

PMR Operational Report

Operation Number	ME-G1012	Chief of Operations Validation Date	03/29/19
Year- PMR Cycle	Second period Jan-Dec 2018	Division Chief Validation Date	04/01/19
Last Update	03/29/19	Country Representative Validation Date	04/26/19
PMR Validation Stage	Validated by Representative		

Basic Data

Operation Profile

Operation Name	GEF Program for the Implementation of Prioritized ESC Projects in Three Mexican Cities	Loan Number	GRT/FM-16409-ME
Executing Agency	BANCO NACIONAL DE OBRAS Y SERVICIOS PUBLICOS, S.N.C.	Sector/Subsector	EN-BIO - ENERGY-BIO-ENERGY
Team Leader	RIQUELME, RODRIGO	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Investment Grants	Country	MEXICO
Lending Instrument		Convergence related Operation(s)	
Borrower	ESTADOS UNIDOS MEXICANOS		

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
ME-G1012	13,761,468	13,761,468	0	0	13,761,468	13,761,468	0	0.00%	13,761,468
Aggregated	13,761,468	13,761,468	0	0	13,761,468	13,761,468	0	0.00%	13,761,468

Expense Categories by Loan Contract (cumulative values)

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RESULTS MATRIX

IMPACTS

No information available for this section

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RESULTS MATRIX

OUTCOMES

Outcome Nbr. 0: 1. Improve and increase the solid waste management and the generation of low-carbon energy to reduce greenhouse emissions in Xalapa

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
0.0	Tons of greenhouse gas emissions avoided associated to energy production by the biodigester plant in Xalapa	Tons of CO2eq/y	0.00	2017	P	0.00	0.00	0.00	0.00	0.00	1,792.00	1,792.00
					P(a)	0.00	0.00	0.00	0.00	0.00	1,792.00	1,792.00
					A	0.00	0.00					

Details

Means of verification: *Annual Average. The information will be provided by Banobras based on the reports delivered by the operator

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
0.1	Tons of municipal solid waste disposed at the sanitary landfill of Xalapa	ton/day	490.00	2017	P	0.00	0.00	0.00	0.00	0.00	430.00	430.00
					P(a)	0.00	0.00	0.00	0.00	0.00	430.00	430.00
					A	0.00	0.00					

Details

Means of verification: Operation log of incoming and outgoing solid waste conducted by operator and included in the Final Evaluation

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
0.2	Power production from low-carbon energy sources in Xalapa	MWh/year	0.00	2017	P	0.00	0.00	0.00	0.00	0.00	3,962.00	3,962.00
					P(a)	0.00	0.00	0.00	0.00	0.00	3,962.00	3,962.00
					A	0.00	0.00					

Details

Means of verification: Power: 452 KW. Operation log tracked by the meter and included in the Final Evaluatio

Pro-Gender	No	Pro-Ethnicity	No
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Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
0.3	Tons of compost produced by the biodigester in Xalapa	ton/day	0.00	2017	P	0.00	0.00	0.00	0.00	0.00	26.00	26.00
					P(a)	0.00	0.00	0.00	0.00	0.00	26.00	26.00
					A	0.00	0.00					

Details

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RESULTS MATRIX

OUTCOMES

Means of verification: Operation log of incoming and outgoing compost conducted by the operator, and included in the Final Evaluation

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

Outcome Nbr. 1: Increase the production of low carbon energy to reduce greenhouse gas emissions in La Paz

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
1.0	Tons of greenhouse gas emissions avoided through solar panels in La Paz	Tons of CO2eq/y	0.00	2017	P	0.00	0.00	1,692.00	1,684.00	0.00	0.00	1,589.00
					P(a)	0.00	0.00	1,692.00	1,684.00	0.00	0.00	1,589.00
					A	0.00	0.00					0.00

Details

Means of verification: *Annual Average during project lifetime taking into account public buildings from first phase. Semester Progress Report of overall production

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

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
1.1	Power production from low-carbon energy sources in La Paz	MWh/y	0.00	2017	P	0.00	0.00	1,959.00	1,949.00	0.00	0.00	1,840.00
					P(a)	0.00	0.00	1,959.00	1,949.00	0.00	0.00	1,840.00
					A	0.00	0.00					

Details

Means of verification: *Annual Average during project lifetime taking into account public buildings from first phase. Operational logs from meter readings aggregated over all PV plants

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

Outcome Nbr. 2: The municipality and stakeholders have the technical, environmental and economic information needed to make a decision on whether or not make the investment in Campeche

