Climate Investment Funds

SREP/SC.22/3 January 16, 2020

Meeting of the SREP Sub-Committee Nairobi, Kenya March 2020

Agenda 3

SREP OPERATIONAL AND RESULTS REPORT

PROPOSED DECISION:

The SREP Sub-Committee reviewed the document, SREP/SC.22/3, *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 SREP Sub-Committee appreciates the analysis conducted by the CIF Administrative Unit, in collaboration with the MDBs, on achievements, resource availability, pipeline review, and portfolio updates.

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1 Introduction

- 1. The Scaling up Renewable Energy Program in Low Income Countries (SREP) of the Climate Investment Funds (CIF) aims to demonstrate the economic, social, and environmental viability of low-carbon development pathways in the energy sector by creating new economic opportunities and increasing energy access through the use of renewable energy.
- 2. This report consists of the semi-annual operational report for the reporting period of January 1 to June 30, 2019 (unless otherwise indicated) and the annual results report for the 2019 reporting year (RY2019).¹ The report provides an update on SREP operations; a portfolio analysis of the SREP-funded programs and projects under the endorsed investment plans and SREP Private Sector Set-Aside (PSSA); a summary of activities related to gender, risk, and knowledge management; and details on the results of the SREP projects under implementation.
- 3. The following annexes are included in this report: Annex 1: Resource availability, Annex 2: SREP pipelines, Annex 3: Summaries of results, Annex 4: Disbursements by project, and Annex 5: Project implementation status. Country-level information and updates will be provided in a separate information document, <u>SREP Country Portfolios</u>.

2 Strategic issues

2.1 Overview of SREP implementation

- 4. SREP was launched in 2010 as a pilot program in six countries² with approximately USD 300 million in pledges and contributions. Over time, the number of countries has increased with the availability of additional resources. In 2012, six new pilots (seven countries) were added,³ and in 2014, the SREP Sub-Committee agreed to select another 14 countries to join SREP.⁴ SREP now consists of 27 pilot countries,⁵ while the total amount of SREP resources has increased to approximately USD 750 million.
- 5. The initial six countries, with the support of the MDBs, developed and submitted their investment plans for endorsement between 2011 and 2012. Subsequently, the additional six pilots, with the exception of Yemen, also submitted their investment plans. Among the 14 new countries selected in 2014, 11 countries had developed investment plans that were endorsed by the Sub-Committee between 2015 and 2019.

¹ Depending on the MDB, the report year covers the period from January 1, 2018 to December 31, 2018 or from July 1, 2018 to June 30, 2019.

² The initial six pilot countries are: Ethiopia, Honduras, Kenya, Maldives, Mali, and Nepal.

³ These countries were previously on a reserve list: Armenia, Liberia, Mongolia, Pacific region (Solomon Islands and Vanuatu), Tanzania, and Yemen.

⁴ The 14 new countries are: Bangladesh, Benin, Cambodia, Ghana, Haiti, Kiribati, Lesotho, Madagascar, Malawi, Nicaragua, Rwanda, Sierra Leone, Uganda, and Zambia.

⁵ Of the 27 countries, 23 countries have endorsed investment plans.

 To date, the SREP Sub-Committee has endorsed investment plans for 23 pilot countries with a total indicative allocation of USD 810 million and seven project concepts under SREP PSSA with a total indicative allocation of USD 92.4 million. Figure 1 provides a timeline of key milestones.



Figure 1: SREP timeline with key milestones

7. Implementation progress varies among the pilot countries. Overall, about 89 percent of the available SREP resources has been approved by the SREP Sub-Committee. Figures 2 and 3 show trends in SREP funding approvals by the SREP Sub-Committee and MDBs over time.



Figure 2: SREP Sub-Committee project approvals by fiscal year (with projections for FY20-22)



Figure 3: SREP funding approval rates by fiscal year (with projections for FY20-22)

2.2 Resource availability

8. As of September 30, 2019, SREP had an unrestricted fund balance after administrative budget reserves of USD 59.4 million (see Table 1 and Annex 1). Total anticipated commitments were USD 153.2 million, including projects and programs in the sealed and reserve pipeline, project preparation grants (PPGs), and MDB project implementation services (MPIS). As of September 30, 2019, SREP has a shortfall of USD 90.3 million (USD 68.1 million in grant and USD 22.2 million in non-grant) if all projects in the sealed and reserve pipelines are submitted.

		Total	Grant	NonGrant
Unrestricted Fund Balance (A)		59.4	28.1	31.3
Remaining Anticipated Commitments (FY19-FY21) (B)				
Program/Project Funding and MPIS Costs		149.7	96.2	53.5
Available Resources (A - B)		(90.3)	(68.1)	(22.2)
Potential Future Resources (FY19-FY21) (C)				
Release of Currency Risk Reserves	a/	17.2	3.7	13.6
Potential Available Resources (A - B + C)		(73.0)	(64.4)	(8.6)

Table 1: Summary of SREP resource availability: sealed and reserve pipeline

(USD million, as of September 30, 2019)

a/ 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.

Note: The Unrestricted Fund Balance does not yet include the new contributions from Switzerland (USD 16 million) announced in December 2019.

9. For planning purposes, the CIF Administrative Unit and the MDBs develop a sealed pipeline which matches the available resources for programming, including potential resources from the release of the currency risk reserves. Annex 2 provides an updated sealed pipeline as well as a reserve pipeline. The sealed pipeline has been kept under review and shared with the SREP Sub-Committee periodically. Table 2 provides a scenario of resource availability that considers only the sealed pipeline.

Table 2: Summary of SREP resource availability: sealed pipeline

		Total	Grant	NonGrant
Unrestricted Fund Balance (A)		59.4	28.1	31.3
Remaining Anticipated Commitments (FY19-FY21) (B)				
Program/Project Funding and MPIS Costs		56.5	19.5	37.0
Available Resources (A - B)		2.9	8.5	(5.7)
Potential Future Resources (FY19-FY21) (C)				
Release of Currency Risk Reserves	a/	17.2	3.7	13.6
Potential Available Resources (A - B + C)		20.1	12.2	7.9

(USD million, as of September 30, 2019)

a/ 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.

Note: The Unrestricted Fund Balance does not yet include the new contributions from Switzerland (USD 16 million) announced in December 2019.

3 Status of the SREP portfolio

3.1 Portfolio overview and updates

10. As of June 30, 2019, total funding approved by the SREP Sub-Committee reached USD 593.4 million⁶ for 48 projects and programs, including five projects under SREP PSSA (see Table 3 for overview). This amount accounts for 89 percent of SREP resource available for programming. These projects are expected to leverage a total of USD 3.15 billion in co-financing from the governments of the recipient countries, MDBs, private sector, and bilateral agencies. Detailed information on co-financing breakdown by project is included in the information document, <u>SREP Country Portfolios</u>. Figure 4 provides a breakdown of the SREP portfolio by MDB, region, sector, and technology.

⁶ Total approved project funding includes project funding, IPPGs, and PPGs.

	Indi	cative pipeli	ne allocatio	on	Approved fur		
	TOTAL	IP	PSSA	IPPG	Sub- Committee	MDB	Disbursement
SREP funding (USD million) *	662.6	573.4	85.2	4.03	593.4	523.5	117
Number of projects	54	48	6		48	44	28

Table 3: Overview of SREP portfolio (as of June 30, 2019)

*Excluding projects that have been canceled or dropped.

Figure 4: SREP Sub-Committee-approved funding by MDB, region, sector, and technology

(as of June 30, 2019)



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

 Table 4 presents the status by country of the 23 endorsed country investment plans, the Pacific regional project, and SREP PSSA concepts along with the rates of funding approvals. It should be noted that 11 of the 23 countries received endorsement of their investment plans since May 2015.

Table 4: Endorsement of SREP investment plans and PSSA concepts

	Country/Region	Endorsement date	Indicative allocation	Indicative pipeline funding ¹	Approved funding	% approval over indicative pipeline ¹
First group of countries	Ethiopia	Mar-12	50.0	31.6	29.6	94%
	Honduras	Nov-11 ²	30.0	29.1	29.1	100%
	Kenya	Sep-11	50.0	32.9	32.9	100%
	Maldives	Oct-12	30.0	25.9	25.9	100%
	Mali	Nov-11	40.0	28.6	28.6	100%
	Nepal	Nov-11 ³	40.0	39.8	39.8	100%
Second group of countries	Armenia	Jun-14	40.0	40.0	40.0	100%
	Liberia	Oct-13	50.0	50.0	50.0	100%
	Mongolia	Nov-15	30.0	29.9	29.9	100%
	Pacific Region	May-15	2.0	2.0	2.0	100%
	Solomon Islands	Jun-14	14.0	14.0	14.0	100%
	Tanzania ⁴	Sep-13	50.0	15.1	15.1	100%
	Vanuatu	Nov-14	14.0	14.0	14.0	100%
Third group of countries	Bangladesh	Nov-15	75.0	68.2	52.5	77%
	Cambodia		25.3	25.3	17.3	68%
	Ghana	May-15	11.5	11.5	1.5	13%
	Haiti	May-15	30.0	27.1	27.1	100%
	Nicaragua	May-15	7.5	7.5	7.5	100%
	Uganda	Nov-15	4.2	4.2	4.2	100%
	Rwanda	Nov-15	50.0	49.5	49.5	100%
	Lesotho	Dec-17	13.8	13.8	13.8	100%
	Madagascar	Jun-18	1.7	1.7	1.7	100%
	Kiribati	Jan-19	5.0	4.9	1.2	25%
	Zambia	May-19	11.2	11.2	0.1	1%
	Subtotal	for IPs	675.2	577.4	527.1	91%
	Subtotal f	or PSSA	92.4	85.2	65.2	77%
	TOTAL (IPs	s +PSSA)	767.6	662.6	592.2 ⁵	89%

(USD million, as of June 30, 2019)

Note:

Including approved funding, projects in the sealed pipeline and cancellations.

Revised endorsement in April 2017

Revised endorsement in May 2015

Including cancellation of USD 21.73 million for the Tanzania Geothermal Project (AfDB) and cancellation of USD 10 million for the Tanzania Renewable Energy for Rural Electrification Project (World Bank)

Excluding IPPGs received by Malawi and Republic of Yemen

3.1.1 Investment plans

- 12. Following the initial review and discussion of the SREP Investment Plan for Zambia, the SREP Sub-Committee endorsed an updated version of the investment plan in May 2019 through decision by mail, for an indicative allocation of USD 21.15 million in SREP funding. The Zambia investment plan consists of two projects: Energy Access in Rural and Peri-Urban Areas (World Bank) and Wind Power Promotion (AfDB). The SREP Sub-Committee also approved a USD 1.15 million preparation grant for the project with AfDB. See Box 3 for more on Zambia's investment plan.
- 13. With the current SREP resource constraint and the submission deadline agreed by the SREP Sub-Committee, the development of SREP investment plans for the remaining countries (Benin, Malawi, Sierra Leone, and Yemen) is not expected to proceed further. In other words, the total number of SREP countries with endorsed investment plans will remain at 23.

3.1.2 SREP Sub-Committee approvals

- 14. Between January 1 and June 30, 2019, two projects were approved by the SREP Sub-Committee in Haiti and Lesotho for a total of USD 20.4 million in SREP funding (see Table 5 for a summary and Box 1 for more on the project in Haiti and Box 2 for Lesotho). This brings the total approved SREP funding to USD 593.4 million for 48 projects.
- 15. After the June 30, 2019 reporting cut-off date, one project was approved by the SREP Sub-Committee: Bangladesh Grid-connected Utility-scale Solar PV (IFC) for USD 15.5 million.

