DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

Multilateral Investment Fund

**MEXICO**

Scaling SME Energy Efficiency and Green Lending

**(ME-M1088)**

**Donors Memorandum**

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Project Summary

Scaling SME Energy efficiency and Green Lending (ME-M1088)

In Mexico, SMEs account for the near-totality of Mexican firms in the formal economy, provide 73% of formal employment and generate 52% of GDP.[[1]](#footnote-1) However, SMEs are losing market share due to increasing competition from bigger and more efficient companies in a more globalized economy.[[2]](#footnote-2) In a context of declining market share, SMEs need to reduce inefficiencies and become more competitive.

According to a study published by GIZ, electricity consumption by Mexican SMEs represents 47% of total national electricity consumption; energy efficiency investments could reduce SME energy costs between 10% and 20%, and could reduce emissions by 7 million tons of CO2.[[3]](#footnote-3) SMEs are nevertheless not aware that a more efficient use of energy can result in these savings. They lack the knowledge and instruments to identify inefficiencies, and financial resources or access to credit for such investments in energy efficiency.

Large commercial banks with high geographical penetration in Mexican territory are in the early stages of developing appropriate financing solutions for energy efficiency. These organizations are exceptionally well positioned to reach scale, leverage their networks, mobilize partners, and develop the financing products and necessary training to unlock energy efficiency markets. However, financing SME initiatives in energy efficiency still remains an untapped market. This project represents the first effort to achieve scale in lending to SME clients of commercial banks for energy efficiency investments, which is highly replicable in other LAC countries with potential systemic impact.

In order to develop financing for SMEs’ investment in energy efficiency, the local development Bank NAFIN developed in 2011 a guarantees program in collaboration with other national public institutions such as FIDE, and the Secretary of Energy (SENER).[[4]](#footnote-4) The goal of this initiative was to provide financing together with guarantees to foster SME demand for energy efficient equipment and replace obsolete, inefficient and pollutant equipment.

Through this project, the MIF will support Banco Nacional de Mexico, S.A. (“Banamex”) to develop energy efficiency capacity building for 45,000 SMEs and credit products for 5,000 SMEs in Mexico. This project will leverage the NAFIN guarantees program using the geographical penetration of Banamex to support SME initiatives in energy efficiency at a large scale.

The project will also capitalize on knowledge products and on-line tools generated in previous MIF projects. Banamex will partner with the TEC de Monterrey, the executing agency of a previous MIF project, greening suppliers of large firms (ME-M1077), and will use the on-line platform and training in energy efficiency developed for that project in order to train Banamex SME clients and Banamex staff.

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Acronyms and Abbreviations

|  |  |
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| **AOP** | Annual Operating Plan |
| **CFE** | Federal Commission of Energy |
| **COF** | Country Office |
| **DNA** | Diagnostic of Executing Agency Needs |
| **EU** | Executing Unit |
| **EA** | Executing Agency |
| **FIDE** | Fideicomiso para el Ahorro en Energía |
| **GHG** | Greenhouse gas |
| **IADB** | Inter-American Development Bank |
| **ITESM** | Instituto Tecnológico de Estudios Superiores de Monterrey |
| **MIF** | Multilateral Investment Fund |
| **NAFIN** | Nacional Financiera |
| **OR** | Operating Regulations |
| **PC** | Project Coordination |
| **PSR** | Project Status Report |
| **SME** | Small and Medium Enterprises |
| **QED** | Quality for Effectiveness in Development |
| **TOR** | Terms of Reference |
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Project Information

Scaling SME Energy efficiency and Green Lending

(ME-M1088)

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| **Country and Geographic Location:** | Mexico. The project is expected to benefit SMEs in the following cities: Mexico DF, Guadalajara, and Monterrey | | |
| **Executing Agency:** | Banco Nacional de Mexico, S.A. | | |
| **Access Area:** | Access to Basic Services and Green Growth | | |
| **Agenda:** | Expanding access to clean and efficient energies | | |
| **Coordination with**  **Other Institutions:** | The following partners have confirmed their contribution to the project: NAFIN for loan guarantees; the Instituto Tecnologico y de Estudios Superiores de Monterrey (ITESM) for on-line training and to facilitate the use of the on-line energy diagnostic tool developed in ME-M1077[[5]](#footnote-5); vendor partners of energy efficient equipment are still to be defined[[6]](#footnote-6) | | |
| **Direct Beneficiaries:** | 45,000 SMEs Banamex clients in Mexico will receive technical assistance in energy efficiency; 5,000 SMEs will receive loans from Banamex to invest in energy efficient equipment | | |
| **Indirect Beneficiaries:** | More than 50,000 SMEs that are not directly clients of Banamex, at least one vendor that will partner with Banamex to provide energy efficient equipment/technologies | | |
| **Financing:** | Technical Cooperation: | US$ 1,000,000 | 50% |
| Investment: | US$ 0 |  |
| Loan: | US$ 0 |  |
| **TOTAL MIF FUNDING:** | US$ 1,000,000 |  |
| Counterpart: | US$ 1,000,000 | 50% |
| Co-financing (if available): |  | 0% |
| **TOTAL PROJECT BUDGET:** | US$ 2,000,000 | 100% |
| **Execution and Disbursement Period:** | 30 months of execution and 36 months of disbursement. | | |
| **Special Contractual Conditions:** | Conditions prior to first disbursement will be satisfactory to IDB and will also include: (i) a signed letter of cooperation between ITESM and Banamex; (ii) a commitment letter from NAFIN that outlines the parameters of their support to the project; (iii) hiring the Project Coordinator; (iv) operating regulations established, and (v) establishment of separate account and contract to manage the funds of the project. These conditions are required previous to the initial disbursement. | | |
| **Environmental and Social Impact Review:** | This operation was screened and classified as required by the IDB’s safeguard policy (OP-703). Given the limited impacts and risks and the expected positive environmental benefits, the proposed category for the project is C. | | |
| **Unit with Disbursement Responsibility:** | The project will be administered and supervised at the COF/Mexico. | | |

