



Operation Number: **RG-L1071**
Year- PMR Cycle: **First period Jan-Jun 2016**
Last Update: **10/20/2016**
PMR Validation Stage: **Validated by Chief of Operations**

Chief of Operations validation date: **10/21/2016**
Division Chief validation date:
Country Representative validation date:

Inter-American Development Bank - IDB
Office of Strategic Planning and Development Effectiveness

Operation Profile

Basic Data

Operation name:	Sustainable Energy Facility (SEF) for the Eastern Caribbean	Loan Number:	3561/OC-RG
Executing Agency (EA):	CARIBBEAN DEVELOPMENT BANK		
Team Leader:	Gischler Blanco,Christiaan	Sector/Subsector:	ENERGY INTEGRATION
Operation Type:	Loan Operation	Overall Stage:	Disbursing (From eligibility until all the Operations are closed)
Lending Instrument:	Investment Loan	Country:	REGIONAL
Borrower:	CARIBBEAN DEVELOPMENT BANK		Convergence related Operation(s):

Total Cost and Source

	Original IDB	Current Active IDB	Local Counterpart	Co-Financing/Country	Total operation cost - Original Estimate
RG-L1071	\$20,000,000.00	\$20,000,000.00	\$29,435,000.00		\$49,435,000.00

Available Funds (US\$)

	Current IDB	Disb. Amount to Date	% Disbursed	Undisbursed Balance
RG-L1071	\$20,000,000.00	\$0.00	0.00%	\$20,000,000.00

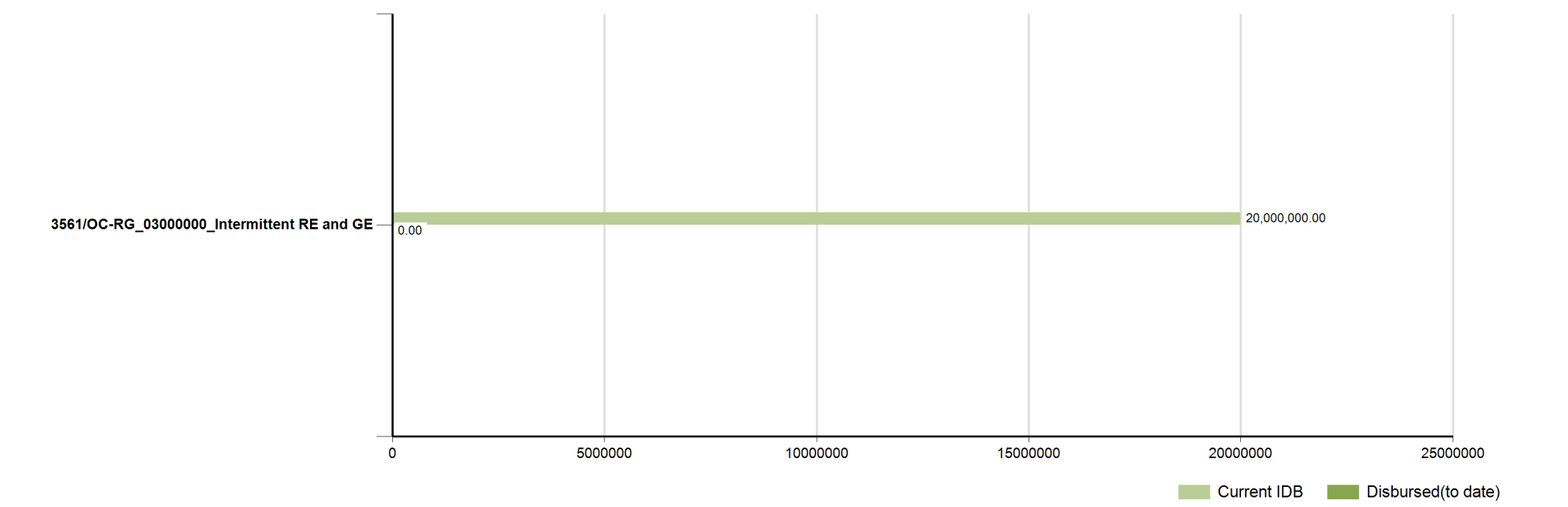
Environmental and Social Safeguards

Main Operation	
Impacts Category:	B13
Safeguard Performance Rating:	
Safeguard Performance Rating - Rationale:	

Reformulation Information

Main Operation	
Was/Were the objective(s) of this operation reformulated?	NO
Date of approval:	

Expense Categories by Loan Contract (cumulative values)