Table 5: SREP Sub-Committee-approved projects and programs

Country	IP/PSSA	Project title	MDB	SREP funding (USD million)
Haiti	IP	Off-Grid Electricity Program	IFC	7.5
Lesotho	IP	Lesotho Renewable Energy and Energy Access Project	IBRD	12.9
		TOTAL APPROVAL		20.4

(January 1 to June 30, 2019)

Box 1: Haiti: Off-Grid Electricity Program



While there are several early-stage off-grid renewable energy installations in Haiti, organized as cooperatives, they rely on subsidies provided by various organizations, including USAID, IDB, and UNEP. There are no commercially-driven renewable energy systems, but the Haiti: Off-Grid Electricity Program (IFC) aims to initiate the track record of such systems and contribute to accelerating private sector participation in offgrid renewable energy development. Focusing on solar photovoltaics (PV), the program will support two subprojects:

- Advisory support to a public-private partnership (PPP) scheme on the island of La Gonave to develop
 a standalone mini-grid renewable energy network for approximately 2.5 megawatts (MW) of
 capacity
- An investment that will seek to create a virtual grid using renewable energy, which will deliver approximately 215,800 MWh of energy to its users over the life of the investment

By utilizing SREP funds to leverage other private sector sources, IFC will attempt to demonstrate the viability

*Photos courtesy of Earthspark

3.1.3 MDB approvals

16. During the reporting period, the MDBs approved four projects for USD 64.2 million in SREP funding (see Table 6), bringing the total MDB approved SREP funding to USD 523.5 million for 44 projects. See Box 2 for more on the Cambodia National Solar Park Project.

Table 6: SREP MDB-approved	Projects and Programs
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(January 1 to June 30, 2019)

Country	IP/PSSA	Project title	MDB	SREP funding (USD million)
Bangladesh	IP	Scaling Up RE project	IBRD	29.3
Nepal	IP	Nepal Private Sector Led Mini-Grid Energy Access Project (formerly ABC Business Models for Off-Grid Energy Access)	IBRD	7.6
Kenya	PSSA	Kenya Kopere Solar PV Project	AfDB	11.6
Cambodia	IP	National Solar Parks Program	ADB	15.7
	64.2			

Box 2: Cambodia - National Solar Park Project

The National Solar Park Project (ADB) will support the national electricity utility, Electricite du Cambodge (EDC) in expanding access to clean energy and increasing solar energy generation in Cambodia. With a total cost of 28.8 million, of which SREP is providing USD 15.7 million, the project will have two main outputs:

- A solar park facility able to accommodate up to 100 MW of solar power generation on 150-200 hectares of land in selected provinces
- A 30-40-kilometer 115 kilovolt (kV) transmission line connection to an existing substation, including a new solar park substation with two transformers, switchgear, controls, and a supervisory control and data acquisition (SCADA) system compatible with the EDC's SCADA requirements

ADB is assisting EDC in designing and conducting a tender for procuring the first power plant in the solar park (30-50 MW), which will be built by the private sector using commercial sources of finance. Additional power plants supplying the remaining 50-70 MW are expected to be tendered out to the private sector by EDC in a subsequent phase.

The project is the first of its kind in Cambodia and builds on lessons learned from EDC's tendering and ADB's financial support of a 10 MW solar farm at Bavet, Svay Rieng Province in 2016. It was the first non-sovereign utility-scale solar project in the country and the first competitively tendered renewable energy project with an independent power producer.

3.1.4 Funding cancellations

17. During this reporting period, AfDB canceled the Tanzania Geothermal Energy Development Project, including a USD 5 million SREP loan and USD 16.73 million SREP grant. AfDB and the Government of Tanzania agreed to cancel the project due to changes in the scope of activities and co-financing arrangement.

3.2 Co-financing

18. The 48 projects approved by the SREP Sub-Committee (USD 593.4 million) as of June 30, 2019 are expected to leverage over USD 3.15 billion in co-financing from governments, MDBs, bilateral, and other sources. This represents a leverage ratio of 1 to 5.32, meaning for every USD 1 invested by SREP, another USD 5.32 will be co-invested by other financiers. As shown in Figure 5, MDBs represent the largest source of co-financing, followed by the bilateral and others, and private sector.



Figure 5: Co-financing of SREP Sub-Committee-approved funding by source (As of June 30, 2019)

3.3 Disbursement

19. SREP disbursements increased by USD 15 million during the reporting period, reaching USD 117 million in total. Figure 6 shows the disbursement trend over time. Out of the 44 MDB-approved projects, 28 are disbursing. Annex 4 provides detailed information on disbursements at the project level for public sector projects.⁷ Disbursement ratio (as a percent MDB approvals) reached 22 percent in FY19, up from 20 percent in FY18.

⁷ See Table D2 of <u>The Disbursement Report</u>. Project-level disbursement data for private sector programs/projects are confidential.



Figure 6: SREP disbursement trend by fiscal year

4 Cross-cutting themes

4.1 Gender

- 20. As requested by the SREP Sub-Committee, gender scorecard indicator reporting now reflects trends in the investment plan and project portfolio over time for gender 'quality at entry' (i.e., gender integration at design stage). This stands in contrast to the earlier practice of reporting only on investment plans and projects approved during the reporting period.
- 21. Tables 7 and 8 show an increase in all three scorecard indicator areas for projects and in two of three areas for investment plans since the baseline at the start of the CIF Gender Action Plan in 2014. For investment plans, performance dropped slightly from the baseline (from 80 percent to 70 percent of total SREP investment plans that host sector-specific gender analysis). Boxes 3 and 4 shed light on gender considerations in Lesotho's project to increase access to renewable energy and Zambia's SREP investment plan.

Table 7: Gender scorecard indicators in SREP investment plans

Indicators	Gender Action Plan Baseline ⁸ (June 2014), % (n)	GAP Phases 1 & 2 (July 2014- June 2019) % (n)	SREP Inception till June 2019, % (n) ⁹
Sector-specific gender analysis	80% (8 of 10 IPs)	62% (8 of 13 IPs)	70% (16 of 23 IPs)
Women-targeted activities	70% (7 of 10 IPs)	92% (12 of 13 IPs)	83% (19 of 23 IPs)
Sex-disaggregated M&E indicators	70% (7 of 10 IPs)	100% (13 of 13 IPs)	87% (20 of 23 IPs)

(Program inception to June 2019)

Table 8: Gender scorecard indicators in SREP projects

(Program inception to June 2019)

Indicators	Gender Action Plan Baseline ¹⁰ (2014) % (n)	GAP Phases 1 & 2 (July 2014 – June 2019(% (n)	SREP Inception till June 2019 % (n) ¹¹	
Sector-specific gender analysis	70% (7 of 10 projects)	74% (28 of 38 projects)	73% (36 of 48 projects)	
Women-targeted activities	80% (8 of 10 projects)	89% (34 of 38 projects)	88% (44 of 48 projects)	
Sex-disaggregated M&E indicators	70% (7 of 10 projects)	79% (30 of 38 projects)	77% (38 of 48 projects)	

⁸ All baseline figures are as of June 30, 2014.

⁹ During the current reporting period (January 1 to June 30, 2019), two new SREP investment plans were endorsed. Both scored positively on all three gender scorecard indicators.

¹⁰ All baseline figures are as of June 30, 2014.

¹¹ During the current reporting period, two new SREP projects were approved. While both projects included "sector-specific gender analysis", only one project integrated "women-targeted activities" and "sex-disaggregated M&E indicators". Original "parent" projects and their related 'additional finance' projects are scored jointly now as a single project, with linked ratings on the scorecard indicators. This is to better align gender reporting with program portfolio reporting. In the current period, one additional financial project was approved and scored with the original parent project.

Box 3: Supporting women's employment and productive use applications of energy access investments in Lesotho

The Lesotho Renewable Energy and Energy Access Project (World Bank) aims to increase renewable energy access in rural and peri-urban areas of Lesotho. With USD 12.9 million in SREP funding supporting a total project size of USD 52.9 million, the project will extend the main grid in per-urban areas to reach industrial, commercial, and residential customers, and promote off-grid solutions to expand rural household energy access.

Women will particularly benefit from the project through support to their expanded participation in the energy sector as employees and as consumers by supporting productive use applications of increased energy access through livelihoods promotion in such areas as agro-processing, manufacturing, and services. The project will conduct a study to identify the barriers that women face in entering the energy sector workforce and will focus on employment for women in the sites where the project will build and operate mini-grids. Expected follow-up interventions will target both energy agency level and local entry points, including human resources reforms in energy agencies to attract female candidates through expanded outreach in recruitment and skills development of rural women at the community level.

In addition, the project plans for a community awareness campaign on the benefits and costs of electricity services, payment mechanisms, and procedures and safety practices related to electrification. It will promote productive and efficient use of energy by all customers, both female and male. The project will address the risk of gender-based violence during implementation by training implementing agencies and contractors on good practices in this area. It will track gender progress in implementation via sex-disaggregated core indicators of the energy sector, and gender-specific indicators that measure changes in women's employment in the energy sector, and the presence of consumer education campaigns in the project with a focus on targeting female household members and women in business.

Box 4: Designing for gender equality outcomes in Zambia's SREP investment plan

The SREP Zambia Investment Plan seeks to scale up renewable energy across the country through planned investments in rural and peri-urban energy access, as well as wind and geothermal investments to contribute to Government of Zambia's overall development goals, including in the area of gender equality. The plan recognizes gender differences in electricity access rates, benefits of electricity access, and affordability between women and men.

In Zambia, household members largely depend on traditional fuels for their energy uses, including cooking, particularly in rural areas. Women's role in supplying and using these traditional fuels predominates. As the Zambia Gender and Energy Mainstreaming Strategy highlights, the lack of rural electrification disproportionately impacts women in terms of time poverty and negative health impacts of traditional fuels.¹ Zambia's SREP investment plan points to health and safety risks faced by women in fuelwood collection, such as gender-based violence, physical strain, and respiratory impacts of fuelwood use.

Women in Zambia also face challenges in terms of affordability of electricity. Surveys find as many as 30 percent of rural customers find current off-grid connections unaffordable. More than 50 percent of rural customers are unwilling to pay for solar home systems, even when payment plan options are offered. Female-headed households are willing to pay less than male-headed households. The plan also identifies a gender gap in employment related to geothermal resources as these are situated in high-poverty rural areas where women do not have the skills required for new geothermal jobs.

Several measures to enhance gender integration are planned. First, gender differences in access and use, needs, and affordability will be investigated. Subsidies will lessen electricity connection cost for vulnerable households and will support acquisition of energy efficient appliances by women's community organizations for productive use. Women's participation in clean cookstove production will be encouraged, along with consumer campaigns targeted at rural women. Lastly, internship initiatives to foster women's interest in energy careers will be supported. Sex-disaggregated data will be collected to track distributional outcomes, including among women and female-headed households.

4.2 Risk management

- 22. Implementation risk is the risk that a project, once effective, is not implemented in a timely manner. At the program-level, SREP's score for implementation risk remained **Medium** as four projects representing USD 34 million of approved funding have been flagged for this risk. At the project-level, however, each of these projects has exceeded SREP's tolerance for this risk. The CIF Administrative Unit has added an additional criterion for flagging projects for this risk to account for the heightened implementation risk of projects which extend their anticipated dates of final disbursement. The CIF Administrative Unit now flags a project for implementation risk if the project meets at least one of the following three criteria:
 - i. The project has been effective for 36 months but has disbursed less than 20 percent of program funds.
 - ii. The project is within 15 months of the anticipated date of final disbursement but has disbursed less than 50 percent of program funds.
 - iii. The anticipated date of final disbursement for the project has been extended, and less than 50 percent of approved funds have been disbursed.

23. Table 9 illustrates the two projects representing USD 19 million of SREP funding have been flagged under the first criterion (vs. three projects totaling USD 27 million as of December 31, 2018). While one of the three projects flagged in December increased disbursements to above 20 percent of MDB-approved funding, (Biogas Extended Program – Nepal (World Bank)) it remains flagged under the second criterion as it is now within nine months of the anticipated date of final disbursement but has disbursed only 24 percent of approved funds. The other two projects which remain on the current list are highlighted in orange.

Table 9: SREP public sector projects effective for 36 months with less than 20 percent ofapproved funds disbursed

COUNTRY	PROJECT TITLE	MDB	SREP Funding (USD million)	Cumulative Disb. FY19-S2	Disbursement Ratio	Effectiveness Date	Months after effectiveness date	MDB Co- finance
Maldives	Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program	IBRD	11.7	2.1	18%	10/1/2014	58	16.0
Kenya	Electricity Modernization Project	IBRD	7.5	-	0%	9/17/2015	46	0.0

24. Table 10 shows that four projects representing USD 34 million of SREP funding have been flagged under the second criterion (vs. two projects totaling USD 20 million as of December 31, 2018). The two projects flagged in December that remain at risk are highlighted in orange.

