

Meeting of the SCF Trust Fund Committee

Washington, D.C. (Hybrid)

Friday, June 14, 2024

SREP OPERATIONAL AND RESULTS REPORT



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> SCF/TFC.18/02.3 May 29, 2024

PROPOSED DECISION

The Committee:

- i. Reviewed the document, SCF/TFC.18/02.3, SREP Operational and Results Report and welcomed the progress made in advancing the work of SREP in participating countries.
- ii. Welcomed the analysis conducted by the CIF Secretariat, in collaboration with the MDBs, on achievements and results, resource availability, pipeline review, and portfolio updates.
- iii. Recognized the increasing number of SREP countries reaching the conclusion phase of their investment plans—whereby all constitutive projects in the investment plan have been fully implemented—and welcomed the pilot Investment Plan Close-Out that was conducted in the Maldives (SREP).
- iv. In emphasizing an ongoing commitment to CIF's unique programmatic approach and the strategic importance of ensuring its effective application throughout the full program cycle, requested the CIF Secretariat, in coordination with the MDBs, to develop and implement an *Investment Plan Close-Out Strategy*. The strategy should determine modalities for capturing countries' final achieved results, based on each SCF program's approved monitoring and reporting system, to provide deliberate operational closure to the investment plans; while seeking to maximize country ownership; promote inclusive, multi-stakeholder engagement; ensure lessons learned; and strengthen synergies with CIF's transformational change and gender priorities.

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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 SREP Operational and Results Report provides an update on SREP operations, a portfolio analysis of SREP-funded programs and projects under the endorsed investment plans and SREP Private Sector Set-Aside (PSSA), and a summary of activities related to gender, risk, and knowledge management. It also details the results of SREP projects under implementation.
- 3. This report covers the period from January 1 to December 31, 2023, and provides a cumulative update of the entire SREP portfolio, including disbursements, through December 31, 2023 (with additional updates on resource availability until March 31, 2024). Results reporting of projects under implementation also covers the period from January 1 to December 31, 2023.
- 4. The following annexes are included in this report: Annex 1: Resource Availability; Annex 2: SREP Pipelines; Annex 3: Summaries of Results; Annex 4: Project Implementation Status; and Annex 5: Disbursements by Project.

2 Strategic Issues

2.1 Resource Availability

- 5. As of March 31, 2024, SREP has USD 774.37 million in cumulative funding. The uncashed promissory notes were encashed in March 2024.
- 6. As of March 31, 2024, SREP has an unrestricted fund balance, after administrative budget and currency reserves, of USD 132.8 million (see Table 1 and Annex 1). Total anticipated commitments are USD 110.7 million, including projects and programs in the sealed and reserve pipeline, project preparation grants (PPGs), CIF-TAF, and multilateral development bank (MDB) project implementation services (MPIS). As of March 31, 2024, SREP has a balance of USD 2.1 million in grant, and USD 20.0 million in non-grant, if all projects in the sealed and reserve pipelines were to be submitted. The total anticipated commitments in only the sealed pipeline are USD 43.2 million (see Table 2).

Table 1: Summary of SREP resource availability, sealed and reserve pipeline (USD million, as of March 31, 2024)

	Total	Non- Grant	Grant
Unrestricted Fund Balance (C)	164.7	98.4	66.3
Future Programming Reserves	31.9		31.9
Unrestricted Fund Balance (C) After Reserves	132.8	98.4	34.5
Total Anticipated Commitments (D)	110.7	78.4	32.3
Available Resources (C-D)	22.1	20.0	2.1

Table 2: Summary of SREP resource availability, sealed pipeline (USD million, as of March 31, 2024)

	Total	Non- Grant	Grant
Unrestricted Fund Balance (C)	164.7	98.4	66.3
Future Programming Reserves	31.9		31.9
Unrestricted Fund Balance (C) After Reserves	132.8	98.4	34.5
Total Anticipated Commitments (D)	43.2	32.0	11.2
Available Resources (C-D)	89.6	66.4	23.3

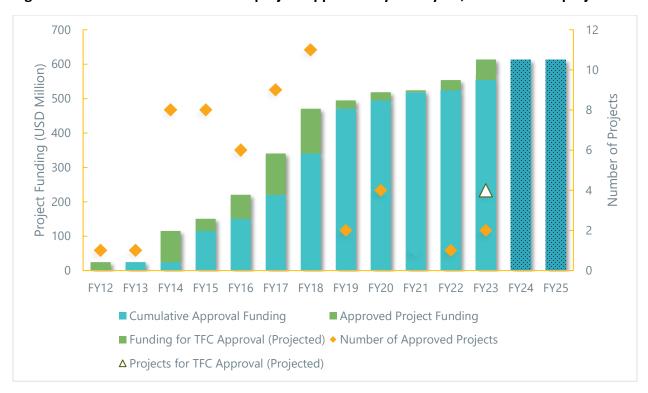
2.2 Overview of SREP Implementation and Pipeline Management

- 7. SREP was launched in 2010 as a pilot program in six countries 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 (in seven countries) were added, and in 2014, the SREP Technical Committee agreed to select another 14 countries to join the program. SREP now consists of 27 pilot countries, while the total amount of SREP resources is USD 774.37 million.
- 8. 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, except for Yemen, submitted their investment plans. Among the 14 new countries selected in 2014, 11 countries developed investment plans that were endorsed by the SREP Technical Committee between 2015 and 2019.
- 9. As of December 31, 2023, the SREP Technical Committee has endorsed investment plans for 23 pilot countries, with a total indicative allocation of USD 613.2 million for 57 projects and programs, and four project concepts under SREP PSSA, with a total indicative allocation of USD 31 million.¹

¹ Pipeline is less than last year due to the revisions made to the sealed and reserve pipeline in 2022.

10. Implementation progress varies among the pilot countries. Overall, about 93.1 percent of the available SREP resources have been approved by the SREP Technical Committee. Figures 1 and 2 show trends in SREP funding approvals by the SREP Technical Committee and MDBs over time by fiscal year (FY).²

Figure 1: SREP Technical Committee project approvals by fiscal year, with FY24-25 projections



² CIF's fiscal year is from July 1 to June 30.

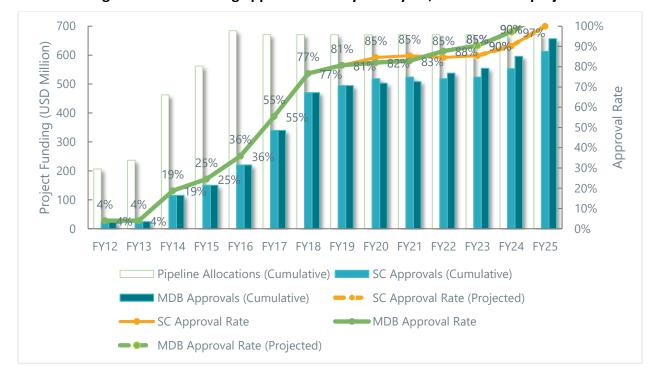


Figure 2: SREP funding approval rates by fiscal year, with FY24-25 projections

11. In April 2024, the MDB Committee revised the potential list of projects for the SREP pipeline and will be submitting potential projects to the Technical Committee for its review. The current pipeline is in Annex 2.

2.3 Results Reporting

2.3.1 Investment Plan Close-Out of Results

- 12. With the IP Close-Out CIF is reaching a new frontier with its programmatic approach business model. An increasing number of CIF countries' investment plans (IPs) are reaching a stage where *all projects* in the IP are either completed or will reach completion soon. Despite the importance placed on CIF's programmatic approach, there has not as of yet been a mechanism in place to close out investment plans from both operational- and results-oriented perspectives. This FY the CIF embarked upon an important, first-of-its kind approach for CIF, MDBs, and recipient countries to pilot the implementation of such a mechanism.
- 13. Over the spring of FY24, CIF rolled out a series of IP Close-Out missions that involved an enhanced, multi-dimensional approach for taking stock of the final results achieved under PPCR, FIP, and SREP in country (including Program, M&R, E&L, Gender and Social Inclusion, Stakeholder Engagement priority areas) and that enabled the respective countries (Zambia, Indonesia, the Caribbean Region and the Maldives) to formally conclude programmatic activities for their respective investment plans, while also serving as pilots of the approach itself for each of the threee programs and for CIF as a whole. For SREP in mid-May (13–17 May) a Results IP Close-Out workshop was held in Male, Maldives with approximately 60

- participants from government, ADB, WB, women-led groups and the private sector. Important insights on impact, as well as lessons for the new projects in the Maldives, were gained and will feed into the current CIF portfolio in the Maldives.
- 14. These workshops mark the endline of the M&R System and the IP Close-Out serves to bookend the multi-stakeholder investment planning approach utilized prior to and throughout implementation. Other objectives include compiling key insights, lessons, and challenges to inform the countries' involvement in new CIF and other related investments; integrating transformational perspectives into a participatory assessment of results for learning purposes; and deepening the knowledge on gender and social inclusion and the role of stakeholder engagement in filling imporant knowledge gaps.
- 15. IP Close-Out Plans for FY25: A CIF-wide strategy paper on close-outs will be developed in FY25 for submission to the CIF Joint Trust Fund Committee. This paper will be based on the experience of the close-out pilots in Zambia, the Caribbean Region, Indonesia, and the Maldives. It will focus on options for the institutionalization of close-outs, including program-specific considerations. The M&R toolkits for each CIF program will then be updated accordingly. In tandem, the CIF Secretariat expects to develop prioritization criteria (e.g., total investment volumes, number of projects implemented per country, robustness of the programmatic approach, geographic and sectoral diversity, implementation maturity, coordinated timing of project closures, strategic importance, etc.) that will be used to inform high-, medium-, and low-intensity modalities and program-specific strategies.
- 16. For SREP tentative priority close-outs have been pre-identified, i.e., Armenia and Ethiopia. The CIF Secretariat also plans to assess appropriate options for countries that have already completed implementation of their close-outs several years ago.
- 17. **Communications:** Several video products are being developed to be shared with the CIF Trust Fund Committee and other key audiences, alongside blogs, photos, and other communications products specific to the SPCR/IP close-out mechanism.

3 Status of SREP Portfolio

3.1 Portfolio Overview and Updates

18. As of December 31, 2023, total funding approved by the SREP Technical Committee has reached USD 571.2 million³ for 53 projects and programs, including four projects under SREP PSSA (see Table 3). This amount accounts for 93 percent of SREP resources available for programming. These projects are expected to leverage a total of USD 3.38 billion in cofinancing from the governments of recipient countries, MDBs, the private sector, bilateral, and other sources. Detailed information on co-financing by project is included in the information document, SREP Country Portfolios. Figure 3 provides a breakdown of the SREP portfolio by MDB, region, sector, and technology.

³ Total approved project funding includes project funding, IPPGs, and PPGs.

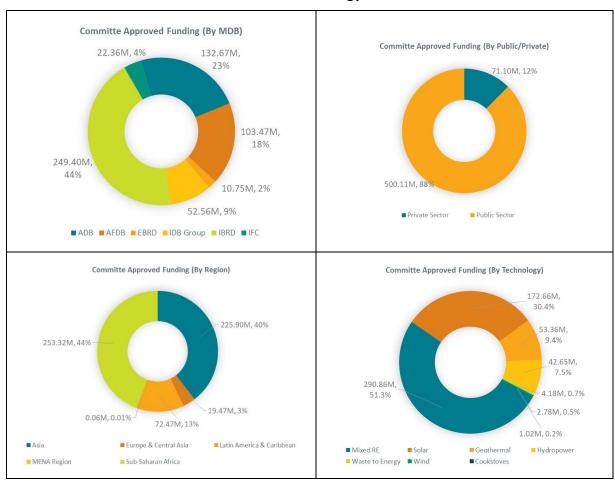
Table 3: Overview of SREP portfolio (USD million, as of December 31, 2023)

Overview of SREP Portfolio (as of December 31, 2023, USD Million)								
	Indi	icative	Pipeline	Alloca	tion	Approved Fu	ınding	Disbursement
	Total	IP	PSSA	RFS	IPPG	Committee	MDB	
SREP Funding	613.2	514.9	36.1	58.5	3.71	571.2	555.7	301.16
Number of Projects	57	48	4	5		53	52	49

^{*} TAF is not included

RFS – Remaining Fund Balance

Figure 3: SREP Technical Committee-approved funding by MDB, region, sector, and technology



19. 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 in May 2015 or after.

Table 4: Endorsement of SREP investment plans and PSSA concepts (USD million, as of December 31, 2023)

	Country/Region	Endorsement Date		Indicative Pipeline Funding (USD Million)	Approved Funding (USD Million)	% Approval
	Ethiopia	Mar-12		29.5	29.5	100%
	Honduras	Nov-11	<u>a</u>	43.9	28.9	66%
First Set of	Kenya	Sep-11	_	27.4	27.4	100%
Countries	Maldives	Oct-12		25.8	25.8	100%
	Mali	Nov-11		43.5	26.5	61%
	Nepal	Nov-11	b	36.1	36.1	100%
	Armenia	Jun-14		19.5	19.5	100%
	Liberia	Oct-13		49.5	49.5	100%
Second Set	Mongolia	Nov-15		29.8	29.8	100%
of	Pacific Region	May-15		2.0	2.0	100%
Countries	Solomon Islands	Jun-14		14.0	14.0	100%
	Tanzania	Sep-13		13.8	13.8	100%
	Vanuatu	Nov-14		7.8	7.8	100%
	Bangladesh	Nov-15		68.0	68.0	100%
	Cambodia	Jun-16		30.0	30.0	100%
Third Set of	Ghana	May-15		29.8	29.8	100%
Countries	Haiti	May-15		19.6	19.6	100%
	Nicaragua	May-15		7.5	7.5	100%
	Rwanda	Nov-15		49.5	49.5	100%
	Uganda	Nov-15		0.0	0.0	0%
	Lesotho	Dec-17		23.8	13.8	58%
	Madagascar	Jun-18		0.3	0.3	100%
	Kiribati	Jan-19		4.9	4.9	100%
	Zambia	May-19		1.2	1.2	100%
Subtot	al for Investment F	Plans (IP)		577.0	535.0	93%
	PSSA 1st	Nov-13		36.1	36.1	100%
	PSSA 2nd	Oct-15				
	Private Sector Set-	Aside (PSSA)		81.1	61.1	75%
Total (IP + PSSA)			613.2	571.2	93%

Notes

a/ Revised endorsement date is April 2017

b/ Revised endorsement date is May 2015

3.1.1 Investment Plans

20. With the current SREP resource constraint and the submission deadline agreed by the SREP Technical Committee, no new investment plans have been endorsed and 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 Technical Committee Approval

21. During the reporting period, the USD 5.5 million "Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support" was approved (see Table 5).

Table 5: SREP Technical Committee Approved Projects and Programs
(January 2023 to January 2024)

					Project Fundi	ng USD	_ Approval
Project ID	Project Title	Country	IP/PSSA	MDB	Grant	Non- Grant	Date
PSRERFS06A	RFS: Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	Armenia	RFS	EBRD	5,500,000	-	1/9/2023
				Total	5,500,000		

3.1.3 MDB Approvals

22. During the reporting period, the MDBs approved the USD 28.5 million "Ghana Mini Grid and Solar PV Net Metering" and the USD 5.5 million "Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support" in SREP funding (see Table 6), bringing total MDB-approved SREP funding to USD 555.7 million for 52 projects.

Table 6: SREP MDB-approved projects and programs (January 1 to December 31, 2023)

					Project Funding USD		_ Approval
Project ID	Project Title	Country	IP/PSSA	MDB	Grant	Non- Grant	Date
XSREGH044A	Ghana Mini Grid and Solar PV Net Metering	Ghana	IP	AFDB	28,490,000	-	3/14/2023
PSRERFS06A	RFS: Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	Armenia	RFS	EBRD	5,500,000	-	4/25/2023
				Total	33,990,000		

3.1.4 Funding Cancellations

23. During the reporting period, USD 1.4 million in grant funding was canceled due to unused residual PPG funds or unused funds at project closures (see Table 7). Since January 2024, USD 6.2 million in grant funding was canceled at project closure (see Table 8).

Table 7: SREP Cancellations (January 1 to December 31, 2023)

Project ID	Duoinet Title	Country	IP/PSSA	MDB =	Project Funding USD		Cancellation
Project ID	Project Title	Country		IVIDD -	Grant	Non-Grant	Date
XSREMG085A	RESERVE: Hybridization of Isolated Diesel Generation Centers with Solar Technologies	Madagascar	IP	AFDB	1,400,000	-	12/31/2023
PSREML502A	Segou Solar Park	Mali	PSSA	AFDB	-	25,000,000	12/31/2023
				Total	1,400,000	25,000,000	

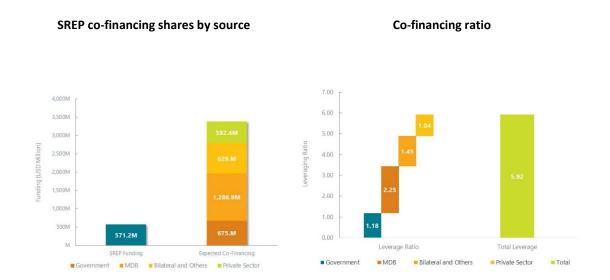
Table 8: SREP Cancellations (January 1, 2024 to June 2024)

Duningt ID	Dunings Tisle	Countrie	ID/DCCA	MDD	Project Fu	nding USD	Cancellation
Project ID	Project Title	Country	IP/PSSA	MDB -	Grant	Non-Grant	Date
XSREVU040A	Rural Electrification Project	Vanuatu	IP	IBRD	6,204,754		3/21/2024

3.2 Co-financing

24. The 53 projects approved by the SREP Technical Committee as of January 31, 2024 (USD 571.2 million) are expected to leverage over USD 3.38 billion in co-financing from governments, MDBs, bilateral, and other sources. This represents a leverage ratio of 1 to 5.9, meaning that for every USD 1 invested by SREP, another USD 5.9 will be co-invested by other financiers. As shown in Figure 4, MDBs represent the largest source of co-financing, followed by bilateral and other sources, and the private sector.