1. Background and Justification

**A. Dimensions of the problem**

* 1. In Mexico, SMEs account for the near-totality of Mexican firms in the formal economy, provide 73% of formal employment and generate 52% of GDP. However, these SMEs are losing competitiveness due to increasing global competition. Mexico’s economic growth has been mainly driven by accumulation of labor and capital. The total factor productivity for the period 2005-2009 has been small or negative which highlights a low competitiveness and productivity of Mexican economy.[[7]](#footnote-7) The Global Competitive Report 2012-2013 that analyses overall country competitiveness reveals that Mexico (which ranks 53rd out of 144 countries in the overall ranking) falls in position when isolating the parameter of production process sophistication and technological readiness. In this category, Mexico ranks 72nd out of 144 which highlights the use of less sophisticated production processes and obsolete machinery in the private sector.[[8]](#footnote-8) If substituted by more efficient machinery, these companies could potentially become more competitive, while using less electricity. This is consistent with the results of a study published by GIZ on energy efficiency opportunities for SMEs in Mexico, which shows that, on average, SMEs could generate cost savings of up to 20% and a reduction of 7 million tons of CO2 by investing in energy efficiency measures.[[9]](#footnote-9)
  2. According to the Climatescope, Mexico has comparatively high electricity tariffs for the SMEs in commercial and industrial segments when compared to neighboring countries which translate into higher energy costs/KWH used. Higher energy costs can be attributed to public sector control and management of energy resources with limited private sector involvement.[[10]](#footnote-10) Although most SMEs are informal and are usually subject to the residential tariff in Mexico, there are 3.8 million SMEs under the commercial electricity tariff.[[11]](#footnote-11) These SMEs consume 47% of total national electricity (which corresponds to 92,367 GWh/year).

**B. Factors limiting SMEs’ investments in energy efficient equipment in Mexico**

* 1. Mexican SMEs face multiple barriers to invest in energy efficiency and energy efficient equipment. First, they have little knowledge and awareness on the efficient use of resources and are not aware that a more efficient use of energy can result in savings or increased profits. This is partly due to the lack of available information on the benefits of such investments, as well as the lack of tools to measure and assess business opportunities. Furthermore, part of the problem is a limited relationship with energy efficient equipment providers, and limited available R&D on energy efficiency.[[12]](#footnote-12) Most importantly, even in cases where businesses are aware of the benefits of energy efficiency, SMEs lack the financial resources for such investments and, if credit is required, they usually lack the access to finance for investing in energy efficiency.
  2. In Mexico, commercial banks are conservative and usually require significant collateral/guarantees in their lending activities to SMEs. Although approximately 90% of Mexico’s banking industry is now foreign-owned, Mexican banks continue to lend to a small group of companies which leaves most of SMEs with limited credit access: Mexican banks usually seek additional guarantees to lend to this segment.[[13]](#footnote-13) On top of this, energy efficiency is a particularly difficult concept for financial institutions as it is not yet common practice to take into account future energy savings when evaluating credit profiles and/or repayment capacities and, therefore, perceive a high risk in this type of investments. High transaction costs such as legal arrangements, the lack of necessary scale (which prevents standardized financing products), and limited incentives for the sales force to commercialize energy efficiency financing products are additional barriers that may make loan conditions (pricing and maturity) unattractive for SME clients. As a result, commercial banks are not capturing the significant opportunities presented by lending to small scale energy efficiency projects.
  3. To overcome these challenges, the project intervention will be twofold. First, it will focus on awareness raising and training for SMEs on the potential of energy efficiency as means to reduce costs and increase competitiveness. Second, it will help develop financial products targeted to the SMEs which will be secured by guarantees provided by NAFIN in order to develop lending products for energy efficient equipment.[[14]](#footnote-14)

**C. Bringing energy efficiency projects to the private sector in Mexico**

* 1. Mexico has significant experience in energy efficiency programs both in the public and private sectors. According to the Climatescope, from 2006 to 2011, investment in clean technologies accounted for US$ 5.8Bn, the largest commitment after Brazil.[[15]](#footnote-15) In the private sector, the public entity FIDE implemented 4,300 energy efficiency projects since 1989.[[16]](#footnote-16) Most of the projects focused on the industrial segment of the economy and 1,800 projects were implemented in industrial SMEs resulting in average savings of 32% of their electricity bills.[[17]](#footnote-17) However, the impact of this program is limited, as 80% of all SMEs in Mexico are in the commerce and services businesses, not the industrial sector. [[18]](#footnote-18)
  2. In 2011, and in order to develop energy efficiency opportunities for non-industrial SMEs, NAFIN developed a guarantee program in collaboration with national public institutions such as SENER and the Secretary of Economy.[[19]](#footnote-19) The initiative’s goal consists in fostering SME demand for energy efficient equipment to replace obsolete, inefficient and pollutant equipment. To that aim, NAFIN created a portfolio of energy efficient equipment that is eligible to qualify for this program.[[20]](#footnote-20) NAFIN provides guarantees to encourage lending for SMEs that are willing to invest in energy efficient equipment included in NAFIN catalogue. NAFIN issuance of its guarantees, which cover 80% of loans disbursed for purchasing energy efficient equipment in the event of default on the underlying loan, occur if two conditions prior are met: (i) the use of a calculator developed by NAFIN that specifically calculates energy savings in KWH, in monetary terms, and its equivalent in GHGs, and (ii) the destruction of old equipment by certified scrapping entities. For the second condition, NAFIN offers an additional discount of 10% on new energy efficient equipment to encourage destruction of old equipment. SMEs who can apply for these guarantees need to be formally registered with the tax authorities and to pay commercial electricity tariffs.[[21]](#footnote-21)
  3. NAFIN piloted this initiative with the public entity FIDE as part of a National Appropriate Mitigation Action (NAMA) for Mexico.[[22]](#footnote-22) Since 2011, the pilot NAFIN-FIDE-SENER has successfully replaced more than 3,000 old durable goods of SMEs such as motors, refrigerators, air conditioning machines and others, with new and more efficient equipment. In order to reach broader scale in this initiative, NAFIN will provide the guarantees program to private financial institutions with broader commercial outreach, so that they can use guarantees to make this credit accessible to their SME clients that would otherwise be excluded from it. Guarantees act as risk mitigator for the financial institution that is usually reluctant to lend to the broad SME segment. This should improve the program’s scale as most SMEs are served by financial institutions such as commercial banks, microfinance institutions, or other financial intermediaries which did not have access to the guarantees program under the pilot phase. Banamex, one of the major commercial banks in Mexico, is the first commercial bank participating in NAFIN’s guarantees program.