Table 10: SREP public sector projects within 15 months of closing with less than 50 percent ofapproved funds disbursed

			SREP Funding	Cumulative Disb.	Disbursement	Anticipated Date of Final	Months Before Anticipated Date of	MDB Co- flnancing (USD
COUNTRY	PROJECT TITLE	MDB	(USD million)	FY19-S2	Ratio	Disbursement	Final Disbursement	million)
Nepal	Biogas Extended Program	IBRD	7.9	1.4	24%	4/1/2020	9	16.0
Maldives	Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program	IBRD	11.7	2.0	18%	4/1/2020	9	0.0
Kenya	Electricity Modernization Project	IBRD	7.5	-	0%	6/30/2020	12	0.0
Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	7.0	-	0%	6/1/2020	11	0.0

25. The CIF Administrative Unit received no reports of any SREP projects meeting the third criterion.

4.3 Knowledge management

4.3.1 CIF Evaluation and Learning (E&L) Initiative

26. A new study funded through the CIF Evaluation and Learning Initiative (E&L) Call for Proposals was published by the World Bank on the effectiveness of various financing instruments and the role of the public sector in mobilizing finance for grid-connected solar projects in developing countries. The analysis considers five key public sector interventions: direct and indirect financing, legal policy and regulatory instruments, governmentsponsored guarantees, planning technical and operational capacity, and investment in enabling infrastructure. It draws on empirical evidence and selected examples from developing countries to identify lessons that could be relevant for other countries and inform future action by governments and their development partners. The report notes the decreased risks, accelerated deployment, and lower costs for solar PV plans in many markets, and recommends that public financing focus on improving grid infrastructure in areas such as automated control centers, transmission infrastructure, regional power interconnectors, and energy storage systems. It also recommends strengthening institutional and technical capacity in countries, for example of grid operators, power sector planners, and state-owned utilities. Finally, it finds that long-term predictability in government policies and plans as well as reforms to ensure the financial sustainability of power utilities are also important for leveraging greater investment in grid-connected solar energy.¹²

- 27. In line with the recently approved E&L FY20-22 Business Plan, work has begun to design and scope a new study on use and effectiveness of concessional finance tools and approaches in the Clean Technology Fund (CTF) and SREP, following on the successful report by Bloomberg New Energy Finance (BloombergNEF) published earlier this year¹³. The new study will begin full implementation in early 2020 and is expected to be completed later in the year. Efforts are also being made to deepen and further mainstream lessons from the transformational change studies¹⁴ published earlier in the year, including through country or thematic case studies and participation in various climate finance events.
- 28. As indicated in the recently approved Evaluation and Learning (E&L) Initiative FY20-22 Business Plan, the E&L Initiative plans to conduct a learning-oriented evaluation of SREP's early implementation and lessons learned in FY21. This activity is likely to be implemented in the second half of FY21 and is contingent upon approval of the forthcoming E&L FY21 Work Plan and related CIF AU FY21 Business Plan.
- 29. The last SREP Pilot Countries Meeting was convened in September 2018 in Kigali, Rwanda, which brought together 80 participants from the SREP countries, representatives from multilateral development banks (MDBs), the private sector, GCF, as well as SREP Sub-Committee members and observers. Going forward, SREP learning will be more thematically based, in partnership with other institutions and initiatives, such as the E&L Initiative's Transformational Change Learning Partnership, ESMAP, and SEforALL. Emerging themes could include energy storage and integration of renewable energy into the energy systems. In addition, CIF is collaborating with ESMAP to organize an event at the next SEforALL Forum in May 2020 to feature the results and learning on Multi-Tier Framework on energy access (also see below).

¹⁴ https://www.climateinvestmentfunds.org/sites/cif_enc/files/knowledge-

 ¹² The Role of the Public Sector in Mobilizing Commercial Finance for Grid-Connected Solar Projects: Lessons Learned and Case Studies. World Bank, 2019 (see here for links to the <u>full report</u> and <u>summary brief</u>).
 ¹³ <u>https://data.bloomberglp.com/professional/sites/24/BNEF_The-Clean-Technology-Fund-and-Concessional-Finance-2019-Report.pdf</u>

documents/evaluation_of_transformational_change_in_the_cif_final_w_mresp_jan_2019.pdf

4.3.2 Multi-Tier Framework on Access

30. In partnership with World Bank's Energy Sector Management Assistance Program (ESMAP), CIF has funded a special initiative to support surveys and Multi-Tier Framework (MTF) on access and country-level capacity building in at least ten SREP countries. MTF is one of the tools to measure progress toward reaching the goal of universal access to modern energy services. MTF surveys have now been undertaken in 16 countries, which include both SREP and non-SREP countries. Seven reports have been finalized and are accessible online. Five reports are in the final stages and are expected to be published by the end of December 2019. The remaining four are under preparation and are expected to be completed by the end of 2020. Country-specific updates include the following:

11 SREP Countries

- **Bangladesh**: This nationally representative and government-implemented survey has been supported by MTF-ESMAP since late 2016. Findings were formally presented to the government on September 26, 2018. A report on results was drafted in November 2018 after gaining peer feedback. The report is being updated to include a re-estimation of the cooking tiers. The report will be finalized by December 2019.
- **Cambodia**: Cambodia's MTF Energy Access Country Diagnostic Report was published in June 2018 and disseminated at the 2018 Sustainable Energy for All Forum in Lisbon. The report can be accessed at <u>https://energydata.info.</u>
- Ethiopia: Ethiopia's MTF Energy Access Country Diagnostic Report was published in June 2018 and disseminated at the 2018 Sustainable Energy for All Forum in Lisbon. The report can be accessed at https://energydata.info.
- **Honduras**: MTF work was launched in Honduras in September 2016. Data have been collected, cleaned, and analyzed. The country diagnostic report for Honduras will be finalized by December 2019.
- Kenya: Data collection and analysis is completed, and the team is working on the Country Diagnostic Report. The core MTF and oversampled data will support the World Bank/IDA Kenya Off-Grid Solar Access Project and Kenya Energy Management Program, as well as the utility's slum electrification efforts supported by the World Bank and GPOBA. In collaboration with the Rockefeller Foundation, MTF Kenya's enterprise survey is ongoing as is the pilot for remote data gathering. MTF analysis was presented to the government on October 22, 2018. The MTF country diagnostic report is being finalized and will be published by December 2019.
- **Liberia**: MTF Liberia discussion with the government began in December 2016, and the national data collection was launched in March 2017. Collected data have been cleaned and analyzed. The Country Diagnostic Report will be published by December 2019.

- Madagascar: In November 2018, MTF identified and finalized its partnership with a firm for implementation in Madagascar. The firm is currently collecting the dataset and will complete the field work in a couple of months. MTF's household survey will also include a mini-grid operator survey and an oversampling of approximately 500 households using mini-grids as source of electricity.
- **Nepal**: An MTF workshop with the Nepalese government and international development stakeholders took place in November 2016. In July 2017, household survey data collection began and is now complete. Both mini-grid and enterprise survey activities began in October of the same year; the data have since been cleaned and analyzed. The final country report has been published and is available at https://energydata.info.
- **Rwanda**: Rwanda's MTF Energy Access Country Diagnostic Report was published in June 2018 and disseminated at the 2018 Sustainable Energy for All Forum in Lisbon. The report can be accessed at <u>https://energydata.info.</u>
- **Uganda**: Dialogue with the Ugandan government began early 2016. The Ugandan Bureau of Statistical Office (UBOS) was responsible for executing both the Household and Enterprise surveys using MTF's questionnaire. UBOS submitted the revised draft, and the survey completion report will be finalized by December 2019. In the meantime, the MTF team is preparing the Uganda MTF Country Diagnostic Report to be finalized by the end of FY20.
- Zambia: MTF Zambia activities began in September 2017. Data have been cleaned and analysis was finalized in July 2018. Findings were shared with the government in November 2018 at a Lusaka workshop. The final diagnostic report for Zambia is now available https://energydata.info.

Five Non-SREP Countries

- **Niger**: The first draft of the Niger MTF country diagnostic report is currently being reviewed by peer reviewers. Niger report will be published by June 2020.
- **Nigeria**: The first draft of the Nigeria MTF country diagnostic report has been drafted and is being reviewed internally. The final report will be published by the beginning of 2020.
- **Democratic Republic of Congo (DRC):** Currently, the team is collecting the data from Goma (North Kivu). Data collection will be completed by October 2019.
- **Myanmar**: Myanmar's MTF Energy Access Country Diagnostic Report was published in June 2019 and is available at https://energydata.info.

- Sao Tome and Principe: Sao Tome and Principe's MTF Energy Access Country Diagnostic Report was published in July 2019 and is available at https://energydata.info.
- 31. Responding to requests from the World Bank Africa region, MTF work will be implemented in six additional countries (Zimbabwe, Sierra Leone, Cameroon, Burkina Faso, Burundi, and Malawi) in FY20-21 funded by ESMAP. A website is being created to house all MTF data, reports, and instruments to facilitate the use of data and encourage the use of MTF by other stakeholders. Further outreach will be carried out once country baselines are completed.

4.3.3 GDI partnership

- 32. CIF has partnered 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, CIF officially joined the GDI partnership as its 40th member. Today the GDI partnership has more than 50 members around the world.
- 33. In 2018, CIF conducted six case studies in collaboration with the MDBs using the GDI methodology, two of which were based on SREP projects: Geothermal Field Development through Public-Private Partnerships in Menengai, Kenya and Promoting Sustainable Business Models for Clean Cookstoves in Honduras . In 2019, CIF embarked on a new set of studies for SREP; namely, the POISED mini-grid project in Maldives (expected to be published by end December 2019) and the Cambodia National Solar Park Project.
- 34. **The Maldives GDI case study** examines the Preparing Outer Islands for Sustainable Energy Development Project (POISED) (ADB) and its pioneering efforts to bring solar photovoltaic (PV)-diesel hybrid energy systems to key outer island locations of Maldives and improve the efficiency of power generation. Before POISED started implementation, over 98 percent of the total installed capacity came from fossil fuels, resulting in 20 percent of the GDP spent in diesel fuel imports and making electricity prices very expensive.
- 35. The POISED project was designed to help Maldives shift toward greater energy selfsufficiency and minimize emissions and exposure to global petroleum price volatility. It aims to facilitate the installation of solar-PV-battery diesel hybrid systems, meeting up to 30 percent of the daytime peak load demand. The POISED project is a successful proof of concept for solar PV in the country, as the solar-PV-diesel hybrid systems achieve fuel savings of up to 28 percent compared to diesel-only generator sets. It makes the case that investing in renewable energy is financially sound.
- 36. The POISED project encountered unexpected delivery challenges that the Project Management Unit (PMU) was able to overcome. The first challenge was the reticence towards renewable energy in Maldives. Prior to the POISED project implementation, there had been some experiences within the renewable energy sector in the Maldives that raised some reticence towards the implementation of a new project. ADB, together with funding

from other agencies, such as JICA or World Bank, supported pilot renewable energy projects in the Maldives, prior and at the same time as POISED, which helped improve the local population and government's perception of renewable energy. Additionally, the POISED project also supported other awareness-raising initiatives on renewable energy and field demonstrations to explain the benefits of renewable energy, show proof of concept, and raise awareness about solar-PV-battery diesel hybrid systems.

- 37. The second challenge found were constraints in finance. While the project was under implementation, one loan did not materialize, and another one was put on hold for over a year. To overcome this challenge, the Project Management Unit (PMU) found new funding resources, which were mobilized to cover for these loans, including additional finance from ADB and a grant from the European Union. The PMU showed flexibility and adaptive management to ensure project implementation is shielded from situations that could compromise effectiveness.
- 38. The third challenge was the limited local knowledge among foreign contractors hired to install the solar-PV-battery diesel hybrid, and limited technical capacity among local operators hired to maintain them. There were also language barriers with foreign contractors: some of the equipment signals, back-end programs, and instructions were in foreign language. The PMU made sure that all signals and instructions were translated into English and also offered more comprehensive training and used the experience to strengthen operator training in subsequent phases of the project.
- 39. The POISED project represents an unprecedented effort to mobilize financing for renewable energy investments in the Maldives. This case study shows how the PMU was flexible in finding solutions to accommodate changes and keeping the project moving. The POISED project and the Maldives' SREP investment plan demonstrate the economic feasibility and growth potential of solar PV systems. These experiences and challenges offer lessons for the installation of solar hybrid systems in other countries.