Figure 4: Co-financing shares by source and co-financing ratio of SREP Technical Committeeapproved projects (as of December 31, 2023)



3.3 Disbursements

25. For the first half of FY 2024, MDB board approvals⁴, including committee approvals for preparation grants, remained unchanged from FY23 at USD 602.0 million. Disbursements increased by USD 31.0 million to USD 302.3 million, representing an increase of 11.4 percent

⁴ Data included in this section does not include MPIS or guarantees, but includes PPG, IPPG, and TAF.

- from the previous fiscal year. This resulted in an overall increase of 5.1 percent in the disbursement ratio from FY23 to 50.2 percent.
- 26. Annex 5 provides detailed information on disbursements at the project level for public sector projects.

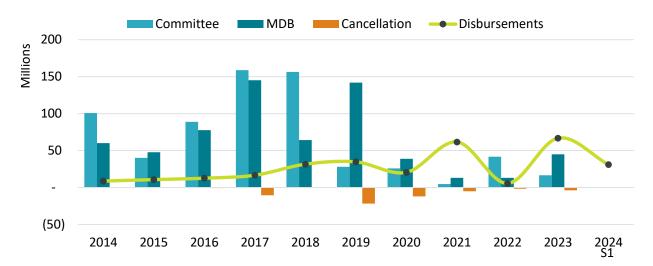


Figure 5: SREP disbursements trend by fiscal year, as of December 31, 2023

4 Cross-Cutting Themes

- 4.1 Partnerships, Knowledge Management, Evaluation, and Learning
- 27. During July 2023–June 2024, a SREP Investment Plan Close-Out workshop and two REI Learning Platform events took place, reaching over 150 participants.
- 28. Independent Evaluations: As a supplement to the independent Evaluation of the Development Impacts from CIF's Investments published in FY23, a workbook was published in FY24 to provide a step-by-step guide to planning and designing climate programs that generate social, economic, environmental, and market benefits, beyond the program's core objectives. The workbook helps put the key lessons from the evaluation into action and provides tools for project planners and implementors to maximize development impacts in climate projects.
- 29. **Maximizing Transformational Impacts Toolkits for New CIF Programs**: In June 2024, the E&L Initiative produced toolkits for the new CIF programs, including one for the REI Program. These toolkits provide guidance for each program on how to incorporate evaluation and learning considerations related to transformational change, just transition, and other elements into investment plan development processes.
- 30. **The Results Deep Dive Series** provides granular and in-depth thematic/topical analysis of key results areas, and serves as a supplement to CIF's annual results reports. Where the annual M&R documents provide a systematic synthesis of portfolio performance vis-à-vis program-

specific core impact indicators, the Deep Dives provide in-depth reviews of these results within specific thematic or developmental dimensions of climate change, offering crucial detail, insights, and lessons regarding various performance characteristics. A total of six Deep Dives were published in FY24 (CTF – Governance & Policy; SREP – GHGs; FIP – Land Tenure; PPCR – Livelihoods/Beneficiaries; CTF – Energy Access; and FIP – Livelihoods), with the SREP Deep Dive focusing on the magnitude and distribution of GHG impacts across the SREP portfolio (see Box 6 in the results section).

- 31. **COP28**: The CIF organized and/or participated in 37 events at <u>COP28</u> in December 2023, including many panel discussions and events related to renewable energy.
- 32. **REI Learning Platform**: The Learning Platform aims to generate, apply, and share learning on renewable energy integration issues in developing countries. It seeks to strengthen institutional capacities for integrating renewable energy, facilitating effective project implementation, and improving planning and enabling environments to accelerate renewable energy integration. Based on demand from clients and partners, and recommendations from sector stakeholders, the platform delivered two events in FY24. A <u>hybrid event</u> was organized in November 2023 in Washington, D.C. to explore how countries can better engage, involve, and promote the private sector in renewable energy integration. In addition, a three-day learning event in Tunisia was organized in May 2024 to bring together countries stakeholders to facilitate learning and dialogue among, and build the capacities of, technical officials in relevant developing countries government ministries, MDBs, and other sector stakeholders.
- 33. **Transformational Change Learning Partnership (TCLP)**: CIF's <u>TCLP</u> continues to engage partners and practitioners in learning on diverse topics that span current and future CIF programming, including themes related to scaling renewable energy.
 - a. The TCLP conducted its annual <u>workshop</u> in October 2023 to highlight the work of the E&L Initiative and deepen the role of the TCLP for transformational climate action. The workshop included sessions that highlighted the importance of transformational climate finance, including approaches for de-risking the impact of currency and exchange rate volatility for clean energy and climate finance projects.
 - b. The TCLP launched regular virtual working sessions designed to share and gather feedback and suggestions around knowledge products and activities currently under development. They covered topics such as how to increase the allocation of climate finance to local actors and communities, diagnostic evaluations for transformational change, a toolkit for maximizing transformational intent in new CIF programs, and how to further enhance the reach and impact of the TCLP community of practice.
 - c. The TCLP also launched two new guidance notes series. The Evaluation for Transformational Climate Action Guidance Series is aimed at supporting evaluation of, and for, transformational change in CIF programs, projects, and related activities. The Transformational Climate Finance Guidance Series is aimed at exploring priority themes identified by the TCLP community of practice, which includes cross-cutting themes relevant to energy.

- 34. **Just Transition**: In July 2023, CIF's E&L Initiative launched its <u>Just Transition Planning Toolbox</u>, an interactive online guide that provides practical guidance for planning and implementing just transitions across sectors. The Toolbox includes five modules that cover a range of topics from mobilizing stakeholders and jointly agreeing on visions and principles for transitions, to the wide range of analysis needed to inform planning decisions and bringing all this together within a just transition plan. The Toolbox contains over 250 real-world examples and "how to" resources. The Toolbox was launched during a webinar in July 2023 that brought together over 100 participants and a team of experts to share insights from transition planning in different contexts around the world. Along with the Toolbox, six just transition pilot projects implemented by MDB partners progressed in their activities, including a project aimed at using artificial intelligence to identify the green skills needed for Egypt's energy transition, whose completion is expected in FY25.
- 35. Climate Delivery Initiative: In FY24, in response to a new Call for Proposals for CDI case studies, CIF fielded a longlist of 11 MDB project nominations, of which six were finalized for completion as part of the current cohort (2 from CTF, 1 from FIP, 2 from PPCR, and 1 from SREP). Of these, the SREP/EBRD/Armenia Green Economy Financing Facility (GEFF) case study has completed its primary data collection mission and is in drafting stage of the full case. All cases are expected to be completed and published, in line with a staggered launch timeline, by late summer, with a cohort-wide and cumulative CDI learning event slated for early fall of 2024. The selection process for the next cohort of case studies will also commence at the beginning of the next fiscal year.

Box 1: Climate Delivery Initiative in Armenia



From March 11–15, 2024, a CIF delegation including Jimmy Pannett (Lead SREP) and Liliia Zhukovska (CIF Gender Specialist), traveled to Armenia to collect data, information, and input for a robust Climate Delivery Challenge case study on the "SREP Caucasus Green Economy Financing Facility (GEFF)" project. Using the CDI methodology, the mission looked into the nature and magnitude of the primary delivery challenges and took stock of gender-specific barriers, as

well as the key drivers behind the disproportionately lower accrual of benefits from climate finance to women and reasons for lower participation of women-led businesses. There was also a focus on the solution strategies that were deployed.

Key Takeaways:

The mission provided important and significant input for the understanding of the context of the GEFF project, including how it is perceived by stakeholders; what barriers were encountered; and what solutions were employed in its rollout. As of reporting year 2023, the project had exceeded the targeted installed capacity, installing 46.67MW (162% vs target), as well as the number of men (by 109% vs target), and business (by 335% vs target) beneficiaries. Furthermore, the Government of Armenia is requesting additional financing from SREP for a second GEFF phase, given its performance.

Preliminary findings indicate how the SREP program was instrumental in being a catalyst for promoting investment in green technologies, as the cashback mechanism designed into the program has proven to be an essential incentive for SMEs. The clarity of this is illustrated by the fact that the GEFF financing was favored even though the Government of Armenia implemented a subsidy program and green financing is available through other donors.

The team also gained much insight regarding the role of gender and the issues related to gender access and what gaps remain to be addressed. Preliminary findings were that while women and men are treated equally from a legal-financial standpoint (i.e., there is no discrimination between sexes in terms of ability to apply for finance and both sexes obtain the same financial terms), in practice existing social norms result in significant inequalities in access to finance (e.g., assets are inherited by men and many women-led SMEs do not have collateral to satisfy their financial needs). Also, Financial Intermediaries (FIs) do not consider the different societal gender roles, as they have socially and historically evolved, to either design tailored financial products for women and market these products to them, or to monitor the number and performance of loans based on gender to assess their outreach and risk profile.

36. **CIF-MDB KMEL Coordination Calls**: The CIF organized two CIF-MDB Knowledge, Monitoring, Evaluation, and Learning (KMEL) Coordination Calls in October 2023 and May 2024, where several energy-related updates were shared. These calls provide MDB partners with updates on upcoming CIF KMEL activities and facilitate requests to avoid duplication, build synergies, and identify areas for cooperation.

4.2 Gender

4.2.1 SREP Portfolio Performance on Gender

- 37. CIF Gender team continued to provide on-demand support to program teams during the reporting period to enhance the quality of gender integration at the project design phase, through ensuring inclusion of interlinked i) sector-specific gender analysis, ii) women-specific activities, and iii) gender indicators, including gender-specific and gender-disaggregated indicators, in projects documents. The TFC approved one new project in 2023, "RFS: Caucasus Green Economy Financing Facility (GEFF) SREP Armenia Renewable Energy Grant Support" (EBRD). The project includes two gender-scorecard indicators, namely, gender analysis and gender indicators (see Box 2).
- 38. Table 9 presents gender scorecard performance for SREP projects from inception until the end of the reporting period, demonstrating gradual improvement in the quality of gender integration since the adoption of the CIF Gender Action Plan (GAP) in 2014. The most significant progress relates to the inclusion of women-targeted activities in projects, showing improvement from 80 percent in the baseline to 88 percent for projects implemented after the GAP was approved. Following this, there is progress on sex-disaggregated indicators that are included in 77 percent of the projects compared to 70 percent in the baseline. The integration of gender analysis has also improved modestly, showing an increase of two pecentage points to 72 percent. The number of projects that have incorporated all three gender scorecard metrics remained at 60 percent.

Box 2: Understanding Barriers Faced by Women-Led Enterprises in Armenia

The baseline gender assesment of the gender component was conducted by Green Economy Financial Facility (GEFF) in collaboration with EBRD and was presented in the <u>"Women and Men in Bussines in Armenia"</u> factsheet. The aim of the assesment is to assist in identifying gender impacts and gaps and recommending how to mainstream gender into the project.

The analysis focuses on gender dynamics within Armenia's micro, small, and medium enterprises (MSMEs). It reveals a balanced participation between men and women in the survey, with women slightly outnumbering men. The personal profiles of respondents highlight age disparities, with male business leaders generally older, and a higher proportion of single or divorced/separated women compared to men. Women are overrepresented in Yerevan and tend to inhabit multi-generational households where all members contribute economically, with women taking a more active role in household decision-making. In terms of business profiles, women are prominently engaged in services, agriculture, and other sectors, often as self-employed or sole entrepreneurs, while men dominate larger businesses. Notably, fewer women are involved in formal management and decision-making roles within their businesses, indicating a preference to share responsibilities with men, who are perceived as more experienced. Moreover, the analysis delves into the participation of MSMEs in various sectors through focus group discussions (FGDs), which include businesses facilitated by partner financial institutions (PFIs) or drawn from the project team's MSME database. These MSMEs operate in diverse sectors such as tourism, agriculture, food processing, and services, such as restaurants and cosmetics. The insights from these discussions provide a nuanced understanding of the challenges and opportunities faced by MSMEs, particularly those led by women, in contributing to Armenia's green economy initiatives.

Indicators integrated in the project design focus on the number of women and men, businesses, and community services benefitting from improved access to electricity and fuels, as a result of SREP intervention with the target of 10,000 women/8,000 men and 200 SMEs/MSMEs.

Table 9: SREP project gender scorecard performance

Indicators	Projects approved before June 2014 % (n) (Gender Action Plan (GAP) Baseline)	Projects approved in July 2014– December 2023 (% and n) ¹	— of them projects approved in January 2023–December 2023	Cumulative: All projects approved from inception till December 2023 % (n)
Sector-specific gender analysis	70% (7 of 10 projects)	72% (31 of 43 projects)	100% (1 of 1 projects)	72% (38 of 53 projects)
Women-targeted activities	80% (8 of 10 projects)	88% (38 of 43 projects)	0% (0 of 1 projects)	87% (46 of 53 projects)
Sex-disaggregated M&E indicators	70% (7 of 10 projects)	77% (33 of 43 projects)	100% (1 of 1 projects)	75% (40 of 53 projects)
All 3 scorecard indicators positive	60% (6 of 10 projects)	60% (26 of 43 projects)	0% (0 of 1 projects)	60% (32 of 53 projects)

39. TAF program had not been established yet when the GAP was approved and thus it has no baseline. Since its inception, the TAF portfolio has shown strong performance on womentargeted activities, which are integrated into 97 percent of projects. The inclusion of sexdisaggregated indicators is also notable, with almost three quarters of all projects including them. However, gender analysis lags behind, with only 43 percent of the portfolio conforming to this gender scorecard metric. Consequently, the share of projects that have all three gender scorecard metrics is not very high, standing at 29 percent. In projects approved during the reporting period, gender scorecard indicators are broadly in line with the averages, with the only observation that 1 out of 6 approved projects did not contain women-targeted activities, which is quite rare in the history of TAF portfolio (Table 10).

Table 10: TAF project gender scorecard performance

Indicators	Projects approved before June 2014 % (n) (Gender Action Plan (GAP)Baseline	Projects approved in July 2014 – December 2023 (% and n) ¹	- of them projects approved in January 2023-December 2023	Cumulative: All projects approved from inception till December 2023 % (n)
Sector-specific gender analysis	N/A	43% (15 of 35 projects)	50% (3 of 6 projects)	43% (15 of 35 projects)
Women-targeted activities	N/A	97% (34 of 35 projects)	83% (5 of 6 projects)	97% (34 of 35 projects)
Sex-disaggregated M&E indicators	N/A	74% (26 of 35 projects)	67% (4 of 6 projects)	74% (26 of 35 projects)
All 3 scorecard indicators positive	N/A	29% (10 of 35 projects)	33% (2 of 6 projects)	29% (10 of 35 projects)

4.2.2 Knowledge Management and Learning

- 40. **St. Lucia's case study and video.** The Gender ESMAP team traveled to St. Lucia in January to conduct comprehensive research for the case study and accompanying video, highlighting the gender component within the "DPSP II: Renewable Energy Sector Development Project". This initiative offers scholarships and apprenticeships explicitly tailored for women pursuing technical programs at Sir Arthur Lewis Community College. Progress is underway in developing the case study and video, with completion expected by the end of May, when they will be ready for dissemination.
- 41. CIF Secretariat proactively engaged with the MDBs to support the development of new proposals for the CIF Country Engagement Budget, resulting in 10 approved country engagement activities in FY25 with a focus on gender. A number of activities with a focus on the gender and energy nexus are planned for FY25:
 - **Rwanda's case study and video.** The Gender ESMAP team will travel to Rwanda during FY25 to gather essential information to produce a case study and video related to gender activities in the "Renewable Energy Fund Project".
 - Good Practice Workshop. For FY25, ESMAP is planning a workshop to disseminate good
 practices highlighted during the SREP and CTF portfolio reviews. ESMAP is seeking
 synergies with CIF and additional funding to ensure its success.
 - Mentorship and role model programs. Moreover, ESMAP initiates mentorship and role
 model programs in St. Lucia to be rolled-out during FY25. These programs are designed
 to complement the existing internship initiative. The Gender ESMAP team has identified
 challenges in recruiting women from secondary schools to participate in the program
 and is mindful of the potential risk that, despite a shortage of graduates, not all trained
 women may get jobs in the sector.

- The AfDB will implement an activity to empower women through access to renewable energy sources via climate change adaptation activities and mechanisms in Ethiopia.
- In addition, AfDB will develop three Country Briefs on Gender in Renewable Energy as well as capacity development activities and exchanges between key stakeholders on the gender and sustainable renewable energy nexus, focusing on West Africa. These briefs will be specifically crafted for the three SREP pilot countries in West Africa (Ghana, Liberia, Mali), aimed at further bolstering gender mainstreaming activities within the renewable energy sector at both country and regional levels.

4.3 Risk Management

- 42. The SREP Risk Report provides an update on assessments of the more significant risk exposures facing SREP. This section presents a summary of the projects under implementation risks, based on data from December 31, 2023, and compares them with projects flagged in the previous SREP Risk Report (which was based on data as of December 31, 2022 for implementation risk).
- 43. SREP's risk score for implementation risk remains **high**. Twelve projects representing USD 178.1 million of program funding are flagged for this risk, which represents 31.7% of SREP's total funding. From the previous reporting period, four new projects have been flagged, three have been resolved, and eight remain unresolved, totaling USD 52.4 million, USD 50.9 million, and USD 125.7 million, respectively.