Results Matrix

Impacts

Impact:	0 Define impact statement								
Observation:									
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2023		EOP
0.0 Average electricity tariff for customers in ECC		US\$/KWh	0.33	2015	Measures the average electricity tariff in the 6 ECC covered by the program.		P		0.30
							P(a)		0.30
	A								
0.1 Regional penetration of indigenous renewable energy sources for power generation within the ECC		%	0.00	2016	Measures the average electricity tariff in the 6 ECC covered by the program.		P		30.00
							P(a)		30.00
	A								



Outcomes

Outcome:	1 Reduction in electricity consumption from public lighting sectors with EE projects financed by the program															
Observation:																
Indicators		Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017		2018	2019	2020	2021	2022	2023	EOP
1.0 Electricity saved by EE applications, measures & programs			GWh/year	0.00	2016	Report from CDB based on utility sales reports		P	4.00	6.00	11.30	11.30	11.30	11.30	11.30	66.50
		P(a)						4.00	6.00	11.30	11.30	11.30	11.30	11.30	66.50	
		A												0.00		
Outcome:	2 Reduction in imports of fossil fuels for electricity generation in ECC due to EE projects financed at any stage by the program.															
Observation:																

Outcome:	2 Reduction in imports of fossil fuels for electricity generation in ECC due to EE projects financed at any stage by the program.
Observation:	

Indicators		Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017	2018	2019	2020	2021	2022	2023	EOP
2.0 Reduction in imports of fossil fuels for electricity generation			Thousand barrels of oil	0.00	2016	Executing Agency (EA)	Estimation based on efficiency levels and number of retrofitted lamps; to be provided by the Executing Agency (EA) based on information from governments and utilities in ECC. Final calculations to be checked with the utilities and the governments in the ECC (ex-post CBA)	P	6.50	9.70	18.30	18.30	18.30	18.30	107.70
		P(a)					6.50	9.70	18.30	18.30	18.30	18.30	107.70		
		A											0.00		
Outcome:		3 Greenhouse Gas (GHG) emissions avoided by EE projects financed at any stage by the program													
Observation:															

							2017	2018	2019	2020	2021	2022	2023	EOP	
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations									
3.0 GHG emissions avoided due to EE projects		ktCO2e/yr	0.00	2016	IDB methodology, based on number of lamps installed, efficiency levels of lamps, and an average conversion factor (ex-post CBA)	IDB estimations made following IDB methodology, based on number of lamps installed, efficiency levels of lamps, and an average conversion factor (ex-post CBA)	P	3.00	4.50	8.60	8.60	8.60	8.60	8.60	50.40
	P(a)						3.00	4.50	8.60	8.60	8.60	8.60	8.60	50.40	
	A														
Outcome:	4 ECC with legal and regulatory frameworks that enable Geothermal Energy (GE) development														
Observation:															
							2017	2018	2019	2020	2021	2022	2023	EOP	
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations									
4.0 # countries that have GE legal and regulatory frameworks		# countries	1.00	2015	Report from CDB		P		1.00	1.00					3.00
	P(a)							1.00	1.00					3.00	
	A														
Outcome:	5 Women trained in construction, operation and/or maintenance of RE and EE infrastructure and projects														
Observation:															

							2017	2018	2019	2020	2021	2022	2023	EOP	
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations									
5.0 Women trained in the field of SE out of the total number of people trained using Program resources		%	0.00	2016	Report from CDB	Reports from the CDB based on information from governments and private project sponsors. Measured as an average of individual GE sub-projects at the end of the program	P							25.00	
	P(a)												25.00		
	A														
Outcome:	6 GHG emissions avoided by geothermal projects financed at any stage by the program														
Observation:															
							2017	2018	2019	2020	2021	2022	2023	EOP	
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations									
6.0 GHG emissions avoided due to RE projects		ktCO2e/yr	0.00	2016	IDB estimations	IDB estimations made following IDB methodology, based on installed capacity, electricity generation, and an average conversion factor (ex-post CBA).	P				310.20	310.20	310.20	310.20	1,240.90
	P(a)									310.20	310.20	310.20	310.20	1,240.90	
	A														
Outcome:	7 Reduction in imports of fossil fuels for electricity generation in ECC with geothermal projects financed at any stage by the program														
Observation:															