4.3.4. RISE

- 40. In partnership with the World Bank, ESMAP, and Sustainable Energy for All (SEforALL), SREP supported the launch of Regulatory Indicators for Sustainable Energy (RISE), which assesses countries' policy and regulatory support for each of the three pillars of sustainable energy: access to modern energy, energy efficiency, and renewable energy.
- 41. According to the RISE 2018 report, between 2010 and 2017, there was consistent improvement in electricity policy and regulations in all access-deficit countries assessed by RISE. Overall, three-quarters of access-deficit countries established some key policy or regulation required to expand access to electricity (green and yellow zone). More than one-third of the countries, mainly located in Sub-Saharan Africa, have initiated the transition from an insufficient regulatory framework for electricity access in 2010 to the adoption of at least some necessary policy attributes by 2017, with more than a quarter of the countries now having a comprehensive policy and regulatory framework (green zone).
- 42. Two out of the three top-scoring countries for policy regulatory environment for electricity access in 2017 were SREP countries (i.e., Bangladesh and Cambodia), and another two SREP

countries (Rwanda and Tanzania) were the fastest policy improvers from 2010 to 2017. Furthermore, three SREP countries moved from red to yellow during this period (Haiti, Mali, and Nepal), while another five SREP countries moved to green (Ethiopia, Ghana, Kenya, Nicaragua, and Uganda). See below for more country-specific improvements and achievements:

Bangladesh

• Among the three top-scoring countries for policy regulatory environment for electricity access in 2017

Cambodia

- Among the three top-scoring countries for policy regulatory environment for electricity access in 2017
- Leading the way in grid electrification policies
- Using information from the MTF surveys, such as households' willingness to pay, expenditures, consumption patterns, appliance use, and other variables, to quantify the need for private-sector investment in the sector

Ethiopia

- Achieved a green rating for their policy environment
- Has the most comprehensive energy-access-enabling environment on the continent
- Has developed a national electrification plan with a comprehensive scope that scores in the green zone in the last seven years, allowing it to develop clear policy frameworks for grid electrification, mini grids, and standalone systems
- Using the MTF terminology to set or adjust their energy access targets

Ghana

- Strong renewable energy policy frameworks, scoring in the green zone
- Has filled most gaps in electricity access policy and regulation and have more mature access policy frameworks in 2017

Kenya

- Stands out for its accelerated progress in electrification underpinned by rapid adoption of supporting policy measures, following the paradigm shift contained in the country's National Electrification Program.
- Has dedicated their efforts to developing mini grids and standalone systems by establishing national programs and providing dedicated financing facilities

Rwanda

• Achieved a green rating for their policy environment

• Using the MTF terminology to set or adjust their energy access targets. The Rural Electrification Fund in Rwanda, the entity responsible for rural electrification, is using information obtained from the MTF surveys to inform their investment needs.

Tanzania

- Achieved a green rating for their policy environment
- Has developed a national electrification plan with a comprehensive scope that scores in the green zone in the last seven years
- Has dedicated their efforts to developing mini grids and standalone systems by establishing national programs and providing dedicated financing facilities

Uganda

- Achieved a green rating for their policy environment
- One of the seven countries in Sub-Saharan Africa that have filled most gaps in electricity access policy and regulation
- One of the 12 RISE countries (five in Sub-Saharan Africa) to pilot clean cooking solutions

5 Results

5.1 Background

- 43. The SREP Sub-Committee approved a revised SREP results framework in June 2018 to include co-financing leveraged by SREP projects and installed capacity as SREP core indicators, along with two existing core indicators:
 - Core indicator 1: Annual electricity output (megawatt hours per year, 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 other modern energy services fuels as a result of SREP interventions
 - Core indicator 3: Increased public and private investments in targeted subsectors as a result of SREP interventions
 - Core indicator 4: Installed capacity (megawatt, MW) from renewable energy as a result of SREP interventions
- 44. Some SREP projects are not direct investment projects but focus on strengthening the enabling environment for investments in clean energy and energy access. These projects will contribute indirectly to the achievement of the core indicators as well as progress made to improve the regulatory, institutional, and policy frameworks for renewable energy.
- 45. In addition, all projects and programs report on co-benefit indicators that reflect the broader impact of 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 following supervision missions, at mid-term, or upon project completion.

- 46. The following should be noted while reviewing the results:
 - Reporting Year (RY): This report covers RY2019. Depending on MDB, this means the period from January 1, 2018 to December 31, 2018 or July 1, 2018 to June 30, 2019.
 - Actuals: "Actuals" refers to the actual results reported by a project for the latest 12month reporting period. "Actual cumulative" refers to total actual results since the project started reporting results.
 - Targets: For electricity output and estimated GHG emissions reduction, "targets" are expected results to be achieved on an annual basis. For other indicators, such as improved energy access, co-financing, and installed capacity, "targets" refers to cumulative results expected to be achieved during the course of the project.
 - Co-financing: Different MDBs take different approaches to reporting on actual cofinancing. 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. Others report based on annual disbursements by the respective cofinanciers 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 projectspecific baselines, SREP projects can estimate GHG emissions avoided using a simple, common, and transparent proxy-based method (emission equivalent based on dieselgenerated electricity, as adopted by ADB: 793.7 tons CO₂eq per GWh).

5.2 Overview

- 47. This section on SREP results is based on the expected and actual results data reported by 45 MDB-approved projects¹⁵ and programs totaling USD 492 million in SREP funding as of June 30, 2019. It provides an analysis of implementation progress for each of the indicators. Project-by-project results data are given in Annex 3. Overall, the 2019 reporting year saw a significant increase in achieving results on the ground over two SREP core indicators: electricity output increased by 88 percent from the previous year to over 39,498 MWhs, and the number of people with increased energy access rose by 45 percent to 268,689.
- 48. MDBs began approving SREP projects in 2011. On average, about five SREP projects are approved by the MDBs per year, with some acceleration since 2014 (i.e., about seven

¹⁵ It should be noted that from a portfolio perspective, each SREP fund request is counted (totaling 45). However, when reporting on distinct project results, some projects are combined (e.g., IDB Honduras ADERC project).

projects per year between 2014 and 2018) (see Figure 7). Overall, the SREP's portfolio is still relatively young. The data presented is based on a young portfolio, for which notable results are yet to be observed given approximately 90 percent of the projects (both number and funding volume) are under 5 years in implementation and more than half of the portfolio still under two years from MDB approvals.



Figure 7: MDB-approved SREP projects

49. Of the 45 MDB-approved projects and programs included in RY2019 results reporting, 21 projects (16 investment projects and five technical assistance/advisory service projects) are generating results on the ground. While this is twice as many projects reporting actual results as RY2018, many of these numbers are reflected in Core Indicator 3: Co-Financing leveraged, which increased by 9 percent to reach a cumulative total of USD 529 million. Electricity output increased by over 88 percent, reaching 39,498 MWh annually. In addition, a cumulative total of 268,689 people and 634 businesses now have improved energy access as a result of SREP interventions, a 45 percent and 37 percent to 173 MW cumulative total, including 169 MW of indirect installed capacity based on steam potential from the Menengai Geothermal Development Project (AfDB).

50. Table 11 offers an overview of SREP expected and actual results (cumulative and for RY2019).

Table 11: SREP results overview

(MDB-approved SREP funding USD 523.5 million as of June 30, 2019)

	Actual (RY2016)	Actual (RY2017)	Actual (RY2018)	Actual (RY2019)	Target
Electricity output (MWh/yr)	276	1,186	20,987	39,498.32	3,365,872
Improved energy access (people)	7,395	10,600	185,068	268,689	8,759,920
Improved energy access (businesses)	-	-	462	634	142,782
GHG emissions reduced/avoided (tons CO2 eq/yr)	251.3	8,537	24,827	35,992.56	2,508,323
Installed capacity (MW)	0.9	2.9	154.78*	173.16*	672.6
Co-financing (USD million)	410	476	485	529	2,162.70

Note: GHG reductions and electricity output: Figures are ANNUAL

Co-financing, installed capacity, improved energy access: Figures are CUMULATIVE

*Including 150 MW for RY2018 and 169 MW for RY2019 indirect MW from Kenya Geothermal

51. Compared with RY2018, RY2019 saw an increase in electricity produced and more people benefitting from improved energy access (see Figures 8 and 9). The Extended Biogas Program (World Bank) in Nepal accounts for the increase in electricity output. More than 50 percent of the increase in people benefitting from improved energy access comes from the Mali Rural Electrification Hybrid Systems Project (World Bank), followed by the PROFOGONES cookstoves project in Honduras (IDB) and the POISED Project in Maldives (ADB).



Figure 8: Electricity output reported by SREP projects (MWh)

Figure 9: New or improved access reported by SREP projects (no. of people)



- 52. It should be noted that for geothermal projects, SREP interventions typically focus on upstream exploratory drilling and only contribute indirectly to SREP core results indicators, which are linked to downstream (post-SREP project) electricity production from renewable energy. Once the SREP-funded drilling activities are completed, the project starts reporting on the indirect "actual results" of installed capacity. This is the case of the Kenya Menengai Geothermal Development Project (AfDB). As more information becomes available on the construction of geothermal power plants and electricity generation, reporting on other core indicators is expected to emerge.
- 53. Due to the risky nature of geothermal development, some projects may not lead to desirable outcomes for SREP investments as is the case of the Armenia Geothermal Exploratory Drilling Project (World Bank). It was implemented to confirm whether the geothermal resource at the project site was suitable for power generation and, if confirmed, to involve the private sector in the development of the geothermal power plant. Drilling took place and confirmed the geothermal resource was not suitable for power production, and geothermal power production was not pursued. While the project achieved its objective of assessing the feasibility of geothermal production, it did not achieve any results against the SREP core indicators.

5.3 Core indicators 1 and 4: Electricity production and installed capacity

54. A total of 28 MDB-approved projects have targets under Core Indicator 1, and seven projects reported on actual electricity production in RY2019 (vs. six in RY2018), as shown in Table 12. During this reporting period, eight projects reported results on electricity production from renewable energy, including the Rwanda Renewable Energy Fund (World Bank) for the first time. Total electricity production has increased to 39,498 MWh/yr, with the Nepal Biogas Program (World Bank) as the main driver for the RY2019 increase in production. It has seen a year-to-year increase of over 136 percent and achieved over 107 percent of its target.

- 55. The remaining 21 projects that did not report actual results on Indicator 1 include four geothermal projects and ten projects approved in the second half of 2017. Seven other projects have just started construction or are finishing contract bidding.
- 56. With respect to Indicator 4 for installed capacity, early results have been reported by three projects: 0.1 MW from the Nepal South Asia Sub-regional Economic Cooperation Power System Expansion Project (ADB), as a result of the installation of solar and wind mini-grids; 2.3 MW from the Maldives POISED Project (ADB); and 0.26 MW from the Mali Rural Electrification Hybrid Systems (World Bank). See Annex 3 for more details on electricity projection and estimated GHG emissions reduction on all projects targeting Indicators 1 and 4.

