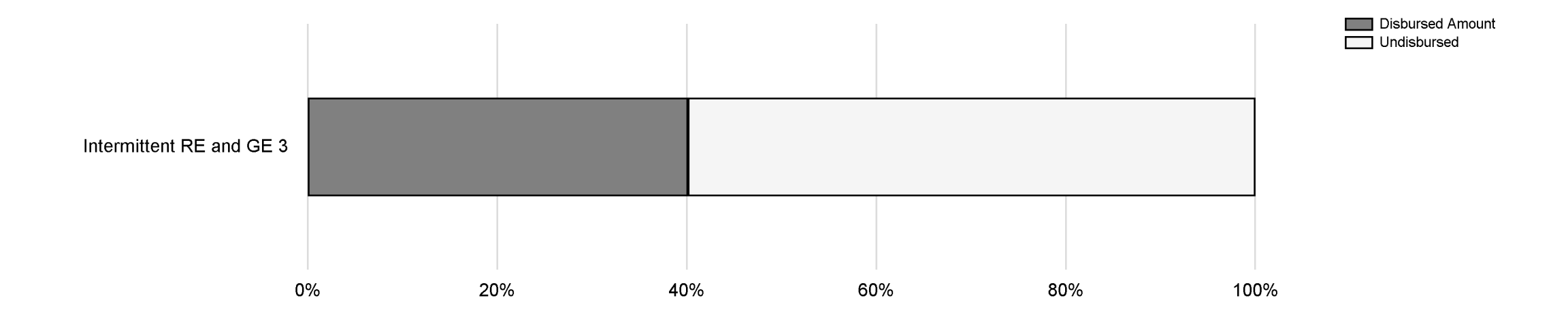


PMR Public Report

Operation Number	RG-L1071	Chief of Operations Validation Date	04/06/23
Year- PMR Cycle	Second period Jan-Dec 2022	Division Chief Validation Date	05/01/23
Last Update	04/03/23	Country Representative Validation Date	05/15/23
PMR Validation Stage	Validated by Representative		
Basic Data			
Operation Profile			
Operation Name	Sustainable Energy Facility (SEF) for the Eastern Caribbean	Loan Number	3561/OC-RG
Executing Agency	CARIBBEAN DEVELOPMENT BANK	Sector/Subsector	ENERGY-ENERGY INTEGRATION
Team Leader	GISCHLER BLANCO, CHRISTIAAN	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Loan Operation	Country	Regional
Lending Instrument	Investment Loan	Convergence related Operation(s)	RG-G1009, RG-G1004
Borrower	CARIBBEAN DEVELOPMENT BANK		
Environmental and Social Safeguards			
Impacts Category	B13	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	Partially Satisfactory	Date of approval	
Safeguard Performance Rating - Rationale	CDB assigned an Environmental and Social liaison to the IDB-CDB portfolio who coordinates the E+S teams involved in preparation and supervision of CDB loans. CDB supervision of geothermal subprojects is infrequent, and CDB support to ESIA development in Nevis has depended highly on preparation and review from the IDB, inconsistent with the Program Operating Manual which establishes that CDB lead on project preparation and supervision. Resettlement was closed satisfactorily in the St. Vincent geothermal project. No geothermal subprojects are currently in execution.		

Financial Data									
	Total Cost and Source					Available Funds (US\$)			
Operations	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disbursed	Undisbursed Amount
RG-G1004	3,013,698	3,013,698	0	0	3,013,698	3,013,698	1,855,705.99	61.58%	1,157,992.01
RG-G1009	19,050,000	19,050,000	0	0	19,050,000	19,050,000	19,050,000	100.00%	-
RG-L1071	20,000,000	20,000,000	29,435,000	0	49,435,000	20,000,000	8,016,000	40.08%	11,984,000
Aggregated	42,063,698	42,063,698	29,435,000	0	71,498,698	42,063,698	28,921,705.99	68.76%	13,141,992.01
Expense Categories by Loan Contract (cumulative values)									



Please note that inactive indicators and outputs are not displayed; totals in the actual cost table may not match the sum of the cost of the outputs displayed, due to the cost of inactive outputs.

RESULTS MATRIX

General Development Objectives

General Development Objectives Nbr. 0: Define impact statement

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2025	
0.0	Average electricity tariff for customers in ECC	US\$/KWh	0.33	2015	2026	P	.3
						A	-

Details

Means of Verification: Measures the average electricity tariff in the 6 ECC covered by the program.

Observations:

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator			

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2025	
0.1	Regional penetration of indigenous renewable energy sources for power generation within the ECC	%	0	2016	2026	P	30
						A	-

Details

Means of Verification: Measures the average electricity tariff in the 6 ECC covered by the program.

