



Report Number: ICRR0024078

1. Project Data

Project ID
P149872

Project Name
EE in Public Facilities -PRESEMEH

Country
Mexico

Practice Area(Lead)
Energy & Extractives

L/C/TF Number(s)
IBRD-85940,IBRD-88440

Closing Date (Original)
31-Oct-2021

Total Project Cost (USD)
51,864,601.61

Bank Approval Date
08-Mar-2016

Closing Date (Actual)
28-Oct-2023

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	100,000,000.00	0.00
Revised Commitment	100,000,000.00	0.00
Actual	46,074,601.61	0.00

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Project ID
P160778

Project Name
AF for EE in Public Facilities -PRESEMEH (P160778)

L/C/TF Number(s)
TF-A7062

Closing Date (Original)

Total Project Cost (USD)
5790000.00

Bank Approval Date

Closing Date (Actual)



30-Mar-2018

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	5,790,000.00
Revised Commitment	0.00	5,790,000.00
Actual	0.00	5,790,000.00

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of the project was **“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”** (Loan Agreement dated July 29, 2016, Schedule 1, page 7). The PDO statement in the PAD (para 17) was identical to that in the Loan Agreement. The Borrower was the United Mexican States (Loan Agreement dated July 29, 2016, page 1).

In 2018, the PDO was revised to read as: **“(i) 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 (ii) to contribute to strengthening the enabling environment”** (First Amendment to the Loan Agreement dated May 22, 2018, Schedule 1, page 6).

This ICR Review (ICRR) assesses the following original and revised objectives.

Objective 1. To promote the efficient use of energy in the Borrower’s municipalities by carrying out energy efficiency investments in Selected Municipal Sectors.

Objective 1 Revision 1. 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.

Objective 1 Revision 2. The objective statement remained the same as Objective 1 Revision 1, but the Theory of Change of the objective and the indicators were revised.

Objective 1 Revision 3. The objective statement remained the same as Objective 1 Revision 1, but the indicators were revised from Objective 1 Revision 2.

Objective 2. To contribute to strengthening the enabling environment.

Objective 2 Revision 1. The objective statement remained the same as Objective 2, but the indicators were revised.



Objective 2 Revision 2. The objective statement remained the same as Objective 2, but the Theory of Change of the objective and the indicators were revised from Objective 2 Revision 1.

Objective 2 Revision 3. Same as Objective 2 Revision 2.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

30-Mar-2018

c. Will a split evaluation be undertaken?

Yes

d. Components

The cost estimates of project components were based on the PAD (table 1, page 8) and the ICR (table 4.1, page 45). The actuals at closing in 2023 were based on the ICR (table 4.1, page 45). The appraisal estimates and the actual costs for the components excluded front-end fees.

Component 1: Policy Development and Institutional Strengthening (Original Estimate (2016): US\$7 million, Revised Estimate (2020): US\$2.12 million, Actual: US\$2.55 million)

This component aimed at strengthening the enabling environment for energy efficiency (EE) by financing the following activities:

- i. conducting municipal energy efficiency diagnostics to assess energy use and identify energy saving in priority areas; and providing capacity-building activities on EE at the municipal and national level;
- ii. conducting of sector-wide capacity-building activities; and
- iii. implementing the project as set forth in the project operational manual (POM).

The 2020 restructuring changed the sector-wide capacity-building activities from developing a framework to scale up EE investments in municipalities to developing three regulatory information tools to support the implementation of the national EE strategy.

Component 2: Municipal Energy Efficiency Investments (Original Estimate (2016): US\$148.75 million, First Revised Estimate (2018): US\$133.82 million, Second Revised Estimate (2020): US\$55.19 million, Actual: US\$53.30 million)

This component aimed at increasing EE investments in municipalities (i.e., street lighting, water and wastewater facilities, and municipal buildings) by financing the following activities:



- i. implementing municipal energy efficiency subprojects through procuring and installing EE appliances (e.g., street lighting fixtures, streetlight management and control systems, water pumps and motors, and air conditioning and photovoltaic systems in public buildings); and
- ii. preparing feasibility studies, including detailed energy audits and designs, and bidding documents, for the subprojects.
- iii. The 2020 restructuring dropped activities related to municipal buildings, while expanding the target municipalities to cover smaller municipalities in addition to the large ones (ICR, table 4.2, page 45).

The 2021 restructuring dropped activities related to water and wastewater management facilities (ICR, table 4.2, page 45).

Component 3: Public Facility Energy Efficiency Investments (Original Estimate (2018): US\$70.7 million, Revised Estimate (2020): US\$9.39 million, Actual: US\$9.79 million)

The 2018 restructuring added this component to the project with additional financing. This component aimed at strengthening the enabling environment for EE in public facilities (i.e., schools and hospitals) by financing the following activities:

- i. conducting capacity-building activities for EE at eligible public facilities; supporting the development of policy and of monitoring, reporting, and verification procedures; and providing targeted energy and science education mainly for girls.
- ii. implementing public facility energy efficiency subprojects through procuring and installing EE appliances; and preparing feasibility studies, structural safety assessment, and bidding documents for the subprojects.

The 2020 restructuring dropped activities related to schools.

The 2021 restructuring expanded the target hospitals to cover state-administered health facilities in addition to the health facilities under the Mexican Social Security Institute (IMSS: Instituto Mexicano del Seguro Social) (ICR, table 4.2, page 45).

Component 4: Municipal Energy Efficiency Contingency Facility (Original Estimate (2018): US\$5.79 million, Actual: US\$5.79 million)

The 2018 restructuring added this component to the project with additional financing. This component financed the capitalization of the Municipal Energy Efficiency Contingency Facility to partially cover the risk of default by eligible entities under their respective Energy Service Agreements.

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

Project Cost: At appraisal, the project was estimated to be US\$156.00 million (PAD, table 1, page 8). During implementation, the project cost estimate was increased to US\$217.98 million in 2018, and subsequently decreased to US\$73.15 million in 2020 (ICR, table 4.1, page 45). At project closing, the actual cost was US\$ 72.10 million (ICR, table 4.1, page 45). The difference of US\$1.05 million between the final



estimate and the actual cost was mainly caused by cancellations of sub-project investments due to delays in the procurement and administrative processes (ICR, footnote 65, page 45).

Financing: At appraisal, the project was planned to be financed through loans totaling US\$100.00 million from the International Bank for Reconstruction and Development (IBRD). In 2018, the total financing increased to US\$155.79 million with an additional financing of US\$50.00 million from IBRD to conduct energy efficiency investments in schools and hospitals and a grant of US\$5.79 million from the Global Environmental Fund (GEF) (ICR, table 4.1, page 45). In 2020, the total financing was decreased to US\$55.79 million due to cancellation of IBRD loan of US\$100.00 million (ICR, table 4.1, page 45). At project closing, the project disbursed a total of US\$51.84 million, consisting of US\$46.05 million from the IBRD loan (including the front-end fee of US\$0.375 million) and US\$5.79 million from the GEF grant (ICR, table 4.1 on page 45 and annex 3 on page 44). The undisbursed amount was cancelled (Meeting with the Task Team Leader (TTL) and the ICR author on May 31, 2024, hereafter, Task Team meeting).

Borrower Contribution: At appraisal, the borrowers' contribution was estimated to be US\$56.00 million (PAD Data Sheet). At project closing, the borrowers' contribution was US\$20.26 million (ICR, table 4.1, page 45).

Dates and Restructurings: The project was approved on March 8, 2016, and became effective on September 23, 2016. The Mid-Term Review was reported on October 7, 2019. The project closed on October 28, 2023, which was 24 months after the original closing date of October 31, 2021.

The project was restructured four times.

- **First restructuring (March 30, 2018):** The project received an additional financing of US\$55.79 million to implement new components 3 and 4, as described in sections 2.d. and e. In line with the additional financing, the project was restructured by: (i) revising the PDO to include other Eligible Public Facilities as participants of sub-projects (ICR, paras 11 and 21); (ii) revising the results framework through adding new indicators, increasing targets, and upgrading the indicator on projected lifetime greenhouse gas (GHG) emission reductions from an Intermediate Results indicator to a PDO indicator (ICR, paras 12 and 13); and (iii) assigning the Energy Savings Trust Fund (FIDE: Fideicomiso para el Ahorro de Energía Eléctrica) as the implementing agency for components 3 and 4 (ICR, para 19). The Project was renamed from Municipal Energy Efficiency Project (PRESEM: Proyecto de Eficiencia y Sustentabilidad Energética Municipal) to Energy Efficiency in Public Facilities Project (PRESEMEH) (Project Paper dated March 8, 2018).
- **Second restructuring (December 18, 2020):** The restructuring involved a partial loan cancellation of US\$100 million, due to (i) the COVID-19 pandemic that resulted in reallocation of the government resources to the health emergency response; and (ii) the 2018 national elections which brought in a new government with new priorities to address inequality and poverty through strengthened public institutions, as described in section 3. The restructuring affected the Theory of Change of (ToC) the PDO as the project shifted its focus from reducing energy consumptions in municipalities to reducing energy gaps in poorer municipalities by enhancing EE. The restructuring resulted in downsizing components 1, 2, and 3, dropping the EE interventions in schools and municipal buildings, and changing the target of the enabling environment from that for private entities to the government (ICR, para 26). Subsequently, the PDO indicators on energy savings, GHG reductions, and ESAs reduced targets, and the PDO indicator on the framework to scale up municipal energy efficiency (EE) changed its statement to measure the “number of regulatory tools designed to support the implementation of the national EE strategy” (ICR, para 26).



- **Third restructuring** (October 14, 2021): The restructuring extended the project closing date for 18 months to accommodate for implementation delays caused by (i) a prolonged transition followed by the national elections in 2018; (ii) the 2020/2021 restrictions on investments in hospitals and on the EE equipment market due to the COVID-19 pandemic; and (iii) municipal elections across the country in June 2021 (ICR, para 27). Additionally, the implementing responsibility of component 1 was transferred from the Secretary of Energy (SENER: Secretaría de Energía) to FIDE under SENER's supervision; because, the new government approved an austerity decree in 2020 which limited SENER's ability to perform several project activities including procurement (ICR, paras 19 and 65).
- **Fourth restructuring** (January 26, 2023): The restructuring extended the project closing date for six months to complete project activities.

Split Ratings: IEG concurs with the ICR (footnote 47, page 20) that split ratings are deemed necessary due to the substantial changes in the PDO, the project's ToC, and the project scope during restructurings.

3. Relevance of Objectives

Rationale

Country and Sector Context: At the time of project preparation, Mexico had been conducting structural reforms in the energy, telecommunications, and financial sectors and implementing a supporting competition policy (PAD, para 3). In line with the reform, Mexico passed the energy reform legislation (2013-2014), which aimed at increasing productivity, competition, and overall efficiency in the energy sector (PAD, para 6). The reform opened domestic energy markets to private sector participation, especially for exploration and production of hydrocarbons and electricity generation, to increase energy production and enhance energy security (PAD, para 6). The reform also sought to support the reduction of energy consumption through energy savings and efficiency initiatives. The National Energy Strategy (ENE: Estrategia Nacional de Energía, 2014-2028) included energy efficiency (EE) as a transformational priority area for reducing the country's vulnerability by decreasing electricity demand, thereby helping lower greenhouse gas (GHG) emissions in all sectors and government levels, including local governments (PAD, para 6). During project implementation which was followed by the 2018 election, the country and sector context drastically changed due to the change in political administration and the establishment of new government priorities. The priorities of the new government, which was described in the National Development Plan 2019-2024, included: addressing inequality, improving the well-being of the population (especially the poor), strengthening the role of the public sector in the economy, including the role of the country's large energy state-owned enterprises, and improving public finances (with austerity measures, elimination of corruption, reduced indebtedness, and fiscal discipline) (ICR, para 25 and footnote 16, page 11).

Relevance to Government Strategies: At appraisal, the original PDO was aligned with the energy reform legislation and the ENE, as well as Mexico's Intended Nationally Determined Contribution submitted to the United Nations Framework Convention on Climate Change (March, 2015) and the National Climate Change Strategy (ESNC: Estrategia Nacional de Cambio Climático) that defined a range of actions to achieve these goals, including a renewed focus on efficient energy use and the transition into the development of sustainable cities (PAD, paras 3, 4, and 6). At project closing, the revised PDO was in line with



Mexico's National Program for the Sustainable Use of Energy, derived from the National Development Plan (2019-2024), and for Mexico's climate strategy (ICR, para 30).

Relevance to the World Bank Assistance Strategies: At appraisal, the original PDO was aligned with Pillar I (Unleashing productivity) and Outcome 9 (Strengthened institutional framework to manage urban development and reduced GHG emissions) under Pillar IV (Promoting Green and Inclusive Growth) in the Country Partnership Strategy (CPS) (FY14-FY19) (CPS, annex 1.A, page 42). At project closing, the revised PDO was in line with Objective 6 (Provide more inclusive and sustainable infrastructure services) and Objective 7 (Support the government in reaching its climate change goals) under Focus Area C (Enabling sustainable infrastructure and climate action) in the Country Partnership Framework (CPF) (FY20-FY25) (CPF, annex 1, pages 39-41).

The World Bank's Previous Experience in the Sector: The World Bank had experience in the development of analytical tools and operational work in EE at the national and municipal levels in Mexico. The World Bank supported a study on Low-Carbon Development for Mexico (MEDEC: México: estudio sobre la disminución de emisiones de carbono, 2010), which contributed to developing several World Bank financed operations addressing EE, such as the MEDEC Low-Carbon Development Policy Lending Loan (P121800, FY2011) and the Efficient Lighting and Appliances Project (P106424 and P120654, FY2011). Moreover, the World Bank collaborated with Mexico's participation in the Partnership for Market Readiness which aimed to develop Nationally Appropriate Mitigation Action Plans on urban EE and refrigerator efficiency (PAD, para 14).

Overall, the project's original and revised objectives were aligned with the strategies of the government and the World Bank's assistance at appraisal and project closing, respectively. The project adapted to the change in government priorities and the COVID-19 pandemic by modifying the PDO statement and the project design to maintain the relevance of the PDO, particularly the first objective (i.e., to promote the efficient use of energy at the municipal level). On the other hand, the PDO formulation was general and vague about the definition of the enabling environment in the second objective (i.e., to contribute to strengthening the enabling environment). For instance, the second objective shifted its focus from the mobilization of private investment to the strengthening of the public utility due to the change in political administration; however, such notable change was not reflected in the PDO statement. Thus, the overall relevance of the objectives is rated substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To promote the efficient use of energy in the Borrower's municipalities by carrying out energy efficiency investments in Selected Municipal Sectors [Original Objective]



Rationale

Theory of Change (ToC): At appraisal, the definition of a ToC was not a requirement (ICR, para 75). The ICR (figure 1, page 7) presented a reconstructed ToC of the project based on the original and revised project designs. The ToC aggregated project activities and outputs by components, resulting in an unclear results chain leading towards outcomes and articulating how the ratings have been reached. Based on the project documents, this ICRR reconstructs the ToC of Objective 1 as follows.

The ToC postulated that activities such as signing Energy Services Agreements (ESAs) with municipalities to implement subprojects for EE in municipalities and public facilities, conducting detailed energy audits, developing subproject designs and bidding documentation, procuring and installing EE appliances would result in outputs such as target facilities equipped with EE appliances. The outputs were postulated to contribute to the outcome that EE appliances in facilities operated and maintained and the projected lifetime energy savings increased. In the long-term, the outcomes were postulated to contribute to the long-term outcome of the electricity demand and energy consumption decreased.

Critical assumptions included: (i) municipalities commit to the repayment of a portion of the EE investments; (ii) Mexico commits to the implementation of EE programs and strategies; (iii) the Secretary of Energy (SENER: Secretaría de Energía) and the Energy Savings Trust Fund (FIDE: Fideicomiso para el Ahorro de Energía Eléctrica) have ability to implement operations funded by the World Bank; (iv) public institutions commit to implement the operation; (v) government policy changes will not affect the critical assumptions. In addition, another potential critical assumption could have been: (vi) achievement of results of strengthening the enabling environment for EE investments (Objective 2) precede or parallel with progress towards achievement of this objective.

The ToC was mostly sound with simple and clear causal relationships among activities, outputs, and outcomes. On the other hand, the critical assumptions (v) and (vi) were not fulfilled, negatively affecting the achievement of the objective.

Outputs:

- 189,682 tones/year of projected lifetime GHG emission reductions were reported, **not meeting the original target of 463,405 tones/year.**
- 47 subprojects were designed (i.e., 47 energy audits were conducted), **exceeding the original target of 28.** This target was exceeded due to the high number of energy audits conducted for hospitals with an aim to prepare enough pipeline subprojects in case any EE interventions in hospitals were cancelled by potential restrictions derived from the COVID-19 pandemic (ICR, annex 1, page 36).
- 20 streetlight interventions were financed by the project, **exceeding the original target of 9.**
- No water and wastewater intervention was financed by the project, **not meeting the original target of 8.**
- No municipal building intervention was financed by the project, **not meeting the original target of 6.**

Outcomes:

- 427,147 megawatt hours (MWh) of projected lifetime energy savings were reported, **not meeting the original target of 1,020,714 MWh** (42 percent of the target).



- 36 Energy Services Agreements (ESAs) were signed, **exceeding the original target of 23** (157 percent of the target). Although this indicator was designed as a PDO indicator, it measured the number of agreements signed with municipalities to implement a subproject and participate in the revolving fund mechanism (PAD, annex 1, page 18 and ICR, para 75), which was an intermediate result at best.

The outcome target on the projected lifetime energy savings was modestly achieved. Additionally, considering the moderate achievement of outputs regarding EE interventions in municipalities financed by the project, it was unclear to what extent these subprojects contributed to the energy savings. Thus the overall achievement of Objective 1 is rated modest.

Rating
Modest

OBJECTIVE 1 REVISION 1

Revised Objective

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 [Objective after the 2018 Restructuring]

Revised Rationale

Theory of Change (ToC): The ToC remained the same as the one for Objective 1, except that the ToC included public facilities (i.e., schools and hospitals) as additional targets for EE interventions covered under Component 3 (Public Facility Energy Efficiency Investments) that was added during the 2018 restructuring.

Outputs:

- As outlined above, the numbers of subprojects designed and streetlight interventions financed **exceeded the first revised target of 44 and 16**, respectively. On the other hand, the number of municipal building intervention financed did **not meet the first revised target of 8**.
- Two public facility interventions were financed by the project, **not meeting the original target set at the 2018 restructuring of 8**. This indicator was added to measure results of the new Component 3. According to the Project Paper dated March 6, 2018 (page 29), this indicator was supposed to measure how many subprojects (stand-alone or bundled) in public schools and hospitals were financed by the project. On the other hand, at project closing, the indicator measured how many institutions participated in the project, which was two institutions: the Mexican Social Security Institute (IMSS: Instituto Mexicano del Seguro Social) and the State of Tabasco (ICR, annex 1, page 37). In line with the original indicator definition, the project financed EE interventions in 17 hospitals, according to the Borrower's report (ICR, annex 6, table 6.1, page 53).

Outcomes:

- As outlined above, the projected lifetime energy savings did **not meet the first revised target of 1,735,000 MWh** (25 percent of the target); the number of ESAs signed **almost met the first revised target of 40** (90 percent of the target); and the projected lifetime GHG emission reductions did **not**



meet the first revised target of 810,000 tones/year (23 percent of the target). During the 2018 restructuring, this indicator on GHG emission reductions was upgraded from an Intermediate Results indicator to a PDO indicator with the increased target.

The projected results on the energy savings and GHG emission reductions over the lifetime of EE appliances were negligible compared to the upwardly revised outcome targets. Overall, the achievement of Objective 1 Revision 1 is rated negligible.

Revised Rating

Negligible

OBJECTIVE 1 REVISION 2

Revised Objective

The objective statement remained the same as Objective 1 Revision 1, but the Theory of Change of the objective and the indicators were revised. [Objective after the 2020 Restructuring]

Revised Rationale

Theory of Change (ToC): Based on the project documents, this ICRR reconstructs the ToC of Objective 1 Revision 2 as follows.

The ToC of the objective was revised due to the COVID-19 pandemic and the shifts in the government's priorities, as described in sections 2.e. and 3. The target facilities for EE interventions under subprojects were changed as follows: (i) municipal buildings were dropped; (ii) schools were dropped; and (iii) smaller municipalities became eligible, in addition to the large municipalities already eligible, based on the revised eligibility criteria that included poverty, security, and/or climate zones criteria (ICR, para 21 and table 4.2, annex 4, page 45). The original and revised outputs were postulated to contribute to the outcomes such as the projected energy savings and GHG emissions decreased and the deficits in energy services in municipalities reduced.

Critical assumptions are the same as those for the ToC of Objective 1.

Outputs:

- The Intermediate Results indicator on the number of municipal building interventions was dropped because this type of subprojects was cancelled due to issues related to lengthy procedures to obtain permits to perform work in historic buildings (ICR, table 8.2, page 60).
- As outlined above, the number of public facility interventions financed **exceeded the first revised target of 1**.

Outcomes:

- As outlined above, the projected lifetime energy savings **largely achieved the second revised target of 603,504 MWh** (71 percent of the target). The EE interventions achieved the minimum requirement of at least 20 percent energy savings from the baseline scenario (ICR, para 43). The number of ESAs signed **exceeded the second revised target of 21** (171 percent of the target). On the other hand, the



projected lifetime GHG emission reductions did **not meet the second revised target of 306,122 tones/year** (62 percent of the target).

In addition to the outcomes defined in the Results Framework, the project task team reported on the following achieved outcome which did not have any formal target.

- The energy services (e.g., lighting) were expanded in terms of lighting coverage in the streets and hospitals that did not have energy services at the level of national norms (ICR, paras 43 and 44).

The downwardly revised outcome targets were largely achieved. The coverage and quality of lighting were expanded in the streets and hospitals with energy gaps. Overall, the achievement of Objective 1 Revision 2 is rated substantial.

Revised Rating

Substantial

OBJECTIVE 1 REVISION 3

Revised Objective

The objective statement remained the same as Objective 1 Revision 1 but indicators were revised from Objective 1 Revision 2. [Objective after the 2021 Restructuring]

Revised Rationale

Theory of Change (ToC): The ToC remained the same as the one for Objective 1 Revision 2, except for the water and wastewater facilities were dropped from the target facilities for EE interventions (ICR, table 4.2, annex 4, page 45).

Outputs:

- The Intermediate Results indicator on the number of water and wastewater interventions was dropped because this type of subproject was cancelled due to challenges at entry conditions (ICR, table 8.2, page 60).

Outcomes:

- As outlined above, the projected lifetime energy savings and the projected lifetime GHG emission reductions **exceeded the third revised target of 290,000 MWh** (147 percent of the target) and **the third revised target of 145,000 tones/year** (131 percent of the target), respectively.

The further diminished outcome targets were exceeded. On the other hand, no additional evidence on the achievement of outcomes was provided compared to the achievement of Objective 1 Revision 2. Overall, the achievement of Objective 1 Revision 3 is rated high but with moderate shortcomings.

Revised Rating



High

OBJECTIVE 2

Objective

To contribute to strengthening the enabling environment [Original Objective]

Rationale

Theory of Change (ToC): Based on the project documents, this ICRR reconstructs the ToC of Objective 2 as follows.

The ToC of Objective 2 postulates strengthening the enabling environment for EE interventions in the following three aspects: policy framework, financial sustainability, and capacity building on EE. On the **policy framework** activities include developing procurement methodologies for performance-based contracting and designing energy management systems (EnMS) to facilitate the incorporation of EE into municipal planning consideration would result in outputs such as a development of the sector-wide framework to scale up municipal EE. Outputs were to contribute to the outcome of the framework accepted by the Secretary of Energy (SENER: Secretaría de Energía).

Regarding the **financial sustainability** aspect, the ToC includes activities such as operationalizing revolving EE financing schemes based on ESAs would result in outputs such as a low default rate of municipalities to repay their shares of loans. Regarding the aspect of **capacity building on EE**, the ToC suggests that activities such as providing technical and administrative staff with training to operate and maintain the new investments and raising awareness on the EE benefits would result in outputs such as institutional capacities to operate and maintain EE investments strengthened. Those outputs were to contribute to the outcome that the financial and operational mechanism piloted to support a market solution for national-scale deployment of EE interventions. In the long-term, the outcomes were to contribute to the long-term outcome of the electricity demand and energy consumption decreased.

Critical assumptions are the same as those for the ToC of Objective 1.

The ToC was largely sound. The statement of the objective was vague regarding what aspects of the enabling environment the project aimed to strengthen, but the descriptions of the project activities in the project documents provided supplemental information for the links among outputs and outcomes.

Outputs:

- Zero designs of energy management systems (EnMS) for street lighting, water and wastewater, and municipal buildings was completed, **not meeting the original target of 3**.
- Default rate of municipalities (i.e., average rate of non-payment over total outstanding loan balance) was 0 percent, **exceeding the original target of 10 percent**. At project closing, the target for the municipalities' payment discipline (avoidance of default) was expected to result in a 100 percent payment discipline by municipalities and health facilities (ICR, para 41). Out of the US\$16.8 million expected to be repaid by the beneficiaries via the ESAs, 37.8 percent was repaid, and the remaining 62.2 percent was expected to be repaid within the next five years, as stipulated under the schedule of the respective ESAs (ICR, par 41).
- 13 capacity-building and outreach activities were implemented, **not meeting the original target of 25**.



- 692 participants participated in consultation activities during project implementation, **not meeting the original target of 1,000.**
 - 16 percent of the participants in consultation activities during project implementation were female (i.e., 114 participants), decreasing from the baseline of 25 percent and **not meeting the original target of 40 percent.**

Outcomes:

- A framework to scale up municipal EE in the country was not accepted by the Secretary of Energy (SENER: Secretaría de Energía), **not meeting the original target.** The framework was to include relevant procurement methodologies for performance-based contracting and studies to refine the financial and operational mechanism to support a market solution for national-scale deployment (PAD, annex 2, page 21).

The outcome of strengthening the enabling environment to support a market solution for national-scale deployment of EE interventions was not achieved. Overall, the achievement of Objective 2 is rated negligible.

Rating

Negligible

OBJECTIVE 2 REVISION 1

Revised Objective

The objective statement remained the same as Objective 2 but the indicators were revised. [Objective after the 2018 Restructuring]

Revised Rationale

Theory of Change (ToC): The ToC remained the same as the one for Objective 2, except for additional activities to strengthen the municipalities' financial sustainability aspect in the enabling environment. The ToC included activities to establish the Municipal EE Contingency Facility (Component 4) to partially cover the risk of default by eligible municipalities under their respective ESAs.

Outputs:

- As outlined above, the number of capacity-building and outreach activities implemented did **not meet the first revised target of 30.**

Outcomes: Same as the one in Objective 2.

The achievements of the outcome and the upwardly revised output target were negligible. Overall, the achievement of Objective 2 Revision 1 is rated negligible.

Revised Rating



Negligible

OBJECTIVE 2 REVISION 2

Revised Objective

The objective statement remained the same as Objective 2, but the Theory of Change of the objective and the indicators were revised from Objective 2 Revision 1. [Objective after the 2020 Restructuring]

Revised Rationale

Theory of Change (ToC): Based on the project documents, this ICRR reconstructs the ToC of Objective 2 Revision 2 as follows.

The ToC of the objective was revised due to the COVID-19 pandemic and the shifts in the government's priorities, as described in sections 2.e. and 3. Regarding the **policy framework** aspect, the municipality EE scale-up framework was replaced with the regulatory information tools for the national EE strategy, which put an emphasis on supporting public utilities. Regarding the **financial sustainability** aspect, the activities related to performance-based contracts were dropped. The results chain for the **capacity building on EE** aspect remained the same as that under Objective 2. The original and revised outputs were to contribute to the outcome that the enabling environment would be enhanced to strengthen the role of the public institutions in the EE sector.

Critical assumptions are the same as those for the ToC of Objective 1.

The ToC reduced its scope due to the restructuring as the key outcome was changed from the establishment of the municipality EE scale-up framework for the sector-wide reform to the development of three tools to inform updates of three separate national EE norms. In addition, no information was provided by the ICR regarding how and to what extent the output of the updated national EE norms for residential and commercial buildings contribute towards the outcome of the promotion of EE in municipal and public facilities.

Outputs:

- Average of payment discipline per municipality (percentage, avoidance of default) was 100 percent, **exceeding the first revised target of 90 percent**. During the 2020 restructuring, the indicator was revised from measuring the non-payment to measuring the payment discipline (ICR, table 8.2, page 60).
- As outlined above, the number of capacity-building and outreach activities implemented **exceeded the second revised target of 12**.
- 692 participants participated in engagement activities during project implementation, **exceeding the first revised target of 300**. During the 2020 restructuring, this indicator was revised from the number of participants in "consultation activities" to that in "engagement activities" to better reflect the type of interventions that could be delivered (ICR, table 8.2, page 61).
 - 114 female participants participated in engagement activities during project implementation, **exceeding the first revised target of 100 participants**. The unit of this indicator was revised from "percentage" to "number" during the 2020 restructuring.

Outcomes:



- The PDO indicator on the number of frameworks accepted by the Secretary of Energy (SENER: Secretaría de Energía) to scale up municipal EE in the country was dropped. This was because the government's focus on the enabling environment changed from the policy advice and setting the basis for scaling up the project to contributing to updating, strengthening, and tailoring three key energy efficiency norms (ICR, table 8.2, page 60).
- Three regulatory information tools were designed to support the implementation of the national energy efficiency strategy, **meeting the target set at the 2020 restructuring of 3 regulatory information tools**. This PDO indicator was added during the 2020 restructuring to replace the dropped PDO indicator above; however, this indicator measured an intermediate result at best without measuring to what extent the tools were used to support the implementation of the national EE strategy.

In addition to the outcomes defined in the Results Framework, the project task team reported on the following achieved outcome which did not have any formal target.

- The three regulatory information tools informed the government to update three national EE norms, namely, (i) NOM-013-ENER-2013 related to EE in street lighting, (ii) NOM-020-ENER-2011 related to EE in residential buildings, and (iii) NOM-008-ENER-2001 related to EE in commercial buildings (ICR, para 37). At project closing, the updated EE norms were to be approved with a stipulation by the Quality Infrastructure Law (LIC: Ley de Infraestructura de la Calidad, published in the Federal Official Gazette on July 1, 2020) (ICR, footnote 30, page 15). After implementation, the updated norms were expected to contribute to electricity savings of 1,790 GWh and GHG reductions of 782,160 tCO₂ per year (ICR, para 37).

The revised outcome of the utilization of the regulatory information tools was achieved. It is plausible that the updated national EE norms would be approved in the future to contribute to the energy savings. Additionally, referring to the ToC, the outcome of enhancing the enabling environment to strengthen the role of the public institutions in the EE sector was substantially achieved. Overall, the achievement of Objective 2 Revision 2 was substantial.

Revised Rating
Substantial

OBJECTIVE 2 REVISION 3

Revised Objective

Same as Objective 2 Revision 2. [Objective after the 2021 Restructuring]

Revised Rationale

Same as Objective 2.

Revised Rating
Substantial



OVERALL EFFICACY

Rationale

Objective 1 is rated modest. Objective 2 is rated negligible. Overall, the efficacy of the original objective is rated modest due to low achievement.

Overall Efficacy Rating

Modest

Primary Reason

Low achievement

OVERALL EFFICACY REVISION 1

Overall Efficacy Revision 1 Rationale

The achievements of the first revisions of Objectives 1 and 2 are rated negligible. Overall, the efficacy of the first revised objectives is rated negligible due to low achievement.

Overall Efficacy Revision 1 Rating

Negligible

Primary Reason

Low achievement

OVERALL EFFICACY REVISION 2

Overall Efficacy Revision 2 Rationale

The achievements of the second revisions of Objectives 1 and 2 are rated substantial. Overall, the efficacy of the second revised objectives is rated substantial.

Overall Efficacy Revision 2 Rating

Substantial

OVERALL EFFICACY REVISION 3

Overall Efficacy Revision 3 Rationale

The achievement of Objective 1 Revision 3 is rated high but with moderate shortcomings. The achievement of Objective 2 Revision 3 is rated substantial. Overall, the efficacy of the third revised objectives is rated substantial.

Overall Efficacy Revision 3 Rating

Substantial



5. Efficiency

Economic and Financial Analysis: The project documents (e.g., PAD, Project Paper, Restructuring Papers, and ICR) presented the Economic Internal Rate of Return (EIRR), the Financial Internal Rate of Return (FIRR) with direct support, and/or the FIRR without direct support for the whole project and/or each subproject type at different time of the project implementation.

This ICR Review assesses changes in the EIRRs. At appraisal, the PAD (table 2, page 13) presented EIRRs for three subproject types: 8 percent for street lighting subprojects, 57 percent for municipal buildings subprojects, and 64 percent for water utility subprojects. The EIRR of the project was 43 percent. The economic and financial analysis focused on Component 2, which accounts for 94 percent of the IBRD loan (PAD, para 38). The discount rate for the EIRR was 4 percent for street lighting subprojects and 6 percent for municipal buildings and water utility subprojects (PAD, annex 7, pages 58-67).

At the time of restructuring and additional financing in 2018, the project paper (table 3, page 18) presented EIRRs for five subproject types, which included two additional subproject types (i.e., schools and hospitals): 8 percent for street lighting subprojects, 8 percent for municipal buildings subprojects, 18 percent for water utility subprojects, 10 percent for school subprojects, and 13 percent for hospital subprojects. The project's EIRR was expected to be 11 percent with the Economic Net Present Value (ENPV) of US\$ 41.34 million (ICR, table 4, page 19). The economic and financial analyses consider Components 2 and subcomponent 3(b), which accounted for 93 percent of IBRD financing (Project Paper, para 26).

At project closing, the ICR (table 5.3, annex 5, page 51) presented EIRRs for two subproject types based on actual results: 19 percent for street lighting subprojects and 20 percent for hospital subprojects. The project's EIRR was 19 percent with the ENPV of US\$ 54.08 million (ICR, table 4, page 19). The percentage of total project cost for which the EIRR was calculated was not provided by the ICR, but the project's task team explained that the calculation was based on the investment portion of the project expenditure.

While the whole project's EIRR decreased from the ex-ante rate of 43 percent to the ex-post rate of 19 percent, the EIRRs of subprojects on street lighting and hospitals increased from the ex-ante rates of 8 percent and 13 percent to the ex-post rates of 19 percent and 20 percent, respectively. For the street lighting subprojects, the key factors of the improvement in the EIRR included the lower costs and longer lifetimes of procured and installed equipment observed during implementation (ICR, para 10, annex 5, page 49).

Implementation and Administrative Efficiency: The project extended the project duration for 24 months, and the project's actual disbursement of US\$ 51.84 million was approximately half of the originally approved World Bank financing of US\$ 100.00 million (ICR, datasheet, page 2). The project had a slow pace of disbursement in the early years of implementation, due to (i) the complexity of the project and its organizational arrangements that required establishing a new implementation model in multiple institutions at different levels of government and (ii) the prolonged government transition period following the 2018 national elections (ICR, para 61). Additionally, the procurement processes were delayed due to the absence of a procurement specialist from 2017 to 2020 (ICR, paras 64 and 85). Moreover, at the municipal level, the implementation efficiency was negatively affected by: (i) the misalignment among the project's timeline and the municipalities' electoral calendars, which caused difficulties for some municipal leaders to commit expenditures for the benefits (and repayments) that would fall on a subsequent administration; and (ii) the bureaucratic process and time to obtain the necessary information and approvals from municipalities to sign the ESAs that could take from a few months up to a year (ICR, paras 66 and 68).



Although the project’s EIRR decreased from appraisal to project closing, the substantial changes in the project components and allocations during implementation meant these rates were not directly comparable to each other. In fact, the EIRRs of two types of subprojects that were implemented (i.e., street lighting and hospitals) increased from the ex-ante rate to the ex-post rate due to the lower costs and the higher qualities of the procured equipment. On the other hand, the implementation and administrative efficiency was negatively affected by the complexity of the project design and the political and governance factors at the national and municipal levels. Overall, with moderate shortcomings, the efficiency is rated substantial.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	43.00	94.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	19.00	0 <input checked="" type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Table 1. Overall Outcome Ratings.

Rating Dimension	Objective before Restructuring	Objective after the 2018 Restructuring	Objective after the 2020 Restructuring	Objective after the 2021 Restructuring
Relevance of Objectives	Substantial			
Efficacy				
Objective 1	Modest	Negligible	Substantial	High
Objective 2	Negligible	Negligible	Substantial	Substantial
Overall Efficacy	Modest	Negligible	Substantial	Substantial
Efficiency	Substantial			
Outcome Rating	Moderately Unsatisfactory	Unsatisfactory	Satisfactory	Satisfactory
Outcome Rating Value	3	2	5	5
Amount Disbursed (US\$ million)*	1.03	13.77	6.05	30.99
Disbursement (%)	2	27	12	60



Weight Value	0.06	0.53	0.58	2.99
Total weights	4			
	(0.06 + 0.53 + 0.58 + 2.99 = 4.16, rounding down to 4)			
Overall Outcome Rating	Moderately Satisfactory			

* The amount disbursed for each period is based on the datasheet in the ICR (page 3).

a. Outcome Rating
Moderately Satisfactory

7. Risk to Development Outcome

Government Ownership Risk. There is a potential risk that an adoption of the three EE norms to support the national EE strategy might be delayed as the actual decision to adopt the norms would follow a preestablished process outlined in the Quality Infrastructure Law (ICR, para 93). To mitigate the risk, the project collaborated closely with the National Commission for the Efficient Use of Energy (CONUEE: Comisión Nacional para el Uso Eficiente de la Energía) and provided the technical studies to update the norms to be feasible to implement, aligned with Mexico’s needs, and instrumental in increasing the country’s EE performance to achieve its emissions reductions targets (ICR, para 93). In addition, SENER continued working with CONUEE after the project closing, defining an action plan for the approval of the norms (ICR, para 93).

Financial Risk. There is a potential risk that operation and maintenance (O&M) of the investments might be affected by budget allocations (ICR, para 94). Beneficiary institutions could face challenges in the event of having to replace investments not covered under the warranty, due to (i) budget constraints and costs higher than prices they were used/allowed to pay; and/or (ii) limited knowledge of technical specifications and market availability at the local level (ICR, para 94). To mitigate the risk, the Energy Savings Trust Fund (FIDE: Fideicomiso para el Ahorro de Energía Eléctrica) provided asset managers of each sub-project with (i) O&M capacity building, (ii) information on the warranty, and (iii) some additional lights adapted to each system in the event of a needed replacement (ICR, para 94). FIDE also made a commitment to remain engaged with each sub-project until the end of the repayment period (ICR, para 94). Moreover, the streetlighting subprojects were envisaged to continue receiving the necessary support and funding to operate satisfactorily given their popularity among the communities (ICR, para 96). Furthermore, the Mexican Social Security Institute (IMSS: Instituto Mexicano del Seguro Social) informed the World Bank that it was integrating the project-supported investments in its O&M strategy (ICR, para 96).

8. Assessment of Bank Performance

a. Quality-at-Entry



The strategic relevance was adequate, as described in section 3. The project's approach to operationalize the new EE revolving fund mechanism was appropriately designed, as the financing mechanism was found to be critical to enable the capacity to deliver subprojects (ICR, para 70). Technical aspects were adequately designed, building upon prior interventions including the technical assistance (TA) engagements. For instance, the first completed municipal EE subproject, a street lighting investment in León, was based on an earlier TA engagement and served as the showcase project, providing evidence of the benefits, and thus encouraging other municipalities to participate in this project (ICR, para 86). On the other hand, the M&E arrangements were average, as described in section 9. The risk assessment underestimated the risks related to the political and governance challenges and the changing market conditions (ICR, para 88). Moreover, the objectives and targets were overoptimistic in terms of the magnitude of influence the project could have in improving the private sector market for EE (ICR, para 89). This shortcoming in the project design, combined with the changes in the government priorities, resulted in substantial changes in the scope of the second objective in the PDO (i.e., enabling environment) and the activities under component 1, as described in sections 2-4. Overall, the quality at entry is rated moderately satisfactory due to moderate shortcomings at the project preparation and appraisal stages.

Quality-at-Entry Rating Moderately Satisfactory

b. Quality of supervision

Supervision of fiduciary and safeguard aspects was adequate in general, as described in section 10. The World Bank ensured adequate transition arrangements after project closing, which led to the government's decision to continue using the sustainable financing mechanism established by the project to prepare six new street lighting subprojects to install 10,300 new light points which are expected to generate additional energy savings (35,844 MWh) and emission reductions (15,700 tCO₂) (ICR, para 42). The client, as well as the sub-national entities that participated in the project, expressed their interest in exploring a continuation of the project, signaling their satisfaction with the project's performance (ICR, para 35). On the other hand, the focus on development impact was only partially adequate. Although the project proactively adapted to the changing implementation conditions and revised the project designs through four restructurings, the revisions were mainly driven by excessive focus on the achievement of indicator targets in the Results Framework rather than refining the indicators to better capture the intended outcomes. This resulted in setting unrealistically high targets during the 2018 restructuring that were downscaled several times through the other restructurings. Additionally, the shortcomings in the M&E arrangements were not adequately addressed during implementation, as described in section 9. Moreover, the World Bank's supervision support was not seamless. The client noted that four turnovers of the TTLs during implementation caused disruptions to implement this highly-complex project in terms of client engagement and responsiveness (ICR, para 73). Overall, the quality of supervision is rated moderately satisfactory due to moderate shortcomings in the proactive identification of opportunities and resolution of threats.

The overall performance of the World Bank is rated moderately satisfactory, based on the moderately satisfactory ratings for the quality at entry and the quality of supervision.



Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The Theories of Change (ToC) that were described or visualized in the PAD and the ICR were mostly sound and reflected in the Results Framework; however, the reconstructed ToC of the project (ICR, figure 1, page 7) combined the original and revised project designs and aggregated project inputs and outputs, resulting in unclear results chains, as mentioned in section 4. The first objective in the PDO was clearly specified, though the second objective was vague about its target and scope, as described in section 3. The M&E design and arrangements were embedded institutionally. The indicators encompassed most of the outcomes and intermediate results. On the other hand, the methodologies to measure expected performance of energy savings and GHG emission reduction were not adequate, as the calculations relied on many estimates and assumptions, which were supposed to but not fully refined by the detailed energy audits during implementation (ICR, para 89). In addition, the Results Framework missed an opportunity to include an indicator to measure results regarding essential investments in enabling infrastructure and enhancing the level and quality of service (to meet national norms and address instances of suppressed demand), as mentioned in the ICR (para 76).

b. M&E Implementation

The Results Framework was proactively revised to be in line with the changes introduced to the project design through restructurings. For instance, the indicator on the projected lifetime GHG emission reductions was reclassified from an Intermediate Results (IR) indicator to a PDO indicator, as per objective of the GEF grant added in the 2018 restructuring (ICR, para 77). In addition, during the 2020 restructuring, the PDO indicator for the second objective in the PDO was revised, as the approach to contribute to improving the enabling environment evolved and the original indicator was not deemed relevant anymore (ICR, para 77). The indicators included in the Results Framework were sufficiently measured and reported, as required by the loan agreements (ICR, para 78). The shortcomings in the M&E design (mentioned in section 9.a.) were partially addressed during implementation, as these issues remained at project closing. Moreover, M&E data collection for the indicator on the number of public facility interventions were financed by the project was not fully aligned with the original definition of the indicator, as described in section 4.

c. M&E Utilization

The collected data and information through the Results Framework were used to calibrate the project restructurings and day-to-day decisions to overcome implementation challenges (ICR, para 78). The M&E findings were communicated to the teams on the ground, and their feedback regarding progress toward outputs and outcomes was crucial to processing project restructurings and updating the targets,



particularly those that were adjusted with the approval of the additional financing and the subsequent cancellation of funds (ICR, para 78). The M&E data and findings were likely to inform subsequent interventions planned by the government. On the other hand, the Results Framework did not provide evidence of achievement of the outcome on the expansion in coverage of quality energy services, as described in section 4. The ICR provided the qualitative data to supplement the data; nevertheless, adding a methodologically sound indicator in the Results Framework through a restructuring when the need for such indicator became apparent could have provided better evidence on achievements of the outcome.

