

PMR Public Report

Operation Number	BA-X1003	Chief of Operations Validation Date	04/06/22
Year- PMR Cycle	Second period Jan-Dec 2021	Division Chief Validation Date	04/24/22
Last Update	04/05/22	Country Representative Validation Date	04/25/22
PMR Validation Stage	Validated by Representative		

Basic Data

Operation Profile

Operation Name	Support for the Public Sector Smart Energy Program	Loan Number	ATN/EX-13316-BA
Executing Agency	MINISTRY OF ENERGY AND WATER RESOURCES (MEWR)	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	Investment Grants	Country	Barbados
Lending Instrument		Convergence related Operation(s)	BA-L1025
Borrower			

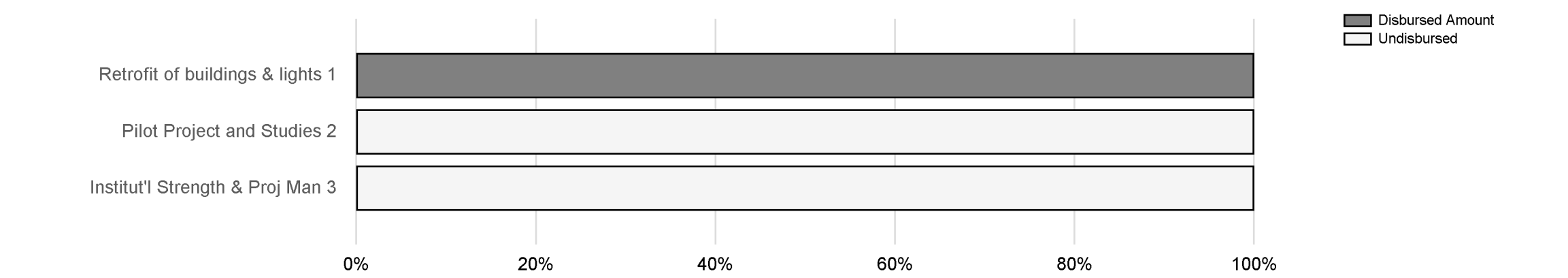
Environmental and Social Safeguards

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 support the next steps (pilot studies) to ensure compliance with IDB Policies. The PEU contracted authorized Contractor/Subcontractor to perform the management of the hazardous waste of the retrofit buildings and Air Condition replacements. Evidence of manifest of final disposal and reports are 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	7,664,000	24,664,000	17,000,000	13,864,863.92	81.56%	3,135,136.08
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	7,664,000	30,474,000	24,029,515	19,341,494.68	80.49%	4,688,020.32

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 2023	
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 consupction 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 2023	
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
1.1	Electricity Generated from Solar PV Systems (MWh/year, MWh to date generated).	MWh	0	2012	P	-	-	-	-
					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
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	-	-	-	-
					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
3.1	Fossil Fuels Saved from the implementation of the pilot projects (barrels of oil equivalent).	barrels of oil	0	2012	P	-	-	-	-
					A	-	-	-	-

Details

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

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

EOP 2023
6,073
-

EOP 2023
28,608
-

EOP 2023
240
-

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
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	-	-	-	-
					A	-	-	-	-

Details

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

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

EOP 2023
80
-

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		2021	EOP 2023	2021	EOP 2023
1.01	Streetlight installation completed	%	P	-	85	-	9,977,800
			P (a)	2	88	-	7,450,418.05
			A	5	88	-	7,450,418.05
1.02	Number of public buildings retrofitted with EE	Buildings	P	-	12	-	4,150,000
			P (a)	14	14	2,916,049	2,447,464.24
			A	-	-	604,527	604,527
1.03	PV in Public Buildings Installed	MW	P	-	1.19	-	5,500,000
			P (a)	1.22	4.09	964,809	6,732,632.49
			A	0.68	3.45	47,502	5,815,326.49

Component Nbr. 2 Pilot projects

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2021	EOP 2023	2021	EOP 2023
2.01	Public Electric Vehicles with Solar PV installed and pilot completed	Electric vehicles	P	-	8	-	300,000
			P (a)	-	10	443,094	1,201,007.4
			A	-	10	419,525	1,186,919.4
2.02	Ocean studies completed	Studies	P	-	1	-	1,000,000
			P (a)	1	1	723,458	977,484.09
			A	1	1	723,278	977,304.09

Component Nbr. 3 capacity building

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2021	EOP 2023	2021	EOP 2023
3.01	Capacity Building training/activities completed	numbr of people	P	-	-	-	1,395,000
			P (a)	20	509	935,335.01	1,162,244.22
			A	446	459	389,281	889,130.2
3.02	Public awareness events completed	number of people	P	-	100	-	305,000
			P (a)	50	454	115,112.44	474,922.5
			A	187	454	115,112.51	288,922.51
3.03	Monitoring and evaluation activities completed	activities	P	-	4	-	500,000
			P (a)	2	4	139,464	517,879
			A	-	4	32,620	371,035
3.04	Number of Jobs created in ETD for implementing the PSSE Program	Positions	P	-	4	-	1,153,000
			P (a)	-	9	134,252.15	2,330,315.68
			A	-	9	106,532.35	1,786,559.09

Other Cost				
	Administrative fees expended	P		383,200
		P (a)		383,200
		A	0	383,200
Total Cost				
	Total Cost	P		24,664,000
		P (a)	6,371,573.6	23,677,567.67
		A	2,438,377.86	19,753,341.83

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	3/17/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/21/2022
	Monitoring and evaluation activities completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/17/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/17/2022
	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	3/17/2022
	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	3/17/2022
	Public awareness events completed	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/17/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/21/2022
	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	3/17/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/17/2022
	PV in Public Buildings Installed	Modify contribution to CRF Indicator	Flag contribution to CRF indicator	MYEPEZ	4/5/2022
		Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSEC	3/17/2022
			Modify Physical EOP P	MYEPEZ	4/5/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	MYEPEZ	4/5/2022
			Modify Physical Historical Actual	MYEPEZ	4/5/2022
			Modify Physical P value	MYEPEZ	4/5/2022
	Streetlight installation completed	Modify Output	Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	CARLOSEC	3/17/2022

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
2	Inactive		Environmental and Social Safeguards
	Response Actions		
	2.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
3	Inactive		Institutional Environment
	Response Actions		
	3.0	Management Strategy	Status
		-	

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

Risk ID	Risk Status		Risk Taxonomy
8	Inactive		Political Environment
	Response Actions		
	8.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
10	Materialized		Goods, and Services
	Response Actions		
	10.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
12	Active		Social Environment
	Response Actions		
	12.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
14	Inactive		Internal Processes
	Response Actions		
	14.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
15	Active		Internal Processes
	Response Actions		
	15.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
16	Active		Internal Processes
	Response Actions		
	16.1	Management Strategy	Status
		MITIGATE	ACTIVE

IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Others - Fiduciary Dimensions