

PMR Operational Report

Operation Number	JA-L1056	Chief of Operations Validation Date	04/06/18
Year- PMR Cycle	Second period Jan-Dec 2017	Division Chief Validation Date	04/19/18
Last Update	03/18/18	Country Representative Validation Date	04/20/18
PMR Validation Stage	Validated by Representative		

Basic Data

Operation Profile

Operation Name	Energy Management and Efficiency Programme	Loan Number	3877/OC-JA
Executing Agency	Petroleum Corporation of Jamaica	Sector/Subsector	EN-EEC - ENERGY-ENERGY EFFICIENCY AND RENEWABLE ENERGY IN END USE
Team Leader	MASSON, MALAIKA EBONY ANIETIA	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Loan Operation	Country	JAMAICA
Lending Instrument	Investment Loan	Convergence related Operation(s)	
Borrower	JAMAICA		

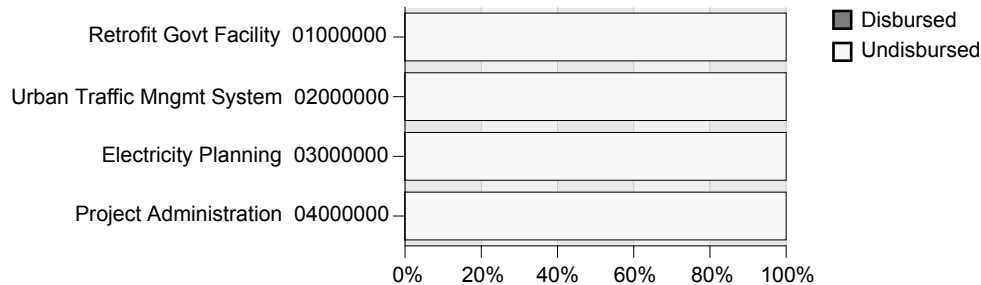
Environmental and Social Safeguards

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

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
JA-L1056	15,000,000	15,000,000	0	15,000,000	30,000,000	15,000,000	160,000	1.07%	14,840,000
Aggregated	15,000,000	15,000,000	0	15,000,000	30,000,000	15,000,000	160,000	1.07%	14,840,000

Expense Categories by Loan Contract (cumulative values)



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. Please also 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.

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RESULTS MATRIX

IMPACTS

Impact Nbr. 0: Reduction of Jamaica's debt by avoiding fuel imports through the promotion of energy efficiency in government facilities and fuel conservation in road transportation

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
0.0	Crude oil imports for refined petroleum products reduced	Million of Barrels	8.80	2015	P		0.00
					P(a)	7.50	7.50
					A		0.00
Details							
Means of verification: Annual report from PCJ							
Pro-Gender		No		Pro-Ethnicity		No	

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RESULTS MATRIX

OUTCOMES

Outcome Nbr. 0: Retrofitting HEPA Government Facilities

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
0.0	Reduced annual electricity consumed in 73 Health, Education and Public Agency (HEPA) Government facilities	kWh	31,377,402.00	2015	P		0.00
					P(a)	16,004,807.00	16,004,807.00
					A		0.00

Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
0.1	Reduced annual GHG (CO2) emissions resulting from reduced electricity consumption (kWh) in 73 HEPA Government facilities	Tons of CO2 equivalent	52,401.25	2015	P		0.00
					P(a)	26,728.53	26,728.53
					A		0.00

Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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Outcome Nbr. 1: Implementation of an Urban Traffic Management System (UTMS)

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
1.0	Reduced annual transport fuel consumed by traffic in the Kingston Metropolitan Region (KMR)	Million litres	296.80	2015	P		0.00
					P(a)	192.70	192.70
					A		0.00

Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
1.1	Reduced annual GHG (CO2) emissions from reduced transport fuel consumed in the KMR	Tons of CO2	579,203.00	2015	P		0.00
					P(a)	376,044.00	376,044.00

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RESULTS MATRIX

OUTCOMES

1.1	Reduced annual GHG (CO2) emissions from reduced transport fuel consumed in the KMR	Tons of CO2	579,203.00	2015	A		0.00
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Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
1.2	Reduced hours of annual travel time in the KMR	Millions hours	155.20	2015	P	0.00
					P(a)	99.96
					A	0.00

Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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Outcome Nbr. 2: Increased Support to Electricity Planning

Observation:

