IP-NI-054	Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement Program under the PINIC
IP-NI-075	Nicaragua	Integral Development of Rural Areas Project
IP-RW-058	Rwanda	Renewable energy Fund
IP-SB-037	Solomon Islands	Renewable Energy Access Project
IP-TZ-027	Tanzania	Geothermal Development
IP-TZ-030	Tanzania	Rural Electrification Project
IP-UG-066	Uganda	130MW Geothermal Development Program
PS-UG-067	Uganda	130MW Geothermal Development Program
IP-UG-068	Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net Metering
IP-UG-070	Uganda	Wind Resource Map and Pilot Wind Power Development Program
IP-VU-040	Vanuatu	Rural Electrification Project