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
2.0	Technical, environmental and economic studies agreed and approved by the Municipality and stakeholders to build the Campeche infrastructure project	# of times	0.00	2017	P	0.00	0.00	0.00	0.00	0.00	1.00	1.00
					P(a)	0.00	0.00	0.00	0.00	0.00	1.00	1.00
					A	0.00	0.00					

Details

Means of verification: Report of the municipality approving the project

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

Outcome Nbr. 3: Improve and promote solid waste management –control and recovery of materials- in order to encourage the generation of low-carbon energy and the reduction of GHG emissions

Observation:

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OUTCOMES

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2022
3.0	Number of times that the pilot projects have served as a reference for other projects in the country	# of times	0.00	2017	P	0.00	0.00	0.00	0.00	0.00	2.00	2.00
					P(a)	0.00	0.00	0.00	0.00	0.00	2.00	2.00
					A	0.00	0.00					
Details												
Means of verification: The information will be provided by Banobras and included in the Final Evaluation												
Pro-Gender		No			Pro-Ethnicity		No					

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Biodigester for Xalapa's solid waste management system operating

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2018	EOP 2022	2018	EOP 2022
1.1	Final design of the biodigester plant in Xalapa finalized	study	P	0	1	0	200,000
			P(a)	0	1	0	200,000
			A	0	0	0	0
1.2	Biodigester for Xalapa's solid waste management system operating	Biodigester	P	0	1	0	3,390,547
			P(a)	0	1	0	3,390,547
			A	0	0	0	0
1.3	Preliminary works executed	works	P	0	1	0	3,390,546
			P(a)	0	1	0	3,390,546
			A	0	0	0	0
1.4	Biodigester and energy production plant in Xalapa built	Plant	P	0	1	0	200,000
			P(a)	0	1	0	200,000
			A	0	0	0	0

Component Nbr. 2 Solar photovoltaic capacity for self-supply in public buildings and schools in La Paz

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2018	EOP 2022	2018	EOP 2022
2.1	kW of generation capacity installed – low carbon sources in La Paz	KW	P	0	2,580	500,000	4,500,000
			P(a)	0	2,580	500,000	4,500,000
			A	0	0	0	0

Component Nbr. 3 Comprehensive program for the sanitation of the Bay of Campeche

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2018	EOP 2022	2018	EOP 2022
3.1	Detailed-design of the sanitation infrastructure in Campeche completed considering climate change adaptation measures	Study	P	0	1	0	1,000,000
			P(a)	0	1	0	1,000,000
			A	0	0	0	0

Component Nbr. 4 Institutional strengthening, dissemination and communication

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2018	EOP 2022	2018	EOP 2022
4.1	Biodigester and solar photovoltaic power plants seminars, conference, capacity building and lesson-learned activities conducted	Seminars, conference, activiti	P	0	3	0	30,000
			P(a)	0	3	0	30,000
			A	0	0	0	0
4.2	Biodigester, solar photovoltaic power plants, and sanitation technical training workshops in Xalapa, La Paz and Campeche conducted	Trainings	P	0	3	0	50,000
			P(a)	0	3	0	50,000
			A	0	0	0	0
4.3	Technical guidelines developed to replicate the biodigester technology	Document	P	0	1	0	50,000
			P(a)	0	1	0	50,000
			A	0	0	0	0
4.4	Performance assessment study of solar PV technologies in schools developed	Report	P	0	1	0	50,000
			P(a)	0	1	0	50,000
			A	0	0	0	0
4.5	Review paper with lessons learned from the experience on photovoltaic plants in public schools developed	Paper	P	0	1	0	50,000
			P(a)	0	1	0	50,000
			A	0	0	0	0

Other Cost

	Administración	P			127,075	635,375
		P(a)			127,075	635,375
		A			0	0
	Auditoria	P			15,000	75,000
		P(a)			15,000	75,000
		A			0	0
	Monitoreo	P			12,000	60,000
		P(a)			12,000	60,000
		A			0	0
	Evaluación Intermedia	P			0	30,000
		P(a)			0	30,000
		A			0	0
	Evaluación Final	P			0	50,000
		P(a)			0	50,000
		A			0	0

Total Cost

	Total Cost	P			654,075	13,761,468
		P(a)			654,075	13,761,468
		A			0	0

CHANGES TO THE MATRIX

No information available for this section

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IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories

Intra/Inter Coordination