4.3.1 Implementation Risk for Projects Not Yet Effective

4.3.1.1 Criteria 1A

44. The following table represents projects where funds were committed at least four years ago by the TFC, but the projects are still not effective.

Table 11 Criteria 1A SREP implementation risk project table

Total Funding Flagged	Total MDB Co-Financing	Total Cumulative Disbursement	Average Disbursement Ratio
15.5M	18.8M	0.0M	0%

In millions of USD as of December 31, 2023

Criteria 1A

Country	Project Title	MDB	Funding	Committee Approval Date	Effectiveness Date	Final Date of Disbursement	MDB Co-Financing	Cumulative Disbursement	Disbursement Ratio	Effectiveness	Years since Committee Approval
Bangladesh	Grid-connected Utility-scale Solar PV	IFC	15.5	19-Sep-19	-	-	18.8	-	0.0%	Not Effective	4.3 years

4.3.2 Implementation Risk for Effective Projects

4.3.2.2 Criteria 2

45. The following table represents projects that have been effective for at least 36 months, but have disbursed less than 20 percent of program funds.

Table 12 Criteria 2 SREP implementation risk project table

Total Funding	Total MDB	Total Cumulative	Average
Flagged	Co-Financing	Disbursement	Disbursement Ratio
77.9M	255.8M	10.3M	13.2%

In millions of USD as of December 31, 2023

									Critei	ria Z
Country	Project Title	MDB	Funding	Committee Approval Date	Effectiveness Date	Final Date of Disbursement	MDB Co- Financing	Cumulative Disbursement	Disbursement Ratio	Years since Effectiveness
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	22.4	25-Jul-17	18-Feb-19	31-Dec-24	20.0	4.0	18.0%	4.9 years

Kenya	PSSA: Kopere Solar Park	AFDB	11.6	28-Dec-18	27-Feb-19	MISSING	18.2	-	0.0%	4.8 years
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement Program under the PINIC	IADB	7.5	2-Aug-16	15-Dec-16	15-Dec-23	51.4	1.5	19.9%	7.0 years
Bangladesh	Scaling Up Renewable Energy	IBRD	29.3	25-Aug-17	27-Jun-20	31-Jul-25	156.0	4.3	14.7%	3.5 years
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	IBRD	7.1	14-Mar-18	23-Oct-18	30-Nov-25	10.3	0.5	6.4%	5.2 years

4.3.2.3 Criteria 3

46. The following table represents projects that are within 15 months of their anticipated date of final disbursement, but have disbursed less than 50 percent of program funds.

Table 13 Criteria 3 SREP implementation risk project table

Total Funding	Total MDB	Total Cumulative Disbursement	Average
Flagged	Co-Financing		Disbursement Ratio
33.9M	66.0M	6.6M	19.4%

In millions of USD as of December 31, 2023

										Criteri	ia 3	
Country	Project Title	MDB	Funding	Committee Approval Date	Effectiveness Date	Final Date of Disbursement	MDB Co- Financing	Cumulative Disbursement	Disbursemen t Ratio	Effectiveness	Months to Final Disbursement	Extension Granted
Kenya	PSSA: Kopere Solar Park	AFDB	11.6	28-Dec-18	27-Feb-19	MISSING	18.2	-	0.0%	4.8 years	PAST DUE	No
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project	AFDB	8.7	10-Apr-18	17-Sep-18	30-Jun-23	27.8	2.4	27.1%	5.3 years	PAST DUE	No
Haiti	Renewable Energy and Access for All	IBRD	13.6	5-Jun-17	23-Jul-18	1-Apr-25	20.0	4.2	31.1%	5.4 years	38 months	No

4.3.2.4 Criteria 4

47. The following table represents projects with extensions on their anticipated date of final disbursement, but have disbursed less than 50 percent of program funds.

Table 14 Criteria 4 SREP implementation risk project table

Total Funding	Total MDB	Total Cumulative	Average
Flagged	Co-Financing	Disbursement	Disbursement Ratio
121.6M	307.4M	32.0M	26.3%

In millions of USD as of December 31, 2023

									Criteria 4				
Country	Project Title	MDB	Funding	Committee Approval Date	Effectiveness Date	Extended Date of Final Disbursement	MDB Co- Financing	Cumulative Disbursement	Disbursement Ratio	Years since Effectiveness	Months to Final Disbursement	Extens Grant	
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	22.4	25-Jul-17	18-Feb-19	31-Dec-24	20.0	4.0	18.0%	4.9 years	31 months	Ves	42 onths
Nepal	South Asia Sub-regional Economic Cooperation Power System Expansion Project: Rural Electrification Through Renewable Energy	ADB	31.2	12-May-14	15-Jan-15	30-Jun-24	5.0	10.3	32.9%	9.0 years	15 months	Yes	24 onths
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement Program under the PINIC	IADB	7.5	2-Aug-16	15-Dec-16	15-Dec-23	51.4	1.5	19.9%	7.0 years	PAST DUE	Yes	21 onths
Bangladesh	Scaling Up Renewable Energy	IBRD	29.3	25-Aug-17	27-Jun-20	31-Jul-25	156.0	4.3	14.7%	3.5 years	48 months	Yes	18 onths
Nepal	Nepal Private Sector – Led Mini-Grid Energy Access Project	IBRD	7.6	21-Jul-17	30-Sep-19	30-Apr-24	-	2.1	27.4%	4.3 years	10 months	Yes	12 onths
Tanzania, United Republic of	Renewable Energy for Rural Electrification	IBRD	9.0	14-Apr-16	17-Mar-17	15-Jun-26	35.0	2.8	30.6%	6.8 years	75 months	Yes	43 onths
Mongolia	Upscaling Renewable Energy Sector	ADB	14.6	13-Apr-18	12-Feb-19	29-Feb-24	40.0	7.1	48.5%	4.9 years	5 months	Yes	14 onths

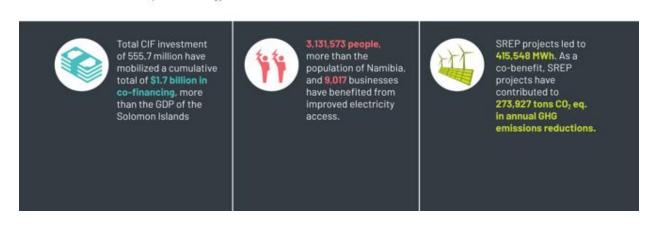
5 Results

WHERE DO WE STAND? SREP Results as of December 31, 2023

Total SREP investments of



businesses with improved energy access



5.1 Background

- 48. The SREP Technical Committee approved a revised SREP M&R Toolkit in June 2018 to include co-financing leveraged by SREP projects and installed capacity as SREP core indicators. As such, all SREP projects report on these four core indicators:
 - Core Indicator 1: Annual electricity output (megawatt-hour 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
- 49. The MDBs collect results data on an annual basis following the SREP Monitoring and Reporting Toolkit and report their data in the CIF Collaboration Hub (CCH) online platform. The results section of the CCH was launched in 2020, with a training session for MDBs on how to use the CCH results reporting template provided by the CIF Administrative Unit. The template lists indicators for projects and programs approved by the corresponding cut-off date for reporting. The template is completed by the MDBs, and the data are collated and analyzed by the CIF Administrative Unit and presented in the Operational and Results Report.
- 50. Some SREP projects are not investment projects; instead, they focus on strengthening the enabling environment for investments in clean energy and energy access. All of these projects, which closed by the end of 2023, account for 13 percent of the total SREP portfolio and contribute indirectly to achieving the core indicators, as well as the progress made in improving the regulatory, institutional, and policy frameworks for renewable energy.
- 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.
- 52. The following should be noted while reviewing the results:
 - Reporting cycle: Following the November 2020 SCF Intersessional Meeting, the SCF
 Trust Fund Committee reviewed <u>Options to Improve the Efficiency of SCF Governance</u>
 and approved Option 2. Consequently, SCF Committee meetings moved to an annual
 schedule, with June's meeting set as the main annual meeting, shifting CIF results
 reporting from November to June.

- Reporting year (RY): Results reporting herein cover RY2024. This means the period from January 1, 2023, to December 31, 2023.⁵
- 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 greenhouse gas (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: MDBs take different approaches to reporting on achieved co-financing.
 This includes establishing milestones when MDBs recognize co-financing and identifying the relevant co-financing amounts. While some MDBs report the full amount once a project is approved by their boards, others do not report until reaching financial close. Others report based on annual disbursements by the respective co-financiers or only report the full amount once the project starts operating. In addition, some co-financing figures may not be reported for confidentiality reasons.
- GHG reduction: In 2012, the SREP Technical Committee decided that SREP projects should measure the co-benefit of avoided GHG emissions. In the absence of country or project-specific baselines, SREP projects can estimate GHG emissions avoided using a simple, common, and transparent proxy-based method (emission equivalent based on diesel-generated electricity, 793.7 tons CO₂eq per GWh).

5.2 Overview

- This section on SREP results is based on the expected and actual results data reported by 52 MDB-approved projects and programs totaling USD 555.7 million in SREP funding, of which 40 are generating results on at least one core indicator. It highlights the progress of each indicator, with Annexes 3, 4, and 5 providing complete details of the portfolio results reporting, implementation, and disbursement, respectively.
- 54. Overall, RY2024 saw significant increases across all four core SREP indicators (see Table 15).
 - a. Annual electricity production increased by 87 percent—from 222,129 MWh/yr in RY2023 to 415,548 MWh/yr in RY2024 driven by a combination of further achievements in SREP projects that have previously reported results, as well as those reporting results for the first time, marking the largest ever annual increase in electricity production in the SREP portfolio to date.

⁵ Due to changes in Trust Fund Committee meeting schedules, results reporting will take place at the end of the calendar year instead of the middle of the calendar year. IFC's annual results are based on those from RY2021 as a proxy, as they are the latest results available. Adjustments will be made *ex-post* once IFC actual results are reported.

- b. Improved energy access for businesses also saw the largest increase: an additional 1,968 businesses saw improved access to electricity (27 percent year-on-year increase).
- c. Co-financing increased by USD 259 million, reaching USD 1,737 million (20 percent year-on-year increase), marking a co-financing ratio of 3.3 for the overall portfolio.
- d. The number of people with improved access to electricity also saw its largest ever year-on-year increase due to existing projects reporting large increases. An additional 1,292,498 people (633,416 men and 659,082 women) benefited in RY2024 representing a 71 percent increase from RY2023.
- e. A total 90.74 MW of clean energy capacity was installed, representing a 20 percent year-on-year increase.
- 55. **SREP portfolio maturity:** MDBs began approving SREP projects in 2011, and between 2014 and 2023, an average of four projects were approved per calendar year (see Figure 6). As of December 31st, 2023, 52 SREP projects across 20 countries and one region have been approved.⁶

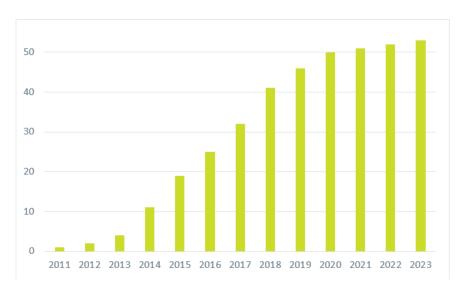


Figure 6: MDB-approved SREP projects (by number of projects, 2011–2023)

56. The first set of approved projects is nearing full implementation, but almost half of the SREP portfolio (40% percent) is still in the 0 to 5-year range since MDB approval (see Figure 7). These projects, after various delays are now becoming fully operational, leading to significant annual increase across the various indicators. SREP works in the least developed countries, and its portfolio is subjected to external risks, such as political instability and an unfavorable fiscal environment. Additionally, SREP's portfolio was significantly impacted by delays caused by COVID-19, which have led to projects taking 5–6 years on average to begin

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⁶ One SREP project is an enabling environment project that operates in the Pacific Region.

reporting results. This is slightly longer than the average energy project in the CTF portfolio that works on a similar technology and takes around 3–4 years. Thus, now that many of these projects are operational, it is expected that SREP projects will deliver larger annual increases for these indicators.

Figure 7: SREP portfolio maturity by project count and SREP financing

Project count

Financing



Table 15: SREP results overview

	Achieved	Achieved	Achieved	Target						
	(RY2016)	(RY2017)	(RY2018)	(RY2019)	(RY2020)	(RY2021)	(RY2022)	(RY2023)	(RY2024)	
Electricity	276	1,186	7,011	7,187	46,421	99,966	195,703	222,129	415,548	2,181,969
output									(19%)	
(MWh/yr)										
Cumulative	7,395	10,600	185,068	268,689	308,946	409,123	1,088,285	1,839,075	3,131,573	6,304,421
improved									(50%)	
energy access										
(people)										
Cumulative	-	-	311	561	801	2,618	5,809	7,049	9,017	33,599 ⁷
improved									(27%)	
energy access										
(businesses)										

⁷ Menengai Geothermal Development Project (AfDB) in Kenya is expected to provide 110,000 businesses with improved access to electricity. However, this downstream component is not supported by the SREP.

GHG emissions	251.3	8,545	22,984	44,651	88,730	108,540	185,171	215,045	273,927	2,465,654
reduced/avoide									(11%)	
d (tons CO2										
eq/yr)										
Cumulative	0.9	2.9	154.78*	173.16*	243.83*	279.98*	323.59*	444.92*	535.66*	1,527.74
installed									(35%)	
capacity (MW)										
Cumulative co-	410	476	485	529	674	856	1,144	1,4788	1,737	3,253.83
financing (USD									(53%)	
million)										

Note: Figures on GHG emissions reductions and electricity output are annual. Figures on co-financing, installed capacity, and improved energy access are cumulative. Also, it should be noted that different MDBs have their own cutoff points for results reporting, and reporting year (RY) is not the same as fiscal year (FY) for which MDBs also have their own cycle (either between January–December or July–June).

5.3 Core Indicator 1 and Core Indicator 4: Electricity Production and Installed Capacity

57. A total of 35 MDB-approved projects have targets under Core Indicator 1, and 19 projects, or 54 percent, reported on actual electricity production in RY2024, as shown in Table 16. See Annex 3 for detailed information about all project targets and actual results related to core indicators 1 and 4.

Table 16: SREP projects reporting on installed capacity and electricity production in RY2024

Country	Project	MDB	Technology	Cumula	ative Installed (MW)	Capacity	Annual Electricity Production (MWh/yr)			
				Actual 2023	Actual 2024 (% achieved)	Target	Actual 2023	Actual 2024 (% achieved)	Target	
Armenia	Caucasus Green Economy Financing Facility (GEFF) — SREP Armenia Renewable Energy Grant Support + Extension	EBRD	Mixed	46.67	48.85 (170%)	28.66	54,065	62,854 (105%)	59,980	
Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support (Extension)	EBRD	Mixed							
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	Solar	1.3	3.71 (28%)	13.2	701	1,159 (23%)	5,054	
Bangladesh	Scaling Up Renewable Energy	WB	Mixed	11.75	41 (13%)	310	0	0	483,000	

⁸ Adjustment from USD 1,274 million from the previous ORR.

^{*} Includes the 169 MW indirect MW from Kenya Geothermal and 26 MW from Ethiopia Geothermal.

Cambodia	National Solar Parks	ADB	Solar	60	60 (60%)	100	11,845	128,577 (64%)	200,000
Ethiopia	Geothermal Sector Development Project	WB	Geothermal	21	26 (74%)	35	n.a	n.a	n.a
Haiti	Renewable Energy Access for All	WB	Solar	0.1	0.62 (6%) ⁹	10	0	1,160 (8%)	15,200
Haiti	Renewable Energy for the Metropolitan Area	WB	Solar	2.5	2.5 (45%)	5.5	0	13,000 (163%)	8,800
Honduras	ERUS Universal Energy Access Program (PAUE)	IDB Group	Mixed	0	1 (59%)	1.7	0	1,576 (43%)	3,700
Honduras	Honduras Renewable Energy Financing Facility	IDB Group	Mixed	83.23	87.76 (57%)	153	95,810	90,056 (21%)	427,000
Honduras	Self-Supply RE Guarantee Program	IDB Group	Solar	8.24	15.58 (78%)	20	7,905	9,134 (20%)	45,000
Kenya	Menengai Geothermal Project	AfDB	Geothermal	170	170 (113%)	150	n.a	n.a ^a	n.a
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini Grids	IBRD	Hydro	0	0 (0%)	2	780	780 (16%)	5,000
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	WB	Solar	1.5	1.5 (7.5%)	20	12,788	12,788 (127%)	10,000
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	ADB	Solar	22.1	22.1 (110%)	21	14,880	14,880 (53%)	27,600
Mali	Rural Electrification Hybrid Systems	WB	Solar	7.21	7.21 (117%)	6.18	7,103	14,782 (114%)	13,000
Mongolia	Upscaling Renewable Energy Sector	ADB	Mixed	5.64	15.64 (38%)	41	2,354	12,001 (12%)	98,770
Mongolia	Upscaling Rural Renewable Energy – Solar PV	WB	Solar	0	10 (100%)	10	0	30,000 (71%)	42,000
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project + Additional Financing	ADB	Mixed (wind/solar)	2.9	2.9 (10%)	29.8	4,888	8,640 (15%)	58,078
Nepal	Extended Biogas Program	WB	Biogas	n.a.	n.a	n.a.	1,496.31	1,469.3 (143%)	1,044
Rwanda	Renewable Energy Fund	WB	Mixed RE	n.a	n.a	n.a	7,221	12,329 (95%)	13,000
Solomon Islands	Solar Power Development Project	ADB	Solar	0	0	2	0	34 (1%)	3,100
Vanuatu	Rural Electrification Project	WB	Solar	0.29	0.29 (6%)	4.5	320	320 (12%)	2,700
			Total	444.92	535.66	963.54	222,129	415,548	1,518,926

Notes: Table only shows projects that have reported achieved results on either annal electricity production or installed capacity.

a/ 1,182,000 MWh from Menengai Geothermal Project and 552,000 MWh from the Geothermal Sector Development Project excluded, as the SREP component is used to support the exploratory geothermal drilling phase and will thus only indirectly contribute to the electricity produced.

