



Energy Efficiency in Public Facilities Project (PRESEMEH) (P149872)

LATIN AMERICA AND CARIBBEAN Mexico Energy & Extractives Global Practice IBRD/IDA Investment Project Financing FY 2016 Seq No: 14 ARCHIVED on 28-Jun-2023 ISR56387
Implementing Agencies: Secretaría de Energía (SENER), United Mexican States

Key Dates

Key Project Dates	
Bank Approval Date: 08-Mar-2016	Effectiveness Date: 23-Sep-2016
Planned Mid Term Review Date: 15-Jul-2019	Actual Mid-Term Review Date: 07-Oct-2019
Original Closing Date: 31-Oct-2021	Revised Closing Date: 28-Oct-2023

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
The objective of the project is to promote the efficient use of energy in the Borrower's municipalities by carrying out energy efficiency investments in selected municipal sectors and contribute to strengthening the enabling environment.
Has the Project Development Objective been changed since Board Approval of the Project Objective?
Yes
Board Approved Revised Project Development Objective (If project is formally restructured)
The objective is to promote the efficient use of energy in the Borrower's municipalities and other eligible public facilities by carrying out energy efficiency investments in selected public sectors and to contribute to strengthening the enabling environment.

Components Table

Name
Policy development and institutional strengthening:(Cost \$2.12 M)
Municipal energy efficiency investments:(Cost \$55.19 M)
Public Facility Energy Efficiency Investments:(Cost \$9.38 M)
Municipal Energy Efficiency Contingency Facility:(Cost \$6.08 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate



Implementation Status and Key Decisions

The Project has completed 11 municipal street lighting subprojects. Another 9 subprojects are under implementation, of which 2 have already finalized lighting installation, and another 4 are quite advanced and are expected to finalize by July 2023, while the last 3 are expected to start between June and July 2023 to finalize works by September 2023.

The Project is also implementing subprojects in hospitals: 16 facilities administered by IMSS[PG1] (*Instituto Mexicano de Seguro Social*, or Mexican Social Security Institute, in English) and 2 administered by the State of Tabasco. Solar photovoltaic (PV) systems are being installed in all 18 hospitals, while replacement of lighting systems is ongoing in 13 of them, and replacement of air conditioning have started in 6 of the 18 hospitals.

The energy efficiency investment subprojects already completed and those under implementation are expected to generate lifetime energy savings of 389,846 MWh and greenhouse gas emission reductions of 176,028 tCO₂/year, surpassing the project's target indicators of 290,000 MWh and 145,000 tCO₂ respectively.

The technical assistance (TA) activities under Component 1 and 3a (Policy development and institutional strengthening) are ongoing, and their progress is satisfactory. These activities are informing the update of national energy efficiency regulations for buildings (residential and commercial) and street lighting, identifying PRESEMEH lessons learned, and implementing an online course on energy efficiency in hospitals. The 4 TA activities are expected to be completed by August 2023.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	□ Moderate	□ Moderate	□ Moderate
Macroeconomic	□ Low	□ Low	□ Low
Sector Strategies and Policies	□ Low	□ Low	□ Low
Technical Design of Project or Program	□ Substantial	□ Moderate	□ Moderate
Institutional Capacity for Implementation and Sustainability	□ Moderate	□ Moderate	□ Moderate
Fiduciary	□ Substantial	□ Substantial	□ Moderate
Environment and Social	□ Low	□ Low	□ Low
Stakeholders	□ Low	□ Moderate	□ Moderate
Other	□ Moderate	□ Moderate	--
Overall	□ Substantial	□ Moderate	□ Moderate

Results

PDO Indicators by Objectives / Outcomes

Promote the efficient use of energy				
► Projected lifetime energy savings (Megawatt hour(MWh) (Megawatt hour(MWh), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	184,759.00	184,759.00	290,000.00



Date	31-Jul-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	<p>The following results reflect energy savings from 11 municipal street lighting subprojects already completed.</p> <p>Energy savings measures are being implemented in other 9 municipalities and 18 hospitals. All of them are expected to be completed by the project closing date, with their associated estimated energy savings that would allow to meet the end target.</p> <p>The installation works to replace street lighting are completed in Minantital and Nanchital municipalities; notwithstanding, municipal authorities are yet to sign the "final reception certification" ("acta final de recepción" in Spanish) to complete the administrative closure of both subprojects. So, these projects are not yet considered completed. As soon as municipalities sign certifications, this indicator value will increase to 192,622 MWh.</p>			