Observations:

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator			

RESULTS MATRIX

Specific Development Objectives

Specific Development Objectives Nbr. 0: Reduction in electricity consumption from public lighting sectors with EE projects financed by the program

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
0.0	Electricity saved by EE applications, measures & programs	GWh/year	0	2016	P	4	6	11.3	11.3	11.3	11.3	11.3	66.5
					A	-	3	3.5	-	15.3	9.2	-	31

Details

Means of Verification: Report from CDB based on utility sales reports

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 1: Reduction in imports of fossil fuels for electricity generation in ECC due to EE projects financed at any stage by the program.

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
1.0	Reduction in imports of fossil fuels for electricity generation	Thousand barrels of oil	0	2016	P	6.5	9.7	18.3	18.3	18.3	18.3	18.3	107.7
					A	-	4.9	6	-	24.3	-	-	35.2

Details

Means of Verification: Executing Agency (EA)

Observations: 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)

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 2: Greenhouse Gas (GHG) emissions avoided by EE projects financed at any stage by the program

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
2.0	GHG emissions avoided due to EE projects	ktCO2e/yr	0	2016	P	3	4.5	8.6	8.6	8.6	8.6	8.6	50.4
					A	-	2.3	3	-	10.6	4.4	-	-

Details

Means of Verification: IDB methodology

Observations: IDB estimations made following IDB methodology, based on number of lamps installed, efficiency levels of lamps, and an average conversion factor (ex-post CBA)

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 3: ECC with legal and regulatory frameworks that enable Geothermal Energy (GE) development

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
3.0	# countries that have GE legal and regulatory frameworks	# countries	1	2015	P	-	1	1	-	-	-	-	3
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: Report from CDB

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 4: Women trained in construction, operation and/or maintenance of RE and EE infrastructure and projects

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
4.0	Women trained in the field of SE out of the total number of people trained using Program resources	%	0	2016	P	-	-	-	-	-	-	-	25
					A	-	35	-	-	-	-	-	-

Details

Means of Verification: Report from CDB

Observations: 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

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 5: GHG emissions avoided by geothermal projects financed at any stage by the program

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
5.0	GHG emissions avoided due to RE projects	ktCO2e/yr	0	2016	P	-	-	-	310.2	310.2	310.2	310.2	1,240.9
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: IDB estimations

Observations: IDB estimations made following IDB methodology, based on installed capacity, electricity generation, and an average conversion factor (ex-post CBA).

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 6: Reduction in imports of fossil fuels for electricity generation in ECC with geothermal projects financed at any stage by the program

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
6.0	Reduction in imports of fossil fuels for electricity generation	Thousand barrels of oil	0	2016	P	-	-	-	662	662	662	662	2,648
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: IDB estimations

Observations: 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).

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 7: Geothermal power generation capacity installed in projects facilitated or financed at some stage by the program

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
7.0	MW of geothermal capacity	MW	0	2016	P	-	-	-	-	-	-	55	55
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: Report from CDB.

Observations: Estimations of expected installed capacity based on quality of resource confirmed once exploration wells are drilled

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	2.22 Installed power generation capacity from renewable sources (MW) (C)

Specific Development Objectives Nbr. 8: 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:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
8.0	Number of GE projects financed that moved to the following stage of development	Number of GE projects	0	2016	P	-	1	1	1	1	-	-	4
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: Reports from the CDB

Observations: Report from CDB with information from ECC and private project sponsors

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 9: Women participate in consultation processes related to GE projects

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
9.0	% of women who participate in consultations	%	0	2016	P	-	-	-	-	-	-	-	45
					A	-	-	-	-	-	-	-	-

Details

Means of Verification: Reports from the CDB

Observations: 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).

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 11: GEF Performance Ratings

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
11.0	Rating of Likelihood of Achieving Project Global Environmental Objective (DO) (Scale: 1 - 6, where 1 = Highly Satisfactory [HS] and 6 = Highly Unsatisfactory [HU])	#	0	2015	P	-	-	-	-	-	-	-	-
					A	1	1	1	-	1	-	-	-

Details

Means of Verification: SAPR from CDB

Observations: The Team Leader will establish the corresponding ranking based on the SAPR

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	2023	EOP 2025
11.2	Rating of Implementation Progress (IP) (Scale: 1 - 6, where 1 = Highly Satisfactory [HS] and 6 = Highly Unsatisfactory [HU])	#	0	2015	P	-	-	-	-	-	-	-	-
					A	1	1	1	-	1	-	-	-