⁹ 1.42 MW in installed capacity has been achieved, but this is a joint CTF-SREP financing project, so only the SREP share (35 percent) is included to avoid double counting.

58. Much of the increase in annual electricity production is from the "National Solar Park Project" (ADB) in Cambodia which completed its construction in late 2022, leading to 128,577 MWh in annual electricity production, an increase of 1,085 percent from the previous year. The final aspects of the main solar park are expected to finish later this year, while the battery storage system component, as part of the "Grid Reinforcement Project" (ADB), is still in the bidding stages. Upon completion, the country's first ever grid-connected energy storage system is expected to deliver 16 MWh in battery storage capacity.

Box 3: National Solar Park Project (ADB)

SREP funding: USD 14 million

Project co-financing: USD 12.71 million

Approval date: May 2019

The project aims to increase the share of renewable energy in the grid by creating the first-of-a-kind 100 MW solar park in Cambodia, supported by the private sector.

In RY2024, the annual electricity production significantly increased from 11,845 MWh to 128,447 MWh, marking an increase of over 1,000 percent as a result of the 60 MW installed capacity achieved in the previous reporting cycle.

While the solar park is largely completed and is now operational with the final aspects, such as the southern access road, and procurement and installation of additional equipment in the solar park is expected to finish by September 2024, much of the progress is now directed towards the BESS component, which will become Cambodia's first utility-scale BESS upon its completion by 2027.

Upon its completion, the project is expected to provide affordable electricity to over 108,700 households, resulting in 165,000 tCO2 in annual GHG emissions reductions.

- 59. Ten projects reported an increase in installed capacity of 90.74 MW, bringing the cumulative total to 535.66 MW. The "Scaling Up Renewable Energy" (WB) in Bangladesh reported the largest increase in RY2024, of 29.75 MW, which is almost a third of the total increase this reporting year, as a result of the operationalization of 18 of the 28 solar PV sub-projects.
- 60. One project, "ERUS Universal Energy Access Program" (PAUE) (IDB Group) in Honduras reported results for the first time, adding 1 MW of installed capacity in the municipality of Brus Laguna, Gracias a Dios Department and Guanaja Island. Upon completion, the project is expected to provide improved electricity access to over 2,400 homes, including the indigenous Miskito community in the area.
- 61. **Geothermal projects:** For geothermal projects in the SREP portfolio, financing is used for the upstream exploratory drilling, which is one of the riskier components. Once this phase is completed, the project will report on indirect "achieved results" for installed capacity based on the steam capacity produced. Upstream exploratory drilling is crucial for the downstream components, which in turn focus on electricity production and grid connection. In most instances, the latter components are independent of SREP financing and are not monitored over the project lifetime of the SREP projects. SREP projects, such as the "Menengai

- Geothermal Development Project" (AfDB) in Kenya and the "Geothermal Sector Development Project" (WB) in Ethiopia focus on geothermal drilling. However, the subsequent energy access projects that will follow, as a result of the completion of the drilling activities, are indirect results that are expected to enable further energy access to over 3.6 million people.
- 62. Due to the risky nature of geothermal development, some projects in the SREP portfolio focus solely on the exploratory phase rather than the energy and electricity production phase. For example, the "Armenia Geothermal Exploratory Drilling Project" (WB) was implemented to confirm whether the geothermal resource at the project site was suitable for power generation. If confirmed, the private sector would be involved to develop the geothermal power plant. Drilling took place and confirmed the geothermal resource was not suitable for power production, so geothermal power production was not pursued at the discretion of the private geothermal developers. The project achieved its development objective of assessing the feasibility of geothermal production and the results were highly informative as it provided the necessary data on the steam potential of the Karkar geothermal site and future investments in the area.
- 63. **Transmission projects:** Two projects in Honduras, namely, the "Grid-Connected RE Development Support (ADERC) Transmission Phase I" (IDB Group) and the "Grid-Connected RE Development Support (ADERC) Transmission Phase II" (IDB Group), used all the financing to develop transmission line to facilitate access of renewable energy to the main grid, thus increasing the share of clean power to the country's overall energy mix. These transmission projects have no additional economic value yet play a crucial role in allowing renewable energy capacity to be evacuated to the main grid. In the case of Honduras, eight percent of all the renewable energy produced in the country is curtailed due to transmission bottlenecks. Upon completion, the project is expected to evacuate 380 MW of renewable energy capacity, leading to 47,000 tCO2 in annual GHG emissions reductions and increasing the share of renewable energy in Honduras from 49 to 53 percent.

Box 4: Upscaling Rural Renewable Energy - Solar PV (WB)

SREP Funding: USD 12 million **Project Co-financing:** USD 42 million

Approval Date: June 2017

The project works to improve the power reliability in Mongolia by rehabilitating distribution networks, supporting the construction of a 10-MW solar PV power plant, and providing technical assistance.

After multiple delays from COVID-19 and procurement challenges, the project became fully operational in 2023, leading to the completion of 10 MW solar PV plant, providing over 130,000 people with clean and improved electricity. Additionally, the project has achieved or overachieved most of the outcome indicators set out. The project is expected to close in late 2024, after the remaining funds are fully disbursed to the four remaining contracts that will rehabilitate distribution systems in 1) Khovd, 2) Uvs, 3) Bayan-Ulgii, and 4) Zavkhan, Gobi-Altai, and Bayankhongor provinces.

5.4 Core Indicator 2: Improved Energy Access

- As shown in Table 17, 16 out of 32 projects have reported achieved results on Core Indicator 2: Improved Energy Access in RY2024.¹⁰ See Annex 3 for detailed information on all project targets and actual results, with a gender breakdown.
- 65. Compared to RY2023, there was a 51 percent increase in the number of people benefiting from SREP-funded projects, representing an additional 1,292,498 people, of whom 659,082, or 51 percent, are women. This brings the cumulative total number of beneficiaries to 3,131,573, of whom 1,590,509, or 51 percent, are women. This marks the largest year-on-year increase thus far, cumulatively reaching almost half of the 6.3 million target.
- 66. The "Rwanda Renewable Energy Fund" (WB) continues to drive this increase, adding almost 700,000 people alone, and accounting for over 54 percent of the total increase this reporting year. The significant increase is attributed to the update of the National Electrification Plan (NEP) in 2023, which enabled more villages to be eligible for off-grid connection via private sector investments in solar home systems (SHS).¹¹
- 67. The "Upscaling Rural Renewable Energy Solar PV" project (WB) in Mongolia reported results on improved energy access for the first time, leading to 133,587 people with improved access to electricity due to the completion of the 10 MW solar power plant in Myangad, Khovd Province. The rehabilitation of distribution networks has also led to significant reduction in annual power interruption in region—from 809 minutes per year prior to project intervention to 413 minutes per year, significantly overachieving the expected target of 647 minutes per year in the project area.

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¹⁰ Results for expansion of the Caucasus Green Economy Financing Facility (EBRD) are jointly reported with the main component.

Table 17: SREP projects reporting on improved energy access in RY2024

Country	Project title	MDB	Technology	People Businesses								
				Cumulative Number of Women			Cumulative Number of Men			Cumulative Number of Businesses		
				Actual 2023	Actual 2024 (% achieved)	Target	Actual 2023	Actual 2024 (% achieved)	Target	Actual 2023	Actual 2024 (% achieved)	Target
Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	EBRD	Mixed	5,354	5,651 (56%)	10,000	8,708	8,968 (112%)	8,000	268	287 (358%)	80
Armenia	Caucasus Green Economy Financing Facility (GEFF) — SREP Armenia Renewable Energy Grant Support (Extension)	EBRD	Mixed									
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	Solar	3,000	7,512 (20%)	38,021	3,046	8,686 (23%)	38,566	n.a.	n.a.	n.a.
Haiti	Renewable Energy Access for All	IBRD	Solar	13,691	40,460 (23%)	175,000	13,692	40,460 (23%)	175,000	62	957 (25%)	3,900
Haiti	Renewable Energy for the Metropolitan Area	IBRD	Solar	26,500	26,500 (63%)	42,000	26,500	26,500 (63%)	42,000	0	93 (16%)	600
Honduras	Honduras Renewable Energy Financing Facility	IDB Group	Solar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	55	60 (272%)	22ª
Honduras	Sustainable Rural Energization (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	IDB Group	Improved cookstoves	37,012	37,012 (20%)	187,500	36,398	36,398 (19%)	187,500	146	146 (49%)	300
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini Grids	WB	Hydro	82,399	82,399 (110%)	74,400	83,728	83,728 (110%)	75,600	n.a	n.a	n.a
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	ADB	Solar	95,553	95,553 (620%)	15,410 ^b	100,658	100,658 (653%)	15,410 ^b	3,881	3,881 (100%)	n.a. ^c

Mali	Rural Electrification Hybrid	WB	Solar	150,165	318,602	277,603	147,783	313,544	273,197	0	n.a.	n.a.
	Systems				(114%)			(115%)				
Mongolia	Upscaling Renewable Energy	ADB	Mixed RE	35,333	58,406	118,824	41,390	67,409	139,353	n.a.	n.a.	n.a.
	Sector				(49%)			(48%)				
Mongolia	Upscaling Rural Renewable	WB	Solar	0	66,794	80,640	0	66,793	80,640	n.a.	n.a.	n.a.
	Energy – Solar PV				(83%)			(83%)				
Nepal	South Asia Subregional	ADB	Mixed	15,157	26,129	213,194	16,968	27,124	197,156	n.a	n.a	n.a.
	Economic Cooperation Power		(wind/		(12%)			(14%)				
	System Expansion Project +		solar)									
	Additional Financing											
Nepal	Extended Biogas Program	WB	Biogas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	194	194	186
											(104%)	
Rwanda	Renewable Energy Fund	WB	Mixed RE	459,305	815,352	936,000	420,930	750,035	864,000	2,303	3,201	27,500
					(87%)			(87%)			(12%)	
Solomon	Electricity Access and	WB	Mixed RE	5,763	8,363	4,579	5,998	8,912	4,766	36	9 (125%)	75
Islands	Renewable Expansion Project				(183%)			(187%)				
	-2											
Vanuatu	Rural Electrification Project	WB	Solar	1,776	1,776 (8%)	21,927	1,849	1,849 (8%)	22,823	20	104	37
											(281%)	
			Total	931,427	1,590,509	2,195,098	907,648	1,541,064	2,124,011	7,010	9,017	32,700
<u>. </u>												

Notes:

a/ More than 3,000 new SME businesses have benefited indirectly, mainly located in rural, economically-deprived communities.

b/ The target of 30,820 people is based on the population of the project's Phase 1 with five sample island sub-projects presented during SREP Technical Committee approval. The project will cover a total of 167 islands with an estimated population of 251,500 people.

c/ Target to be established by ADB.

68. RY2024 saw 1,968 businesses with improved access to electricity, making it also the largest ever year-on-year increase, reaching a cumulative total of 9,017 businesses. The "Renewable Energy Fund Project" (WB) in Rwanda accounted for the largest increase, adding 897 businesses alone. This is closely followed by the "Renewable Energy Access for All" (WB) in Haiti, which provided 895 businesses, such as household micro, small and medium enterprises (MSMEs), and healthcare and water facilities, mainly in rural areas, with improved access to electricity.

Box 5: Electricity Access and Renewable Energy Expansion Project – 2 (WB) in the Solomon Islands

SREP Funding: USD 12 million **Project Co-financing:** USD 15 million

Approval Date: July 2018

The Project aims to increase the amount of energy supplied to the grid and increase the share of renewable energy in the Solomon Islands by 1) developing a hybrid mini-grid, 2) supporting electricity connections in low-income areas of the islands, 3) developing at least one grid-connected solar plant, and 4) supporting project management via an enabling environment component.¹²

In 2023, the project has provided over 17,000 people and 94 businesses with improved access to electricity, overachieving its target of 9,345 people (182 percent) and 75 businesses (125 percent), respectively.

Beyond the SREP results, the project also supported the development of the country's National Electrification Strategy (NES), identifying financing needs to electrify over 63,000 households, and reviewed the Electricity Act (2022). Following the recommendations from the latter law, the Electricity (Amendment) Bill, which was passed in 2023, removed the legal ambiguity of whether solar was a permitted source of generation.

5.5 Core Indicator 3: Co-financing Leveraged

- 69. As shown in Figure 8, total co-financing saw an increase of USD 259 million, reaching USD 1,737 million, or 53 percent, of the USD 3,254 million target. As of this reporting year, 50 of 52 projects have co-financing targets. Of these, 27 of 39 projects have achieved MDB co-financing; 14 of 29 projects have achieved government co-financing; 16 of 21 projects have achieved private sector co-financing; and 16 of 26 projects have achieved other or bilateral sources. Details on co-financing from various sources are provided in Annex 3.
- 70. The private sector accounts for the largest share of the increase, adding USD 164 million, or 63 percent, of all achieved co-financing this reporting year. At the project-level, the largest increase is from the Honduras "Renewable Energy Financing Facility" (IDB Group), which alone co-financed USD 161 million, with 145 million coming from the private sector. This increase is due to the completion of bidding contracts across sub-projects in Honduras, the Dominican Republic, and Jamaica.

¹² https://projects.worldbank.org/en/projects-operations/project-detail/P162902.

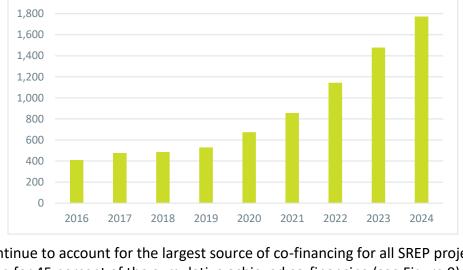


Figure 8: Cumulative co-financing reported by SREP projects, 2016–2024

71. MDBs continue to account for the largest source of co-financing for all SREP projects, accounting for 45 percent of the cumulative achieved co-financing (see Figure 9), almost half of which comes from two projects in Kenya—the "Menengai Geothermal Development Project" (AfDB) and the "Electricity Modernization Project" (WB). However, in recent years, co-financing from private sector has seen significant increases, overtaking government as the second largest share of the cumulative co-financing in RY2024. This is driven mainly by the "Honduras Renewable Energy Financing Facility" (IDB Group), which accounts for 84 percent of the achieved cumulative private sector co-financing.

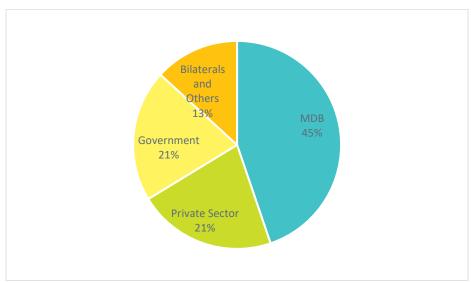


Figure 9: Distribution of achieved cumulative co-financing in SREP portfolio

5.6 Enabling Environment Projects

72. There are seven MDB-approved SREP projects in Ethiopia, Honduras, the Maldives, Mali, Mongolia, and the Pacific region, whose primary objective is to strengthen the enabling

environment for investments in clean energy and energy access. These projects contribute only indirectly to the achievement of different SREP core indicators. All of these projects were approved early on the SREP portfolio and have been completed. See Annex 4 for more detailed project implementation highlights. These types of projects are fundamentally important and pave the way for other investments in renewable energy, as well as enhanced energy access, for example:

- 173. Improved energy access: Various SREP enabling environment projects contributed to improved energy access for populations in different countries via amending regulations to foster private sector participation. For example, the "Lighting Ethiopia" project (IFC) indirectly provided over 8.7 million people with improved access to electricity. By addressing market entry barriers for private sector solar lantern suppliers, the project facilitated the creation of national standards for solar lanterns and solar home systems. These standards, which were later adopted by the Ethiopian Standards Agency, play a crucial role in guaranteeing the quality and dependability of solar products. Additionally, the project contributed to the understanding of the solar market by supporting comprehensive market survey reports on the solar supply chain, thereby providing valuable insights into the sector's dynamics.
- 74. The "Project for Scaling Up Renewable Energy in Mali" (AfDB) reviewed five electrification and energy strategies and developed a guideline for investors in renewable energy as a means to increase both public and private investments in renewable energy. This led to an increase in the share of people with access to electricity in rural areas, rising from 15 percent in 2015 to 24 percent by 2020.
- 75. Increasing investments in renewable energy: SREP enabling environment projects contributed to increasing investments in renewable energy in various countries. For example, in Ethiopia, the "Geothermal Sector Strategy and Regulations" project (IFC) assisted in the establishment of a geothermal strategy, a roadmap, and licensing regulations, as a way to increase electricity from geothermal sources in the country, leading to the approval of the 150 MW Corbetti Geothermal Plant. At the same time, the "Promoting Renewable Energy in Mali Project (PAPERM)" (AfDB) strengthened the institutional framework for renewable energy and provided tools to support private sector investment, subsequently contributing to increasing the share of renewable energy in Mali from 10 to 13 percent by 2020, due to the approval of 38 renewable energy projects since 2015.¹³
- 76. In the Pacific Region, the "Sustainable Energy Industry Development Project" (WB) has successfully mapped the solar and wind resources data, which was used by utility companies to adjust their investment strategies in various Pacific islands, ranging from adjustment of existing tariff structures to development of a wind project in Samoa.