The M&E design had some shortcomings that were partially addressed during implementation, limiting full utilization of the M&E data. On the other hand, the additional data provided in the ICR complemented some of the shortcomings. Overall, the M&E quality is rated substantial.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

Environmental and Social Safeguards: At appraisal, the project was defined as environmental risk Category B, and triggered the safeguard policies of Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11), and Projects on International Waterways (OP/BP 7.50) (ICR, para 79). As a result of the assessment, an Environmental and Social Management Framework (ESMF) was prepared and disclosed in the country and on the World Bank's external website on September 4, 2015, after consultation with key stakeholders (ICR, para 79). The ESMF included the criteria to implement the other safeguard policies triggered. Regarding the Projects on International Waterways (OP/BP 7.50), an exception was granted, as the project would not finance any works or activities that would exceed the original scheme or change its nature (ICR, para 79). The safeguard policy on Physical Cultural Resources (OP/BP 4.11) became irrelevant, as the municipal building subprojects that could include historical infrastructure were never implemented (Task Team meeting). During implementation, the ESMF was revised to add requirements and guidance to implement subprojects in compliance with the safeguard policies (ICR, para 80). Overall, the project complied with the applicable safeguard policies (ICR, para 82).

b. Fiduciary Compliance

Financial Management: Throughout implementation, financial management (FM) requirements were generally complied with in a timely manner (ICR, para 83). During implementation, there were considerable delays in the process of capitalizing the Contingent Facility financed under Component 4. GEF proceeds were disbursed as an advance to the project's Designated Account on February 4, 2021, but were not documented until January 26, 2022, which was a week after the funds were transferred to the Energy Savings Trust Fund (FIDE: Fideicomiso para el Ahorro de Energía Eléctrica)'s Designated Account to capitalize the Contingent Facility on January 18, 2022 (ICR, para 83). After the initial advance, GEF proceeds were transferred to the Treasury of the Federation (TESOFE: Tesorería de la Federación) and



remained there for over 11 months, pending the Ministry of Finance’s approval to transfer funds from the TESOFE to FIDE. Audit reports were generally submitted in due time, including unmodified (clean) opinions (ICR, para 84). As a result of these audits, there were some findings and internal control recommendations related to weaknesses in administrative processes and planning, resulting in low implementation and disbursement progress during the first half of the implementation period (ICR, para 84). To address administrative weaknesses, the SENER implemented additional administrative controls regarding project and procurement process files and archives, control over consultant’s contract payment management (ICR, para 84).

Procurement: Procurement performance was generally found to be compliant with World Bank requirements (ICR, para 85). The World Bank delivered several procurement-related trainings to the implementing agencies. The project rating for procurement decreased from Satisfactory to Moderately Satisfactory in May 2018 and to Moderately Unsatisfactory by December 2018, mainly due to the absence of a procurement specialist since December 2017 and weaknesses detected in the decision-making process during procurement processes (ICR, para 85). By June 2020, the rating was revised upward to Moderately Satisfactory, after intensified follow-up from the World Bank over several months and improved project performance, including acceleration of the implementation through successful procurement processes (ICR, para 85). As procurement reactivated after the peak of the COVID-19 health crisis and the market revealed significant changes that required testing several alternatives to contract the products and services required for the subprojects, the World Bank’s intensive and timely implementation support was instrumental to find pragmatic procurement solutions to address the new and evolving realities (ICR, para 91).

c. Unintended impacts (Positive or Negative)

The ICR (para 56) did not report unanticipated effects that were quantifiable and of significant magnitude.

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	The quality at entry and the quality of supervision are rated moderately satisfactory due to moderate shortcomings.
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	



12. Lessons

The ICR (paras 97-101) provided five recommendations. Three of them are presented here with rephrasing.

Considering the gaps in the level and quality of pre-project (baseline) energy services, it may help to adequately assess the actual success and relevance of EE subprojects in municipalities and public institutions facing poverty and vulnerability. The idea behind EE investments is that they can be repaid with energy savings from replacing inefficient equipment with efficient alternatives. However, a balance is needed between maximizing actual energy savings and the need for infrastructure investments to ensure sustainability and minimum levels and quality of services. Throughout the project's execution, the implementing team noticed that there were several instances where energy services were lacking or did not comply with relevant national regulations (ICR, para 6, annex 5, page 48).

An Energy Efficiency (EE) revolving fund mechanism may enhance the impact and sustainability of publicly financed EE projects, though it may demand considerable effort and time. During implementation, this project observed that putting in place all elements to operationalize the new financial model of the revolving fund and gaining the trust of stakeholders took longer than expected, but investing in this effort was critical as the budget constraints severely limit municipalities and health institutions' capacity to allocate financial resources toward EE investments (ICR, para 70). The ICR (para 98) recommended that effective early communication to highlight the project's benefits, such as energy savings and improved service quality, would be crucial to the planning process.

Implementing a project across multiple municipalities and government levels is complex, though it may bring benefits. The project involved different institutions at different levels of government and in multiple municipalities, which inherently brought complexity to the project's implementation and resulted in a slow pace of disbursement in the early years of implementation (ICR, para 61 and footnote 49, page 22). Despite the challenges, the project established the EE revolving fund that would work across the country beyond the project's timeframe and ensured payment discipline by the beneficiaries (ICR, para 35). The ICR (para 99) recommended that designing and planning of EE operations should: (i) account for local capacities, resources, decision-making processes, and the political landscape; and (ii) leverage existing structures and balance the trade-off between quick, large investments in fewer, larger municipalities and broader, inclusive investments across many smaller municipalities.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



The ICR provides a detailed overview of the project with good quality of evidence. The evidence is robust, based on credible sources, and appropriately referenced. The narrative is candid and mostly focused on results. The narrative supports the ratings and available evidence and tries to triangulate data to reach conclusions. The ICR's recommendations are clear and useful. In response to IEG's inquiry, the project's task team provided data and information to complement the ICR, including the evidence that the project completed the planned mitigation activities for safeguards compliance, as described in section 10. On the other hand, the reconstructed ToC of the project (ICR, figure 1, page 7) does not articulate individual results chains, as mentioned in section 4. This has limited the report's capability to revert to and articulate progress against the ToC. Moreover, the ICR's recommendations do not explicitly describe which specific experiences of the project informed formulation of each recommendation. Furthermore, the ICR is of an excessive length at 31 pages, compared to the OPCS-recommended 15 pages. Overall, the quality of ICR is rated substantial.

a. Quality of ICR Rating
Substantial