Country	Project title	MDB	Technology	Inst	alled Capa	acity	Ar Prod	nual Elec luction (N	tricity IWh/yr)
				Actual 2018	Actual 2019	Target	Actual 2018	Actual 2019	Target
Honduras	Self-Supply RE Guarantee Program	IDB	Solar	0.9	0.9	20	1,338	1,949	45,000
Kenya	Menengai Geothermal Project	AfDB	Geothermal	150	169	150	0	0	1,182,000
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	IBRD	Solar	1.5	1.5	20	2,190	2,674	32,611
Maldives	Preparing Outer Islands for Sustainable Energy Development Project (POISED)	ADB	Solar	2.3	2.3	21	3,376	1,679	27,600
Mali	Rural Electrification Hybrid Systems	IBRD	Solar	0.18	0.26	4.8	1.72	2.72	8,653
Nepal	South Asia Sub-regional Economic Cooperation Power System Expansion Project	ADB	Mixed (wind/solar)	0.1	0.1	4.8	65	114	25,228
Nepal	Extended Biogas Program	IBRD	Biogas	n.a.	n.a.	n.a.	14,016	33,052	15,900
Rwanda	Renewable Energy Fund	IBRD	Mixed RE	n.a.	n.a.	n.a.	0	28	13,000
						Total	20,987	39,498	1,349,992

Table 12: SREP projects reporting actual results on installed capacity and electricityproduction in RY2019

5.4 Core indicator 2: Improved energy access

- 57. A total of 24 projects have targets under Core Indicator 2, and seven projects reported on actual improved energy access in RY2019 (vs. five in RY2018), as shown in Table 13. Compared to RY2018, there is a 45 percent increase in the number of people benefiting from the SREP-funded projects, representing an additional 83,621 people and bringing the cumulative total number of beneficiaries to 268,689. The Mali Rural Electrification Hybrid Systems Project (World Bank) provided the greatest contribution to this increase, with over 145,897 people benefitting from improved energy access. Additionally, the number of business with improved energy access increased in RY2019, bringing the cumulative total to 634 businesses. This includes 355 businesses benefitting from the Maldives POISED Project (World Bank), a result not foreseen or targeted at project design. See Annex 3 for project-level details on improved energy access, which include the following examples:
 - In Liberia, under the Renewable Energy for Electrification Project (World Bank), 16,200 people have benefitted from the deployment of 7,468 stand-alone solar PV systems. The hydropower plant is still under development, with the bidding process set to begin in the latter half of 2019.
 - In Honduras, under the Sustainable Rural Energization Project (IDB), 17,108 improved stoves have been built and a group of local technicians has been trained in construction services and maintenance of improved stoves. A pilot exercise to commercialize mobile improved stoves has also developed, including upgrading a laboratory at the Honduras National University to analyze components of improved stoves.
 - In Mali, over 16,000 solar lanterns have been disseminated. Furthermore, results exceeded targets in CFL distribution: 9,842 were distributed in RY2019, bringing the total to 40,527 (vs. target of 36,600), and in persons trained: 380 trained in RY2019, raising the total to 476 (vs. target of 420).
- 58. The remaining 17 projects that did not report actual results on Indicator 2 include two geothermal development projects and ten projects approved since 2017. Another five projects have just started construction or are finishing contract bidding.

Country	Project title	MDB	Technology						
				Nu	imber of Pe	ople	Numb	er of Busi	nesses
				Actual	Actual	Target	Actual	Actual	Target
				2018	2019		2018	2019	
Honduras	Sustainable Rural	IDB	Improved	40,716	57,250	375,000	0	19	300
	Energization (ERUS)-Part		cookstoves						
	I & III: Promoting								
	Sustainable Business								
	Models for Clean								
	Cookstoves								
	Dissemination								
Liberia	Renewable Energy for	IBRD	Hydro	0	16,200	150,000	n.a.	n.a.	n.a.
	Electrification in North								
	and Center Liberia								
	Project – Mini-grids								
Maldives	Preparing Outer Islands	ADB	Solar	32,461	39,939	30,820*	0	355	n.a.**
	for Sustainable Energy								
	Development Program								
	(POISED)								
Mali	Rural Electrification	IBRD	Solar	103,914	145,897	681,000	0	n.a.	n.a.
	Hybrid Systems								
Nepal	South Asia Sub-regional	ADB	Mixed	7,977	7,977	143,350	0	23	n.a.
	Economic Cooperation		(wind/solar)						
	Power System Expansion								
	Project								
Nepal	Extended Biogas	IBRD	Biogas	n.a.	n.a.	n.a.	195	260	400
	Program								
Rwanda	Renewable Energy Fund	IBRD	Mixed RE	0	1,426	1,800,000	0	0	27,500
			Total	185,068	268,689	3,180,170	195	634	28,200

Table 13: SREP projects reporting on improved energy access in RY2019

* The target of 30,820 people is based on the population of the project's Phase 1 with 5 sample island subprojects presented during SREP Sub-Committee approval. The project will cover a total of 167 islands with an estimated population of 251,500. ** Target to be established by ADB

5.5 Core indicator 3: Co-financing leveraged

- 59. As shown in Table 11, total cumulative co-financing realized as of RY2019 is USD 529 million, or nearly 25 percent of the target (USD 2,163 million), reported by 34 of 35 MDB-approved projects with targets under Core Indicator 3. Details on co-financing from various sources are provided on Annex 3.
- 60. To date, SREP pilot country governments are the largest source of co-financing for all SREP projects. This is mainly driven by the Menengai Geothermal Development Project in Kenya which has realized USD 296 million in government co-financing.

5.6 Enabling environment projects

61. 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 contribute indirectly to the achievement of the SREP core indicators. Implementation is at various stages across these projects.

- 62. Ethiopia: The Geothermal Sector Strategy and Regulations Project (IFC) has been completed and entered the post-implementation period in June 2016. This advisory activity is expected to deliver an indirect impact of renewable energy to be produced over the post-implementation period (through June 2021) of 1,401,600 MWh/year with an investment generated of USD 400 million. The project has resulted in the development of a geothermal sector strategy, roadmap, and licensing regulations. The geothermal sector strategy and roadmap were adopted by the government and used to guide the approach utilized for the development of the sector. In addition, the licensing regulations are currently drafted as a bill for consideration of the Council of Ministries.
- 63. Lighting Ethiopia (IFC) is the only enabling environment project reporting on Core Indicator 2 for (indirect) number of beneficiaries. The project is progressing well and on track to meet the set targets at or shortly after completion. A total of 8,376,230 people are receiving access to improved services (1,675,246 households). Furthermore, the project has reached associated cumulative sales revenue of about USD 50 million and has achieved the following:
 - Development of compulsory national standards for solar lanterns and voluntary standards for solar home systems that were adopted by the Ethiopian Standard Agency
 - Implementation of pre-export verification of conformity (PVoC) that was adopted by Ethiopian Ministry of Trade to improve the import procedure of off-grid solar technologies
 - Market survey reports on solar market supply chain and the solar market to inform policy makers and private sector about the market challenges and opportunities
 - Over 450 SMEs and other stakeholders trained on business skills and solar technologies to strengthen the quality verified (QV) solar supply chain, 150 solar technicians trained to support the QV solar after-sales services, and 14 microfinance institutions trained to help them understand the business case for solar lending to end customers and retailers.
- 64. **Honduras:** Under the Strengthening the RE Policy and Regulatory Framework (FOMPIER) Phase II (IDB), the technical cooperation was recently approved.
- 65. **Mali:** The Promoting the Scaling Up of Renewable Energy Project (AfDB) hosted a successful National Renewable Energy Week in Bamako in February 2019. By the end of the reporting period, the project had contributed to the approval of 31 renewable energy projects in Mali, amounting to a cumulative USD 1,172 million in public and private renewable energy financing since 2015. Some technical training, communications, and monitoring and evaluation support are still ongoing, and the project completion date has been revised to the end of 2019.
- 66. **Mongolia:** The Capacity Building and Regulatory Support Technical Assistance (World Bank) has been carried out in system planning and renewable energy grid integration, grid code development, and phasing out of Feed-in-Tariffs. The project has supported drafting of legislation to allow competitive tendering of renewable energy and clear rules for licensing renewable energy plants. With the assistance provided, the renewable energy law was revised, and in July 2019, the amendment of the law was approved by the parliament.

67. **Pacific Region:** Under the Sustainable Energy Industry Development Project (World Bank), Phase I solar and wind resource mapping has been completed. Four Renewable Energy and Energy Efficiency Guidelines have been updated and two newly developed. Sixteen workshops have been completed and software for power system analysis has been made available to the beneficiary utilities. Two workshops on variable renewable energy grid integration, energy storage, and SCADA have been conducted. The first Value of Lost Load (VOLL) studies are being finalized with further VOLL studies to commence shortly.

Annex 1: Resource availability

SREP TRUST FUND - RESOURCES AVAILABLE for COMMITMENTS				
Inception through September 30, 2019 (LISD millions)		Total	Canital	Grant
		Total	Capital	Grant
Cumulative Funding Received				
Contributions Received				
Cash Contributions		625.9	151.1	474.8
Unencashed Promissory Notes	b/	115.0	115.0	-
Allocation of Capital to Grants from Unencashed Promissory Notes	a/		(24.4)	24.4
Total Contributions Received		740.9	241.7	499.2
Investment Income earned -up to Feb 1, 2016	c/	9.9		9.9
Other Income	0/	-		5.5
Total Other Resources		9.9		9.9
Total Cumulative Funding Received (A)		750.8	241.7	509.1
Cumulative Funding Commitments				
Projects/Programs		674.2	232.3	441.9
MDB Project Implementation and Supervision services (MPIS) Costs		22.1	-	22.1
Administrative Expenses-Cumulative to 1st Feb 2016	c/	14.2	-	14.2
Country Programming Budget expense from 1st Jan 2018	c/	0.3		0.3
Total Cumulative Funding Commitments		710.9	232.3	478.6
Project/Program, MPIS and Admin Budget Cancellations	d/	(69.8)	(35.5)	(34.3)
Net Cumulative Funding Commitments (B)		641.1	196.8	444.3
Fund Balance (A - B)		109.7	44.9	64.8
Currency Risk Reserves	e/	(17.2)	(13.6)	(3.7)
Unrestricted Fund Balance		92.5	31.3	61.1
Future Programming Reserves:				
Admin Expenses-Reserve (includes Country Programing budget/Learning and Knowledge exchange reserve) and for FY 20-28 (net of estimated investment income and reflows).Breakup of various components are provided below. (Model Updated as of December 31,2017) Subtract Administration Expense reserve for CIFAU, MDB & Trustee USD 37.9 Million	f/	(31.3)		(31.3)
Country Programming Budget Reserve USD 1.9 Million Learning and Knowledge Exchange Reserve USD 1.1 Million Add Estimated Investment Income Share for SREP USD 9.0 Million Projected Reflows USD 0.6 Million				
Technical Assistance Facility		(1.7)		(1.7)
Unrestricted Fund Balance (C) after reserves		59.4	31.3	28.1
Anticipated Commitments (FY20-FY21)				
Program/Project Funding and MPIS Costs	g/	149.7	53.5	96.2
Technical Assistance Facility	<u>j/ k/</u>	3.5		3.5
Total Anticipated Commitments (D)		153.2	53.5	99.7
Available Resources (C - D)		(93.8)	(22.2)	(71.6)
Potential Future Resources (FY20-FY21)				
Contributions Receivable	h/	- 2 5		2 E
Release of Currency Risk Reserves	e/	17.2	13.6	3.7
Total Potential Future Resources (D)	-,	20.8	13.6	7.2
		·		
Potential Available Resources (C - D + E)		(73.0)	(8.6)	(64.4)
Deflows from MDDs	:/	0.0		0.0
KEITOWS ITOUTI NIDBS	1/	0.0		0.0

a/ Promissory Notes amounting to GBP 19.84 million received as capital contributions are available to finance grants (including administrative costs) according to the terms of the contribution agreements/arrangements. The Promissory Notes are valued as of September 30, 2019 exchange rate.

b/ This amount includes USD equivalent of GBP 93.47 million from the UK.

c/ From Feb 1, 2016, Investment income across all SCF programs has been posted to a notional Admin "account", from which approved Administrative Budget expenses for the Trustee, Secretariat and MDBs are committed. The Country Programming budgets are recorded under individual programs.

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

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

f/ The amount of this reserve is estimated by the CIFAU and Trustee using the 10-year forecast of the Admin Budget less the 10-year estimate of Investment Income and reflows. Pro-rata estimates across three SCF programs are based on the 37% fixed pro rata share of the SREP's cash balance as at December 31, 2017 approved by the SCF TFC on March 8, 2018. The decision reads as "allocate USD 31.6 million from the available grant resources in the SREP Program Sub-Account to finance estimated Administrative Costs from FY19 to FY28, such that the projected, indicative amount of approximately USD 59.6 million in SREP grant resources remains available for allocation to SREP projects". This reserve amount has been reduced by the approved commitment amount of USD 0.3 million for country engagement from January 2018.

g/ Includes both sealed and Reserve pipeline

h/ Contribution Receivable from Denmark is DKK 24.05 million (USDeq. 3.6 million).

i/ The usage of reflow from MDBs are approved by the SCF TFC on March 8, 2018 to cover the shortfall in administrative expenses net of the SCF investment income.

j/ The CTF and SCF Trust Fund Committees agreed on July 20, 2018 to establish the Technical Assistance Facility for Clean Energy Investment Mobilization under the terms of the SCF.

k/ Commitments for the Technical Assistance Facility, as estimated by the CIFAU, will also be funded by contribution receivables.

