

# PMR Public Report

Operation Number	PR-L1146	Chief of Operations Validation Date	10/07/22						
Year- PMR Cycle	First period Jan-Jun 2022	Division Chief Validation Date							
Last Update	10/05/22	Country Representative Validation Date							
PMR Validation Stage	Validated by Chief of Operations								
Basic Data									
Operation Profile									
Operation Name	Promoting Private Sector Investments in Energy Efficiency in the Industrial Sector in Paraguay	Loan Number	4568/GN-PR						
Executing Agency	AGENCIA FINANCIERA DE DESARROLLO	Sector/Subsector	FINANCIAL MARKETS-FINANCING FOR ENVIRONMENTAL SUSTAINABILITY						
Team Leader	DOMINGUEZ, JOAQUIN J.	Overall Stage	Signed/Pending Ratification						
Operation Type	Loan Operation	Country	Paraguay						
Lending Instrument	Investment Loan	Convergence related Operation(s)							
Borrower	AGENCIA FINANCIERA DE DESARROLLO								
Environmental and Social Safeguards									
Impacts Category	B13	Was/Were the objective(s) of this operation reformulated?	NO						
Safeguard Performance Rating		Date of approval							
Safeguard Performance Rating - Rationale									
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
PR-L1146	20,000,000	20,000,000	0	20,000,000	40,000,000	20,000,000	-	0.00%	20,000,000
Aggregated	20,000,000	20,000,000	0	20,000,000	40,000,000	20,000,000	-	0.00%	20,000,000
Expense Categories by Loan Contract (cumulative values)									

No Data Available

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. 0: Promote energy efficiency (EE) investments by MSMEs in Paraguay.

Observation: Measures the quantity of energy required to generate PGY 1 million of output in the industrial sector. Target was established considering the falling trend of this ratio since 2000, when it was over 0.50.

Indicator		Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2027	
0.0	Energy intensity in the industrial sector	toe/million PGY	0.38	2011	2026	P	.29
						A	-

Details

Means of Verification: : Official figures from the Base de Indicadores de Eficiencia Energética (BIIE) and the Balance Energetico Nacional

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. 0:** The general objective of the program is to promote energy efficiency (EE) investments by MSMEs in Paraguay, improving their productivity in the long-term. The specific objectives are: (i) to increase access to medium and long-term finance for EE investment projects by MSMEs; and (ii) to reduce greenhouse gas (GHG) emissions, supporting the achievement of the country's climate change goals

**Observation:** The programming of execution and its corresponding annual products and results consider local mandatory procedures that have an impact in the actual launch date of the program after the signing of the contract (expected in 2018). In particular, an approval by congress is required, which may take up to one year. For this reason, a Y0 is being included in the matrix, during which no reporting of products is expected.

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2019	2020	2021	2022	2023	EOP 2027
0.0	Micro, small and medium enterprises (MSME) that finance EE projects with funds from the program	Micro / small / medium enterprises (#)	0	2017	P	-	-	41	73	93	93	300
					A	-	-	-	-	-	-	-

Details

**Means of Verification:** Annual report on program execution by AFD.

**Observations:** Measures number of eligible EE projects implemented by MSMEs, aggregated for all technologies

**Evaluation Methodology:** -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Disaggregation		Climate-related investments (# MSMEs provided with)	P	-	-	41	73	93	93	300
			A	-	-	-	-	-	-	-

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2019	2020	2021	2022	2023	EOP 2027
0.1	Financing from third parties mobilized by the program	mlls US\$	0	2017	P	-	-	.6	1.1	1.4	1.4	4.5
					A	-	-	-	-	-	-	-

Details

**Means of Verification:** Includes all sources of financing (debt or equity) additional to program resources. Target estimate based on the average total investment required per project and a 90/10 debt to equity ratio. Real values will be monitored and validated with information provided by AFD in periodical reports, which will include detail on sources of financing per individual project.

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**Evaluation Methodology:** -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

0.2	Average maturity of sub-loans	Years	5	2017	P	-	-	-	-	-	-	8
					A	-	-	-	-	-	-	-

Details

**Means of Verification:** Annual report on program execution by AFD

**Observations:** Measures the length of the amortization period for the portfolio of sub projects financed in order to compare with alternative financing sources available (market average and/or AFD financing without program resources).

**Evaluation Methodology:** -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

	Indicator	Unit of Measure	Baseline	Baseline Year		2018	2019	2020	2021	2022	2023	EOP 2027
0.3	Annual energy savings from sub projects financed by the program (accumulated)	toe	0	2017	P	-	-	-	-	.01	.02	.03
					A	-	-	-	-	-	-	-

Details

**Means of Verification:** Source: Annual report on program execution by AFD.

**Observations:** y:2020: 0.001; Y: 2021: 0.004. Indicator shows accumulated annual savings from all beneficiary sub projects in the portfolio financed by the program. Final target was estimated based on an average consumption of beneficiary firms, and efficiency ratios of EE systems installedinstalled and includes accumulated savings of all projects financed. As sources may include electricity and firewood, energy measures (consumption and savings) are standardized by using tons of oil equivalent (toe) as unit. Energy savings = energy consumed by beneficiary firms \* [1 – (efficiency of system installed – efficiency of original system)]. Target value differs from Y5 value, as savings from those projects financed in Y5 can only be accounted for in Y6, which is not included in the matrix. A projection for projects financed in Y5 is added to the target.

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator								

**Means of Verification:** Annual report on program execution by AFD and conversion factor from internationally accepted GHG inventory guidelines.

**Observations:** Indicator is based on the accumulated CO2e emissions avoided by EE energy savings produced in sub projects financed. Final target was estimated based on envisaged EE savings Conversion factors from: (i) default emission factor for stationary combustion of wood/wood waste in manufacturing industries and construction from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (112,000 kg of CO2 per TJ); and (ii) Latin America's average conversion factor for electricity (0.188 kg CO2 per kWh) from the List of international emission conversion factors for electricity. . GHG emissions = energy consumption x CO2 emission factor. Target value differs from Y5 value, as savings from those projects financed in Y5 can only be accounted for in Y6, which is not included in the matrix. A projection for projects financed in Y5 is added to the target.

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Component I: increase access to medium and long-term finance for EE investment projects by MSMEs

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2027	2022	EOP 2027
1.01	Energy efficiency (EE) credit line used	Million US\$	P	9.7	40	5,100,000	40,000,000
			P (a)	-	-	-	-
			A	-	-	-	-
Total Cost							
	Total Cost		P	5,100,000	40,000,000		
			P (a)	0	0		
			A	0	0		

No information available for this section

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
2	Active		Natural Environment
	Response Actions		
	2.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy		
4	Active		Natural Environment		
	Response Actions				
	4.0	Management Strategy		Status	
		-			

Risk ID	Risk Status		Risk Taxonomy		
6	Active		Natural Environment		
	Response Actions				
	6.0	Management Strategy		Status	
		-			

Risk ID	Risk Status		Risk Taxonomy
8	Active		Economic and Financial Environment
	Response Actions		
	8.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
10	Active		Economic and Financial Environment
	Response Actions		
	10.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
12	Active		Political Environment
	Response Actions		
	12.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
14	Active		Social Environment
	Response Actions		
	14.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
16	Active		Social Environment
	Response Actions		
	16.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
18	Active		Political Environment
	Response Actions		
	18.0	Management Strategy	Status
		-	



IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Legal aspects and public processes