5.7 Co-benefits and Development Impacts

77. Beyond the core indicators that measure improved energy access from renewable sources and co-financing from a variety of sources that aim to drive investment in such technologies,

¹³ https://www.esi-africa.com/industry-sectors/generation/ethiopia-breaking-ground-in-geothermal-vision/.

SREP also contributes to various other development outcomes. This is natural since SREP provides financing through the six MDBs, each with their own strategic development priorities. By mapping and measuring these co-benefits or development impacts, SREP intends to gain a robust understanding of the wider impacts of climate projects and to maximize positive externalities, when possible.

- 78. Although SREP's primary objective is improved energy access, many SREP projects also contribute to additional benefits such as health, governance, and gender. For example, the "Accelerating Sustainable Private Investments in RE Program (ASPIRE)" (WB) in the Maldives replaced the use of diesel fuel with solar PV for 38,606 people in Male and Hulhumale islands, thereby reducing the cost of fuel imports, while in Honduras, the "ERUS Solar-Powered Mobile Health Units for Honduras" (IDB Group) has benefited 27,000 people by providing them with access to health clinics, powered by solar power, built initially as an emergency support to treat COVID-19 patients.
- 79. GHG emissions reduction, a co-benefit for SREP, is one of the indicators reported by almost all SREP projects. In RY2024, annual GHG emissions reductions saw its second largest ever year-on-year increase, with 18 SREP projects reporting a reduction of 273,927 tCO2, an increase of over 27 percent. Much of the achieved annual emissions reductions is attributed to the "Extended Biogas Program" (Nepal), which alone saw 33,774 tCO2 reduced, accounting for over 12 percent of the annual reductions.

Five projects reported annual GHG emissions reductions for the first time this reporting year: "Renewable for the Metropolitan Area" (WB) in Haiti, "Renewable Energy Access for All" (WB) in Haiti, "ERUS – Solar-Powered Mobile Health Units for Honduras" (IDB Group), "ERUS Universal Energy Access Program" (IDB Group) in Honduras, and "Upscaling Rural Renewable Energy – Solar PV" (WB) in Mongolia. In Haiti, SREP financing has successfully rehabilitated the Drouet hydro plant in the central part of the country, while in Honduras, SREP financing was used to build two mini-grids in Guanaja island and Brus Laguna municipality.

Box 6: CIF Deep Dive Series - SREP GHG Emission Reductions by Technology¹⁴

While SREP works to provide affordable and improved electricity, via renewable energy sources, to local communities in low and lower-middle income countries, the interventions also support transitions to renewable energy, which in turn play a key role in GHG emission reductions and climate mitigation. It is expected that 42 SREP projects will lead to 3.5 million tCO2 in annual GHG emission reductions, most of which is in the Africa region, followed by LAC, Asia, and ECA.

This deep dive shows that the geothermal projects in the SREP portfolio account for the largest share of the expected GHG emission reductions at 40 percent, despite accounting for only 12 percent of the SREP portfolio in terms of overall financing. Additionally, the deep dive revealed that geothermal projects have the highest average GHG emission reductions per MW of installed capacity, standing at 5,340 tCO2 per MW, in comparison to hydro at 1,936 tCO2, mixed-RE at 1,637 tCO2, and solar at 1,404 tCO2.

Geothermal's high potential for GHG emission reductions relative to SREP financing is due to two major factors. First, SREP financing is used to support the exploratory phase of a geothermal project, which is the most high risk part of the project, while the power production phase, which leads to GHG emission reduction, goes beyond the drilling phase. Second, the "Menengai Geothermal Development Project" (AfDB) in Kenya, attracted significant co-financing and overachieved its target by 13 percent.

In terms of grid connection technologies, on-grid projects account for the largest share of expected GHG emission reductions, at 71 percent, significantly more than off-grid projects, which stand at 17 percent, and mini-grid projects at nine percent. This is because of the presence of geothermal projects, all of which are considered on-grid projects.

From a regional standpoint, projects in ECA, all of which are in Armenia, have the highest reductions per dollar, at 13,000 tCO2 per one million USD invested. However, this is solely because of the expected results from the "Geothermal Exploratory Drilling Project" (WB). The LAC region comes in at second place, at 12,196 tCO2 per one million USD invested, mainly carried by the "Grid-Connected Renewable Energy Development Support (ADERC) Transmission Phases I and II" (IDB Group) project in Honduras. This project focused on the development of transmission infrastructures, which in general have considerable impact on GHG emission reductions by enabling large-scale renewable energy integration, while replacing fossil fuel generation and improving service reliability in power transmission. Africa ranks third, followed by Asia, where such projects have relatively higher upfront costs due to the remote location of the Pacific islands.

Despite the high potential for geothermal projects as a key player in GHG emission reductions and climate mitigation, SREP investments have focused on low-income countries, rather than on countries with the highest potential for GHG emission reductions. SREP's primary objective is electricity access in low-income countries, in which only a few, such as Ethiopia, Kenya, and Nicaragua, have a viable geothermal source that can be used for energy access. For other countries, the main sources of renewable energy will have to come from other conventional technologies, such as solar PV and hydro.

¹⁴ https://www.cif.org/sites/cif_enc/files/knowledge-documents/final 2023-11-07 deep dive srep ghg v4.pdf.

- 80. Social and Economic Development Impacts of Climate Investments (SEDICI) is CIF's flagship research program for mapping and quantifying the key economic, markets', social, and environmental co-impacts of climate investments. SEDICI is structured within 3 phases: (1) an in-depth portfolio analysis and early testing of modelling approaches; (2) a mixed methods evaluation focusing on select projects across the portfolio; and (3) the development and/or application of a select set of modelling tools to provide regular analytics on the development co-benefits of CIF's portfolios.
- 81. The JIM was refreshed to incorporate the new, April 2023 issuance of the Global Trade Analysis Project (GTAP) data base, a key data set on which the model functions, alongside those of the International Labour Organization (ILOSTAT), the World Bank Development Indicators Databank, International Energy Agency (IEA), Energy Information Administration (EIA), and others. Summary findings as of December 2023, include contribution toward: a total of 780,253 person-years of employment¹⁵, of which 341,098 constitute direct employment, 142,029 constitute induced (25% formal, 75% informal), and 196,236 constitute supply chain jobs (35% formal, 65% informal). The forward of effects of additional power generated by SREP projects will contribute to a further 100,890 person years of employment (18% formal, 82% informal).
- 82. SREP projects contribute to a variety of the UN Sustainable Development Goals (SDGs) ranging from providing clean access to electricity to development of local industry. Figure 10 highlights the key SDGs to which SREP projects directly contribute.

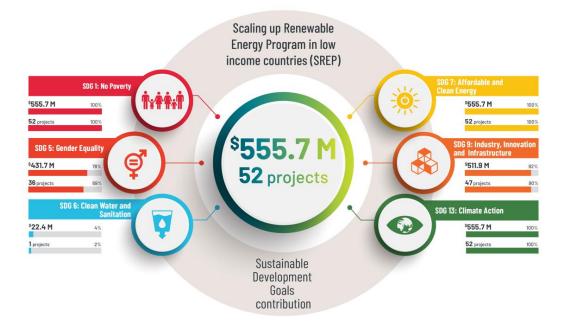


Figure 10: SREP's contributions to the SDGs

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¹⁵ One person-year (or job-year) of employment is a unit that stands for one person employed full-time for one year, or two people for half a year, etc. It is often used in manufacturing, installation, and construction employment that may be temporary in nature, though it may also be used for permanent employment.

- 83. **SDG 1: No Poverty:** The SREP portfolio contributes significantly to SDG 1, measuring the reduction of vulnerabilities of populations facing the greatest economic risks per sub-goal 1.4. For example, the recently approved "ERUS Solar-Powered Mobile Health Units for Honduras" (IDB Group) has benefited 27,000 people in at least four public hospitals by deploying solar-powered peripheral clinics in specific suburban areas with poor electricity services.
- 84. **SDG 6: Clean Water and Sanitation:** While the SREP portfolio's main focus is energy access, people benefiting from improved access to energy also see this extension toward different end uses, including toward improved clean water and sanitation. In Bangladesh, for example, the "Off-Grid Solar PV Irrigation" (ADB) is expected to provide improved irrigation to 10,000 households via solar irrigation pumps.
- 85. **SDG 9: Industry, Innovation and Infrastructure:** SREP portfolio has numerous projects that contribute to co-benefits that fall under SDG 9, tracking how the provision of high-quality, reliable, and resilient infrastructure has significant effects on the "economic development and human wellbeing, with a focus on affordable and equitable access for all." ¹⁶
- 86. In Mongolia, the "Upscaling Rural Renewable Energy Solar PV Project" (WB) has helped construct or rehabilitate almost 1,000 kilometers of distribution lines.
- 87. In Nepal, the "Extended Biogas Project" (WB) has led to the creation of 193 commercial off-grid generation biogas plants.¹⁷
- 5.8 Lessons from Completed Projects "Successful Private Sector Engagement Providing Electricity to Rural Population in Mali"
- When projects have been fully disbursed (public sector) or their loans are completely repaid (private sector), MDBs prepare a project completion report (PCR) or an implementation completion report (ICR) and submit them to the CIF Administrative Unit to conclude their SREP results reporting requirement for each project. These documents are designed to satisfy accountability needs and provide lessons from completed operations. In some cases, an independent review of an ICR (an ICR Review or ICRR) is also conducted.
- 89. The CIF Administrative Unit has received at least one type of completion document for seven of 17 completed projects¹⁸ (see Table 18). Two common themes have emerged across the completion reports: the importance of de-risking in a project, especially for geothermal projects, and the importance of capacity building in a project (see Table 19).
- 90. This year, one project, "Rural Electrification Hybrid Systems" (WB) issued a completion report. The project, which was approved in 2014, received USD 13.3 million in SREP support

¹⁶ https://sdgs.un.org/goals/goal9#targets and indicators

¹⁷ https://documents1.worldbank.org/curated/en/639921648216491573/pdf/Nepal-SREP-Supported-Extended-Biogas-Project.pdf.

¹⁸ Although there are 17 completed SREP projects, not all of them have a completion report. For some MDBs, these documents are confidential and for internal use only. And for other projects, such as the "Geothermal Sector Development Project (GSDP)" (WB) in Ethiopia in RY2024, a completion report is not immediately available right after the project is officially closed and can take some time before it is commissioned.

to expand energy services to the rural areas of Mali via renewable energy generation, replacing diesel and kerosene fuels, from off-grid connections through three major components: (i) increasing the amount of renewable energy produced and grid extensions; (ii) developing an off-grid lighting market via the use of solar lanterns; and (iii) capacity building.¹⁹

- 91. Despite significant political and economic challenges, ranging from multiple project delays, security challenges, two military coups, and COVID-19, the project has finally closed and overachieved most of its objectives set out, providing 632,147 people with improved access to electricity in 50 rural localities, 50.4 percent of which are women. The project overachieved both its initial target of 612,000 people and revised target of 550,800 people by three percent.²⁰
- 92. The project also led to 7.21 MW in installed capacity from 45 hybrid mini-grid systems and 98,853 solar lanterns, overachieving its initial and revised target of 6.7 MW and 6.18 MW, respectively, by eight percent. Additionally, it led to 14,782 MWh in annual electricity production, overarching both its initial target of 14,000 MWh and revised target of 13,000 by six percent.²¹
- 93. On gender, the project trained 60 women that benefited from improved access to electricity in literacy and organizational management to process and market local products and another 24 women in upkeep and maintenance of solar equipment from the project.²²
- 94. As a result of the inclusion of solar power, the price for electricity for the beneficiaries dropped by around 25 percent, while, at the same time, the duration of electricity supply increased from eight hours to 19 hours each day. This led to an increase in economic activities in the different sectors ranging from metal welding, agriculture processing, healthcare, and schools. The enthusiasm from the beneficiaries because of the improvement in quality and duration of the electricity service, combined with the reduction in electricity price was one of the contributing factors for the project to provide more off-grid connections than anticipated.²³
- 95. The project stressed the importance of the private sector as a key player in providing electricity services in rural Mali. The government contracted the private sector which managed and operated the hybrid power plants which improved the efficiency in Mali's energy sector.²⁴ And for future rural off-grid electrification projects, it is expected that the private sector can possibly be a key player in making such rural electrification projects more efficient and sustainable by overseeing the distribution of electricity.²⁵
- 96. The project has demonstrated that the use of off-grid plants and solar home systems is a cost-effective approach to providing affordable electricity to rural populations. This model

¹⁹ https://documents1.worldbank.org/curated/en/099040924102035496/pdf/BOSIB1337a0e5304818bbd1710404e4f33b.pdf.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

could potentially be replicated in other parts of the Sahel region due to the abundance of sunlight in the area and the similar nature of how rural communities are disbursed, as opposed to expanding the main grid infrastructure to these rural communities.²⁶

²⁶ Ibid.

Table 18: List of completed SREP projects

Country/Region	Project	MDB	Connection	Public or Private
Armenia	Geothermal Exploratory Drilling Project	WB	On-grid	public
Ethiopia	Geothermal Sector Development Project (GSDP)	WB	On-grid	public
Ethiopia	Geothermal Sector Strategy and Regulations	IFC	NA	private
Ethiopia	Lighting Ethiopia	IFC	NA	private
Honduras	Strengthening the Renewable Energy Policy and Regulatory Framework Program (FOMPIER), Part I	IDB Group	NA	public
Honduras	Strengthening the Renewable Energy Policy and Regulatory Framework Program (FOMPIER), Part II	IDB Group	NA	public
Honduras	Sustainable Rural Energization Program (ERUS) Part I & III	IDB Group	Off-grid	private
Kenya	Menengai Geothermal Project	AfDB	On-grid	public
Maldives	Preparing Outer Island Sustainable Electricity Development Project (POISED)	ADB	Mini-grid	public
Maldives	Technical Assistance: Republic of the Maldives Capacity Development of the Maldives Energy Authority	ADB	NA	public
Mali	Project for Scaling Up Renewable Energy in Mali	AfDB	NA	public
Mali	Rural Electrification Hybrid Systems	WB	Mini-grid	public
Mongolia	Strengthening Renewable Energy Regulations	WB	NA	public
Nepal	Extended Biogas Program	WB	Off-grid	public
Pacific Region	Sustainable Energy Industry Development Project	WB	NA	public
Tanzania	Mini-Grids Project	IFC	Mini-grid	private
Vanuatu	Rural Electrification Project	WB	On-grid	public

Table 19: Excerpts from SREP project completion documents on common themes

Means to reduce risk in projects	Importance of capacity building in a project
 Grant-funding and/or concessional financing of early-stage exploration is essential for the development of geothermal resources, especially in low-enthalpy regions because of the substantial risk associated with finding a commercially-viable resource. Adequately budgeting for contingencies is essential to avoid cost overruns in high-risk drilling projects. It is important to design and implement a continuous technical capacity improvement program for the staff to cope with the emerging challenges in geothermal field exploration and drilling of wells, as well as utilization of newly developed technologies in the field. 	 Capacity building at the implementing agency is key to the project's success. Capacity building is key. Continue to build the capacity of beneficiaries by focusing on women for permanent and inclusive upgrading, better use of existing infrastructure, and elimination of gender inequalities in renewable energy. Strong leadership at the energy authority is important to ensure that the energy authority continues to play a facilitative role for public and private sector investments in the sector. For an operation that aims to strengthen the ability of stakeholders, adequate project designs which capture capacity elements, including PDO, TA components, and the results frameworks, should be chosen to ensure longer-term sustainability. Resilience of the Borrower institutions coupled with a mix of proactivity and adaptation capacity of the Bank team are the key ingredients to generate results in an FCV context.

