

PMR Operational Report

Operation Number	BA-L1043	Chief of Operations Validation Date	10/21/20
Year- PMR Cycle	First period Jan-Jun 2020	Division Chief Validation Date	
Last Update	10/21/20	Country Representative Validation Date	
PMR Validation Stage	Validated by Chief of Operations		

Basic Data

Operation Profile

Operation Name	Sustainable Energy Investment Program (SMART FUND II)	Loan Number	4865/OC-BA
Executing Agency	Ministry of Energy and Water Resources (MEWR)	Sector/Subsector	ENERGY
Team Leader	PRADO, VERONICA RODRIGUES DO	Overall Stage	Effective/Pending Eligibility
Operation Type	Loan Operation	Country	Barbados
Lending Instrument	Investment Loan	Convergence related Operation(s)	BA-G1002
Borrower	BARBADOS		

Environmental and Social Safeguards

Impacts Category	B	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	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.		

Financial Data

Item	Total Cost and Source					Available Funds (US\$)			
	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disb	Undisbursed Amount
BA-G1002	15,463,142	15,463,142	0	0	15,463,142	15,463,142	0	0.00%	15,463,142
BA-L1043	30,000,000	30,000,000	0	0	30,000,000	30,000,000	0	0.00%	30,000,000
Aggregated	45,463,142	45,463,142	0	0	45,463,142	45,463,142	0	0.00%	45,463,142

Expense Categories by Loan Contract (cumulative values)

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RESULTS MATRIX

IMPACTS

Impact Nbr. 1: Imported Fossil Fuels for Electricity Generation

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
1.0	Decrease in imported fossil fuels for electricity generation	# of barrel of oil	0.00	2018	P		60,155.00
					P(a)		
					A		

Details

Means of verification: PEU Report

Observations: This indicator will be calculated based on the annual electricity from grid avoided, with 10,200 kj/kWh, and 6,311,532 kj/barrel of oil. See M&E Plan

Pro-Gender No **Pro-Ethnicity** No

Impact Nbr. 2: RE Installed Capacity

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
2.0	Increase in RE generation installed	% MW	27.00	2018	P		41.30
					P(a)		
					A		

Details

Means of verification: PEU Report

Observations: This indicator will be calculated as the percentage change from baseline in 2018 (27 MW)

Pro-Gender No **Pro-Ethnicity** No

Impact Nbr. 3: GHG emissions avoided

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
3.0	Annual GHG emissions, avoided	tons CO2 eq.	0.00	2018	P		31,004.00
					P(a)		
					A		

Details

Means of verification: PEU Report

Pro-Gender No **Pro-Ethnicity** No

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OUTCOMES

Outcome Nbr. 0: RE & EE Solutions Introduced in SMEs

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
0.0	Expansion of RE installed capacity	MW	0.00	2018	P	0.00	0.07	0.18	0.32	0.46	0.62	0.62
					P(a)							
					A							

Details

Means of verification: PEU Report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
0.1	Increase in electricity saved due to EE measures	MWh	0.00	2018	P	0.00	0.00	905.00	2,534.00	4,343.00	8,505.00	8,505.00
					P(a)							
					A							

Details

Means of verification: PEU Report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
0.2	Increase in electricity saved due to AC rebates	MWh	0.00	2018	P	0.00	0.00	0.00	258.00	568.00	1,034.00	1,034.00
					P(a)							
					A							

Details

Means of verification: PEU Report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
0.3	Increment in electricity generated from RE sources	MWh	0.00	2018	P	0.00	0.00	115.00	400.00	723.00	1,393.00	1,393.00
					P(a)							
					A							

Details

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OUTCOMES

Means of verification: PEU Report

Pro-Gender No Pro-Ethnicity No

Outcome Nbr. 1: RE & EE Solutions introduced in Public Buildings and Electric Mobility

Observation:

Indicator	Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
1.0	Expansion of RE installed capacity	MW	2017	P	0.00	0.00	2.43	6.49	8.52	10.55	10.55
				P(a)							
				A							

Details

Means of verification: PEU Report

Pro-Gender No Pro-Ethnicity No

Indicator	Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
1.1	Increase in electricity saved due to EE measures	MWh	2018	P	0.00	0.00	0.00	1,764.00	5,292.00	8,820.00	8,820.00
				P(a)							
				A							

Details

Means of verification: PEU Report

Pro-Gender No Pro-Ethnicity No

Indicator	Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
1.2	Increment in electricity generated from RE sources	MWh	2018	P	0.00	0.00	0.00	4,055.00	10,762.60	17,470.50	17,471.00
				P(a)							
				A							