**D. Project Beneficiaries**

* 1. Banamex clients targeted as beneficiaries will be formal SMEs mostly located in urban areas.[[23]](#footnote-23) Banamex has an SME portfolio of clients of approximately 400,000 throughout Mexico, with 43% located in three major cities: Mexico DF, Guadalajara, and Monterrey. Approximately 90% of clients in its overall SME portfolio are small enterprises. Banamex defines small enterprises by annual sales below 35 million pesos (approximately US$ 3,000,000). Although their economic activity is not constant over time, Banamex estimates that most of the small companies within its portfolio are in the commercial and services businesses, while industrial clients are more likely to be medium-sized companies. Out of the 400,000 clients in this portfolio, approximately 10% of the SME portfolio (i.e. approximately 40,000 SMEs) is subject to receive credit.
  2. The project will provide technical assistance to raise awareness on energy efficiency for 45,000 SME Banamex clients located in Mexico DF, Guadalajara, and Monterrey. The training will be provided to SME clients identified during market analysis in Component I. The project will help expand Banamex lending activities to SMEs by facilitating the provision of credit for 5,000 of Banamex clients who may be credit or checking account SME clients of Banamex. Clients interested in lending for investing in the energy efficient equipment included in NAFIN portfolio, will need to be approved by Banamex credit committee following its standard credit procedures.
  3. The project does not have a specific gender perspective; it will serve both women and men indistinctively, though disaggregated data will be collected for measurement purposes. According to the Ministry of Economy, women are the primary decision-makers in 16 million small businesses. The project will recognize the importance of women, and their business preferences to ensure that sustainability challenges facing women in SMEs are considered in the design of the training. Data about project beneficiaries will be disaggregated by gender.
  4. Indirect beneficiaries include SMEs that will become aware of the benefits of investing in energy efficient equipment through public events/conferences and promotional efforts by vendors that will partner with Banamex to offer this product (energy efficient product will be offered together with financing).

**E. Contribution to MIF Mandate, Access Framework and IDB Strategy**

* 1. SMEs in Mexico provide most of the employment opportunities for low-income populations. However, these SMEs are unprepared to face significant competition from bigger and international actors. By supporting SME initiatives to reduce operational energy costs and improve competitiveness, the MIF is supporting private sector development and creating employment. Furthermore, SMEs are the major recruiter of low-income people so we could expect that these populations are expected to indirectly benefit from this project. The widespread presence and institutional capacity of the executing agency (Banamex) will ensure scalability of the project and will increase the likelihood of market spillovers.
  2. This project will seek to build a model of investment in energy efficient equipment for SMEs which leverages a bank-SME-vendor relationship, and will document successful business cases and a thematic study that can serve to replicate this project in Mexico and in other countries through the Citigroup network. The model involves collaboration with vendors, i.e. energy efficiency equipment suppliers that will complement Banamex commercial efforts and help spread the benefits of investing in energy efficient equipment. The project also leverages on a public guarantee program to encourage commercial lending to SMEs. Mexico is a particularly risk-averse market for SME lending compared to neighboring countries, which makes the guarantee program necessary to spread energy efficiency lending for SMEs. We can expect that other countries interested in replicating the bank-SME-vendor model may enjoy more flexible lending conditions. If guarantees program are required, similar public institutions in other countries can be involved. Additionally, the project will contribute to building MIF´s knowledge on innovative business models and sustainable financing structures for energy efficiency.
  3. Link to the Agenda. This project falls under the “Clean and Efficient Energy” Agenda because it helps create a market for cleaner and more efficient energies. The project will structure the demand side through technical assistance for SMEs, and develop the financing side by creating appropriate financing mechanisms for the SME segment. Furthermore, by increasing number of SMEs investing in efficient technologies the project will indirectly “improve the ability of other SMEs to produce, distribute, or service these technologies” since the installation and servicing of the new technologies will be done by other local companies, creating opportunities for these vendors.
  4. Collaboration with the Bank Group. As evidenced by the IDB’s SCF initiatives, large financial institutions in LAC are now developing green financing products to comply with existing and forthcoming regulations. Initial conclusions from green lending projects in LAC, show that management buy-in beyond regulatory requirements is crucial for strategic commitment to develop green finance. SCF has an outstanding Capital Markets Guarantee Facility with Banamex (ME-X1013) to develop Mexican capital markets by providing partial guarantees in support of individual debt securities issued by Mexican issuers, which fulfill additionality criteria such as fostering social or environmental positive impacts, improved corporate governance and supporting new issuers or asset classes, among others. This project represents an additional effort to reach environmental impact through technical assistance for Banamex and its SME clients which will also serve the same goals through the environmental aspect of the SCF guarantee facility. Discussions with SCF highlight opportunities for further collaboration in developing green lending in the region similar to the model followed in the Women entrepreneurship Banking program (WeB).[[24]](#footnote-24) Furthermore, the IIC’s GreenPyme initiative demonstrates that technical assistance for SMEs without readily available financing mechanisms is not sufficient to boost clean and efficient energy markets.