Details																				
Means of Verification: SAPR from CDB																				
Observations: The Team Leader will establish the corresponding ranking based on the SAPR																				
Evaluation Methodology: -																				
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator																
					Indicator	Unit of Measure	Baseline	Baseline Year	2017	2018	2019	2020	2021	2022	2023	EOP 2025				
11.3	Rating of overall Risk that may affect project performance (RISK) (Scale 1 - 4, where 1 = High Risk [H] and 4 = Low Risk [L])			#	0	2015	P	-	-	-	-	-	-	-	-	-				
							A	4	4	4	-	4	-	-	-	-				
Details																				
Means of Verification: SAPR from CDB																				
Observations: The Team Leader will establish the corresponding ranking based on the SAPR																				
Evaluation Methodology: -																				
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator																

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Component I - Energy Efficiency

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2025	2022	EOP 2025
1.01	Funding operations provided for EE projects	Number of funding operations approved by CDB's Board	P	-	3	-	13,000,000
			P (a)	-	4	3,185,000	14,660,000
			A	-	4	2,720,000	12,600,000

Component Nbr. 2 Component II - Reg. framework, inst. strengthening and capacity building

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2025	2022	EOP 2025
2.01	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	-	1,942,828.53
			P (a)	-	3	155,820	1,145,180
			A	-	3	-	985,180
2.02	Training and capacity building interventions for the EA, SPVs, and/or government employees	Number of interventions completed	P	-	8	-	1,032,640.8
			P (a)	-	8	54,000	1,289,000
			A	-	8	54,000	1,289,000

Component Nbr. 3 Component III - Intermittent RE and GE

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2025	2022	EOP 2025
3.01	Funding operations for GE projects	Number of funding operations approved by CDB's Board	P	-	3	3,164,705.88	44,050,000
			P (a)	1	5	6,000,000	25,360,000
			A	-	3	-	24,710,000
3.02	Number of loans for transmission and distribution projects	Number of loans approved by CDB's Board	P	-	1	-	10,000,000
			P (a)	-	2	-	20,000,000
			A	-	1	-	8,016,000
3.03	Funding operations for intermittent RE projects	Number of funding operations approved by CDB's Board	P	-	1	-	1,024,720.66
			P (a)	-	3	255,000	13,408,000
			A	-	3	2,450,000	3,368,000

Other Cost				
	Project Management	P		143,508
		P (a)	0	0
		A	0	0
	Monitoring and evaluation RG-L1071	P	24,375	305,000
		P (a)	31,000	187,000
		A	18,000	77,000
Total Cost				
	Total Cost	P	3,189,080.88	71,498,697.99
		P (a)	9,680,820	76,049,180
		A	5,242,000	51,045,180

CHANGES TO THE MATRIX					
Section	Name	Type of Change	Sub type	Modified By	Entered in System
Output	Funding operations for GE projects	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	4/3/2023
			Modify Financial Historical Actual	ROCHELLEF	4/3/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	ROCHELLEF	4/3/2023
			Modify Physical Historical Actual	ROCHELLEF	4/3/2023
	Funding operations for intermittent RE projects	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	3/27/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	ROCHELLEF	4/3/2023
			Modify Physical Historical Actual	ROCHELLEF	4/3/2023
	Funding operations provided for EE projects	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	3/27/2023
	Number of loans for transmission and distribution projects	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	3/27/2023
	Studies to support energy policy reform, regulation and implementation of renewable energy and energy efficiency projects in the ECC	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	4/3/2023
			Modify Financial Historical Actual	ROCHELLEF	4/3/2023
	Training and capacity building interventions for the EA, SPVs, and/or government employees	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	ROCHELLEF	4/3/2023
			Modify Financial Historical Actual	ROCHELLEF	4/3/2023

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
1	Active		Legal Environment
	Response Actions		
	1	Management Strategy	Status

Risk ID	Risk Status		Risk Taxonomy
2	Active		Technical Design
	Response Actions		
	2.01	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
3	Active		Economic and Financial Environment
	Response Actions		
	3	Management Strategy	Status

Risk ID	Risk Status		Risk Taxonomy
4	Active		Technical Design
	Response Actions		
	4	Management Strategy	Status

Risk ID	Risk Status		Risk Taxonomy		
5	Active		Institutional Environment		
	Response Actions				
	5	Management Strategy		Status	

Risk ID	Risk Status		Risk Taxonomy
6	Active		Environmental and Social Safeguards
	Response Actions		
	6.01	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
7	Active		Political Environment
	Response Actions		
	7	Management Strategy	Status

Risk ID	Risk Status		Risk Taxonomy
8	Active		Institutional Environment
	Response Actions		
	8.01	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
9	Active		Technical Design
	Response Actions		
	9	Management Strategy	Status

Risk ID	Risk Status		Risk Taxonomy
10	Active		Legal Environment
	Response Actions		
	10.01	Management Strategy	Status
		MITIGATE	ACTIVE

IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Intra/Inter Coordination