Promote the efficient use of energy				
► Number of ESAs signed (Number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	24.00	35.00	21.00
Date	31-Jul-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023

Promote the efficient use of energy				
► Projected Lifetime GHG emission reductions (tones/year) (Tons/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	87,919.00	87,919.00	145,000.00
Date	31-Jul-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	<p>GHG savings are derived from the energy savings attributable to the project' energy efficiency investments in municipal street lighting and hospitals and calculated using the national grid emissions factor.</p> <p>As soon as Minatitlan and Nanchital municipalities sign the final reception certification, this indicator value will increase to 91,245 tones/year.</p>			

Strengthening the enabling environment				
► Number of regulatory information tools designed to support the implementation of the national energy efficiency strategy (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	31-Jul-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	<p>The expected outputs under Component 1 will inform the update of 2 national energy efficiency norms in buildings and 1 national energy efficiency norm in street lighting by CONUEE. These norms will be three tools to scale-up energy efficiency at national level. The activities are expected to be completed by August 2023 and will enable meeting the target for this Results Indicator</p>			



Intermediate Results Indicators by Components

Policy development and institutional strengthening				
► Participants in engagement activities during project implementation (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	429.00	493.00	300.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
□ Participants in engagement activities during project implementation – female (Number) (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	95.00	97.00	100.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Municipal energy efficiency investments				
► Average of payment discipline per municipality (avoidance of default) (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	90.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
► Number of Street light interventions (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	11.00	11.00	14.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	<p>Street light interventions have been completed in the following 11 municipalities: Leon, Miguel Hidalgo, Huajapan de Leon, Oaxaca, Cozumel, Culiacan, Rio Grande, Los Pinos, Solidaridad and Xalapa, and Coatzacoalcas.</p> <p>Activity initiation agreements (CIA) have been signed with ten (10) other municipalities to implement energy efficient street lighting interventions (CIAs for Minatitlán, Nanchital, Mineral de la Reforma, Córdoba, Calkiní, Dzitbalché, and Hermosillo signed between February and April 2022; the CIA for San Pablo del Monte was signed in July 2022, and the CIAs for Papantla and Tuxpan were signed in September 2022).</p> <p>Of these 10 municipalities, the procurement process for Nanchital was already underway at the time of the mission and since the October 2022 mission the procurement processes are being launched (by the December 2022 deadline) for Minatitlan, Mineral de la Reforma, Calkini, Dzibalche and Hidalgo. FIDE is working on the energy audits and executive projects of the remaining four municipalities in the Project's Portfolio.</p> <p>Their procurement process would be launched under the Project only if the closing date of the Project is extended. With their implementation, the total number of street lighting interventions implemented under the PRESEMEH would reach 21.</p>			



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Public Facility Energy Efficiency Investments				
► Capacity building, outreach and training activities implemented (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10.00	10.00	12.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	Two more capacity building and dissemination activities will be implemented: (i) the on-line training course on energy efficiency in hospitals, which design and implementation is currently ongoing under Component 3a, and (ii) a workshop to be organized by SENER and CONUEE to disseminate findings and results of the three consultancies being currently implemented under Component 1 on national energy efficiency regulations (NOM-08, NOM-0.13 and NOM-020).			
► Number of Sub-projects designed (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	45.00	47.00	22.00
Date	01-Feb-2016	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	The end target for the results Indicator "Number of Sub-projects designed", i.e., completion of energy audits for individual sub-projects, has been already exceeded: 25 energy audits in municipalities and 22 energy audits in individual hospitals In addition, additional subprojects for municipalilties are expected to be designed in the next three months			
► Public Facility interventions (number) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1.00
Date	07-Feb-2018	22-Nov-2022	12-Jun-2023	28-Oct-2023
Comments:	The indicator refers to the administrative entity with which ESAs are signed for energy efficiency interventions in public facilities (i.e. hospitals)*. Under the Project, ESAs are being signed with IMSS and with the State of Tabasco, which will lead to energy efficiency interventions in their respective hospitals. The extension of the Closing Date will enable the completion of the hospitals (public facilities) interventions that are administered by IMSS and the State of Tabasco and will enable exceeding the Results Indicator target (2 is the expected result). *energy efficiency in public hospitals are a type of "public facility intervention"			

Overall Comments

Note: The number of subprojects designed, meaning energy audits carried out, is higher than the target because, in order to avoid potential restrictions derived from the COVID-19 pandemic, it was decided to have a bigger pipeline of investment-ready hospitals, which could go through procurement quickly if EE interventions in any other hospital were canceled (as it happened in the 6 hospitals of Tabasco in 2020-



2021). So the design of a higher number of sub-projects (i.e., the number of energy audits) was essentially a strategy to try to manage the hospital closure risks associated with the COVID pandemic.