1. Project Description

**A. Objectives**

* 1. The impact of this project is to reduce SMEs’ energy costs in Mexico and improve their competitiveness.[[25]](#footnote-25) The project is also expected to reduce GHG emissions resulting of substituting energy efficiency equipment.
  2. The objective of the project is to increase awareness of SMEs on energy efficiency practices and provide access to finance for investments in energy efficient equipment. Raising awareness, together with the provision of credit for energy efficient equipment installation should result in energy efficiency savings and will positively contribute to increase overall SME competitiveness.

B. Description of Model/Solution/Intervention

* 1. This project will leverage on and scale up an existing NAFIN-FIDE-SENER pilot project which develops lending for SME’s access to energy efficient equipment.[[26]](#footnote-26) Banamex will be the first commercial bank to replicate this NAFIN-FIDE-SENER initiative. Large financial institutions like Banamex are well positioned to leverage their networks, clients, and training capabilities to develop financing products necessary to unlock energy efficiency markets. In addition, Banamex will link finance to customer education and training so that they can successfully commercialize new financial products that can be initially perceived as complex by SME clients who may have limited financial background.
  2. In this project, Banamex will combine training and awareness-raising for three target groups: its SME clients, its internal staff, and the energy efficient equipment providers entering the vendor program with Banamex. Furthermore, Banamex will provide loans guaranteed by NAFIN for its SME clients investing in energy efficient equipment. This triangular approach (bank-SME-vendor) will help address the barriers identified in the background section, bringing together supply and demand for the energy efficiency market and making the necessary financing available to SME clients, by mitigating risks with NAFIN guarantees.

**C. Components**

Component I: Defining the target market for SME energy efficiency lending (MIF: US$10,000; Counterpart: US$140,000).

* 1. This component’s main objective is to identify the target market within Banamex existing clients (both checking and credit clients). Although Banamex has knowledge of its SME portfolio, existing information does not allow identifying market potential for this specific credit product. Gathering relevant information on SMEs’ economic segment and capital use, geographical location within major cities and characteristics of capital endowment (i.e. type of durable goods used in their daily operations and degree of obsolescence/inefficiency) is crucial for successful commercialization. Given that the NAFIN program includes a portfolio of eligible equipment for replacement, defining the target market will also take this portfolio into consideration: identifying SME equipment needs will relate to the existing eligible products in this program. This exercise will help identify potential demand for this specific program and the knowledge needs on energy efficiency. Defining the target market will help better design the commercial strategy, better create appropriate training materials for SMEs and Banamex sales force, and facilitate the selection of the appropriate partner vendors. As part of this component, Banamex will define parameters on energy use that will be integrated in credit requests as well as a methodology to compile this information (i.e. database that will be used as baseline to evaluate the project).
  2. The products delivered will include: (i) an analysis and segmentation of the existing Banamex SME loan portfolio; (ii) one report containing the identification of the target market (analysis will be based on the SME portfolio segmentation and NAFIN’s portfolio of products), and (iii) a template credit request form which includes information on energy use to be monitored during project implementation and methodology to compile data for baseline and evaluation of project.

Component II: EcoCredito product development. (MIF: US$0; Counterpart: US$290,000).

* 1. This component’s main objective is to develop a standardized credit product and to finance SMEs’ acquisition of energy efficient equipment. The MIF will not contribute with funding for this component which will be solely implemented with counterpart funding. Banamex will develop a credit product commercialized under the name of EcoCredito, which is expected to have an average loan size of US$3,000. The average loan size was calculated as the average cost of the equipment included in the NAFIN portfolio of eligible energy efficient equipment for guarantees.[[27]](#footnote-27) In spite of the small loan size, guarantees act as risk mitigator for SME lending. It is expected that guarantees together with the small average loan size, will help Banamex expand its lending activities to SME clients within its portfolio that would otherwise not be perceived as suitable for lending activities.
  2. NAFIN requirements and guidelines for guarantees’ disbursement will be included in the technical characteristics of the EcoCredito and in the credit operational process. The guarantees will cover 80% of loans disbursed to invest in energy efficient equipment only provided certain requirements are met. Requirements include: equipment replaced by eligible machinery in the NAFIN equipment portfolio, the use of NAFIN calculator to establish energy savings, and disposal of old equipment by scrap dealers. NAFIN will offer an additional 10% discount on energy efficiency equipment to encourage the destruction of old equipment.
  3. Loan product development activities will be as follows. First, Banamex will incorporate NAFIN requirements into its operational processes and into the technical description of the credit product. Following Banamex standard procedures for new products, they will define internal operational processes for the EcoCredito in the so-called “product program” (standard name given to documents that define new credit products). This program will also include external operational processes or “flowchart” for vendor program which will define responsibilities of each party (further explained in Component V: develop vendor program with strategic partners). The product program will be submitted for approval and authorization to the risk management department in Banamex. Once the product has been granted authorization, Banamex will implement the necessary procedures for operational readiness. Internal dissemination will occur when the EcoCredito commercial strategy is communicated to Banamex sales force in three major cities.
  4. The products of this component include: (i) one new product program for EcoCredito including NAFIN guidelines for guarantees; (ii) one credit/operational flowchart for vendor to be included in vendor program, and (iii) one commercial strategy to be disseminated to Banamex sales force.

Component III: Awareness raising and training SMEs in energy efficiency (MIF: US$550,000; Counterpart: US$230,000).