Details

Means of verification: PEU Report

Pro-Gender No Pro-Ethnicity No

Indicator	Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
1.3	Private sector funds leverage	US\$(000)	2018	P	0.00	0.00	92.00	276.00	369.00	461.00	461.00
				P(a)							

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OUTCOMES

1.3	Private sector funds leverage	US\$(000)		2018	A							
Details												
Means of verification: PEU Report												
Pro-Gender		No			Pro-Ethnicity		No					

Outcome Nbr. 3: Institutional Capacity Strengthened

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
3.0	Local financial institutions lending for EE/RE projects	# institutions	0.00	2018	P	0.00	0.00	1.00	1.00	0.00	0.00	2.00
					P(a)							
					A							
Details												
Means of verification: PEU Report												
Pro-Gender		No	Pro-Ethnicity				No					

Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
3.2	Implementation of a plan for deployment of electric mobility	# plans	0.00	2018	P	0.00	0.00	1.00	0.00	0.00	0.00	1.00
					P(a)							
					A							
Details												
Means of verification: PEU Report												
Pro-Gender		No	Pro-Ethnicity		No							

Indicator		Unit of Measure	Baseline	Baseline Year		2021	2022	2023	2024	2025	2026	EOP 2026
3.3	Young people empowered and trained to work on EE and RE	# persons	0.00	2018	P	0.00	0.00	1.00	1.00	0.00	0.00	2.00
					P(a)							
					A							
Details												
Means of verification: PEU Report												
Pro-Gender		No	Pro-Ethnicity		No							

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Promoting EE and RE in Small and Medium Enterprises (SMEs)

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2020	EOP 2026	2020	EOP 2026
1.1	Pre-investment studies completed	# studies	P	0	100		783,074.71
			P(a)		0		0
			A		0		0
1.2	Credit line used in EE and RE projects	# loans	P	0	47		11,830,747.4
			P(a)		0		0
			A		0		0
1.3	A/C Rebate Facility	# rebates	P	0	1,000		500,000
			P(a)		0		0
			A		0		0

Component Nbr. 2 Promoting EE and ER in Public Sector

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2020	EOP 2026	2020	EOP 2026
2.1	Pre-investment Studies for Government programs - EE and RE audits	# studies	P	0	40		462,000
			P(a)		0		0
			A		0		0
2.2	Comprehensive studies for deployment of Innovative RE and EE technologies	# studies	P	0	1		238,000
			P(a)		0		0
			A		0		0
2.3	Waste disposal management strategy designed	# strategy	P	0	1		100,000
			P(a)		0		0
			A		0		0
2.4	RE/ EE Retrofits in public buildings functioning	# buildings	P	0	100		23,247,672.66
			P(a)		0		0
			A		0		0
2.5	Public buses with charging station systems implemented	# systems	P	0	5		4,332,298.96
			P(a)		0		0
			A		0		0

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 3 Capacity Building and Institutional Support

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2020	EOP 2026	2020	EOP 2026
3.1	Communication campaigns to promote the use of EE and RE technologies in SMEs and public buildings	# campaigns	P	0	4		433,149.51
			P(a)		0		0
			A		0		0
3.2	Certification program in RE audit implemented	# programs	P	0	1		122,500
			P(a)		0		0
			A		0		0
3.3	Certification program in EE audit implemented	# programs	P	0	1		122,500
			P(a)		0		0
			A		0		0
3.4	Training in O&M and M&E of EE and RE systems implemented	# trainings	P	0	1		220,000
			P(a)		0		0
			A		0		0
3.5	Comprehensive Study on the Deployment of Electric Mobility in Barbados	# studies	P	0	1		330,000
			P(a)		0		0
			A		0		0
3.6	Comprehensive study and capacity building program on Innovative Financial Models for Commercial Financial Institutions	# studies	P	0	1		250,000
			P(a)		0		0
			A		0		0
3.7	Information system on gender for the sector implemented	# systems	P	0	1		0
			P(a)		0		0
			A		0		0
3.8	Young Apprentice Program created and implemented	# programs	P	0	1		0
			P(a)		0		0
			A		0		0

Other Cost

	Project Management and other Cost	P				2,188,000
		P(a)				0
		A				0
	Fees	P				303,198.86
		P(a)				0
		A				0

Total Cost

	Total Cost	P				45,463,142.1
		P(a)				0
		A				0

CHANGES TO THE MATRIX

No information available for this section

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IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories