## Climate Investment Funds

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2014 SREP RESULTS REPORT



# 2014

# SREP RESULTS REPORT













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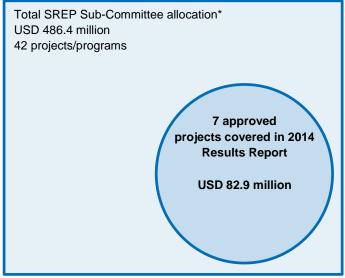
## 1 Introduction

## 1.1 Scope and Purpose of the Report

1. This is the first report on the progress of the Scaling Up Renewable Energy in Low Income Countries Program (SREP). The report covers all projects approved by MDBs before June 30, 2014. The reporting period is from the date the first SREP project was approved by an MDB, December 2011, through June 30, 2014. Since SREP is in very early stages of implementation, this report presents the monitoring and reporting process briefly and the expected results of the projects/programs. Only one project has reported a result thus far.

#### 1.2 Status of the SREP

**Diagram1: SREP Projects** 



\* This includes the Private Sector Set-aside Funds

- 2. As of June 30, 2014, four implementing partners<sup>1</sup> had approved seven projects, for a total of USD 82.9 million in SREP funds. The projects are to be implemented in five pilot countries: Ethiopia, Honduras, Kenya, Maldives and Mali.
- 3. Diagram 1 shows the number of projects covered in this results report vis-àvis the total SREP allocation.
- 4. The data has been reported by four implementing partners, the African Development Bank (AfDB), International Bank for Reconstruction and Development

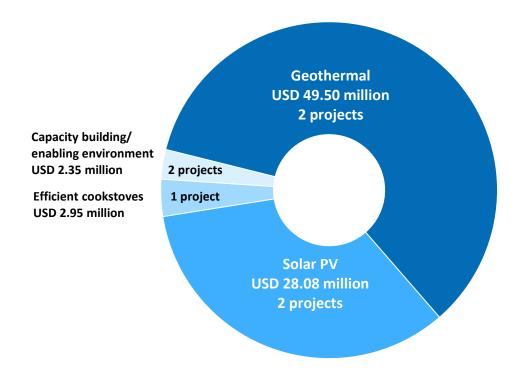
(IBRD), the Inter-American Development Bank (IDB) and the International Finance Cooperation (IFC).

<sup>&</sup>lt;sup>1</sup> African Development Bank, Inter-American Development Bank, International Bank of Reconstruction and Development, and International Finance Corporation.

Table 1: 7 MDB-approved projects by June 30,2014

			SREP funding <sup>2</sup> (USD	MDB approval
	Project	MDB	million)	date
Ethiopia	Geothermal Sector Strategy and Regulations	IFC	1.50	Feb-14
Ethiopia	Geothermal Sector Development Project	IBRD	24.50	May-14
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)	IDB	0.85	Dec-12
Honduras	Sustainable Rural Energization (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cook stoves Dissemination	IDB	2.95	Nov-13
Kenya	Menengai Geothermal Project Phase A-Resource and Infrastructure Development and Mobilization of Private Sector	AfDB	25.00	Dec-11
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	IBRD	12.68	Jun-14
Mali	Rural Electrification Hybrid Systems	IBRD	15.40	Dec-13
	Total of 7 projects/programs		82.88	

Diagram 2. Sector breakdown of the 7 SREP projects/programs



<sup>&</sup>lt;sup>2</sup> Inclusive of Project Preparation Grants

## 1.3 Results Measurement in SREP

5. The SREP core indicators were identified in the revised SREP results framework<sup>3</sup>. Reporting against these indicators is done annually with 2014 being the first reporting round. The two core indicators for SREP-funded projects are:

**Core indicator 1**: Annual electricity output from renewable energy as a result of SREP interventions

**Core indicator 2**: Number of people, businesses and community services benefiting from improved access to electricity and fuels as a result of SREP intervention