* 1. The objective of this component is to raise awareness and provide training to SME clients of Banamex. SMEs will receive on-line training from ITESM which includes energy efficiency theory, practical examples/business cases on energy efficiency, and an on-line self-diagnosis tool. The platform is currently being developed by ITESM for the MIF project ME-M1077 to provide training on efficient use of resources to SMEs in the supply chains of Walmart and Femsa. This proposed project (ME-M1088) will leverage the energy efficiency module which will be adjusted to the characteristics of SME clients in Banamex portfolio. The platform also includes an on-line tool that will provide SMEs’ with instruments to diagnose potential energy savings in their own businesses. Completing the on-line course will require mastering the on-line tool for self-diagnose on energy efficiency which implies adoption of energy efficiency knowledge and skills.
  2. Most of the resources of this component will be devoted to raising the awareness of opportunities for applying energy efficiency tools, and creating a demand for participating in on-line course and in events and learning workshops for SMEs organized by Banamex. Workshops will be organized to bring together Banamex, energy efficient equipment vendors, and clients themselves. The aim of these workshops is to create appropriate forums where demand, supply, and financial intermediaries can discuss and explore opportunities in energy efficiency. As part of this component, a selection of successful business cases using energy efficient equipment will be used to encourage other SMEs to invest in these technologies. These will be in the form of easily accessible products using audiovisual and infographics.
  3. The products of this component are the following: (i) an on-line training for SMEs; (ii) organization of six vendor-SME-Banamex workshops; (iii) commercial campaign products (flyers, banners) for Banamex/vendor clients; (iv) three conferences in Mexico DF, Guadalajara and Monterrey to raise awareness among SME clients, and (v) case studies to disseminate the benefits of investing in energy efficient equipment.

Component IV: Capacity Building for Banamex staff (MIF: US$90,000; Counterpart: US$165,000).

* 1. The objective of this component is to provide training for Banamex staff on energy efficiency and sales arguments related to energy efficient equipment.[[28]](#footnote-28) Banamex staff will be trained on energy efficiency lending opportunities through an on-line module provided by ITESM[[29]](#footnote-29) and workshops organized by EduFin. [[30]](#footnote-30) The workshops will support Banamex sales force ability to articulate sales arguments on energy efficient equipment for SMEs (including fiscal aspects, and other economic, social benefits for SMEs). This component will also include a “training the trainers” activity for the vendor program which will be developed to train Banamex staff who will be involved in coordinating with partner vendors in the credit process. Banamex staff will be trained to transfer knowledge and training to vendor staff under the vendor agreement which will require collaboration in credit disbursement process between Banamex and vendor. In total, 300 Banamex staff will be trained through on-line training, 193 through the workshops, and 43 staff in the training the trainers program.
  2. The activities are the following: (i) adapting the on-line training provided by ITESM for Banamex audience; (ii) training Banamex sales force on energy efficiency subjects through the on-line course; (iii) providing training to the Banamex sales force on sales arguments through workshops organized by Edufin; (iv) training the sales force on the operating processes and commercial goals in three major cities, and (v) “training the trainers” program for Banamex executives who will liaise with vendor’s sales force to achieve collaboration between Banamex and the vendor, as defined in the vendor program.
  3. The products delivered in this component include: (i) an on-line course provided by ITESM adapted to the Banamex audience; (ii) training materials on sales arguments and workshops where training is provided, and (iii) “training the trainers” activities for vendor program.

Component V: Develop Vendor Program with strategic partners (MIF: US$100,000; Counterpart: US$85,000).

* 1. The objective of this component is to establish the conditions of the vendor program, wherein Banamex and the energy efficient equipment providers will jointly provide energy efficient equipment and the necessary financing to SMEs. The vendor program will materialize in a contractual agreement in which the vendor will be in charge of selling and installing the energy efficient equipment and Banamex will disburse the proceeds of the loans directly to the vendor in exchange of documented use of NAFIN instruments: the calculator, and a certification of disposal with certified scrappers. The vendor agreement will therefore include specific details on the operational requirements to ensure disbursement of guarantees. The vendor program will be designed and negotiated so that it can serve the objectives of both Banamex (by increasing the outreach and commercial efforts for the EcoCredito) and the vendor (potentially increasing its sales numbers).
  2. The vendor may be responsible of collecting and submitting the information required by NAFIN for the issuance of its guarantee coverage. Responsibilities will be defined in the contractual agreement to be signed between Banamex and the vendor. This program will also ensure that the use of credit is invested in energy efficient equipment as it will be disbursed directly to the vendors that sell, install and replace the old equipment.
  3. The activities of this component are the following: (i) design and negotiation of vendor agreement; (ii) training delivered by Banamex staff on NAFIN requirements for guarantees (guarantees and disposal mechanisms for old equipment), and (iii) training on credit process and chartflow to vendors by Banamex staff previously trained in the “training the trainers” (activity in Component IV) .
  4. The products of this component include: (i) at least one vendor agreement signed; (ii) training events to deliver the training to vendor; (iii) operating manual on credit process /flow between vendors and Banamex.

Component VI: Knowledge Management and Dissemination Strategy. (MIF US$48,000; Counterpart US$15,000).

* 1. This project seeks to address a principal restraint of energy efficiency markets for SMEs in the LAC region: financing. The objective of this component is to raise awareness on the financing opportunities and benefits of energy efficient equipment for SMEs within the ecosystem supporting energy efficiency. The knowledge products will highlight the role of finance and financing institutions in developing energy efficiency markets. The audiences of this project are: (i) SMEs in Mexico using old, inefficient machinery; (ii) commercial banks interested in developing green lending for SMEs in energy efficiency initiatives; (iii) providers of energy efficient equipment; (iv) the government (through NAFIN guarantees), and (v) universities (through ITESM). Furthermore, the systemic impact of this will be enhanced by a potential replication within the Citigroup financial group in other countries of the LAC region and globally as Banamex staff has agreed to participate in international events to share knowledge generated by the project.
  2. Main products supporting events and the communications strategy will include a thematic study on the state of energy efficiency of SMEs in Mexico based on Banamex client evaluation including an infographic and audiovisual materials. These knowledge products will highlight successful business cases, portray the benefits of investing in energy efficient equipment, and will provide a panorama of the opportunities that can be replicated amongst SMEs in Mexico. Key channels of dissemination will be a proactive media relations strategy by the Executing Agency, direct marketing targeted to reach SME clients and build upon the training components of the project, including annual workshops and conferences, as well as the on-line course offered to clients who wish to invest in energy efficiency.

D. Project Governance and Execution Mechanism

* 1. Banco Nacional de Mexico, S.A. (Banamex) will be responsible for executing the project and fulfilling project objectives. To that end, Banamex will hire a Project Coordinator in charge of an Executing Unit (EU) directly under the responsibility of the Banamex Director of Sustainability Banking who, in turn directly reports to the CEO of the Banamex Group. The EU will be hosted at the Sustainable Banking department in Banamex and will be composed of the Project Coordinator, an assistant, and the support of an internal accountant responsible for maintaining records, justifications of procurement processes, and financial statements for the project. The Project Coordinator will be responsible for the primary functions of the EU during project implementation which include (but are not limited to): a) approve the Annual Operative Plan (AOP), which will be developed by the EU; b) evaluate progress made in each component, and c) control all administrative, procurement and financial processes with the support of the internal accountant.
  2. Banamex will need to establish agreements with two major partners for the successful execution of this project. First, Banamex will sign an agreement with ITESM in order to use and adjust its existing on-line platform for SME clients and for Banamex staff. Second, Banamex will sign at least one vendor agreement to offer the EcoCredit together with energy efficient equipment. This agreement will establish the processes whereby the vendor will incorporate NAFIN requirements for guarantees and the credit flow between Banamex and the vendors.
  3. The cash resources of the project will be managed by an entity of the Grupo Financiero Banamex under contract with the Executing Agency. This contract will be compliant with IDB policies.

E. Sustainability

* 1. The sustainability of this project is based on the institutional commitment of Banamex to the environment and sustainable operations. Banamex materialized this commitment on July 4th 2013, when the CEO of Banamex announced the sustainability strategy in a public conference.[[31]](#footnote-31) The major axes of this strategy are: (i) reduction of the Banamex group carbon footprint; (ii) developing sustainable green finance products; (iii) mainstreaming environmental indicators in credit methodologies, and (iv) leadership in sustainability initiatives. This ME-M1088 project responds to the third priority identified by Banamex. This project will be executed through the Sustainable Banking department of Banamex which directly reports to the CEO of Banamex. Systemic integration of sustainability in traditional lending operations is a strong sign of commitment of high level decision makers. Furthermore, sustainability shall be reached by the inherent characteristics of the executing agency: a large commercial bank such as Banamex is extremely well positioned to reach large numbers of SMEs willing to invest in energy efficiency initiatives thanks to its geographical penetration and commercial strength.
  2. After piloting the guarantee initiative with FIDE, NAFIN is opening the guarantees program to private financial institutions in Mexico. Participation of other players will potentially create further momentum to develop energy efficiency market in Mexico. Facilitating an open market competition for the guarantees scheme may potentially favor the scaling up of this initiative which is key to develop supply and demand for energy efficient equipment.

F. Experience and Lessons Learned from MIF or other Institutions

* 1. The MIF has developed a high level of expertise on SME energy efficiency through different projects in the region. These include: an energy efficiency technical cooperation with Fundación Chile (CH-M1009), a knowledge transfer of energy efficiency to Jamaica, and a project on greening the supply chains of anchor companies with the ITESM (ME-M1077). In Colombia, the MIF funded a project executed by the Bogota Chamber of Commerce to promote energy efficiency amongst industrial SMEs (CO-M1038), and a project which is currently being developed on energy efficiency for the Clean Technology Fund. The MIF is increasingly seen as an important knowledge and technical assistance broker for energy efficiency in the region, and brings a unique focus on energy finance to the mix.
  2. The project will specifically leverage on existing project products developed by the MIF. In the project ME–M1077, the ITESM is developing an on-line platform which will be used for training SMEs in the efficient use of resources for the supply chains of Wal-Mart and FEMSA. Although the original training materials of this project include energy efficiency, water and waste management, the current project ME-M1088 will only use the module on energy efficiency. The ITESM will also adapt training materials on energy efficiency for the specific banker audience within Banamex.
  3. This project will also learn from previous initiatives to increase the use of energy efficient equipment in Mexico even if these initiatives were aimed at households and not at SMEs. Mexico’s Cash for Cooler program, whose aim was to substituting old, polluting and inefficient refrigerators and air conditioning at household level did not result in predicted energy savings.[[32]](#footnote-32) The program helped 1.5 million households in Mexico replace their old refrigerators and air conditioners based on initial studies by the World Bank and McKinsey which determined ex-ante double digit energy savings based on engineering models. The results were contradictory as the replacement of refrigerators did reduce electricity consumption but only by 7% (a quarter of the number predicted by the World Bank study), and air conditioning at home did actually increase electricity consumption which resulted in higher absolute energy costs. These results highlight the need for empirical analysis of energy efficiency measures on an ex-post basis as initial estimates based on engineering characteristics of machinery ignore “behavioral economics” of the economic actors using these devices. The current project ME-M1088 targets a different type of beneficiaries (SMEs instead of households) so we can expect different results. In any case, the project includes the ex-post analysis of energy savings in SME beneficiaries.

G. MIF Additionality

* 1. Non-Financial Additionality. The project is being developed so that it can eventually be rolled-out to other SME clients in Mexico outside the existing Banamex SME portfolio of clients. The international character of the Executing Agency could result in replication globally, more specifically in other countries of LAC such as Colombia, Brazil and Chile, where Citigroup is present. By linking this project with research and activities of a similar project with ITESM, the MIF can bring a high level of knowledge transfer and understanding of the SME segment, practical tools (such as the web tool), and the possibility of regional knowledge events and networks to the project.
  2. MIF’s contribution to this project enables partnerships that would otherwise have taken longer and would not have taken place in a coordinated manner: (i) Banamex- ITESM, and (ii) Banamex-vendor. Collaboration with NAFIN which is providing the guarantees for the loan is further enhanced by the requirement to vendors of adopting the energy efficiency calculator and using it as a pre-requisite for guarantees.
  3. Financial Additionality. Given the nascent character of energy efficiency lending products in the Mexican commercial banking system and especially those targeted at SMEs, a demonstration effect of creating a cost-effective, scalable training module which results in sufficient take-up of green financial products for SMEs is perceived as highly risky by commercial banks. The MIF financing can be catalytic to prove the viability of this type of lending and technical assistance model.

**H. Project Results**

* 1. The objective of the project is to increase awareness of SMEs on energy efficiency practices and provide access to finance for investments in energy efficient equipment. Raising awareness together with the provision of credit for energy efficient equipment installation should result in energy efficiency savings and will positively contribute to increase overall SME competitiveness. Project intends to train 45,000 SMEs through an on-line course for energy efficiency concepts, of which, 30,000 SMEs are expected to show verifiable increases in knowledge about energy efficiency through the use of the on-line tool for self-diagnose. The project will also help 5,000 SMEs access finance to invest in energy efficient equipment.

**I. Project Impact**

* 1. This project impact is to reduce SMEs’ energy costs in Mexico and improve their competitiveness.[[33]](#footnote-33) The project is also expected to reduce GHG emissions resulting of substituting energy efficiency equipment.

**J. Systemic Impact**

* 1. Banamex institutional capacity and broad geographic presence in Mexico is expected to maximize impact, and ensure awareness raising in energy efficiency benefits for both their clients and the environment. The program is expected to create a business case that could be replicated within the Citigroup networks, more specifically in other LAC countries were Citi operates (i.e. Brazil, Colombia, Chile).

1. Monitoring and Evaluation Strategy
   1. Baselines: Each SME requesting a loan from Banamex will be required to provide baseline data about business operations and their energy consumption through NAFIN calculator and additional parameters for energy use in credit requests defined under Component I. Data will also be disaggregated by gender. The data collection to be incorporated into credit applications will focus on financial information, such as operating costs and sales as well as energy consumption parameters. Leveraging the NAFIN calculator for eligible equipment, will allow collecting information on energy use. Using the NAFIN calculator will be a pre-requisite to provide guarantees of the loan.
   2. Monitoring: SME-related data will be collected from several sources, including credit applications, the NAFIN calculator, and additional surveys conducted by external evaluators. Banamex will be responsible for maintaining the databases of applicants, credit recipients, and results from the NAFIN calculator. The Project Coordinator will be responsible for consolidating the data every semester. While ITESM manages the data for users of their online training and diagnostic tools, ITESM will share their relevant data with Banamex so that the Project Coordinator may be responsible for cross-referencing and consolidating the data. Data about project beneficiaries will be disaggregated by gender.
   3. Evaluations: A final evaluation will be conducted for the project. The evaluation will include assessments on project implementation, including the delivery of project activities such as plans and reasons for possible variations, and whether the project was able to deliver on all its products on time, on budget, and with appropriate quality. The evaluation will emphasize, however, whether the project achieved its development objectives, assessing whether participating SMEs generated greater energy efficiency and reductions in energy costs.
   4. The evaluation will also assess whether this intervention model – combining a guarantees program with credit for SME access to energy efficient equipment together with training for SMEs, bank’s staff, and vendors – could be scaled or replicated, and if so, what lessons should be extracted from this project for application in potential future similar projects. The knowledge gaps this project will try to respond are: (i) the role of guarantees as risk mitigators for financial institutions when developing green finance for SMEs, and (ii) the role of technical assistance for the success of the bank-client-vendor approach.
   5. Closing and Sustainability Workshop. The executing agency will organize at least five (5) months before the end of execution, a closing and sustainability workshop with the participation of ITESM, vendors, NAFIN, beneficiaries, MIF personnel, and any other staff to be agreed upon by the MIF, to jointly evaluate Project outcomes, identify additional tasks to ensure the sustainability of actions initiated under the Project, and identify lessons learned.
2. Cost and Financing
   1. The project has a total cost of US$2,000,000, of which US$1,000,000 (50%) will be provided by the MIF, and US$1,000,000 (50%) by the counterpart. The execution period will be of 30 months and the disbursement period will be of 36 months.

|  |  |  |  |
| --- | --- | --- | --- |
| **Components** | **MIF** | **Counterpart** | **Total** |
| Component 1: Defining target market for SMEs energy efficiency lending | 10,000 | 140,000 | 150,000 |
| Component 2: EcoCredito product development | 0 | 290,000 | 290,000 |
| Component 3: Awareness raising and training for SMEs on energy efficiency | 550,000 | 230,000 | 780,000 |
| Component 4: Capacity building for Banamex staff | 90,000 | 165,000 | 255,000 |
| Component 5: Develop vendor program with strategic partners | 100,000 | 85,000 | 185,000 |
| Component 6: Knowledge management and dissemination strategy | 48,000 | 15,000 | 63,000 |
| Executing Agency/ Administrative | 60,000 | 65,000 | 125,000 |
| Monitoring and Evaluation | 37,000 | 10,000 | 47,000 |
| Auditing and Ex post reviews | 15,000 | 0 | 15,000 |
| Contingencies (1%) | 20,000 | 0 | 20,000 |
| **Sub-total** | **930,000** | **1,000,000** | **1,930,000** |
| Impact Evaluation Account (5% of MIF contribution) | 50,000 | 0 | 50,000 |
| Agenda Account | 20,000 | 0 | 20,000 |
| **Grand Total** | **1,000,000** | **1,000,000** | **2,000,000** |
| **% of Financing** | **50%** | **50%** | **100%** |