Annex 2: SREP pipelines

IP/ PSSA	COUNTRY	PROJECT TITLE	MDB	Public/ Private	Grant	Non-Grant	MPIS Balance	Expected Submission Date
SEAL	ED PIPELINE							
IP	Cambodia	Policy Support and Public Awareness	ADB	Public	3.00	-	-	Dec-19
IP	Armenia	Green Economy Financing Facility in Armenia	EBRD	Private	2.25			Oct-19
IP	Zambia	Energy Access in Rural and Peri-Urban	IBRD	Public	10.00	-	-	Feb-20
IP	Kiribati	South Tarawa Renewable Energy	ADB	Public	3.70	-	-	Mar-20
PSSA	Kenya	Olkaria IV Geothermal Power Plant	AFDB	Private	-	20.00	-	Apr-20
IP	Cambodia	Private Sector Solar Development - Utility Scale/Parks	ADB	Private	-	5.00	0.14	Jun-20
IP	Ethiopia	Clean Energy SMEs Capacity Building and Investment Facility	IFC	Private	-	2.00	-	Jun-20
IP	Ghana	Utility-scale Solar PV/Wind Power	IFC	Private	-	10.00	0.45	Jun-20
		SUBTOTAL			18.95	37.00	0.59	
ргсги		-						

RESE	KVE PIPELIN	E						
IP	Cambodia	Private Sector Solar Development - Rooftop Solar	ADB	Private	5.00	1.00	0.14	Sep-20
IP	Lesotho	On-Grid RE Technologies	AFDB	Public	-	5.00	-	Dec-20
IP	Ghana	Solar PV Based Net Metering with	AFDB	Public	11.89	-	0.20	Sep-20
IP	Ghana	RE Mini-Grids and Stand Alone Solar PV	AFDB	Public	16.60	-	0.20	Jun-20
IP	Uganda	Decentralized Renewables Development Program: Mini-Grids & Urban Small Scale Solar PV Net	AFDB	Public	7.10	-	0.08	Dec-20
IP	Uganda	Wind Resource Map and Pilot Wind Power Development Program	AFDB	Public	4.93	-	0.08	Dec-20
IP	Nicaragua	Integral Development of Rural Areas	IDB	Private	7.50	-	-	Dec-20
IP	Madagascar	Funding scheme for hybridization of the JIRAMA priority isolated centers	AFDB	Public	2.00	6.00	0.43	Dec-20
IP	Kenya	Menengai Geothermal Project	AFDB	Public	10.50	4.50	-	Dec-20
IP	Zambia	Wind Power Promotion	AFDB	Public	10.00	-	-	Jun-21
		SUBTOTAL			75.51	16.50	1.12	
			TOTAL		94.46	53.50	1.70	

Annex 3 Summary of results

Electricity production and GHG emissions

Country	Project title	SREP funding (USD	MDB	Annual El Production	ectricity (MWh/yr)	Annual G reduced/a CO2 e	HG emissions voided (tons of equivalent)
		million)		Actual	Target	Actual	Target
Armenia	Geothermal Exploratory Drilling Project	8.85	IBRD	0	224,694	0	166,000
Bangladesh	Off-Grid Solar PV-Solar Irrigation	22.44	ADB	0	5,054	0	2,160
Ethiopia	Geothermal Sector Development Project	24.5	IBRD	0	552,000	0	438,122
Ethiopia	Geothermal Sector Strategy and Regulations*	1.5	IFC	n.a.	n.a.	n.a.	n.a.
Ethiopia	Lighting Ethiopia*	1.6	IFC	n.a.	n.a.	n.a.	n.a.
Haiti	Renewable Energy and Access for All	8.6	IBRD	0	12,000	0	32,000
Haiti	Renewable Energy for Metropolitan Area	11.0	IBRD	0	8,250	0	10,300
Honduras	Strengthening the RE Policy and Regulatory Framework(FOMPIER)*	0.85	IDB	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.	14,997	74,532
Honduras	Self-Supply RE Guarantee Program	5.5	IDB	2,210.32	45,000	871	40,000
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB	0	427,000	0	285,000
Kenya	Menengai Geothermal Project	25	AfDB	0	1,182,00 0	0	734,650
Kenya	Electricity Modernization Project	7.5	IBRD	0	1,242	0	986
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini- grids	25.0	IBRD	0	4,000	0	3,174
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	IBRD	2,674	32,610	1,729	25,883
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	1,679	27,600	895	40,000
Mali	Rural Electrification Hybrid Systems	15.4	IBRD	2.72	8,653	622.48	6,868
Mali	Promoting the Scaling Up of Renewable Energy in Mali*	1.5	AfDB	n.a.	n.a.	n.a.	n.a.

Country	Project title	SREP funding (USD	MDB	Annual E Production	ectricity (MWh/yr)	Annual G reduced/a CO2 e	HG emissions voided (tons of equivalent)
		million)		Actual	Target	Actual	Target
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro)	8.7	AfDB	0	23,680	0	15,800
Mali	Segou Solar Park	25.0	AfDB	0	52,700	0	55,000
Mongolia	TA-Strengthening Renewable Energy Regulations*	1.2	IBRD	n.a.	n.a.	n.a.	n.a.
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	0	98,770	0	87,969
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	IBRD	0	14,020	0	6,200
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	11.8	ADB	114	25,228	32	18,000
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project- Additional Co-financing	20.0	ADB	0	32,850	0	26,280
Nepal	Extended Biogas Program	7.9	IBRD	33,052	15,900	5,865.11	16,970
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC	7.5	IDB	0	315,360	0	87,139
Pacific Region	Sustainable Energy Industry Development Project*	1.9	IBRD	n.a.	n.a.	n.a.	n.a.
Rwanda	Renewable Energy Fund	48.94	IBRD	28	13,000	185	10,314
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	IBRD	0	5,660	0	3,876
Solomon Islands	Solar Power Development Project	6.6	ADB	0	3,100	0	840
Tanzania	Tanzania Mini-grids project	4.75	IFC	0	88,000	0	200,000
Tanzania	Rural Electrification Expansion Project	9.0	IBRD	0	142,000	0	112,000
Vanuatu	Rural Electrification Project	6.77	IBRD	0	2,700	0	5,300
Vanuatu	Energy Access Project	7	ADB	0	2,800	0	2,900
	Total			41,708.6	3,365,872	36,8363	2,508,323

Energy access

Country	Project title	SREP funding	MDB	8 New or improved energy access								
		(USD million)		Wo	omen	N	len	Target Businesses				
				Actual	Target	Actual	Target	Dubinebbeb				
Armenia	Geothermal Exploratory Drilling Project	8.85	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.				
Bangladesh	Off-Grid Solar PV-Solar Irrigation	22.44	ADB	0	38,021	0	38,566	n.a.				
Ethiopia	Geothermal Sector Development Project	24.5	IBRD	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.				
Ethiopia	Lighting Ethiopia*	1.60	IFC	n.a.	n.a.	n.a.	n.a.	n.a.				
Haiti	Renewable Energy and Access for All	8.6	IBRD	0	157,000	0	158,000	3,500				
Haiti	Renewable Energy for Metropolitan Area	11.0	IBRD	0	50,000	0	50,000	1,000				
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)*	0.85	IDB	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	28,864	187,500	28,386	187,500	300				
Honduras	Self-Supply RE Guarantee Program	5.5	IDB	n.a.	n.a.	n.a.	n.a.	n.a.				
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB	n.a.	n.a.	n.a.	n.a.	22				
Kenya	Menengai Geothermal Project	25	AfDB	0	1,250,000	0	1,250,000	110,000				
Kenya	Electricity Modernization Project	7.5	IBRD	0	10,125	0	10,125	n.a.				
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini- grids	25.0	IBRD	8,035	74,400	8,165	75,600	n.a.				
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	IBRD	0	n.a.	0	n.a.	n.a.				

Country	Project title	SREP funding	MDB		New or in	mproved er	nergy access	
		(USD million)		Wo	omen	N	len	Target
				Actual	Target	Actual	Target	Dusinesses
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	19,569	15,410	20,370	15,410	n.a.
Mali	Rural Electrification Hybrid Systems	15.4	IBRD	73,532	343,224	72,365	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.
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro)	8.7	AfDB	0	35,104	0	32,917	n.a.
Mali	Segou Solar Park	25.0	AfDB	0	168,500	0	158,000	n.a.
Mongolia	TA-Strengthening Renewable Energy Regulations*	1.2	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	0	118,824	0	139,353	n.a.
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	IBRD	0	12,500	0	12,500	n.a.
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	11.8	ADB	3,067	75,689	4,910	67,661	n.a.
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project- Additional Co-financing	20.0	ADB	0	137,505	0	129,495	n.a.
Nepal	Extended Biogas Program	7.9	IBRD	n.a.	n.a.	n.a.	n.a.	400
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC	7.5	IDB	n.a.	n.a.	n.a.	n.a.	n.a.
Pacific Region	Sustainable Energy Industry Development Project*	1.9	IBRD	n.a.	n.a.	n.a.	n.a.	n.a.
Rwanda	Renewable Energy Fund	48.94	IBRD	713	936,000	713	864,000	27,500

Country Project title SREP fundin (USD	SREP funding	SREP MDB funding		New or improved energy access						
		(USD million)		Wo	omen	N	Target Businesses			
				Actual	Target	Actual	Target	Dusinesses		
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	IBRD	0	4,579	0	4,766	75		
Solomon Islands	Solar Power Development Project	6.6	ADB	0	2,922	0	3,078	n.a.		
Tanzania	Tanzania Mini-grids project	4.75	IFC	0	55,000	0	55,000	n.a.		
Tanzania	Rural Electrification Expansion Project	9.0	IBRD	0	155,000	0	155,000	n.a.		
Vanuatu	Rural Electrification Project	6.77	IBRD	0	21,927	0	22,823	60		
Vanuatu	Energy Access Project	7	ADB	0	2,212	0	2,303	n.a.		
	Total		133,780	4,420,745	134,909	4,399,176	142,857			

Increased public and private investments

Country	Project title	SREP fund.	MDB	B Increased public and private investments in targeted subsectors as a result of SREP Interventions (USD million)									
		(03D M)		Tot	tal	MDB	5	Government		Private Sector		Bilaterals and Others	
				Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.
Armenia	Geothermal Exploratory Drilling Project	8.85	IBRD	0	109	0	0	1.57	9	0	100	0	0
Bangladesh	Off-Grid Solar PV- Solar Irrigation	22.44	ADB	n.a.	26.6	n.a.	20	n.a.	6.6	n.a.	0	n.a.	0
Ethiopia	Geothermal Sector Development Project	24.5	IBRD	0.4	194	13.9	179	0	12	0	0	0	3
Ethiopia	Geothermal Sector Strategy and Regulations	1.5	IFC	0.63	0.50	0	0	0.46	0.50	0	0	0.17	0
Ethiopia	Lighting Ethiopia	1.60	IFC	2.39	0.20	0	0	0	0	0.07	0	2.32	0.20
Haiti	Renewable Energy and Access for All	8.6	IBRD	0	54.5	0	20	0	0	0	16	0	18.5
Haiti	Renewable Energy for Metropolitan Area	11.0	IBRD	0	12.5	0	4	0	0	0	8	0	0.5
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)	0.85	IDB	0.03	0.1	0	0	0.03	0.1	0	0	0	0
Honduras	Sustainable Rural Energization(ERUS)- Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	2.95	IDB	3.16	3	2.29	2.2	1.15	0	0	0.8	0	0
Honduras	Self-Supply RE Guarantee Program*	5.5	IDB	-	40	1.5	20	0	0	-	20	0	0
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB	0	370	0	4	0	0	0	0	0	366
Kenya	Menengai Geothermal Project	25	AfDB	413	480	116	125	297	246	0	0	0	109