Performance-Based Conditions

Data on Financial Performance

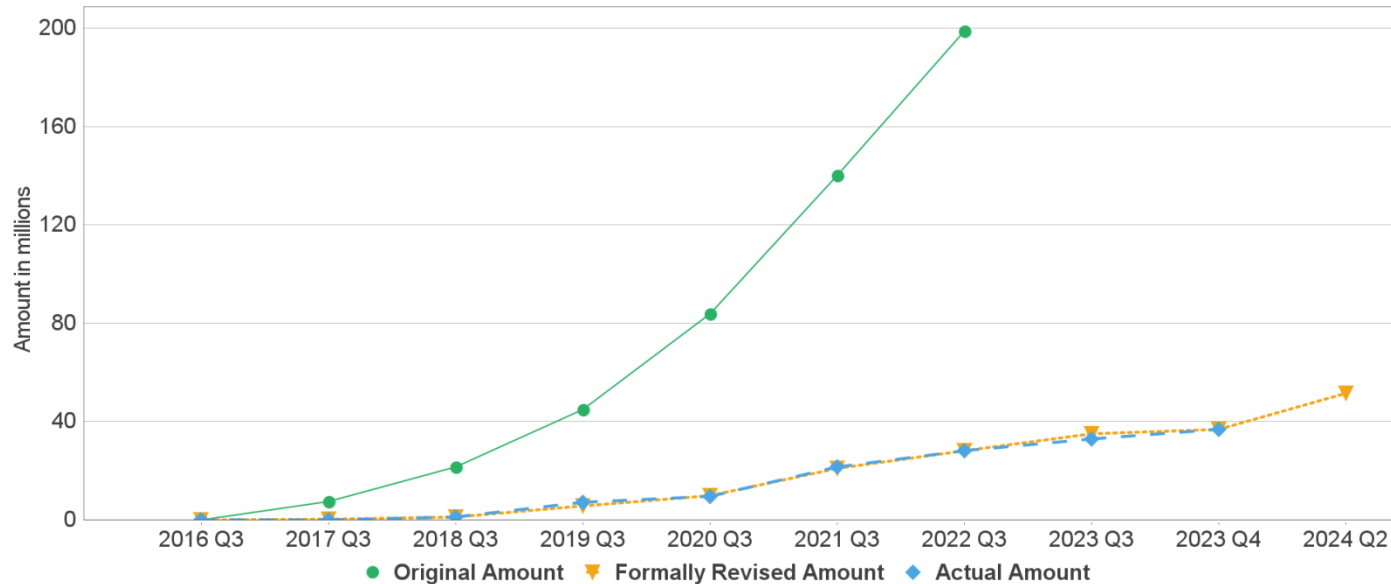
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed	
P149872	IBRD-85940	Effective	USD	100.00	43.30	56.70	29.78	13.52	<div><div></div></div>	69%
P149872	IBRD-88440	Effective	USD	50.00	6.70	43.30	1.50	5.20	<div><div></div></div>	22%
P160778	TF-A7062	Effective	USD	5.79	5.79	0.00	5.79	0.00	<div><div></div></div>	100%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P149872	IBRD-85940	Effective	08-Mar-2016	29-Jul-2016	23-Sep-2016	31-Oct-2021	28-Oct-2023
P149872	IBRD-88440	Effective	30-Mar-2018	10-Aug-2018	26-Oct-2018	31-Oct-2021	28-Oct-2023
P160778	TF-A7062	Effective	30-Mar-2018	10-Aug-2018	26-Oct-2018	31-Oct-2021	28-Oct-2023

Cumulative Disbursements



Restructuring History

Level 2 Approved on 18-Dec-2020 ,Level 2 Approved on 14-Oct-2021 ,Level 2 Approved on 26-Jan-2023

Related Project(s)

P160778-Additional Finance for Energy Efficiency in Public Facilities Project (PRESEMEH) ,P165585-Additional Financing for Energy Efficiency in Public Facilities Project (PRESEMEH)