Indicators		Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017	2018	2019	2020	2021	2022	2023	EOP
7.0 Reduction in imports of fossil fuels for electricity generation			Thousand barrels of oil	0.00	2016	IDB estimations	IDB estimations based on estimated installed capacity and electricity generation to be provided in EA reports based on information from governments and utilities in ECC. Final calculations to be checked with the utilities and the governments in the ECC (ex-post CBA).	P			662.00	662.00	662.00	662.00	2,648.00
								P(a)			662.00	662.00	662.00	662.00	2,648.00
								A							
Outcome:	8 Geothermal power generation capacity installed in projects facilitated or financed at some stage by the program														
Observation:															
Indicators		Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017	2018	2019	2020	2021	2022	2023	EOP
8.0 MW of geothermal capacity			MW	0.00	2016	Report from CDB.	Estimations of expected installed capacity based on quality of resource confirmed once exploration wells are drilled	P						55.00	55.00
								P(a)						55.00	55.00
								A							
Outcome:	9 Geothermal projects financed at any stage by the program that moved on from early exploration to production drilling or from early exploration or production drilling to construction of plants and/or electricity generation														

Observation:																
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017	2018	2019	2020	2021	2022	2023	EOP		
9.0 Number of GE projects financed that moved to the following stage of development		Number of GE projects	0.00	2016	Reports from the CDB	Report from CDB with information from ECC and private project sponsors	P		1.00	1.00	1.00	1.00			4.00	
							P(a)		1.00	1.00	1.00	1.00			4.00	
							A									
Outcome:	10 Women participate in consultation processes related to GE projects															
Observation:																
Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2017	2018	2019	2020	2021	2022	2023	EOP		
10.0 % of women who participate in consultations		%	0.00	2016	Reports from the CDB	Reports from the CDB based on information from governments and private project sponsors (Measured as an average of individual GE sub-projects at the end of the program).	P								45.00	
							P(a)									45.00
							A									

-  RF - Contribution
-  RF - Alignment
-  RF - Strategic Alignment
-  RF - Strategic Alignment during Execution
-  SI - Sector Indicator
-  CI - Country Indicator
-  PG - Pro-Gender
-  PE - Pro-Ethnicity

Outputs: Annual Physical and Financial Progress

Component I - Energy Efficiency		Physical Progress			Financial Progress		
Outputs	Unit of Measure	2016		EOP	2016		EOP
Funding operations provided for EE projects	Number of funding operations approved by CDB's Board	P	1.00	3.00	P		13,000,000.00
		P(a)	1.00	3.00	P(a)		13,000,000.00
		A	0.00	0.00	A		0.00
Component II - Reg. framework, inst. strengthening and capacity building		Physical Progress			Financial Progress		
Outputs	Unit of Measure	2016		EOP	2016		EOP
Studies to support energy policy reform, regulation and implementation of renewable energy and energy efficiency projects in the ECC	Number of studies completed	P		3.00	P		1,942,828.53
		P(a)		3.00	P(a)		1,942,828.53
		A		0.00	A		0.00
Training and capacity building interventions for the EA, SPVs, and/or government employees	Number of interventions completed	P		8.00	P		1,032,640.80
		P(a)		8.00	P(a)		1,032,640.80
		A		0.00	A		0.00
Component III - Intermittent RE and GE		Physical Progress			Financial Progress		
Outputs	Unit of Measure	2016		EOP	2016		EOP
Funding operations for GE projects	Number of funding operations approved by CDB's Board	P	1.00	3.00	P		44,050,000.00
		P(a)	1.00	3.00	P(a)		44,050,000.00
		A	0.00	0.00	A		0.00
Number of loans for transmission and distribution projects	Number of loans approved by CDB's Board	P		1.00	P		10,000,000.00
		P(a)		1.00	P(a)		10,000,000.00
		A		0.00	A		0.00
Funding operations for intermittent RE projects	Number of funding operations approved by CDB's Board	P		1.00	P		1,024,720.66
		P(a)		1.00	P(a)		1,024,720.66
		A		0.00	A		0.00

Other Cost		2016	Cost
Project Management	P	\$28,701.60	\$143,508.00
	P(a)	\$28,701.60	\$143,508.00
	A		\$0.00
Monitoring and evaluation RG-L1071	P	\$24,375.00	\$305,000.00
	P(a)	\$24,375.00	\$305,000.00
	A		\$0.00
Total Cost		2016	Total Cost
	P	\$53,076.60	\$71,498,697.99
	P(a)	\$53,076.60	\$71,498,697.99
	A		

Changes to the Matrix

No information related to this operation.

Please note that the Overall Stage represents the stage of the operation at the time of this report's publication, which might not necessarily match the stage of the operation during the PMR Cycle to which the report pertains.