- 6. All projects and programs are expected to contribute to at least one of the two core indicators<sup>4</sup>, either annual electricity output from renewable energy or improved access to electricity and fuels. There are also projects whose primary objective is to strengthen the enabling environment for investments in clean energy and energy access and therefore the results of these projects will not be reported against the SREP core indicators.
- 7. In addition, all projects and programs develop co-benefit indicators that reflect the broader impact of the SREP-funded interventions in the country. Reporting is not required annually, but data will be made available if the MDBs decide to do so. At project completion evaluations may assess the effectiveness of the supported interventions. Examples of co-benefit indicators are:
  - Increased public and private investments in targeted subsectors as a result of SREP interventions
  - Gender Indicator
  - GHG emissions reduced/avoided
- 8. In February 2014, the CIF Administrative Unit, in collaboration with the MDBs, produced a toolkit for SREP monitoring and reporting<sup>5</sup>. The toolkit is based on the revised SREP results framework and provides guidance on the SREP's two core indicators and suggested co-benefit indicators. The toolkit guides MDBs and country teams on the data to be collected for reporting operational achievements of MDB approved SREP projects.
- 9. Regarding projects that strengthen the enabling environment, the World Bank Group has developed a "Readiness for Investment in Sustainable Energy (RISE) tool, which will be presented at the November 2014 SREP Sub-Committee Meeting<sup>6</sup> for information. RISE is a suite of indicators that assesses the legal and regulatory environment for investment in sustainable energy. The tool, which has only been piloted so far, will be rolled out globally in 2015 to cover 100+ countries, possibly including all existing and new SREP countries. Therefore enabling environment for SREP countries will be measured regularly as RISE continues to run.

<sup>&</sup>lt;sup>3</sup> Revised SREP Results Framework, June 1, 2012

<sup>&</sup>lt;sup>4</sup> Revised SREP Results Framework, June 1, 2012, para. 16

<sup>&</sup>lt;sup>5</sup> The toolkit is available on the CIF website: www.climateinvestmentfunds.org

<sup>&</sup>lt;sup>6</sup> SREP/SC 12/Inf.5 Presentation on the Readiness for Investment in Sustainable Energy (RISE)

## 2 2014 SREP Results Reporting

10. Tables 1 and 2 below present the expected results and cumulative results achieved since the start of the program until June 30, 2014.

Table 1: Summary of 7 MDB-approved projects/programs requested to report results

Column 1	Column 2	Column 3	Column 4	Column 5
	Expected results of 7 projects/ programs under implementation	2014 results cumulative from start	% of expected results	Number of projects contributing to this indicator
Annual electricity output from renewable energy (MWh)	1,775,263	0	-	4
Improved access to electricity and fuels:				
million people	4.7 <sup>7</sup>	0	-	5
businesses	300,300	0	-	2
community services	0	0	-	0

**Table 2: Additional co-benefits** 

Column 1	Column 2	Column 3	Column 4	Column 5
	Expected results of 7 projects/ programs under implementation	2014 results cumulative from start	% of expected results	Number of projects contributing to this indicator
Increased public investments (USD million)	878	2.71	0.3%	7
GHG emissions reduced/avoided (million tons of CO <sub>2</sub> eq)	58	0	-	5

11. The currently approved 82.9 million of SREP resources are expected to lead to USD 878 million of increased public investments. This is a leverage factor of 10.

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

<sup>7</sup> The average household size in the countries where households are reported as beneficiaries is 5. This factor was used for calculating the total number of people with improved access. Population data were taken from www.countryeconomy.com and www.indexmundi.com.

- 12. Of the seven projects and programs, four contribute to this indicator. Of the three projects that do not contribute to this indicator, two focus on policy reform and regulations and one on the promotion of clean cook stoves.
- 13. The expected results are: 1,775,263 MWh annually

Table 3: Projects/programs that contribute to increased supply of renewable energy8

	Project	MDB	SREP funding (USD million)	MDB approval date	Annual electricity output (MWh) target
Kenya	Menengai Geothermal ProjectPhase A- Resource and Infrastructure Development and Mobilization of Private Sector	AfDB	25.00	Dec-11	1,182,000
Mali	Rural Electrification Hybrid Systems	IBRD	15.40	Dec-13	8,653
Ethiopia	Geothermal Sector Development Project	IBRD	24.50	May-14	552,000
Maldives	Accelerating Sustainable Private Investments in Renewable Energy Program (ASPIRE)	IBRD	12.68	Jun-14	32,610
	Total 4 projects		77.58		1,775,263

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

- 14. Of the seven projects and programs, five contribute to this indicator. The two projects that do not contribute to this indicator both focus on creating an enabling environment through regulatory reform, which in the long term is expected to increase people's access to clean energy.
- 15. The expected results are: **4.69 million people**, **300,300 businesses**

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<sup>&</sup>lt;sup>8</sup> Targets at MDB approval

