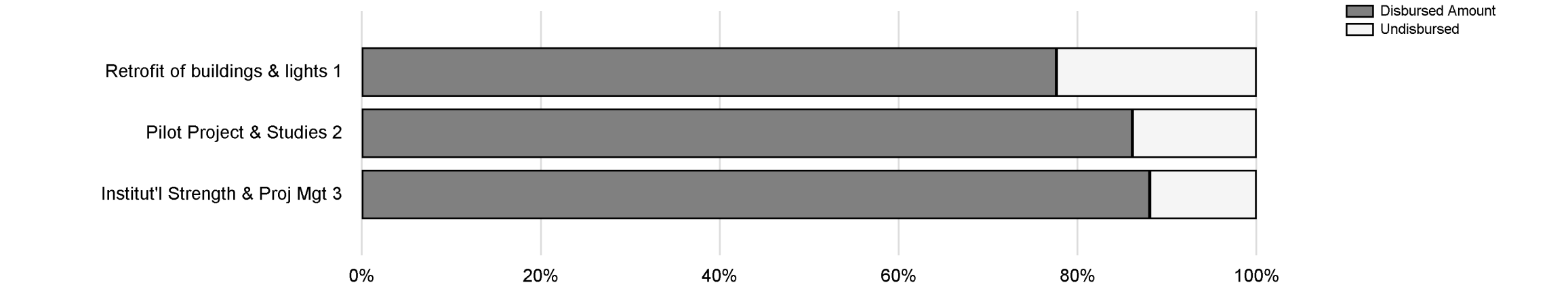


PMR Public Report

Operation Number	BA-L1025	Chief of Operations Validation Date	03/31/23
Year- PMR Cycle	Second period Jan-Dec 2022	Division Chief Validation Date	04/14/23
Last Update	03/29/23	Country Representative Validation Date	04/27/23
PMR Validation Stage	Validated by Representative		
Basic Data			
Operation Profile			
Operation Name	Public Sector Smart Energy (PSSE) Program	Loan Number	2748/OC-BA
Executing Agency	INTER-AMERICAN DEVELOPMENT BANK	Sector/Subsector	ENERGY-ENERGY EFFICIENCY AND RENEWABLE ENERGY IN END USE
Team Leader	ECHEVERRIA, CARLOS BLADIMIR	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Loan Operation	Country	Barbados
Lending Instrument	Investment Loan	Convergence related Operation(s)	BA-X1003
Borrower	BARBADOS		
Environmental and Social Safeguards			
Impacts Category	A	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	Partially Satisfactory	Date of approval	
Safeguard Performance Rating - Rationale	Based on the current stage of the operation, the EA complied with all requirements, and it is preparing with IDB to support the next steps (pilot studies) to ensure compliance with IDB Policies. The PEU contracted an authorized Contractor/Subcontractor to perform the management of the hazardous waste of the retrofitted buildings and Air Condition replacements. The hazardous waste management Plan has not been implemented fully by the contractors, but the best industry practices and guidelines have been prepared by the Environmental Consultant and will be supervised by the PEU. Evidence of manifest of final disposal and reports still pending to be provided by the PEU to verify the information, and this has driven the performance rating to Partially Satisfactory.		

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
BA-L1025	17,000,000	17,000,000	0	0	17,000,000	17,000,000	15,898,061.99	93.52%	1,101,938.01
BA-X1003	7,626,493	7,029,515	0	0	5,810,000	7,029,515	5,476,630.76	77.91%	1,552,884.24
Aggregated	24,626,493	24,029,515	0	0	22,810,000	24,029,515	21,374,692.75	88.95%	2,654,822.25

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. 1: PSSE Financial savings cumulative to date (real 2012 US\$).

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2024	
1.1	PSSE Financial savings cumulative to date (real 2012 US\$).	US\$	0	2012	2021	P	11,284,963
						A	-

Details

**Means of Verification:** Power consumption Information provided by the Government and by the utility (BL&P)

**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	

**General Development Objectives Nbr. 2:** Avoided CO2 emissions by the PSSE Program (cumulative to date).

Observation:							
	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2024	
2.1	Avoided CO2 emissions by the PSSE Program (cumulative to date).	tCO2	0	2012	2021	P	32,528
						A	-
Details							

**Means of Verification:** Reports prepared by Government of Barbados - Energy Division

**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. 1: RE capacity installed in government buildings

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2020	2021	2023	EOP 2024
1.1	Electricity Generated from Solar PV Systems (MWh/year, MWh to date generated).	MWh	0	2012	P	-	-	-	-	6,073
					A	-	-	-	-	-

Details

Means of Verification: Reports prepared by Government of Barbados- Energy Division

Observations: Assuming an output of 1,700/kW/year for solar PV. Note: this includes the 50kW PV system installed for charging the Electric Vehicles in Component 2.

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 2: Energy saving with EE technologies in public lighting and buildings

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2020	2021	2023	EOP 2024
2.1	Electricity Saved through retrofits (energy efficient public lights and energy efficient equipment in public buildings) (MWh/year, MWh to date saved).	MWh	0	2012	P	-	-	-	-	28,608
					A	-	-	-	-	-

Details

Means of Verification: Reports prepared by Government of Barbados Energy Division

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 3: Fossil Fuels Saved from the implementation of the pilot projects (barrels of oil equivalent).