Annex 1 SREP Resource Availability

SREP - RESOURCES AVAILABLE for COMMITMENTS				
Inception through March 31, 2024				
(USD millions)		Total	Capital	Grant
Donor Pledges and Contributions				
Contributions		774.37	270.03	504.34
Allocation of Capital to Grants	a/		(25.82)	25.82
Total Pledges and Contributions		774.37	244.21	530.16
Cumulative Funding Received				
Contributions Received Cash Contributions		774.37	270.0	504.3
Unencashed Promissory Notes		-	-	-
Unencashed promissory notes- TAF		-		-
Allocation of Capital to Grants from encashed Promissory Notes Total Contributions Received	a/	774.37	(25.8) 244.2	25.8 530.2
Other Resources		774.37	244.2	330.2
Investment Income earned -up to Feb 1, 2016	b/	9.9		9.9
Other Income		-		0.0
Total Other Resources		9.9		9.9
Total Cumulative Funding Received (A)		784.3	244.2	540.1
Cumulative Funding Commitments Projects/Programs		738.0	243.5	494.5
MDB Project Implementation and Supervision services (MPIS) Costs		23.4	-	23.4
Administrative Expenses-Cumulative to 1st Feb 2016	b/	14.2	-	14.2
Country Programming Budget expense from 1st Jan 2018, Net	b/	0.4		0.4
Technical Assistance Facility Total Cumulative Funding Commitments		14.7 790.7	243.5	14.7 547.2
Project/Program, MPIS and Admin Budget Cancellations	c/	(171.1)	(97.7)	(73.5)
Net Cumulative Funding Commitments (B)		619.6	145.9	473.7
Fund Balance (A - B)		164.7	98.4	66.3
Currency Risk Reserves	d/	-	-	-
Currency Risk Reserves-TAF		164.7	00.4	-
Unrestricted Fund Balance Future Programming Reserves:		164.7	98.4	66.3
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	e/	(31.2)		(31.2)
Administration Expense reserve for CIFAU, MDB & Trustee USD 37.9 Million Country Programming Budget Reserve USD 2.3 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	h/	(0.6)		(0.65)
Unrestricted Fund Balance (C) after reserves Anticipated Commitments (FY24)		132.8	98.4	34.5
Program/Project Funding and MPIS Costs Technical Assistance Facility	f/	110.7	78.4	32.3
Total Anticipated Commitments (D)		110.7	78.4	32.3
Available Resources (C - D)		22.1	20.0	2.1
Potential Future Resources (FY24) Pledges		_		_
Contributions Receivable		-		-
Release of Currency Risk Reserves		-	-	-
Release of Currency Risk Reserves-TAF				-
Total Potential Future Resources (E)		-	-	-
Potential Available Resources (C - D + E)		22.1	20.0	2.1
	g/	0.39		0.39
Reflows from MDBs				

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.

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

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

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

e/ 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 of December 31, 2017, approved by the SCF TFC on March 8, 2018. The decision reads as "allocate USD 31.7 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 increased by the approved commitment amount of USD 0.1 million for country engagement net cancellations from January 2018. The reflows include the commitment fee, front end fee, and late payment fee.

f/ Anticipated commitments for the SREP program include both Sealed and Reserve pipeline. Anticipated commitments as estimated by the CIFAU.

g/ Any payments of principal, interest from loans, which are due to be returned to the Trust Fund pursuant to the Financial Procedures Agreements consistent with the pertinent SCF funding approved by the SCF Trust Fund Committee. For the avoidance of doubt, the Reflow does not include any return of funds from SCF grants or Administrative Costs, including cancelled or unused funds, or any investment income earned on SCF resources held by any MDB. 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.

h/ 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.

Annex 2: Pipeline

Sealed Pipeline

PROJECT ID	COUNTRY	PROJECT TITLE	MDB	Public/	PPG	Grant	Non-Grant	Project	MPIS	Total	Expected
				Private				preparation Grant	Estimate	Endorsed	Submissio
										Funding	n Date
XSRERFS04A	Honduras	Innovation in models and technologies to accelerate renewable and energy eff	IDB			3.00	12.00		0.50	15.50	Sep-24
PSRERFS02A	Lesotho	Renewable Energy & Energy Access Project (Utility Scale PV)	WB			5.00	5.00		0.40	10.40	Sep-24
XSRERFS03A	Mali	Safo and Kambila Solar Power Plants	AfDB			2.00	15.00		0.30	17.30	Sep-24
										43.20	
		Total				10.00	32.00	-	1.20		

New Projects Aprroved by MDB Committee to be Proposed to the Technical Committee

				•	ested nt (\$M)			Board Date
				In USD	millions			Expected
MDB	Country	Project	New/AF	Grant	Loan	MPIS	Project	Submission
EBRD	Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia	AF	5.8		0.3		Feb-24
IDB	Haiti	Development of mini-grids with private sector participation	New	2.5		0.12		May-24
IDB	Honduras	Increasing renewable generation capacity in the generation assets of	New	2.2	5.1	0.4		Jun-24
WB	Haiti	Renewable Energy for All	AF	3.6	3.5	0.3		Aug-24
ADB	Nepal	Power Transmission and Distribution Strengthening Project (PTDSP)	New	1	10	0.05		Sep-24
ADB	Mongolia	Sustainable Renewable Energy Development Project (SRED)	New	2.2	2.8	0.11		Sep-24
ADB	Solomon Islands	Proposed Disaster Resilient Clean Energy Financing (DRCEF)	AF	2		0.1		Dec-24
AfDB	Zambia	Wind Promotion	New		15	0.45		Dec-24
								will be
IFC		Bangladesh Solar Distribution Textile country	New		10			submitted
								soon.
			Total	19.3	46.4	1.83		•

Annex 3: Summary of Results Reported by SREP Projects as of RY2024

Electricity production and GHG emissions

Country	Project title	SREP funding (USD million)	MDB	Annual E Productio (MWh/yr	on	Annual G emissions reduced/ (tons of C equivaler	s avoided :O2
				Achieve d	Target	Achieve d	
Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support + Extension	5.25	EBRD	62,854	59,980	27,279	22,091
Armenia	RFS: Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	5.5	EBRD	0	23,500	0	10,800
Armenia	Geothermal Exploratory Drilling Project	8.85	WB	0	n.a.	0	n.a.
Bangladesh	Off-Grid Solar PV-Solar Irrigation	22.44	ADB	1,159	5,054	776	2,160
Bangladesh	Scaling Up Renewable Energy	29.5	WB	0	483,000	11,674	319,000
Cambodia	Grid Reinforcement Project	4.7	ADB	0	20	0	4,234
Cambodia	National Solar Parks	14.7	ADB	128,577	200,000	0 ²⁷	165,000
Cambodia	RFS: Energy Transition Sector Development Program (SDP)	11	ADB	n.a.	n.a.	0	161,786
Ethiopia	Geothermal Sector Development Project	24.5	WB	0	n.a.	0	n.a. ²⁸
Ethiopia	Geothermal Sector Strategy and Regulations*	1.5	IFC	n.a.	n.a.	n.a.	n.a.
Ethiopia	Lighting Ethiopia*	2.0	IFC	n.a.	n.a.	n.a.	n.a.
Ghana	Ghana Mini Grid and Solar PV Net Metering	29.2	AfDB	0	111,361	0	71,859
Haiti	Renewable Energy for the Metropolitan Area	8.6	WB	13,000	8,000	3,500	7,000

²⁷ Final annual GHG pending upon completion report.

²⁸ Energy access indicators for the Geothermal Sector Development Project have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

Country	Project title	SREP funding (USD million)	MDB	Annual Electricity Production (MWh/yr)		Annual GHG emissions reduced/avoided (tons of CO2 equivalent)		
				Achieve d	Target	Achieve d		
Haiti	Renewable Energy for All	11.0	WB	1,160	15,200	5,000	36,030	
Honduras	ERUS – Solar-Powered Mobile Health Units for Honduras ²⁹	1.4	IDB Group	n.a.	n.a.	185.66	536	
Honduras	ERUS Universal Energy Access Program (PAUE)	56.55	IDB Group	1,576	3,700	1,261	2,800	
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase I	7.5	IDB Group	0	70,000	0	540,000	
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase II	5	IDB Group	0	n.a.	n.a.	47,000	
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)*	0.85	IDB Group	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 Group	n.a.	n.a.	30,000	74,532	
Honduras	Self-Supply RE Guarantee Program	5.5	IDB Group	9,134	45,000	5,745	40,000	
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB Group	90,056	427,000	81,100	161,608	
Kenya	PSSA: Kopere Solar Park	11.6	AfDB	0	99,920	0	54,046	
Kenya	Menengai Geothermal Project	25	AfDB	0	n.a.	0	n.a. ³⁰	
Kenya	Electricity Modernization Project	7.5	WB	0	1,242	0	986	
Kiribati	South Tarawa Renewable Energy Project	3.7	ADB	0	6,160	0	4,928	
Lesotho	Lesotho Renewable Energy and Energy Access Project	12.9	WB	n.a.	n.a.	0	1,571	

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²⁹ GHG emissions data for ERUS – Solar-Powered Mobile Health Units in Honduras not aggregated as this is reported in the CTF results report to avoid double counting. GHG emissions reductions for SREP is a co-benefit indicator.

³⁰ Energy access indicators for the Menengai Geothermal Project have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

Country	Project title	SREP funding (USD million)	MDB	Annual E Productio (MWh/yr	on	Annual GHG emissions reduced/avoide (tons of CO2 equivalent)	
				Achieve d	Target	Achieve d	Target
Liberia	Liberia Renewable Energy Project	23.5	AfDB	0	56,500	0	44,804
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini- grids	25.0	WB	780	5,000	0	3,174
Maldives	Technical Assistance: Republic of the Maldives Capacity Development of the Maldives Energy Authority*	0.28	ADB	n.a	n.a	n.a	n.a
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	WB	12,788	10,000	313.76	25,883
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	14,880	27,600	8,928.2 8	40,000
Mali	Rural Electrification Hybrid Systems	15.4	WB	14,782	13,000	13,945	10,678
Mali	Promoting the Scaling Up of Renewable Energy in Mali*	1.5	AfDB	n.a.	n.a.	n.a.	n.a.
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro)	8.7	AfDB	0	23,680	0	15,800
Mongolia	TA-Strengthening Renewable Energy Regulations*	1.2	WB	n.a.	n.a.	n.a.	n.a.
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	12,001	98,770	10,107	87,969
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	WB	30,000	42,000	30,441	65,355
Nepal	Nepal Private Sector – Led Mini-Grid Energy Access Project	7.6	WB	0	29,100	0	7,372
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	31.8	ADB	8,640	58,078	7,053.1 2	44,280
Nepal	Extended Biogas Program	4.2	WB	1,469.3	1,044	33,774	36,564

Country	Project title	SREP funding (USD million)	MDB	Annual El Productio (MWh/yr	on	Annual GHG emissions reduced/avoided (tons of CO2 equivalent)		
				Achieve d	Target	Achieve d	Target	
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC ³¹	7.5	IDB Group	0	n.a.	0	n.a.	
Pacific Region	Sustainable Energy Industry Development Project*	1.9	WB	n.a.	n.a.	n.a.	n.a.	
Rwanda	Renewable Energy Fund	48.94	WB	12,329	13,000	2,614	10,314	
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	WB	0	5,660	0	3,876	
Solomon Islands	Solar Power Development Project	6.6	ADB	43	3,100	0	840	
Tanzania	Tanzania Mini-grids project ³²	3.5	IFC	0	88,000	0	200,000	
Tanzania	Rural Electrification Expansion Project	9.0	WB	0	142,000	0	112,000	
Vanuatu	Rural Electrification Project	6.77	WB	320	2,700	416	5,300	
Vanuatu	Energy Access Project	7	ADB	0	2,800	0	2,900	
Total				415,548	2,181,969	273,927	2,465,654	

^{*}Capacity-building projects; n.a: not applicable

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³¹ Energy access indicators for the Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

³² In light of the challenging operating environment that led to a change in the Tanzania Mini-Grid project's strategic relevance, the project was closed earlier than anticipated. As a result, while the project completed a series of important workstreams, the successful market-level outcomes achieved could not stimulate further market development and investment envisioned for the project to meet its SREP core indicator targets. The project's targets are thus no longer included in the results report.

Energy access

Country	Project title	SREP funding	MDB	New or improved energy access							
		(USD million)		Women		Men		Business	es		
				Actual	Target	Actual	Target	Actual	Target		
Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	5.25	EBRD	5,651	10,000	8,968	8,000	287	80		
Armenia	RFS: Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	5.5	EBRD	0	10,000	0	8,000	0	200		
Armenia	Geothermal Exploratory Drilling Project	8.85	WB	n.a.	n.a.	n.a.	n.a.		n.a.		
Bangladesh	Off-Grid Solar PV-Solar Irrigation	22.44	ADB	7,512	38,021	8,686	38,566	n.a.	n.a		
Cambodia	Grid Reinforcement Project	4.7	ADB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Cambodia	National Solar Parks	14.7	ADB	0	257,500	0	242,500		n.a		
Ethiopia	Geothermal Sector Development Project ³³	24.5	WB	0	n.a	0	n.a.	n.a.	n.a.		
Ethiopia	Geothermal Sector Strategy and Regulations*	1.5	IFC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Ethiopia	Lighting Ethiopia*	2.0	IFC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Ghana	Ghana Mini Grid and Solar PV Net Metering	29.2	AfDB	0	42,970	0	41,285	n.a.	n.a.		
Haiti	Renewable Energy for the Metropolitan Area	8.6	WB	26,500	42,000	26,500	42,000	93	800		
Haiti	Renewable Energy for All	11	WB	40,060	175,000	40,060	175,000	957	3,900		
Honduras	ERUS Universal Energy Access Program (PAUE)	6.55	IDB Group	0	10,150	0	10,150	n.a.	n.a.		
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)*	0.85	IDB Group	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Honduras	Sustainable Rural Energization (ERUS)-Part I & III: Promoting Sustainable Business Models for Clean Cookstoves Dissemination	2.95	IDB Group	37,012	187,500	36,398	187,500	146	300		
Honduras	Self-Supply RE Guarantee Program	5.5	IDB Group	n.a.	n.a.	n.a.	n.a.		n.a.		

³³ Energy access indicators for the Geothermal Sector Development Project have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

Country	Project title	SREP funding	MDB	New or improved energy access							
		(USD million)		Women		Men		Business	ses		
				Actual	Target	Actual	Target	Actual	Target		
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB Group	n.a.	n.a.	n.a.	n.a.	60	22		
Kenya	PSSA: Kopere Solar Park	11.6	AfDB	0	301,800	0	298,200		n.a		
Kenya	Menengai Geothermal Project ³⁴	25	AfDB	0	n.a.	0	n.a.		n.a.		
Kenya	Electricity Modernization Project	7.5	WB	0	10,125	0	10,125		n.a.		
Kiribati	South Tarawa Renewable Energy Project	3.7	ADB	0	14,493	0	48,523		9		
Lesotho	Lesotho Renewable Energy and Energy Access Project ³⁵	12.9	WB	0	8,791	0	8,285	0	490		
Liberia	Liberia Renewable Energy Project	23.5	AfDB	0	19,319	0	18,561		n.a		
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini-grids	25.0	WB	82,399	74,400	83,728	75,600		n.a.		
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	WB	n.a.	n.a.	n.a.	n.a.	n.a	n.a.		
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	95,553	15,410	100,658	15,410	3,881	n.a.		
Mali	Rural Electrification Hybrid Systems	15.4	WB	318,602	277,603	313,544	273,197	n.a.	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.		
Mongolia	TA-Strengthening Renewable Energy Regulations*	1.2	WB	n.a.	n.a.	n.a.	n.a.		n.a.		
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	58,406	118,824	67,409	139,353		n.a		
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	WB	66,794	80,640	66,793	80,640		n.a.		

³⁴ Energy access indicators for the Menengai Geothermal Project have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

35 Project also includes a target of 245 communities facilities benefitting from improved access to electricity.

Country	Project title	SREP funding	MDB	New or in	mproved ene	rgy access			
		(USD million)		Women		Men		Business	ses
				Actual	Target	Actual	Target	Actual	Target
Nepal	Nepal Private Sector – Led Mini-Grid Energy Access Project	7.6	WB	0	63,000	0	63,000		n.a
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project	11.8	ADB	25,917	75,689	26,891	67,661		n.a.
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project- Additional Co-financing	20.0	ADB	212	137,505	233	129,495		n.a.
Nepal	Extended Biogas Program	4.2	WB	n.a.	n.a.	n.a.	n.a.	194	186 ³⁶
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC ³⁷	7.5	IDB Group	n.a.	n.a.	n.a.	n.a.		n.a.
Pacific Region	Sustainable Energy Industry Development Project*	1.9	WB	n.a.	n.a.	n.a.	n.a.		n.a.
Rwanda	Renewable Energy Fund	48.94	WB	815,352	936,000	750,035	864,000	3,201	27,500
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	WB	8,363	4,579	8,912	4,766	94	75
Solomon Islands	Solar Power Development Project	6.6	ADB	0	2,922	0	3,078		n.a.
Tanzania	Tanzania Mini-grids project ³⁸	4.95	IFC	0	55,000	0	55,000		n.a.
Tanzania	Rural Electrification Expansion Project	9.0	WB	0	155,000	0	155,000		n.a.
Vanuatu	Rural Electrification Project	6.77	WB	1,776	21,927	1,894	22,823	104	37
Vanuatu	Energy Access Project	7	ADB	0	2,212	0	2,303		n.a.
Total				1,590,6 09	3,183,484	1,541,0 64	3,120,937	9,017	33,599

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³⁶ Project was restructured in April 2020. Target businesses with improved energy access decreased from 400 to 350 and then pro-rated by 53% due to partial cancellation of CIF financing.

³⁷ Energy access indicators for the Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC have been removed as SREP financing was only used to support the upstream component. All energy access indicators are estimates based off the steam potential.

³⁸ In light of the challenging operating environment that led to a change in the Tanzania Mini-Grid project's strategic relevance, the project was closed earlier than anticipated. As a result, while the project completed a series of important workstreams, the successful market-level outcomes achieved could not stimulate further market development and investment envisioned for the project to meet its SREP core indicator targets. The project's targets are thus no longer included in the results report.