Country	Project title	SREP fund.	MDB	Increased public and private investments in targeted subsectors as a result of SREP Interventions (USD million)									
		(USD M)		Total		MDBs		Government		Private Sector		Bilaterals and Others	
				Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.
Kenya	Electricity Modernization Project	7.5	IBRD	8	13.2	8	2.5		0		10.7		0
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini-grids	25.0	IBRD	0.1	2	0.1	2	0	0	0	0	0	0
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	IBRD	3.1	58	0	16	0	0	3.1	42	0	0
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	44.5	112	33	38	0	14	0	0	11.5	60
Mali	Rural Electrification Hybrid Systems	15.4	IBRD	20.34	40.7	16.2	25	0	8.9	0	1.8	4.14	5
Mali	Promoting the Scaling Up of Renewable Energy in Mali	1.5	AfDB	0.57	1	0.23	0.5	0.3	0.3	0	0.2	0	0
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project (PDM- Hydro)	8.7	AfDB	0	48	0	28.3	0	0.1	0	0	0	19.6
Mali	Segou Solar Park	25.0	AfDB	0	17.9	0	17.9	0	0	0	0	0	0
Mongolia	TA-Strengthening Renewable Energy Regulations	1.2	IBRD	0	0.1	0	0	0	0.1	0	0	0	0
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	n.a.	51.6	n.a.	40	n.a.	5.6	n.a.	0	n.a.	6
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	IBRD	1.8	12.5	1.8	12	0	0.5	0	0	0	0
Nepal	South Asia Subregional	31.7	ADB	2.38	41.2	1.38	5	0.3	27.7	0	0	0.267	8.5

Country	Project title	SREP fund. (USD	MDB	Increased public and private investments in targeted subsectors as a result of SREP Interventions (USD million)									t of
		M)		Total		MDBs		Government		Private Sector		Bilaterals and Others	
				Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.	Act.	Exp.
	Economic Cooperation Power System Expansion Project												
Nepal	Extended Biogas Program	7.9	IBRD	10.9	28	0	0	0	18.2	9.6	14.9	1.4	13.1
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC	7.5	IDB	0	95.8	0	51.3	0	10	0	0	0	34.5
Pacific Region	Sustainable Energy Industry Development Project	1.9	IBRD	0.3	3.7	0	0	0	0	0	0	0.85	3.7
Rwanda	Renewable Energy Fund	48.94	IBRD	0	52	0	7	0	0	0	41	0	3.5
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	IBRD	0.8	15.5	0.8	10.3	0	0.3	0	0.1	0	4.8
Solomon Islands	Solar Power Development Project	6.6	ADB	0	9	0	2.2	0	6.8	0	0	0	0
Tanzania	Tanzania Mini-grids project	4.75	IFC	0.15	0.15	0	0	0	0	0.15	0.15	0	0
Tanzania	Rural Electrification Expansion Project	9.0	IBRD	0	150	0	35	0	0	0	59	0	56
Vanuatu	Rural Electrification Project	6.77	IBRD	4.6	27.9	0.4	4	0	1.5	0	0	0	22.4
Vanuatu	Energy Access Project	7	ADB	0	8.1	0	5	0	3.1	0	0	0	0

* Private sector figures are confidential

Annex 4: Disbursements	by project	(public sector)
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COUNTRY	PROJECT TITLE	MDB	SREP Funding (USD million)	SC Approval Date	MDB Board Approval Date	Change in disbursement (Jan 1 to June 30, 2019)	Cumulative Disb. As of June 30, 2019	Disbursement Ratio
	Geothermal Exploratory Drilling							
Armenia	Project (GEDP)	IBRD	8.6	Mar-15	Jun-15	-	6.9	80%
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	22.4	Jul-17	Jul-18	-	-	0%
Bangladesh	Scaling Up Renewable Energy	IBRD	29.3	Aug-17	Mar-19	-	-	0%
Ethiopia	Geothermal Sector Development Project (GSDP)	IBRD	24.5	Apr-14	May-14	-	5.9	24%
Honduras	Grid-Connected RE Development Support(ADERC)-Transmission	IDB	7.0	Aug-17	Sep-18	-	-	0%
Honduras	Sustainable Rural Energization(ERUS)	IDB	6.6	Aug-17	Nov-18	-	-	0%
Haiti	Renewable Energy and Access for All	IBRD	8.6	Jun-17	Oct-17	0.3	0.3	3%
Haiti	Renewable Energy for the Metropolitan Area	IBRD	11.0	Jun-17	Dec-17	0.2	0.2	2%
Kenya	Menengai Geothermal Development Project	AFDB	17.5	Nov-11	Dec-11	1.7	14.4	82%
Kenya	Menengai Geothermal Development Project	AFDB	7.5	Nov-11	Dec-11	-	5.3	71%
Kenya	Electricity Modernization Project	IBRD	7.5	Jan-15	Mar-15	-	-	0%
Liberia	Renewable Energy for Electrification in North and Center Liberia Project-Mini Grids	IBRD	25.0	Dec-15	Jan-16	0.9	5.1	20%
Mali	Rural Electrification Hybrid Systems	IBRD	14.9	Oct-13	Dec-13	2.0	7.8	53%
Mali	Development of Micro/Mini Hydroelectricity for Rural		0.7	Apr 19	5an 19			01/
IVIdII		AFUB	0.7	Api-10	3eb-19	-	-	0%
Mali	Energy in Mali	AFDB	1.5	Sep-14	Oct-14	0.2	0.7	46%
Manaalia	Unangling Dural Demoushing Frances	400	14.6	4.55.10	Car 10			0%
Mongolia	Upscaling Rural Renewable Energy	ADB	14.6	Apr-18	Sep-18	-	-	0%
Mongolia	Upscaling Rural Renewable Energy - Solar PV	IBRD	12.4	Feb-17	Jun-17	-	0.8	6%
Mongolia	TA-Strengthening Renewable Energy Regulations	IBRD	1.2	Aug-16	Aug-16	0.1	0.8	67%
Maldives	Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program	IBRD	11.7	Apr-14	Jun-14	0.1	2.1	18%
Maldives	Preparing Outer Island Sustainable		12.0	bil-14	Son-11	1 1	12.0	10.0%
	Technical Assistance: Capacity	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12.0	501 14	3CP 14	1.1	12.0	10070
Maldives	Development of the Maldives Energy Authority	ADB	0.3	Jul-14	Mar-15	-	0.3	100%

COUNTRY	PROJECT TITLE	MDB	SREP Funding (USD million)	SC Approval Date	MDB Board Approval Date	Change in disbursement (Jan 1 to June 30, 2019)	Cumulative Disb. As of June 30, 2019	Disbursement Ratio
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement Program under the PINIC	IDB	7.5	Aug-16	Sep-16	-	-	0%
Nepal	South Asia Sub-regional Economic Cooperation Power System Expansion Project: Rural Electrification Through Renewable Energy	ADB	31.2	May-14	Nov-16	0.7	3.7	12%
Nepal	Biogas Extended Program		7.0	Eeb-14	Δυσ-14	0.5	1.0	24%
Pacific Region	Sustainable Energy Industry Development Project	IBRD	1.9	May-15	Sep-15	0.1	1.9	53%
Rwanda	Renewable energy Fund	IBRD	48.9	Apr-17	Jun-17	0.2	5.4	11%
Solomon Islands	Renewable Energy Access Project	IBRD	7.1	Mar-18	Jul-18	0.2	0.2	3%
Solomon Islands	Solar Power Development Project	ADB	6.2	Jun-16	Nov-16	1.7	1.7	28%
Tanzania	Rural Electrification Expansion Project	IBRD	9.0	Apr-16	Jun-16		2.3	25%
Vanuatu	Rural Electrification Project	IBRD	6.8	Feb-17	May-17	-	0.4	6%
Vanuatu	Energy Access Project	ADB	7.0	Nov-15	Sep-17	0.1	0.5	6%
Honduras	Support for the National Electricity Transmission Program	IDB	5.0	Jun-18	Sep-18	-	-	0%
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER) Phase II	IDB	0.8	Mar-18	Apr-18	-	-	0%
Cambodia	National Solar Parks Program	ADB	15.7	Apr-18	May-19	-	-	0%

Annex 5: Project Implementation Status

- 68. Armenia: Geothermal Exploratory Drilling Project (World Bank) The planned geothermal exploration drilling has been completed. The results of drilling proved that there was not a geothermal resource that would be economically exploitable. The decision was made not to further proceed with the geothermal power development. The project closed on May 31, 2019.
- 69. Caucasus Green Economy Financing Facility (GEFF) SREP Armenia Renewable Energy Grant Support (EBRD) No issues this reporting period.

70. Bangladesh:

Scaling Up Renewable Energy Project, World Bank

- 71. The SREP loan (USD 26.38 million) was declared effective earlier this week, and the SREP TA grant (USD 2.87 million) is still pending effectiveness. As such, project implementation is in an early stage with no SREP financed activities on the ground quite yet.
- 72. The Infrastructure Development Corporation Limited (IDCOL) is the implementing agency for the Project component benefiting from the SREP Ioan. The SREP Ioan together with an IDA credit (USD 108.23 million) is creating a RE Financing Facility (REFF) that will provide sub-loans to private sector borrowers for both rooftop PV and utility scale PV. IDCOL has submitted first two subprojects for Bank review and is developing a strong subproject pipeline for the Project.
- 73. The Sustainable and Renewable Energy Development Authority (SREDA) is the implementing agency for the SREP TA grant component of the Project. SREDA is currently planning the various activities under the Project. Given that the grant is not yet effective, SREDA has not yet funded activities from it; however, it is proactively promoting the country's net metering policy, which the SREP grant will also be supporting. Furthermore, SREDA has identified a potential site (called Kushtia) for an about 30-40MW utility scale project and signed an advisory mandate with IFC for that site. The SREP grant could advance the preparation of the site for private sector investment, potentially by supporting the preparation of the environmental and social impact assessment and resettlement action plan.

Off-Grid Solar PV-Solar Irrigation Project, ADB

- 74. The SREP project consists of a technical assistance component and an investment component.
- 75. The Regional Technical Assistance: Promoting and Scaling Up Solar Photovoltaic Power through Knowledge Management and Pilot Testing in Bangladesh and Nepal will be closed by end of Dec 2019. Draft roadmap has been discussed with the government of Bangladesh and will be finalized within next week. There is a plan to publish the final report in Q2 2020. As of October 2019, USD 293,830 have been disbursed.

76. Power System Efficiency Improvement Project - Additional Financing (Off-grid solar PV: solar irrigation): By June 2019, six bid documents were prepared for turnkey contracts to install 2,000 solar irrigation pumps. The project inception report is attached for reference. All six packages are tendered out in October 2019. Technical bid evaluation report from EA for package-1 is under ADB review. All 6 packages are expected to be awarded by Q-1, 2020, During this period, 10% mobilization advance (estimated at USD 3 million) is expected. Contract duration for all 6 packages are 10 months. It is expected that by June 2020, 80% of contract value which is on delivery of major goods would be completed. Remaining 10% will be disbursed by December 2020. Further, implementation of Gender Action Plan will begin in January 2020 with the Gender expert consultant on board in November 2019.