Indicator	Unit of Measure	Baseline	Baseline Year		2023	EOP 2023
2.0	Number of formal updates or revisions of the IRP performed by MSET on a timely basis	# of updates/ revisions	0.00	2015	P	0.00
					P(a)	1.00
					A	0.00

Details

Means of verification: Semestral Reports from Petroleum Corporation of Jamaica and M&E Consulting firm report

Pro-Gender	No	Pro-Ethnicity	No
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RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Retrofitting HEPA government facilities

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2017	EOP 2023	2017	EOP 2023
1.1	HEPA government facilities with Energy Efficiency equipment replaced, installed and operating	# of government facilities	P		0		0
			P(a)		23		17,282,500
			A		0		0
1.2	Consultancy engineering and supervision services for retrofitting 30 Government of Jamaica facilities	# of project supervised	P		0		0
			P(a)		30		600,000
			A		0		0
1.3	Energy Efficiency light technology replaced, installed and operating in HEPA government facilities	# of government facilities	P		0		0
			P(a)		50		3,043,750
			A		0		0
1.4	Communication activities completed to raise awareness on Energy Efficient management and maintenance in HEPA government facilities	# of activities	P		0		0
			P(a)		5		250,000
			A		0		0
1.5	Energy Efficient manuals developed for management and maintenance of HEPA government facilities	# of manuals	P		0		0
			P(a)		3		160,000
			A		0		0

Component Nbr. 2 Implementation of an Urban Traffic Management System (UTMS)

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2017	EOP 2023	2017	EOP 2023
2.1	Equipment necessary to upgrade the central control system purchased, installed and operating	Binary (yes=1, no=2)	P		0		0
			P(a)		1		359,820
			A		0		0
2.2	Equipment necessary to modernize and coordinate traffic signals purchased, installed and operating	Binary (Yes+1; No=0)	P		0		0
			P(a)		1		2,521,606
			A		0		0
2.3	Number of packages of support training and capacity building in intelligent transportation system delivered	# of packages	P		0		0
			P(a)		4		618,574
			A		0		0

Component Nbr. 3 Support to Electricity Planning

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2017	EOP 2023	2017	EOP 2023
3.1	Number of technical studies (inclusive of IT software diagnostic study) to support IRP revision or update completed	# of studies	P		0		0
			P(a)		2		230,000
			A		0		0
3.2	Number of training modules completed to support technical capacity in Ministry of Science, Energy and Technology (MSET) to revise or update IRP	# Training Modules	P		0		0
			P(a)		3		100,000
			A		0		0
3.3	Number of technical experts contracted to reinforce capacity and develop training plans within MSET to enable staff to revise/update IRP	# technical experts	P		0		0
			P(a)		5		1,200,000
			A		0		0
3.4	Appropriate IT software for coordinating IRP purchased, installed and operating	# of Software	P		0		0
			P(a)		1		250,000
			A		0		0

Other Cost

	Project Management	P				
		P(a)				2,853,750
		A				
	Monitoring and Evaluation	P				
		P(a)				530,000
		A				

Total Cost

	Total Cost	P				0
		P(a)				30,000,000
		A				0

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CHANGES TO THE MATRIX

Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
Impact	Reduction of Jamaica's debt by avoiding fuel imports through the promotion of energy efficiency in government facilities and fuel conservation in road transportation	Create Impact	Impact inputted amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Annual Electricity consumed in 73 HEPA government facilities	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Annual GHG emissions resulting from kWh consumed in 73 HEPA facilities	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Reduced CO2 emissions resulting from reduced electricity consumption in 73 HEPA Government facilities	Create Outcome	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Reduced electricity consumed in 73 Health, Education and Public Agency (HEPA) Government facilities	Create Outcome	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Annual Electricity consumed in 73 HEPA government facilities	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Annual GHG emissions resulting from kWh consumed in 73 HEPA facilities	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1.1 HEPA government facilities with Energy Efficiency equipment replaced, installed and operating	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1.2 Energy Efficiency light technology replaced, installed and operating in HEPA government facilities	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1.3 Communication activities completed to raise awareness on Energy Efficient management and maintenance in HEPA government facilities	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1.4 Energy Efficient manuals developed for management and maintenance of HEPA government facilities	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1.5 Consultancy engineering and supervision services for retrofitting 30 Government of Jamaica facilities	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Implementation of an Urban Traffic Management System (UTMS)	Create Component	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Support to Electricity Planning	Create Component	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	1. Retrofitting HEPA government facilities	Create Component	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Communication activities completed to raise awareness on Energy Efficient management and maintenance in HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Consultancy engineering and supervision services for retrofitting 30 Government of Jamaica facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Energy Efficiency light technology replaced, installed and operating in HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Energy Efficient manuals developed for management and maintenance of HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	HEPA government facilities with Energy Efficiency equipment replaced, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018