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2020	2021	2023	EOP 2024
3.1	Fossil Fuels Saved from the implementation of the pilot projects (barrels of oil equivalent).	barrels of oil	0	2012	P	-	-	-	-	240
					A	-	-	-	-	-

Details

Means of Verification: Reports prepared by Government of Barbados - Energy Division

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 4: public awareness increased in public sector for RE and EE

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2020	2021	2023	EOP 2024
4.1	Percentage of survey respondents participating at events that report high awareness and support of sustainable energy practices (Number of respondents that answered ?high awareness and support of sustainable energy?/ Total number of survey res	%	0	2012	P	-	-	-	-	80
					A	-	-	-	-	-

Details

Means of Verification: Reports prepared by Government of Barbados - Energy Division

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 RE and EE in public buildings

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2024	2022	EOP 2024
1.01	Streetlight installation completed	%	P	-	85	-	9,977,800
			P (a)	-	88	-	7,449,529.21
			A	-	88	-	7,449,529.21
1.02	Number of public buildings retrofitted with EE	Buildings	P	-	12	-	4,150,000
			P (a)	14	15	1,808,868.24	2,430,884.15
			A	8	8	944,836.42	1,549,363.46
1.03	PV in Public Buildings Installed	MW	P	-	1.19	-	5,500,000
			P (a)	0.64	3.82	851,386	6,857,697.78
			A	0.37	3.82	777,904.82	6,582,470.78

Component Nbr. 2 Pilot projects

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2024	2022	EOP 2024
2.01	Public Electric Vehicles with Solar PV installed and pilot completed	Electric vehicles	P	-	8	-	300,000
			P (a)	-	10	14,088	1,197,554.61
			A	-	10	10,666.67	1,197,554.61
2.02	Ocean studies completed	Studies	P	-	1	-	1,000,000
			P (a)	-	1	180	977,155.36
			A	-	1	-	977,155.36

Component Nbr. 3 capacity building

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2024	2022	EOP 2024
3.01	Capacity Building training/activities completed	numbr of people	P	-	-	-	1,395,000
			P (a)	50	162	273,114.02	1,051,648.02
			A	-	162	337,121.16	1,051,648.02
3.02	Public awareness events completed	number of people	P	-	100	-	305,000
			P (a)	-	304	185,999.99	494,531.08
			A	-	304	202,756.92	491,679.55
3.03	Monitoring and evaluation activities completed	activities	P	-	4	-	500,000
			P (a)	-	4	106,844	465,458.14
			A	-	4	26,530.04	397,565.19
3.04	Number of Jobs created in ETD for implementing the PSSE Program	Positions	P	-	4	-	1,153,000
			P (a)	-	9	293,074.69	2,417,319.15
			A	-	9	40,828.77	2,351,415.77

Other Cost				
	Administrative fees expended	P		383,200
		P (a)	0	383,200
		A	0	383,200
Total Cost				
	Total Cost	P	0	24,664,000

	Total Cost	P (a)	3,533,554.94	23,724,977.5
		A	2,340,644.8	22,431,581.95

CHANGES TO THE MATRIX

Section	Name	Type of Change	Sub type	Modified By	Entered in System
Output	Capacity Building training/activities completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/27/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/27/2023
			Modify Physical Historical Actual	CARLOSEC	3/27/2023
	Monitoring and evaluation activities completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/28/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
	Number of Jobs created in ETD for implementing the PSSE Program	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/28/2023
			Modify Financial Historical Actual	CARLOSEC	3/28/2023
	Number of public buildings retrofitted with EE	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/28/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/27/2023
			Modify Physical Historical Actual	CARLOSEC	3/27/2023
	Ocean studies completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/27/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
	Public awareness events completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/28/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/27/2023
			Modify Physical Historical Actual	CARLOSEC	3/27/2023
	Public Electric Vehicles with Solar PV installed and pilot completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/27/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
	PV in Public Buildings Installed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/27/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/27/2023
	Streetlight installation completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/27/2023
			Modify Financial Historical Actual	CARLOSEC	3/27/2023

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
1	Inactive		Internal Processes
	Response Actions		
	1.01	Management Strategy	Status
		MITIGATE	INACTIVE

Risk ID	Risk Status		Risk Taxonomy
2	Active		Internal Processes
	Response Actions		
	2.01	Management Strategy	Status
		MITIGATE	INACTIVE

Risk ID	Risk Status		Risk Taxonomy
3	Inactive		Internal Processes
	Response Actions		
	3.01	Management Strategy	Status
		MITIGATE	INACTIVE

Risk ID	Risk Status		Risk Taxonomy
4	Materialized		Goods, and Services
	Response Actions		
	4.01	Management Strategy	Status
		MITIGATE	INACTIVE

Risk ID	Risk Status		Risk Taxonomy
5	Inactive		Internal Processes
	Response Actions		
	5.01	Management Strategy	Status
		MITIGATE	INACTIVE



Risk ID	Risk Status		Risk Taxonomy		
6	Inactive		Environmental and Social Safeguards		
	Response Actions				
	6	Management Strategy		Status	

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

Risk ID	Risk Status		Risk Taxonomy
8	Inactive		Social Environment
	Response Actions		
	8.01	Management Strategy	Status
		MITIGATE	INACTIVE

Risk ID	Risk Status		Risk Taxonomy		
9	Inactive		Institutional Environment		
	Response Actions				
	9	Management Strategy		Status	

IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Project Design