Grid-Connected Utility-Scale Solar PV, IFC

- 77. This project was approved by the SREP Sub-Committee in September 2019. IFC has been pursuing a private sector utility-scale solar PV project that is being developed by Scatec Solar. IFC is considering the possibility to provide concessional co-financing to the project from SREP funds. The project has been progressing well and has already passed through IFC's initial reviews including that by the Blended Finance Committee. The project continues making progress on EPC contract and PPA negotiations as well as land procurement. The Scatec Solar is in the process of recruiting further local team members as part of the preparation for project execution. Given the complexity of the land ownership (including land availability and acquisition) faced by most of the developers in Bangladesh (including Scatec Solar) as well as a number of other issues associated with developing first large scale solar project of its kind in the country, it is expected that the project will continue moving at a moderate pace and will likely be presented to IFC board in early summer 2020.
- 78. Cambodia: National Solar Parks Program (ADB) The project became effective on 18 September 2019. Technical proposals evaluation for the PIC contract is ongoing. Bid opening for EPC is scheduled on 2 October 2019. Both contracts are expected to be awarded by Q4 2019.
- 79. **Ethiopia:** For the Geothermal Sector Development Project (World Bank), the Government signed a contract in February 2019 with a consortium to supply and operate drilling rigs in Altuo geothermal site. The contractor already started manufacturing the drilling rigs. The Government also engaged a local civil contractor to prepare Aluto sites for the drilling operation. The consortium will deliver the drilling rigs in October 2019 and start drilling in December 2019.
- 80. **Haiti:** The Renewable Energy and Access for All (World Bank) Request for proposals (RFP) for mini-grid were issued. Two mini-grid companies were selected out of four. Once the selected two companies meet all the conditions for results-based financing, contracts will be awarded in four months. On the other hand, the Government submitted the evaluation report for the recruitment of the Mini-Grid Adviser to assist them on all mini-grid matters, including the evaluation of the RFP proposals.
- 81. Under the Renewable Energy for the Metropolitan Area (World Bank), the technical adviser who will assist the Government in launching the procurement process was selected. The

negotiation is ongoing before the contract is awarded. On the other hand, the World Bank team conducts weekly virtual team meetings with the Government to ensure continuous progress.

- 82. **Honduras:** The Self-Supply RE Guarantee Program (IDB), consists of two guarantee operations (Invema and Grupo Kattan) and a TA operation. The Invema project is currently generating electricity from a rooftop system. The Kattan operation was approved by IDBG in March 2019. The TA operation is under execution.
- 83. The Sustainable Rural Energization Program (ERUS) Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination (IDB) is implemented by Fundacion Hondureña de Ambiente y Desarrollo (Fundación Vida). It seeks to create a transformative impact on the clean cookstove market, by enabling market conditions for new business models and by strengthening the existing private sector capacity in Honduras. The project has built 17,108 improved stoves in the country and trained a group of local technicians in construction services and maintenance of improved stoves. A pilot exercise of commercialization of mobile improved stoves was developed, including the improvement of the laboratory for the analysis of improved stoves components of the Honduras National University.
- 84. Under the Grid-Connected RE Development Support Project (ADERC)— The program consists of an equity operation (Honduras Renewable Energy Finance Facility, H-REFF), an investment grant operation, and a project preparation grant. H-REFF has approved thirteen investments totaling USD\$18.9M (US\$6.2 M SREP), including solar Photo Voltaic (off and ongrid), small hydro, and biomass and energy efficiency. Project capitalization reaches \$33m and \$50m are expected to be raised by the implementing partner. Projects in pipeline currently being assessed by the Fund Manager represent potential new investments for H-REFF of \$19.7 M (US\$11.3 M SREP). Approved investments have created 435 temporary jobs, 414 permanent jobs, 74.1 GWh of clean energy during the first six months of 2019 (of an annual average estimate generation of 1,526 GWh/year) and displaced 49,448 Tons of CO2e (out of a total annual average estimate offset of 1,111,417 Tons of CO2e when operating at full capacity). Furthermore, the National power transmission program loan document was signed by the Honduran Government on December 2018 and is currently expecting eligibility.
- 85. **Kenya:** The Menengai Geothermal Development Project (AfDB) is the only project reporting on Core Indicator 4 for indirect capacity achieved via a SREP intervention. The drilling process is ongoing, but delivery is progressing well. Both government support for the project and fuel supply for drilling rigs have improved. Project implementer, GDC, is introducing directional drilling to advance the drilling progress. AfDB is assisting in procurement of directional drilling services. Total wells drilled at end of October 2017 provided 165 MW at the wellhead. Installation of additional drilling rigs is ongoing.
- 86. The Electricity Modernization Project (World Bank) After initial delays in completing sitespecific feasibility studies and preparing the bidding documents, the bidding for the minigrid installation and operation (total eight sites) is now at the final stage of awarding. Installation of the mini-grids is expected to be completed by late 2020.

- 87. Kopere Solar Park (AFDB) Project is not yet under implementation.
- 88. Liberia: For the Renewable Energy for Electrification in North and Center Liberia Project Minigrids (IBRD), technical studies were completed for launching a procurement package for the construction of the Kaiha mini-hydropower plant. The draft bid documents were reviewed by the World Bank, and bidding is expected to be launched soon. A Simplified Environmental and Social Management Plan has been prepared and disclosed following World Bank safeguards requirements. Preparatory work on the access road has been initiated, while other preparatory studies and consulting services, including the owner's engineer, are ongoing.
- 89. **Maldives:** The Accelerating Sustainable Private Investments in RE Program (ASPIRE) (World Bank) aims to transform the solar PV sector in Maldives by improving the risk perception of the private sector, standardizing the deployment of these technologies, and providing critical mass to ensure subsequent private sector engagement in the sector. The first sub-project with 1.5 MW capacity has completed the first year of operation, and payments have been processed as per the PPA. The second sub-project with 5MW capacity in Greater Male has been tendered. The lowest bid for the solar PPA in the Maldives was at 9 cents --about 60 percent cheaper than the first 1.5 MW. This is a record low bid for Solar energy in the Maldives and among the lowest in the world for remote islands.
- 90. Under the Preparing Outer Islands for Sustainable Energy Development Program (POISED) (ADB) a gender-inclusive community outreach program was implemented to raise awareness on renewable energy and household demand-side management, targeting the island women's development committees and women household consumers in the outer islands covered under the project (not identified as primary gender indicators). The program has reached 104 islands
- 91. Mali: The implementation of activities under the Rural Electrification Hybrid Systems project (IBRD) are on track. The Government signed contracts for the hybridization of 45 existing mini-grids through the introduction of solar power. The dissemination of 100,000 solar lanterns is progressing (16,073) and measures have been taken to accelerate market uptake. In 2019, 9,842 CFLs were distributed bringing the total to 40,527 (36,600 target). Also, 380 persons were trained in 2019, raising the total under the project to 476 (420 target). The construction of the solar plants commenced in February 2019 and are ongoing. Contracts for the densification of existing MV/LV are being awarded. A funding gap of approximately \$20 million was filled through an additional IDA financing approved in July 2019.
- 92. Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro) (AfDB) A launch mission was held in February 2019 alongside Mali's Renewable Energy Week. The project has now entered into its implementation phase. The procurement process for some project goods has been completed. Procurement processes for the power station's construction materials and distribution network are ongoing. Procurement to be accelerated upon recruitment of an international procurement expert to the PIU team.

- 93. Segou Solar Park (AfDB) Project has not reached financial close (i.e. signature date) by reporting period and is not yet under implementation.
- 94. **Mongolia:** The Upscaling Rural Renewable Energy Solar PV Project (World Bank) Three contracts have been signed and are under execution. This includes contracts with a Waste Removal contractor, an Engineering Consultant, and an International Solar Consultant. The procurement of a firm to undertake the Myangad substation upgrade is on the critical path firms are being shortlisted, and construction is expected to commence later 2019. It is expected that the construction activities to begin in early 2020.
- 95. Upscaling Renewable Energy Sector (ADB) The project was MDB approved in 20 September 2018.
- 96. Nepal: For the South Asia Subregional Economic Cooperation Power System Rural Electrification through Renewable Energy (ADB), (i) Mini Hydro Subprojects (MHP)-(Target Installation 4300 kW), contract awarded 6 MHPs with cumulative size of 2600 kW. Out of these, 1 MHPs of 200 kW (Simrutu MHP) is in advance stage of completion. Procurement is ongoing for another 1 subproject with size of 1000 kW. Detailed design of final MHP of size 750 kW in final stage of completion; (ii) Wind Solar Mini Grid (SWMG)-(target Installation 500 kW), 7 SWMGs project with cumulative size of 365kWp completed and construction ongoing for 1 SWMGs with total size of 150 kWp.
- 97. The Extended Biogas Program (World Bank) promotes large off-grid biogas generation in Nepal, measured by two result indicators: (a) Off-grid bio gas generated for thermal application from the large-scale projects (>12m2) and (b) off-grid bio-gas based electricity generated. Due to reduced load shedding in Nepal, the interest from sub-project developers to invest in bio-gas based electricity generation system has now diminished. The developers are now more focused and interested on generating bio-gas for thermal application. The project is on track to achieve its development objective and is showing strong results. Five large-size sub-projects (>100m3/day gas generation capacity) have been completed. 142 sub-projects have been commissioned, and 91 are under construction. Two additional large projects will be commissioned. The sub-project pipeline is strong with 433 projects approved to do pre-feasibility studies out of 529 applications. The disbursement rate has steadily increased since the last reporting period.
- 98. The South Asia Subregional Economic Cooperation Power System Expansion Project -Additional Cofinancing (ADB) – The project has thus far developed 23 Women's microenterprises, of which 39% are women led.
- 99. Nepal Private Sector Led Mini-Grid Energy Access Project (World Bank) The project was approved by World Bank Board on January 30, 2019.
- 100. **Nicaragua:** The Geothermal Exploration and Transmission Improvement Program under the PINIC (IDB) - Studies were carried out to define the area where production drilling will be made; the access road and the platforms were designed, and the ToRs for the environmental impact study were prepared.

- 101. **Rwanda:** Under the Renewable Energy Fund (IBRD), four banks and 32 Saving and Credit Cooperatives (SACCOs) have signed subsidiary financing agreements with National Bank of Rwanda. Five solar companies have been appraised and approved to work with SACCOs. SACCOs have made the first drawdown from the Renewable Energy Fund (REF) facility. The fourth funding window for direct lending from the Rwandese Development Bank (BRD) to off-grid solar companies was activated, and all four financing windows under the REF are now operational.
- 102. **Solomon Islands:** For the Solar Power Development Project (ADB), the Main Engineering Procurement Contract (EPC) was signed in September 2018 and all contracts are signed under the project. Construction at Munda project site has commenced.
- 103. Electricity Access and Renewable Expansion Project 2 (IBRD) The Implementing Agency, Solomon Power, is in the process of setting up the project team, who is now mostly operational. The Project Implementation Manual has also been adopted. The preparation of safeguard studies for two of the five sites for the mini-grids was conducted. The procurement process is ongoing. The land for one site has been confirmed. Access to land for the second site was discussed.
- 104. **Tanzania: In the Renewable Energy Expansion Project (World Bank)** The Government approved Small Power Projects Rules, ending the regulatory uncertainty which has been constraining new investments. Many banks expressed interest to sign up for the credit line facilities in a workshop for commercial banks. At least two banks have already submitted applications which are being vetted by the Bank of Tanzania to be signed up as Participating Financial Institutions. The World Bank team is working to support the first set of transactions in the coming months.
- 105. In the Tanzania Mini-grids project (IFC), An advisory project is under active implementation. First phase is completed successfully and the implementation of the second phase has recently started. Thus far the project has achieved the following:
 - Development of technical standards and specifications for mini-grids distribution network that were enacted by Tanzania Bureau of Standards and gazetted (published) in October 2018;
 - Development of an online mini-grid information portal, hosted and managed by the Rural Energy Agency (REA) and available at <u>http://www.minigrids.go.tz</u>;
 - GIS mapping across all of rural Tanzania, published mini-grid benchmarking reports, technology specific checklists to simplify the environmental and social impact assessment by the National Environmental Management Council (NEMC);
 - Review of more than 50 potential mini-grid projects to identify gaps preventing them from reaching financial closure.
- 106. **Vanuatu:** The Rural Electrification Project (World Bank) implementation activities are progressing steadily. The sale of approved Solar Home Systems commenced in December 2018. The Government awarded the Owner's Engineer contract for the mini-grid component in July 2019. Household wiring to mini-grids is behind schedule. The World Bank team is working closely with the implementing agency to ensure that wiring meets international standards.

107. The Vanuatu Energy Access Project (Small Hydropower Project) (ADB) - Currently procurement for the hydropower plant and T&D is in progress contract awarding is expected by end of this year. Discussions are being carried out between ADB's Procurement/Legal Departments and Government's State Law Office for a mutual agreement for the modifications in the bidding documents to expedite the project awarding process and implementation.