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Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
Output	Retrofitting HEPA government facilities	Modify Component	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Equipment necessary to modernize and coordinate traffic signals	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Output	Equipment necessary to upgrade the central control system purchased, installed and operating	Create Output	Output amended in accordance with updated Results Matrix	03/10/2018	03/10/2018
Outcome	Implementation of an Urban Traffic Management System (UTMS)	Modify Outcome	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual GHG (CO2) emissions resulting from reduced electricity consumption (kWh) in 73 HEPA Government facilities	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual electricity consumed in 73 Health, Education and Public Agency (HEPA) Government facilities	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced transport fuel consumed in the Kingston Metropolitan Region (KMR)	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Retrofitting HEPA Government Facilities	Modify Outcome	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual GHG (CO2) emissions from reduced transport fuel consumed in the KMR	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual transport fuel consumed by traffic in the Kingston Metropolitan Region (KMR)	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced hours of annual travel time in the KMR	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Increased Support to Electricity Planning	Create Outcome	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Number of formal updates or revisions of the IRP performed by MSET on a timely basis	Create Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual GHG (CO2) emissions resulting from reduced electricity consumption (kWh) in 73 HEPA Government facilities	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced annual GHG (CO2) emissions from reduced transport fuel consumed in the KMR	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Reduced hours of annual travel time in the KMR	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Outcome	Number of formal updates or revisions of the IRP performed by MSET on a timely basis	Modify Outcome Indicator	Outcome amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Equipment necessary to modernize and coordinate traffic signals purchased, installed and	Modify	Output amended in accordance with updated Results Matrix	03/15/2018	03/10/2018

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Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
	operating	Output			
Output	Equipment necessary to modernize and coordinate traffic signals purchased, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of packages of support training and capacity building in intelligent transportation system delivered	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of technical experts contracted to reinforce capacity and develop training plans within MSET to enable staff to revise/update IRP	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of technical studies to support IRP revision or update completed	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of training modules completed to support technical capacity in Ministry of Science, Energy and Technology (MSET) to revise or update IRP	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Appropriate IT software for coordinating IRP purchased, installed and operating	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Diagnostic study completed on IT software required in MSET to support IRP coordination	Create Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	HEPA government facilities with Energy Efficiency equipment replaced, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Energy Efficiency light technology replaced, installed and operating in HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Communication activities completed to raise awareness on Energy Efficient management and maintenance in HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Energy Efficient manuals developed for management and maintenance of HEPA government facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Consultancy engineering and supervision services for retrofitting 30 Government of Jamaica facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Equipment necessary to upgrade the central control system purchased, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Equipment necessary to modernize and coordinate traffic signals purchased, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of packages of support training and capacity building in intelligent transportation system delivered	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of technical studies to support IRP revision or update completed	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of training modules completed to support technical capacity in Ministry of Science, Energy and Technology (MSET) to revise or update IRP	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Number of technical experts contracted to reinforce capacity and develop training plans within MSET to enable staff to revise/update IRP	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Diagnostic study completed on IT software required in MSET to support IRP coordination	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Appropriate IT software for coordinating IRP purchased, installed and operating	Modify Output	Output amended in accordance with updated Results Matrix	03/15/2018	03/15/2018
Output	Consultancy engineering and supervision services for retrofitting 30 Government of Jamaica facilities	Modify Output	Output amended in accordance with updated Results Matrix	03/16/2018	03/16/2018

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Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
Output	Diagnostic study completed on IT software required in MSET to support IRP coordination	Delete Output	Output deleted based on edits from PEU. This output is now a part of Output 3.1 (Number of Technical Studies)	03/16/2018	03/16/2018
Output	Number of technical studies (inclusive of IT software diagnostic study) to support IRP revision or update completed	Modify Output	Output re-worded due to merger of two outputs	03/16/2018	03/16/2018
Impact	Crude oil imports for refined petroleum products reduced	Create Impact Indicator	Indicator added to Impact	03/16/2018	03/16/2018
Impact	Crude oil imports for refined petroleum products reduced	Modify Impact Indicator	Means of verification edited.	03/16/2018	03/16/2018