Increased public and private investments

Country	Project title	SREP funding	MDB						tments ir million)	n target	ed subs	ectors	as a
		(USD million)		Total		MDBs	S	Gove	rnment	Private Sector		Bilaterals and Others	
				Act.	Exp.	Act.	Exp.	Act.	Ехр.	Act.	Exp.	Act.	Exp.
Armenia	Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	3	EBRD	13.8 7	14	12.0 6	12	0	0	1.81	2	0	0
Armenia	Caucasus Green Economy Financing Facility (Extension)	2.25	EBRD	17.7 3	13.5	15.1 7	11.2 5	0	0	2.56	2.25	0	0
Armenia	RFS: Caucasus Green Economy Financing Facility (GEFF) – SREP Armenia Renewable Energy Grant Support	5.5	EBRD	0	33.5	0	22.5	0	0	0	3.5	0	7.5
Armenia	Geothermal Exploratory Drilling Project	8.85	WB	1.57	109	0	0	1.57	9	0	100	0	0
Bangladesh	Scaling Up Renewable Energy	29.25	WB	66.3 7	383. 79	62.2 1	156	0	48.79	4.16	0	0	179
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
Cambodia	Grid Reinforcement Project	4.7	ADB	0	189	0	127. 8	0	29	0	0	0	32.2
Cambodia	National Solar Parks	15.7	ADB	4.86	12.7	1.73	7.64	3.13	5.07	0	0	0	0
Cambodia	RFS: Energy Transition Sector Development Program (SDP)	11	ADB	0	33	0	11	0	0	0	0	0	22
Ethiopia	Geothermal Sector Development Project	24.5	WB	89.4	194	75.9 1	179	7.2	12	0	0	3.5	3.5
Ethiopia	Geothermal Sector Strategy and Regulations	1.5	IFC	0.63	0.5	0	0	0.46	0.5	0	0	0.17	0
Ethiopia	Lighting Ethiopia	2.0	IFC	2.4	0.65	0	0	0	0	0.1	0.65	2.3	0

Country	Project title	SREP funding	MDB		reased public and private investments in targeted subsectors as a ult of SREP Interventions (USD million)								
		(USD million)		Total		MDBs			rnment	Priva Secto		Bilate and C	rals Others
Ghana	Ghana Mini Grid and Solar PV Net Metering	29.2	AfDB	0	56.7	0	27.4	0	16	0	0	0	13.3
Haiti	Renewable Energy and Access for All	8.6	WB	11.6	60.5	2.3	20	0	0	8	22	1.25 39	18.5
Haiti	Renewable Energy for Metropolitan Area	11.0	WB	6.9	4.5	040	4	0	0	6.9	0	0	0.5
Honduras	ERUS – Solar-Powered Mobile Health Units for Honduras	1.4	IBD Group	0	0.3	0	0.15	0	0	0	0.15	0	0
Honduras	ERUS Universal Energy Access Program (PAUE)	6.6	IDB Group	14.5	1.6	14.5	0.6	0	0	0	0	0	1
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase I	7.5	IDB Group	0	n.a.	0	n.a.	0	n.a.	0	n.a.	0	0
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase II	5	IDB Group	0	345	0	150	0	9.2	0	186	0	0
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER)	0.85	IDB Group	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 Group	3.82	3.1	2.39	2.2	1.15	0.08	0.28	0.84	0	0
Honduras	Self-Supply RE Guarantee Program*	5.5	IDB Group	3	20	3	20	0	0	-	-	0	0
Honduras	Honduras Renewable Energy Financing Facility	21.3	IDB Group	441. 7	390	51.3	4	2	0	313. 9	40	74.4	346
Kenya	PSSA: Kopere Solar Park	11.6	AfDB	0	52.3	0	18.2	0	0	0	16	0	18.2

 $^{^{\}rm 39}$ Bilaterals and other co-financing jointly reported in the project above. $^{\rm 40}$ MDB co-financing jointly reported in the project above.

Country	Project title	SREP funding	MDB						tments in million)	n target	ed sub	sectors	as a
		(USD million)		Total		MDB	5	Gove	rnment	Private Sector		Bilaterals and Other	
Kenya	Menengai Geothermal Project	25	AfDB	414	480	117. 9	125	296. 5	246	0	0	0	109
Kenya	Electricity Modernization Project	7.5	WB	225	13.2	225	2.5		0	0	10.7	0	0
Kiribati	South Tarawa Renewable Energy Project	3.7	ADB	7.4	11	5.5	8	0.1	1	0	0	1.8	2
Lesotho	Lesotho Renewable Energy and Energy Access Project	12.9	WB	11.3 4	20	11.3 4	10	0	0	0	10	0	0
Liberia	Liberia Renewable Energy Project	23.5	AfDB	0	10.2	0	7.4	0	1.1	0	0	0	1.7
Liberia	Renewable Energy for Electrification in North and Center Liberia Project – Mini-grids	25.0	WB	0.87	2	0.87	2	0	0	0	0	0	0
Maldives	Accelerating Sustainable Private Investments in RE Program (ASPIRE)	12.6	WB	5.8	58	2.5	16	0	0	3.3	42	0	0
Maldives	Preparing Outer Islands for Sustainable Energy Development Program (POISED)	12.7	ADB	232. 79	112	86.5	38	29.3	14	0	0	117	60
Mali	Rural Electrification Hybrid Systems	15.4	WB	21.3 9	40.7	17.2	25	0	8.9	0	1.8	4.19	5
Mali	Promoting the Scaling Up of Renewable Energy in Mali	1.5	AfDB	2.62	1.04	1.36	0.5	0.71	0.37	0.55	0.2	0	0
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro)	8.7	AfDB	0.39	48	0.39	28.3	0	0.1	0	0	0	19.7
Mongolia	TA-Strengthening Renewable Energy Regulations	1.2	WB	0	0.1	0	0	0	0.1	0	0	0	0

Country	Project title	SREP funding	MDB		Increased public and private investments in result of SREP Interventions (USD million)						targeted subsectors as a					
		(USD million)		Total		MDBs	;	Gove	rnment	Privat Secto		Bilate and C	rals Others			
Mongolia	Upscaling Renewable Energy Sector	14.6	ADB	0	46	0	40	0	0	0	0	0	6			
Mongolia	Upscaling Rural Renewable Energy - Solar PV	12.4	WB	34.7	42.5	34.7	42	0	0.5	0	0	0	0			
Nepal	Nepal Private Sector – Led Mini-Grid Energy Access Project	7.6	WB	0.27	9.36	0	0	0	6	0.12	0	0.15	3.4			
Nepal	South Asia Subregional Economic Cooperation Power System Expansion Project (Additional Financing Combined)	11.8	ADB	24.2	41.2	12.1	5	6.7	27.8	0	0	5.3	8.5			
Nepal	Extended Biogas Program	4.2	WB	16.7	15.2	0	0	3.8	10.4	11.6	4.8	1.3	0			
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement under the PINIC	7.5	IDB Group	0	95.8	0	51.3	0	10	0	0	0	34.5			
Pacific Region	Sustainable Energy Industry Development Project	1.9	WB	4.29	3.97	0	0	0	0	0	0.27	4.29	3.7			
Rwanda	Renewable Energy Fund	48.94	WB	23.8 8	51	0	7	0	0.5	193	40	4.6	3.5			
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	6.6	WB	13.4	15.5	10.3	10.3	0	0.33	0	0.1	3.14	4.8			
Solomon Islands	Solar Power Development Project	6.6	ADB	8.32	9	4.42	2.2	3.90	6.8	0	0	0	0			
Tanzania	Tanzania Mini-grids project	4.95	IFC	0.15	0.15	0	0	0	0	0.15	0.15	0	0			
Tanzania	Rural Electrification Expansion Project	9.0	WB	1.50	150	0.4	35	0	0	1.1	59	0	56			
Vanuatu	Rural Electrification Project	6.77	WB	6.35	27.9	0.68	4	0	1.5	0	0	5.7	22.4			

Country	Project title	SREP funding	MDB		Increased public and private investments in result of SREP Interventions (USD million)						geted subsectors as a			
		(USD million)		Total		MDB	s	Gov	ernment	Priva Sect			erals Others	
Vanuatu	Energy Access Project	7	ADB	3.4	8.1	3.4	8.1	0	0	0	0	0	0	

^{*} Private sector figures are confidential

Annex 4: SREP Project Implementation Status

- 97. **Armenia:** Caucasus Green Economy Financing Facility (GEFF) SREP Armenia Renewable Energy Grant Support (EBRD): For the initial component, SREP funding has been fully committed and disbursed toward four sub-projects. For the expansion phase, SREP funding fully committed to four sub-projects (Phase II).
- 98. RFS: Caucasus Green Economy Financing Facility (GEFF) SREP Armenia Renewable Energy Grant Support (EBRD): TA component internally approved. Work ongoing on preparing subprojects to utilize investment allocation.
- 99. **Bangladesh:** Scaling Up Renewable Energy (WB): IDCOL (Implementing Entity) has approved 28 rooftop solar PV sub-projects with 75 MWp capacity for REFF financing of US\$28.5m (80% increase since previous reporting period). Eighteen sub-projects are now in operation with ~41 MWp installed (100% increase in operational capacity since the previous ISR in April 2023). Despite good progress, implementation needs to further speed up to commit all of the REFF funds. Couple of larger utility scale projects are being considered for REFF.
- 100. Off-Grid Solar PV-Solar Irrigation (ADB): The implementation did not progress as per schedule. Till now, only 280 numbers of pump have been installed out of 2000. The six ongoing EPC contracts required contract variation with 33% contract price increment for 2000 Solar Irrigation Pumps (SIP), which ADB approved as per EA's request. However, the ministry did not approve this variation and provided guidance on contract termination. As per the ministry's instruction BREB requested ADB's no objection on contract termination. Since the grant and loan will be closed on 31 December 2024, ADB advised BREB to reconsider the termination and initiate renegotiation with the contractor to install at least 705 nos. of SIP under Package 1 and 2. The decision is still pending from the government's side.
- 101. **Cambodia:** National Solar Parks Program (ADB): During July to December 2023, all civil works were completed including a crossing bridge and access road. Energizing with one circuit was successfully commissioned in November 2022, whereas energizing with two circuits was commissioned in April 2023. Overall, energizing is in full capacity now. The only outstanding activity is the delivery of supplementary equipment and its testing. The project is on track to be closed according to the revised schedule in September 2024.
- 102. Grid Reinforcement Project (ADB): EDC focused on the preparation of the bidding documents for the battery energy storage system (BESS) component of the project, which is funded by G 0736. Due to the need to recruit another Project Implementation Consultant (PIC), the preparation of the documents has been delayed. In light of this and overall delays in project implementation, the grant closing date has been extended by two years, from 31 December 2025 to 31 December 2027, to provide more time for EDC to timely complete all project activities.
- 103. RFS: Energy Transition Sector Development Program (ADB): Disbursements were on track during this period, during which, the main priority for the Implementing Agencies, EDC, and the Ministry of Public Works and Transport (MPWT), was to recruit the project

- implementation consultants. This was still in progress during the period in question, with the note that for the project with MPWT the contract to the project implementation consultant was awarded in December 2023.
- 104. **Ethiopia:** The project made tangible progress by drilling two additional wells at Aluto-Langano site, marking eight geothermal wells drilled under the project (including two drilling with the old rig). No wells have been drilled at Aluto-Bobessa yet due to a technical issue, which is expected to be resolved in December 2023. EEP is preparing its geothermal development strategy to guide its direction beyond the project closing. In December 2023, the project has closed.
- 105. **Ghana:** The grant agreement was signed in May 2022 and the first disbursement of the Bank resources occurred in December 2022. The addendum with SREP co-financing was approved by the Bank in March 2023. The task team is working closely with the government counterparts to process the first disbursement of SREP resources in the course of 2024.
- 106. Haiti: The Renewable Energy and Access for All (WB) and The Renewable Energy for the Metropolitan Area (WB): The rehabilitation of the 1.5 MW mini hydro plant in Drouet is completed as well as the electrification of the five priority hospitals. The process has been launched to electrify hospitals on existing mini grid and mesh grid sites under the ESMAP grant. The Installation of solar-powered water pumps at four water pumping sites are progressing and could be finalized by end of December 2023. The off grid activities (minigrids, solar home system, mesh grid) under OGF are progressing and providing electricity to many households. The number of people with electricity access reached 130,000, of which around 65,000 are females. In addition, 6 new enabling policy and regulatory frameworks for clean energy and access have been enacted and the RISE score is now 22,07 compared to the baseline of 11 in 2017. Approximately US\$16 million in private investment and other commercial financing has been leveraged. Further progress includes (i) signing first concession contracts for minigrids, (ii) successful piloting of mesh grids (micro-grids), and (iii) results-based financing for off-grid solar systems and productive uses
- 107. Honduras: The Self-Supply RE Guarantee Program (IDB Group) – Invema Self Supply Solar and Energy Efficiency was approved in 2014 and reached financial close in 2015. The project consists of: (i) a 928 KW solar PV rooftop for self-supply generation; (ii) a recycled plastic washing line and a bottle cap recycling machine; iii) miscellaneous investments to improve energy efficiency and recycling operations. The financing matures in August 2024. SREP Guarantee Grupo Kattan was approved and reached financial close in 2019. The committed tranche of the IDB Invest loan (US\$ 3.5 million) financed a 4.8 MW solar PV installation in the rooftops of the Industrial Park and included a 25% (US\$ 875,000) first loss guarantee from the Honduran Self-Supply Renewable Energy Guarantee Program from the SREP. An uncommitted tranche approved in 2019 was committed in May 2021 (US\$ 1.5 million) to increase the total capacity of the solar installation in the Industrial Park to 6.5 MW. The installation of this addition occurred in the second half of 2022. The Technical Assistance Facility "Honduran Self-Supply Renewable Energy Technical Assistance Program supported the deployment of Renewable Energy in the private sector of Honduras with 5 feasibility studies and 1 knowledge product. This TA Facility was closed and had no activity in 2023.

- 108. Promoting Sustainable Business Models for Clean Cookstoves Dissemination (Sustainable Rural Energization Program (ERUS) Part I & III): This project is now closed. It achieved its objective of fostering a sustainable private market for clean cookstoves. It granted subsidies for the construction of more than 17,000 clean cookstoves, trained more than 100 beneficiaries through the program "Maestro Fogonero," assisted in the development of national regulations, supported the promotion and dissemination of efficient models and the strengthening of the financial offer, promoted demand, and contributed to avoiding GHG emissions (estimated at 33,000 tons of CO2e).
- 109. Grid-Connected RE Development Support Project (ADERC) – Transmission: The program has two components. The first component focuses on infrastructure, and concentrates more than 90% of the investment. Due to its complexity it was divided into three packages. The first package related to the San Pedro Sula South - San Buenaventura Interconnection system to enhance integration with the regional electricity market. Progress was made in the construction of 13 of the 48 kilometers of the San Pedro Sula South - San Buenaventura transmission line, a work that represents the example of the operation of multiple works of the National Transmission Program. Easement problems were resolved in more than 90% of cases. The challenges arise in the acquisition of materials for the towers that will be installed in the median of the road that connects Villanueva with San Pedro Sula (CA5). Package 2 advanced with the completion of work at the Centro and Miraflores Substations. In addition, the Lainez and Miraflores substations had 85% progress in physical execution, progress is being made in the expansion of the Tonconti, Siguatepeque and Choloma substations. Package 3 is also being executed, as the contract was signed in the first quarter of 2023 and the designs are being finalized and work is beginning. In relation to the component, several consultancies are being carried out and some goods were acquired aimed at strengthening the capabilities of the ENEE Transmission Management.
- 110. Strengthening the RE Policy and Regulatory Framework (FOMPIER) Phase II: FOMPIER has contributed to capacity building of the Secretary/Ministry of Energy and the Regulatory Commission for Electricity Power in the following areas: (i) development of the National Energy Policy, which highlights the importance of having a cleaner and diverse energy matrix, (ii) supporting the review of the incentives of grid connected renewable energy projects under the new law of electricity approved in 2022, (iii) development of the national program for Universal Access to Electricity for the residential sector, education, and health centers (which also incorporates one specific program for productive uses of energy), (iv) training for the operation, maintenance, and sustainability of minibus based on renewables, (v) solar thermal applications including the pilot program to heat the national swimming pool, (vi) supporting the national electromobility program, and (vii) citizenship awareness in efficient use of energy a proposal of energy efficiency law. Project closed in 2023.
- 111. Honduras Renewable Energy Finance Facility (H-REFF): 2023 was a year in which emphasis on final deployment of the TC facility was an important focus as the investment period came to an end. There were various requests to utilize the TC Facility, however initial screening was performed to include those that had the biggest impact to increase capacity and improve local conditions. All this effort also required a more focused knowledge dissemination process as previously established to find the adequate projects in which to invest. This all led

to near full deployment of the TC facility by the end of the year. The H-REFF Technical Assistance facility was absolutely vital for the operations of the fund, for the de-risking of investment opportunities, and for building community relations in those areas where projects supported by the fund are located. In future impact investment funds, similar TC facilities should be considered, as well as blending concessional capital with public or developmental capital to attract private sector investment.