Table 4: Projects/programs that contribute to increased access to clean energy9

				_	Improved Energy Access					
	Project	MDB	SREP funding (USD million)	MDB approval date	People Target	Business Target	Community Services Target			
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	IDB	2.95	Nov- 13	375,000	300	none			
Kenya	Menengai Geothermal Project -Phase A-Resource and Infrastructure Development and Mobilization of Private Sector	AfDB	25.00 <sup> </sup>	Dec- 11	2,500,000	300,000	n.a.			
Mali	Rural Electrification Hybrid Systems	IBRD	15.40	Dec- 13	681,000	n.a.	n.a.			
Ethiopia	Geothermal Sector Development Project	IBRD	24.50 <sup>I</sup>	May- 14	1,100,000	n.a.	n.a.			
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	IBRD	12.68	Jun- 14	38,605	n.a.	n.a.			
	Total 5 projects		100.21		4,694,605	300,300				

n.a. stands for not applicable

## 2.3 Co-Benefit Indicators

16. In SREP it is required that project/program documentation explains how the project/program will contribute to achieving co-benefits at the transformative impact level. Project/programs need to outline in their project/program documentation how the project/program might trigger positive development benefits beyond the immediate project outputs. Key or underlying assumptions about co-benefits should be clearly articulated in the project documents so that ex-post evaluations can assess the effectiveness of supported interventions.

Co-Benefit Indicator: Increased public and private investments in targeted subsectors as a result of SREP interventions

- 17. All seven projects and programs contribute to this indicator. One project has already reported on leveraged investments.
- 18. The expected results are: **USD 878 million**

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<sup>&</sup>lt;sup>9</sup> Targets at MDB approval

- 19. Result reported in 2014: USD 2.71 million
- 20. The Honduras Sustainable Rural Energization (ERUS) Cook Stoves Project reported leveraging of USD 2.7 million, or the equivalent of 89% of the project's target, from Inter-American Development Bank's resources and from private enterprise.
- 21. It should be noted that the Ethiopia Geothermal Sector Strategy and Regulations Project will have an **indirect** impact by drawing private sector investments into the geothermal sector as a result of the project's activities. (See Box 2)

## Box 2: Ethiopia's Geothermal Sector Strategy and Regulations Project

The overall objective of this project is to support the Government of Ethiopia to develop and implement a sector strategy and regulatory framework for the development of geothermal assets in the country. The project aims to create an enabling environment that will allow for an increase in availability of private financing for geothermal development and consequently an increase in geothermal energy produced.

The project started implementation in April 2014. It is anticipated that most of its direct and indirect impacts will be observed near project completion (estimated for 2016).

In addition to the direct co-benefits to be reported, the project will track and report on two **indirect** impacts: (i) increase in renewable energy produced (target is 700,800 MWh per year), and (ii) increase in availability of private financing for geothermal development (target is up to USD 150 million). The calculation used to set the targets and track impacts for these two indirect impacts is based on an estimate of 1,000 MW installed geothermal capacity during project lifetime (which includes a 3-year post-implementation monitoring period), assuming an 80% capacity factor and \$3 million/MW installed cost split evenly between the public and private sector.

#### Co-Benefit Indicator: Gender

- 22. MDBs in collaboration with their SREP focal points and relevant stakeholders are required to develop a gender impact indicator for each project/program.
- 23. In addition, the CIF Administrative Unit in collaboration with the MDBs is currently undertaking work to identify and suggest gender indicators for renewable energy projects. Once available, the SREP revised toolkit will include them.

Co-Benefit Indicator: GHG emissions reduced/avoided over the life of the project

- 24. Of the seven projects and programs, five will contribute to this indicator. The two projects that do not contribute to this indicator both focus on creating an enabling environment through regulatory reform. It is expected in the long term that these projects will indirectly lead to reduced GHG emissions.
- 25. Expected Results: 58.37 million tons of CO<sub>2</sub> equivalent

Table 5: Projects with direct co-benefits of reducing GHG emissions<sup>10</sup>

	Project	MDB	SREP funding (USD million)	MDB approval date	GHG emissions reduced/avoided over project lifetime (tCO <sub>2</sub> eq)
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cook Stoves Dissemination	IDB	2.95	Nov-13	199,093
Kenya	Menengai Geothermal Project-Phase A- Resource and Infrastructure Development and Mobilization of Private Sector <sup>11</sup>	AfDB	25.00	Dec-11	48,750,000
Mali	Rural Electrification Hybrid Systems	IBRD	15.40	Dec-13	137,365
Ethiopia	Geothermal Sector Development Project	IBRD	24.50	May-14	8,762,440
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	IBRD	12.68	Jun-14	517,667
	Total for 5 projects		80.53		58,366,565

- 26. The SREP Sub-Committee decided<sup>12</sup> that SREP projects should measure the co-benefit of avoided GHG emissions using a simple, common, and transparent proxy-based method (emission equivalent based on diesel-generated electricity, as adopted by the ADB: 793.7 tons CO2eq per GWh).
- 27. When a pilot country and the MDBs are of the opinion that reliable and sufficient data are available to enable estimation of avoided GHG emissions for SREP projects using country-specific baselines, and the SREP pilot country chooses to do so, that method will be used.
- 28. IDB, for its cook stoves  $^{13}$  project in Honduras, used available information on the emissions by cook stove in Honduras, including  $CO_2$  (a function of the non-renewability of the resource) and non- $CO_2$  (products of incomplete combustion) for its GHG calculations. As much as possible local figures were used. IBRD applied the SREP proxy-based method (see para 25 above) in all three SREP projects. (See Table 4 above.)

