PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA14823

Project Name	Mexico Municipal Energy Efficiency Project (P149872)
Region	LATIN AMERICA AND CARIBBEAN
Country	Mexico
Sector(s)	Energy efficiency in Heat and Power (100%)
Theme(s)	City-wide Infrastructure and Service Delivery (50%), Climate change (50%)
Lending Instrument	Investment Project Financing
Project ID	P149872
Borrower(s)	United Mexican States
Implementing Agency	Secretaría de Energía (SENER)
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	21-Sep-2015
Date PID Approved/Disclosed	21-Sep-2015
Estimated Date of Appraisal Completion	16-Oct-2015
Estimated Date of Board Approval	20-Jan-2016
Appraisal Review Decision (from Decision Note)	

I. Project Context

Country Context

Economic activity in Mexico is showing signs of a moderate recovery after two years of cyclical weakness with growth at 1.4 and 2.1 percent in 2013 and 2014, respectively. Economic activity is expected to recover in 2015 through 2017, with real GDP growth gradually strengthening from 2.9 percent in 2015 to 3.5 percent in 2017. As a net exporter of oil, the Mexican economy is negatively affected by the recent collapse in oil prices.

Mexico critically advanced in its ambitious structural reform agenda in the areas of labor, education, competition policy, financial sector, telecommunications and energy sector legislation aimed at raising productivity, competitiveness and potential output growth. The opening of the energy sector to private sector participation is expected to be particularly promising in boosting Mexico's lackluster longer-term economic growth performance by increasing the production of oil and gas, and providing the Mexican manufacturing industry with cheaper energy inputs.

Progress in poverty reduction has been limited over the past few years. In addition to weak economic growth there has not been a strong connection between growth and poverty reduction.

The cause of this can be found in the jobs market as there have not been enough high-quality jobs created in recent years. The official national multi-dimensional poverty index (MPI) in Mexico fell from 46.1 percent to 45.5 percent of population between 2010 and 2012.

Mitigation and adaptation to climate change continues to be a national priority to President Peña Nieto's administration. Based on the mandate provided by the Mexico's General Climate Change Law (2012), the country aims to achieve a greenhouse gas emission reduction target of 30 percent below business-as-usual levels by 2020 and 50 percent below 2000 levels by 2050.

Sectoral and institutional Context

There are several key institutions in Mexico's energy sector, led by the Ministry of Energy (Secretaría de Energía, SENER)—the entity responsible for planning and formulating national energy policies— such as the National Commission for the Efficiency Use of Energy (Comisión Nacional para el Uso Eficiente de la Energía, CONUEE), the Energy Savings Trust Fund (Fideicomiso para el Ahorro de Energía Eléctrica, FIDE)— a public-private trust fund, and the Energy Transition and Sustainable Energy Use Fund (Fondo para la Transición Energética y el Aprovechamiento Sustentable de la Energía, FOTEASE) which has become a crucial instrument to finance renewable energy and energy efficiency investments.

Mexico passed an energy reform legislation (2013-2014) intended to increase productivity, competition, and overall efficiency, in particular in the power and hydrocarbon sub-sectors. The reform is opening-up energy markets to private sector participation, including foreign investors, especially for the exploration and production of hydrocarbons and electricity generation. The reform also seeks to support the reduction of energy consumption through conservation and energy efficiency. SENER, in its National Energy Strategy (Estrategia Nacional de Energía, ENE 2014-2028) has included energy efficiency as a transformational priority area to help reduce the country's vulnerability by decreasing electricity demand, thereby helping lower greenhouse gas (GHG) emissions in all sectors and government levels, including local governments.

Important untapped opportunities exist at the subnational level for reducing energy consumption and improving efficiency and service delivery. Cities in Mexico account for almost three fourths of the population (72 percent), which is projected to grow from 117 million to more than 160 million by 2050 (with 88 percent of the population concentrated in urban areas). This significant demographic and economic growth will eventually translate into increased energy consumption.

Energy efficiency is among the most cost-effective way for municipalities to manage energy consumption, decrease energy expenditures, and help achieve greenhouse gas emissions reduction goals. Mexican municipalities' highest expenses after salaries are for street lighting, and water supply and treatment. There have been scattered efforts to improve energy efficiency in municipalities, so far with limited results. Some of the key difficulties encountered by municipalities when implementing energy efficiency measures, in particular street lighting and water pumping improvements, include lack of information and awareness, low technical and implementation capacity, misaligned incentives, restrictive procedures in terms of budgeting, and lack of access to financing.

The World Bank has experience in the development of analytical tools and drawn lessons from operational work in energy efficiency at the national and municipal levels in Mexico. The Bank has

supported the implementation of ESMAP's Tool for Rapid Assessment of City Energy (TRACE) in the municipalities of León and Puebla, and supported SENER expanding the energy efficiency assessments into 30 additional municipalities in Mexico with GEF support from the Efficient Appliances and Lighting Project.

II. Proposed Development Objectives

The development objective of the proposed project is to promote the efficient use of energy in municipalities by financing energy efficiency investments in selected municipal sectors and strengthening the enabling environment.

III. Project Description

Component Name

Policy development and institutional strengthening

Comments (optional)

It would strengthen the enabling environment for energy efficiency at the municipal level, and contribute to the identification of potential subprojects that could feed into a pipeline beyond the Project's life. It would support raising awareness of the multiple benefits of energy efficiency and enhancing capacities at both the national and subnational levels, as well as developing and adapting tools and systems to encourage better integration of energy considerations into subnational planning and management efforts. It would finance: i) capacity building on municipal energy efficiency; ii) sector-wide policy support, including plans to scale-up activities piloted under this operation with a view to transition to more commercial and (iii) project monitoring and management activities.

Component Name

Municipal energy efficiency investments

Comments (optional)

It would support cost-effective energy efficiency investments in municipal street lighting, water and wastewater, and building sectors – drawing from the results of the diagnostics conducted by SENER. These activities are expected to demonstrate the value of energy efficiency investments in municipal sectors as a means of reducing energy consumption and carbon dioxide (CO2) emissions while maintaining or enhancing quality of service. Investments are anticipated to have a positive demonstration impact from an operational, economic, financial and environmental standpoint. By developing and testing revolving financing schemes and implementation models, those that are successful could be replicative, thereby creating a sustainable framework beyond the Project's lifespan.

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IV. Financing *(in USD Million)*

Total Project Cost:	163.00	Total Bank Financing:	100.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
Borrower	9.00
International Bank for Reconstruction and Development	100.00
Local Govts. (Prov., District, City) of Borrowing Country	54.00
Total	163.00

V. Implementation

The Project would be implemented over a six-year period. Overall coordination and implementation would be the responsibility of SENER. Within SENER, the General Directorate of Energy Efficiency and Sustainability (Dirección General de Eficiencia y Sustentabilidad Energética) would be responsible for project implementation, and would be supported by the Responsible Project Implementing Unit (Unidad Responsable Ejecutora del Proyecto, UREP). The implementation of Component 1 would be led by SENER, with support from institutions such as CONUEE, while Component 2 would be operated by FIDE, with support from CFE and oversight from SENER. The Project would channel the IBRD loan and counterpart funds through the FOTEASE, which has been used in previous Bank financed operations since 2009.

SENER would ensure that appropriate Project implementation arrangements are in place and that all activities being developed by other stakeholders – mainly FIDE – are done in accordance with Project design and Bank policies. The UREP's coordination responsibilities will be detailed in the Project's OM (Operations Manual). In addition to overall Project coordination, SENER would also lead the implementation of activities under Component 1. This means that it would prepare, launch and supervise the selection processes to develop the corresponding tasks. With the support of UREP, it would develop the activities. The Component would be financed by the loan and counterpart funding from SENER.

FIDE would execute – as "Operator" – the activities considered under Component 2. FIDE has more than 10 years of experience implementing projects with municipalities, but had previously disengaged itself due to municipalities' lack of financing capacity. The World Bank has provided capacity building to FIDE on its procurement and financial management's guidelines during preparation, and would organize workshops during implementation focusing on preparation of bidding documents and evaluation of economic and financial proposals. CFE – as "Technical Operator" – would help recover the contributions from municipalities and water and wastewater utilities through the electricity bills, and transfer those resources to FIDE.

Detailed implementation arrangements for Component 2 would be articulated around four inter-institutional agreements that are currently being drafted: 1) a collaboration agreement between SENER and FIDE for the execution of Component 2 activities; 2) a collaboration agreement between FIDE and CFE to define the parties obligations, including CFE's activities during subprojects' preparation and implementation; 3) an Activity Initiation Agreement (AIA) between SENER, FIDE and participating municipalities and water utilities, to start subprojects' evaluation and preparation; and 3) an Energy Services Agreement (ESA) between FIDE, CFE and participating municipalities and water utilities to execute agreed subprojects.

The Project would be demand-driven. It would focus on preparing subprojects with those municipalities and water and wastewater utilities that: (i) expressed their interest in participating in the Project – on a first come first served basis – and (ii) complied with the Project's eligibility criteria. SENER would launch annual calls for proposals to municipalities and water and wastewater utilities, asking them to submit one expression of interest. Eligibility criteria to participate in the Project will be in the Project's OM. After the fulfillment of the criteria, SENER and FIDE would sign Activity Initiation Agreements with municipalities and water and wastewater utilities to start subprojects preparation (i.e. feasibility studies, subproject designs, and bidding documents for the implementation of identified priority investments). In order to be financeable, prepared subprojects would need to demonstrate acceptable levels of economic efficiency and energy savings.

Non/reimbursable funding would be allocated to each subproject, to help reduce payback period and provide an incentive to invest in more advanced (and thus, costly) technology and carry out more integrated infrastructure works. They would be established at a level needed to guarantee that payback does not go beyond two municipal administration periods to reduce political risk, as since changes in local administrations have been identified as one of the main barriers to implement energy efficiency investments in Mexican municipalities. The amount of non-reimbursable funding would vary by subproject and the criteria would be re-assessed by SENER and the World Bank during the Project's mid-term review, with a view to reducing them in order to transition to more commercial, sustainable program.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	×	
Natural Habitats OP/BP 4.04		×
Forests OP/BP 4.36		×
Pest Management OP 4.09		×
Physical Cultural Resources OP/BP 4.11	×	
Indigenous Peoples OP/BP 4.10		×
Involuntary Resettlement OP/BP 4.12		×
Safety of Dams OP/BP 4.37		×
Projects on International Waterways OP/BP 7.50	×	
Projects in Disputed Areas OP/BP 7.60		×

Comments (optional)

VII. Contact point

World Bank

Contact: Janina Andrea Franco Salazar
Title: Senior Energy Specialist
Tel: 458-9860
Email: jfranco3@worldbank.org

Contact: Karen Bazex
Title: Senior Energy Specialist
Tel: 473-3079
Email: kbazex@worldbank.org

Borrower/Client/Recipient

Name: United Mexican States
Contact: Silvia Rodríguez Díaz
Title: Subdirector de Proyectos Agropecuarios y Ambientales
Tel: 525536881449
Email: silvia.rodriguez@hacienda.gob.mx

Implementing Agencies

Name: Secretaría de Energía (SENER)

Contact: Santiago Creuheras Díaz
Title: Director General de Eficiencia y Sustentabilidad Energética
Tel: 525550006000-2281
Email: screuheras@energia.gob.mx

VIII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

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