- 112. ERUS Solar Powered Mobile Health Units for Honduras: Two Solar Units of Primary Health have been inaugurated in Erandique, Lempira Department, and Llano de la Virgen, Intibuca Department. The process of systematizing the project's experience was completed in order to gather the lessons learned and provide inputs for replicating and scaling up the model.
- 113. **Kenya:** The Menengai Geothermal Development Project (AfDB): Implementation was completed early in the reporting period. COVID-19 caused some minor delays related to the project completion process. Project reached financial closure on August 31, 2020.
- 114. Electricity Modernization Project (WB): Four mini-grids have been constructed, and one commissioned (Wasini) by November 2023 under the off-grid electrification subcomponent. Commissioning of the other three (Mageta, Takawiri, and Ngodhe) is in progress (when the ICR was prepared). Approximately 1,531 connections (corresponding to 7,655 users) have been made from the four mini-grids already constructed. REREC is committed to completing the remaining three minigrids with its own resources for a total of 3,950 new connections (and 19,750 users, compared to the project target of 13,500).
- 115. PSSA: Kopere Solar Park (AfDB): With the exception of the Letter of Support from the Government of Kenya, all project documents are finalized. Various efforts are being made by the team through AfDB's country office in Kenya to accelerate the conclusion of the letter. The Bank decided that a cancellation notice will be sent to the Sponsors in case no progress is made by end Q1 2024.
- 116. **Kiribati:** South Tarawa Renewable Energy Project (ADB): Disbursements increased in 2023, albeit still below the projections, with the approval of the design and mobilization of the PIC and PMU consultants. The bulk of disbursements will happen in 2025 with the manufacturing and delivery of large-cost long-lead items. With the approval of the design and construction environmental management plan, construction was able to commence in early 2024. The Financial Management indicator is no longer at risk given the submission of outstanding AEFS and audit opinion. Procurement of major equipment commenced and are expected to be installed and commissioned within 2024.
- 117. **Lesotho:** Lesotho Renewable Energy and Energy Access Project (WB): The team is preparing a project restructuring to address poor project performance. The Restructuring Paper will be processed by February 2024 for internal review. The restructuring will mainly include strengthening of project oversight, and funding reallocation. This will be also an opportunity to adjust the scope under Component 1 and include electrification of villages to respond to GoL's request. The team is also following up on the implementation of actions, which have been agreed with the client to increase proactivity, including fiduciary, contract management, and technical design and supervision capacities reinforcement.

- 118. **Liberia:** Liberia Renewable Energy Access Project (WB): The Project is currently reviewing the implementation arrangement to expediate actions in connecting households in the Lofa Minigrid. The Contractors undertaking the installation of the distribution network have submitted expedited work schedule which the project team is closely following.
- 119. Renewable Energy Project (AfDB): The Bank has cleared the evaluation report for the Construction of the Hydropower Plant and the Contract was signed before the end of November 2023. The disbursement rate is expected to improve in 2024 with theadvance payment to the contractor for the construction of the Hydropower Plant. The financial closure date is June 2027.
- 120. **Maldives:** Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program (WB): The project construction for the 11 MW is scheduled to start shortly. This will use the investments from SREP. The ASPIRE 5 MW sub-project installation is progressing well. The project has already installed and connected the section on the low income housing. The segment on the Hulhumale Link Road is close to completion. The timelines for construction and delivery of the project are being closely monitored by the Ministry of Climate Change, Environment and Energy, and the Government of Maldives. They are working closely to expedite the project delivery.
- 121. **Mali:** Rural Electrification Hybrid Systems project (WB): Implementation is progressing at a steady pace. As of December 2020, the project supported the addition of approximately 5.2 MW of solar PV capacity in the existing mini-grid systems of 30 localities, connected 9,072 new households to the mini-grids, facilitated the construction of 39 km of distribution lines, and the installation of 8,034 solar home systems for people not living within the vicinity of mini-grids. The project also supported the electrification of 37 community clinics and the dissemination of 51,000 Lighting Africa certified solar lanterns. To date, the project has benefited about 500,000 people in Mali's rural areas.
- 122. Mini Hydropower Plants and Related Distribution Networks Development Project (PDM-Hydro) (AfDB): The last supervision mission took place in June 2023. Considering the start-up challenges of the project, with COVID-19 outbreak and then disbursement ban due to the political situation, the project was extended until December 2025 on request from the country. The construction work of the power plant started in December 2023. The water level decline and the cumulative disbursement rate is expected to reach 35% in 2024. The new financial closure date is December 2025.
- 123. **Mongolia:** Upscaling Rural Renewable Energy Solar PV Project (WB): The project is progressing satisfactorily and is on track to achieve its development objective by the new project closing date of March 31, 2024. Component 2 (funded by the CTF) that includes the Solar Power Plant (SPP) was successfully commissioned in May 2022 and an official ceremony took place. The plant has been operating for ten months. The indicator for this component requires annual data collection, however the plant has been operational for less than one year. The project is expected to close in March 2024.
- 124. Upscaling Renewable Energy Sector (ADB): The Taishir wind power project will be changed to solar power project and the Project Steering Committee (PSC) approved the change in Oct

- 2023. Three shallow-ground heat pump projects are being implemented and contract variation for two sub-projects will be signed. PSC approved the contract variation on December 2023. Altai 10 MW solar PV was commissioned on 26 December 2023. Uliastai ground heat pump was state-commissioned on 6 April 2023 but additional work was needed. PSC approved the contract variation in December 2023. Contract variation is being signed. Telmen SVG was state-commissioned on 20 July 2023. Technical and state commission contract with National Energy Center was signed and they have worked on Altai 10 MW solar PV. Project closing date has been extended to 28 February 2027. A capacity building training for 13 engineers was conducted in 2023.
- 125. **Nepal:** The South Asia Subregional Economic Cooperation Power System (ADB): The remaining issues related to determining eligible VGF are expected to be resolved by April 15th, 2024. Upon resolving this issue, significant disbursement will take place. The contract for the Solar and Battery Energy System is progressing smoothly after being awarded, and the project unit is conducting fortnightly meetings with the contractor and EA staff to ensure that the project timelines are strictly adhered to. The government has shown strong commitment to implementing the project. The successful implementation of the project will lead to speedy disbursement.
- 126. The Extended Biogas Program (WB): The project was restructured in June 2020 to accelerate disbursements with new disbursement arrangements allowing funds to disburse upon preagreed milestone achievements. Due to the COVID-19 outbreak, field mobilizations are restricted, and milestone achievements could not be verified. For the same reason, the subprojects faced construction delays, including delays in preparation and site mobilization. At many of the sites, the activities are continuing at a reduced scale. A total of 176 waste to energy sub-projects have completed construction, among which, six are very large-sized, above 100 cubic meters (five with the capacity of more than 500 cubic meters of gas generation per day) utilizing animal and agricultural waste. The rest are sub-projects with less than 100 cubic meters of gas generation capacity. The project is now closed.
- 127. Nepal Private Sector—Led Mini-Grid Energy Access Project (WB): The two minihydros and the two solar sub-projects have completed the technical studies; environment and social studies including approval of ESIAs and ESMP in case of one solar sub project. One Solar sub-project Subhakalika Solar Minigrid is under construction. Regarding Biogas component of the Project, 12 out of 14 sub-projects have completed the construction and are in operation. The remaining 2 sub-projects planned to be completed by March, 2024.
- Nicaragua: The Geothermal Exploration and Transmission Improvement Program under the PINIC (IDB Group): The project is expected to be reformulated; however, new energy authorities (and new administration) has recently taken place, so the IDB needs the mandate of the new authorities to proceed with the reformulation. The reformulation will follow the same scheme as RG-G1009 (Sustainable Energy Facility of the Eastern Caribbean) and Mexican Geothermal Project (ME-G1005). For NI-G1008 Geothermal Exploration Program, civil works, including the access road to the geothermal field in the Cosiguina volcano, had important advances. It is only pending the installation of water pipeline, delayed due to the scarcity of materials due to the container crisis. Unfortunately, the process to hire a firm to

- drill the geothermal wells failed due to the lack of interest of international firms with experience in drilling geothermal fields. However, in RY2024 the Executing Agency subscribed to a memorandum of understanding with the Costa Rican institute of electricity to support the development of the drilling campaign.
- 129. **Rwanda:** Renewable Energy Fund (WB): Since the project restructuring and extension in May 2023, the project has been on track for completion by December 2024. Due to the restructuring, Window 5, which has driven the implementation momentum, now has access to additional funds from credit windows (Window 1–4), and is expected to fully disburse by December 2024. Owing to the discontinuation of Ubudehe categories for beneficiary targeting by Rwanda, a new subsidy regime based on the size of the SHS was approved in October 2023 and will be launched in February 2024. Furthermore, the Government of Rwanda included 2000 additional villages in the list of off-grid areas in August 2023, significantly increasing the number of eligible beneficiaries under the REF. Since this addition, the solar companies supported by REF have connected an average of 20,000 households per month. So far, REF has provided off-grid electricity access to 1.7m out of the target 1.8m people.
- 130. **Solomon Islands**: The Solar Power Development Project (ADB): The financial dispute with the previous EPC contractor has been resolved in Q2/2023 which allowed Solomon Power to receive access to the subcontractor's project documents and services that are needed to fully commission the plants. The solar plant in Tulagi was commissioned in September 2023. Faulty equipment components were detected in Q4/2023 and ordered which will allow the full commissioning of the plants in Kirakira, Malu'u and Munda in Q1/Q2 2024.
- 131. Electricity Access and Renewable Expansion Project 2 (IBRD): The Project was restructured in May 2023 and the Project closing date was extended to November 28, 2025 to allow sufficient time to complete contract implementation. The Solomon Islands Country Management Unit has hired a hands on Implementation Support Consultant to support increasing disbursement in the portfolio. The consultant is a procurement specialist and started working with the task team in May 2023 to try to resolve the specific issue with declaring contract effectiveness. The consultant continues to support the task team with contract management and procurement-specific issues related to contract implementation.
- Tanzania: The Renewable Energy Expansion Project (WB): The Maguta Mini Hydro (1.2 MW) project and the Injangala Mini Hydro (0.36 MW) project were approved by the TIB Board in 2023. The Injangala project has been fully implemented by the project promoter. The project was officially launched on 25th October 2023 in Makete Njombe region. Implementation and associated disbursements on the Maguta mini hydro project are progressing well. The Bugando Natural Energy Limited (5MW) project was also approved by the TIB Board in 2023, and the project promoter is in the process of completing the disbursement conditions.
- 133. **Vanuatu:** Rural Electrification Project (WB): The project closed as scheduled on June 30, 2022. The World Bank team initially envisaged that the project would be restructured and extended based on the government's request for project extension and restructuring dated November 16, 2021. The team had obtained an in-principle approval from CIF in May 2022 to extend the SREP funding portion of the project. However, the Ministry of Finance and

Economic Management (MFEM) later informed the World Bank, on June 9, 2022, that the government no longer sought an extension of the project due to a disagreement over applicable procurement rules for the project. While the World Bank Procurement Regulations apply to the project per the Financing Agreement, the government requested, instead, to apply its own procurement rules.

134. The Vanuatu Energy Access Project (Small Hydropower Project) (ADB): The Brenwe Hydropower Plant and transmission line component was commissioned in October 2023 and an inauguration event held in December 2023. Work has continued on the transmission line component in Espiritu Santo, with an estimated completion in March 2024. The government has approved 300 million Vatu for the Low-voltage (LV) line roll-out in Malekula and a budget application for LV infrastructure was submitted to the Parliament in 2023 for approval in 2024. Livelihood trainings for targeted communities have started and will continue to prepare households in target areas for the arrival of power.

Annex 5: Disbursements by SREP Project

In millions of USD

Country	Project Name	MDB	Committee Approval Date	MDB Board Approval Date	Funding	Disbursement	Cumulative Disbursement	Disbursement Ratio
Maldives	Preparing Outer Island Sustainable Electricity Development Project / Technical Assistance: Capacity Development of the Maldives Energy Authority	ADB	Jul-2014	Sep-2014	12.7	-	12.7	100.0%
Nepal	South Asia Sub-regional Economic Cooperation Power System Expansion Project: Rural Electrification Through Renewable Energy	ADB	May-2014	Nov-2016	10.7	0.5	10.2	95.5%
Solomon Islands	Solar Power Development Project	ADB	Jun-2016	Nov-2016	5.5	-	5.5	100.0%
Vanuatu	Energy Access Project (Small Hydropower Project)	ADB	Nov-2015	Sep-2017	6.6	0.0	6.6	99.2%
Bangladesh	Off-Grid Solar PV-Solar Irrigation	ADB	Jul-2017	Jul-2018	4.0	0.8	3.4	83.7%
Mongolia	Upscaling Renewable Energy Sector	ADB	Apr-2018	Sep-2018	8.5	0.4	8.5	100.0%
Cambodia	Grid Reinforcement Project	ADB	May-2020	Sep-2020	4.7	-	-	-
Cambodia	National Solar Parks Program	ADB	Apr-2018	May-2019	7.4	1.8	5.1	68.8%
Maldives	Technical Assistance: Republic of the Maldives Capacity Development of the Maldives Energy Authority	ADB	Jul-2014	Mar-2015	0.3	-	0.3	100.0%
Kiribati	South Tarawa Renewable Energy Project	ADB	Oct-2020	Nov-2020	1.3	0.4	1.3	95.9%
Cambodia	RFS: Energy Transition Sector Development Program (SDP)	ADB	Nov-2022	Dec-2022	11.0	-	-	-
Kenya	Menengai Geothermal Development Project	AFDB	Nov-2011	Dec-2011	19.9	-	19.9	100.0%
Mali	Mini Hydropower Plants and Related Distribution Networks Development Project	AFDB	Apr-2018	Sep-2018	4.3	-	4.1	94.3%

In millions of USD

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Country	Project Name	MDB	Committee Approval Date	MDB Board Approval Date	Funding	Disbursement	Cumulative Disbursement	Disbursement Ratio
Mali	Project for Scaling Up Renewable Energy in Mali	AFDB	Sep-2014	Oct-2014	1.4	0.0	1.4	100.0%
Liberia	Liberia Renewable Energy Project	AFDB	Jun-2017	Oct-2019	3.3	1.0	2.6	79.7%
Ghana	Ghana Mini Grid and Solar PV Net Metering	AFDB	Jan-2022	Mar-2023	0.7	-	0.7	100.0%
Honduras	Strengthening the Renewable Energy Policy and Regulatory Framework Program (FOMPIER), Part I	IADB	Oct-2012	Dec-2012	0.0	-	0.0	100.0%
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase I	IADB	Aug-2017	Sep-2018	7.5	0.6	7.5	100.0%
Honduras	ERUS Universal Energy Access Program (PAUE)	IADB	Aug-2017	Nov-2018	6.4	0.0	5.9	92.4%
Nicaragua	Nicaragua Geothermal Exploration and Transmission Improvement Program under the PINIC	IADB	Aug-2016	Sep-2016	1.5	-	1.2	82.1%
Honduras	Strengthening the RE Policy and Regulatory Framework (FOMPIER) Phase II	IADB	Mar-2018	Apr-2018	0.7	-	0.7	100.0%
Honduras	Grid-Connected RE Development Support (ADERC) - Transmission Phase II	IADB	Jun-2018	Sep-2018	4.9	-	2.7	55.1%
Ethiopia	Geothermal Sector Development Project (GSDP)	WB	Apr-2014	May-2014	22.9	8.8	17.5	76.1%
Kenya	Electricity Modernization Project	WB	Jan-2015	Mar-2015	4.7	0.5	3.8	80.7%
Maldives	Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Program	WB	Apr-2014	Jun-2014	7.0	-	7.0	100.0%
Mali	Rural Electrification Hybrid Systems	WB	Oct-2013	Dec-2013	13.3	-	13.3	100.0%
Nepal	Biogas Extended Program	WB	Feb-2014	Aug-2014	4.2	-	4.2	100.0%
Tanzania, United Republic of	Renewable Energy for Rural Electrification	WB	Apr-2016	Jun-2016	3.3	-	2.8	85.0%
Liberia	Renewable Energy for Electrification in North and Center Liberia Project-Mini Grids	WB	Dec-2015	Jan-2016	16.7	3.2	15.6	93.0%
Armenia	Geothermal Exploratory Drilling Project (GEDP)	WB	Mar-2015	Jun-2015	6.4	-	6.4	100.0%

In millions of USD

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Country	Project Name	MDB	Committee Approval Date	MDB Board Approval Date	Funding	Disbursement	Cumulative Disbursement	Disbursement Ratio
Solomon Islands	Electricity Access and Renewable Expansion Project – 2	WB	Mar-2018	Jul-2018	0.5	-	0.5	100.0%
Vanuatu	Rural Electrification Project	WB	Feb-2017	May-2017	0.6	-	0.6	100.0%
Haiti	Renewable Energy and Access for All	WB	Jun-2017	Oct-2017	4.2	0.6	3.2	74.6%
Haiti	Renewable Energy for the Metropolitan Area	WB	Jun-2017	Dec-2017	4.8	0.8	4.3	89.3%
Pacific Region	Sustainable Energy Industry Development Project	WB	May-2015	Sep-2015	1.8	0.2	1.8	100.0%
Nepal	Nepal Private Sector – Led Mini-Grid Energy Access Project	WB	Jul-2017	Jan-2019	2.1	0.7	1.9	93.3%
Mongolia	Upscaling Rural Renewable Energy - Solar PV	WB	Feb-2017	Jun-2017	11.6	-	4.5	39.0%
Mongolia	Capacity Building and Regulatory Support Technical Assistance	WB	Aug-2016	Aug-2016	1.2	-	1.2	100.0%
Rwanda	Renewable Energy Fund	WB	Apr-2017	Jun-2017	38.2	9.1	38.2	100.0%
Bangladesh	Scaling Up Renewable Energy	WB	Aug-2017	Mar-2019	4.3	1.0	3.4	78.0%
Lesotho	Lesotho Renewable Energy and Energy Access Project	WB	May-2019	Jan-2020	2.8	-	2.8	100.0%



The Climate Investment Funds

The Climate Investment Funds (CIF) were established in 2008 to mobilize resources and trigger investments for low carbon, climate resilient development in select middle and low income countries. To date, 14 contributor countries have pledged funds to CIF that have been channeled for mitigation and adaptation interventions at an unprecedented scale in 72 recipient countries. The CIF is the largest active climate finance mechanism in the world.

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