#### Other Co-Benefits

<sup>&</sup>lt;sup>10</sup> Targets at MDB approval. These have been updated since publication of the Semi-Annual Operational Report.

<sup>&</sup>lt;sup>11</sup> Based on project assumption of 25-year lifecycle

<sup>&</sup>lt;sup>12</sup> Summary of the Co-Chairs, Meeting of the SREP Sub-Committee, October 31, 2012

<sup>&</sup>lt;sup>13</sup> Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination

29. All projects and programs will produce other co-benefits in addition to those described above. These co-benefits are already included in the project documents and will be assessed upon project completion.

Table 6: Sample co-benefit indicators from two projects

Mali's Rural Electrification Hybrid Systems Project	Unit	Targets
Number of compact fluorescent lamps distributed	lamps	36,600
Number of solar lanterns distributed	lanterns	110,000
Number of persons trained under the project	people	420
Ethiopia's Geothermal Sector Strategy and Regulations Project Enabling Environment Co-Benefit Indicators		
Number of recommended laws/regulations enacted	laws/regulations	3
Number of recommended policies/practices improved	policies/practices	3
Number of entities that implemented recommended changes	entity	4
Number of workshops, training events, seminars, conferences etc.	event	10

## 3 Next Steps

- 30. Whilst this report looks at the portfolio of MDB approved projects only, the 2015 report will assess the progress of SREP projects/programs against overarching program targets as indicated in the SREP investment plans.
- 31. In addition, the SREP Monitoring and Reporting Toolkit will be reviewed in light of the experience of this first round of reporting. The CIF Administrative Unit will work with the MDBs to establish what needs SREP pilot countries may have in terms of knowledge and understanding of the results reporting on SREP. The CIF Administrative Unit will collaborate with the MDBs to address any needs for capacity building identified.

Annex I. Summary of the results of SREP projects approved by MDBs before June 30, 2014<sup>14</sup>

	Annual Electr			у						Increase in public and		GHG emmisions reduced/avoided				
COUNTRY	PROJECT TITLE	MDB	SREP FUNDING (USD	MDB approval date	outp (MW		People Business		Rusiness		unity ces	private investments (USD Million)		(tons of CO <sub>2</sub> equivalent)		
			m illion)	uate	Target	2014	Target	2014	Target	2014	Target	2014	Target	2014	Target	2014
Honduras	Strengthening the RE Policy and Regulatory Framew ork(FOMPIER)	IDB	0.85	Dec-12	0	n.a.	0	0	0	0	0	0	0.35	0.00	n.a.	n.a.
Honduras	Sustainable Rural Energization(ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	IDB	2.95	Nov-13	n.a.	n.a.	375,000	0	300	0	0	0	3.03	2.71	199,093	0
Kenya	Menengai Geothermal Project-200 MW Geothermal-Phase A-Resource and Infrastructure Development and Mobilization of Private Sector	AfDB	25.00	Dec-11	1,182,000	0	2,500,000	0	300,000	0	n.a.	n.a.	477.70	0.00	48,750,000	0
Mali	Rural Electrification Hybrid Systems	IBRD	15.40	Dec-13	8,653	0	681,000	0	n.a.	n.a.	n.a.	n.a.	36.33	0.00	137,365	0
Ethiopia	Geothermal Sector Strategy and Regulations	IFC	1.50	Feb-14	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.50	0.00	n.a.	n.a.
Ethiopia	Geothermal Sector Development Project	IBRD	24.50	May-14	552,000	0	1,100,000		n.a.	n.a.	n.a.	n.a.	301.50	0.00	8,762,440	0
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	IBRD	12.68	Jun-14	32,610	0	38,605	0	n.a.	n.a.	n.a.	n.a.	58.50	0.00	517,667	0
	Total		82.88	7	1,775,263	0	4,694,605	0	300,300	0	0	0	877.91	2.71	58,366,565	0

<sup>14</sup> Targets revised on January 12, 2015