1. Executing Agency
2. **Executing Agency**
   1. The Executing Agency will be Banco Nacional de Mexico, S.A. (“Banamex”). Banamex is one of the largest banks in Mexico and was acquired by Citigroup in 2001. Banamex has more than 125 years working in Mexico and provides a full range of financial products and services. Banamex SMEs Business Unit (within the Consumer finance division) has over 400,000 SME clients. Most of them (90%) are small enterprises and are located in the major urban areas of the country: 43% are based in Mexico DF, Guadalajara and Monterrey. The size of the SME loan portfolio exceeds over US$1 billion and serves 40,000 SME clients (i.e. 10% of all SME clients).
   2. Banamex also runs several efforts related to social and cultural encouragement, especially a Financial Educacion Program (Edufin) executed through Fomento Social Banamex, A.C. Edufin is a program of social responsibility implemented in 2004 that seeks to encourage a financial culture in Mexico that impels the quality of life and the well-being of the Mexicans, developing for this, successful and efficient methodologies and seeking in a large scale, with the base of the pyramid.
   3. In 2012 Banamex integrated all efforts on sustainable banking (such as reducing the carbon trace in its operations, how to use energy originated from renewable sources, etc.) and green lending under in its Sustainable Banking department that directly reports to Banamex CEO. With this project, Banamex is aligning its main objectives, mission and vision with sustainability to serve its clients, its shareholders and the communities in which we operate in a sustainable way.
3. Project Risks
   1. **Limited demand from SME clients.** There is a risk that Banamex will not enlist enough clients with the required characteristics to participate in the guarantees scheme (i.e. formal SMEs under the commercial electricity tariff). Banamex will devote time and resources to understand the economic needs of SME clients in Component I, so that the commercial campaign can be targeted to SMEs with higher appetite for this type of products. However, with a pool of SME clients of more than 400,000 SMEs, Banamex will likely meet project results (5,000 SMEs already receive an EcoCredito). The project will also establish linkages between Banamex and vendors which will provide additional commercial effort to promote the project among clients. Joint efforts between vendors and Banamex will materialize in bank-SME-vendor workshops and awareness raising conferences that demonstrate economic benefits to be replicated by other clients. Limited demand could also be a result of economic slowdown. According to the International Monetary Fund, prospects for Mexican economic growth are still positive during the years of project’s implementation: 2.9% in 2013 and 3.2% for 2014.[[34]](#footnote-34) If a stronger than expected economic downturn occurred in this period, the number of beneficiaries will be modified to accommodate new economic conditions.
   2. **Delays in project execution** may occur due to late submission of NAFIN calculator and potential delays in adjusting ITESM on-line modules. Banamex will mitigate this risk by signing a letter of cooperation with ITESM and a commitment letter with NAFIN that outlines the parameters of their support of the project. Activities and deliverables have been planned with longer execution periods to allow for flexibility in this respect.
   3. **Partner vendors are unable to comply with all processes to apply for energy efficiency guarantees.** Banamex will ensure that the partners selected for vendor program can meet NAFIN requirements to disburse guarantees (i.e. the use of the NAFIN calculator and the destruction of old inefficient equipment), and have the capabilities to collaborate with Banamex in the credit processes. Collaboration between Banamex and the vendors will be materialized in a written agreement that will define contractual rights and obligations so that NAFIN guarantees can be disbursed. Banamex is also expected to sign at least one vendor program so that this risk is mitigated by diversifying partners.
   4. **Risk of rebound effect i.e. improvements in energy efficiency lead to increased utilization of energy efficient equipment and therefore higher energy costs.** The “Cash for Cooler program” in Mexico resulted in higher energy use of air conditioning machines**.** This project ME-M1088 targets different beneficiaries (SMEs) that should in principle be driven by profits and efficiency in cost structure. The project will measure impact on relative terms i.e. in terms of improved use of energy resources in SME economic activities such as energy costs/output; energy costs/hours of operation of new equipment or other ratios that measure relative use of energy. Potential energy savings identified in the NAFIN catalogue of products and determined by the use of the NAFIN calculator will be validated through the ex-post evaluation of energy savings.
4. Environmental and Social Effects
   1. The Environmental and Social Review Committee (ESR) approved this operation with a category “C” on July 15, 2013, Agenda 28-13.
   2. This project will have direct positive environmental impacts, since it should result in the reduction of energy use and GHG by SMEs in Mexico. The project will also have indirect positive spillover effects and potentially develop a larger market for energy efficiency services and technologies in Mexico. The network of participating SMEs will increase knowledge exchange of best practices in workshops and conferences, and some of the knowledge will likely spill-over to other non-participating businesses through other SME networks and media communications. This project will have direct positive social impacts, as it will help SMEs to improve their competitiveness, by means of a more efficient use of energy, and therefore free resources that can be used for expansion of their business, the creation of new markets (for energy efficiency) and the generation of new jobs or even openings for entrepreneurs to develop new businesses.

1. Compliance with Milestones and Special Fiduciary Arrangements

8.1 **Disbursement by Results and Fiduciary Arrangements.** The Executing Agency will adhere to the standard MIF disbursement by results, procurement and financial management arrangements specified in Annex VII. For the procurement of goods and contracting of consulting services, the Executing Agency will comply with the IDB Policies (GN-2349-9 and GN-2350-9). Since the Executing Agency belongs to the private sector, the project team has determined that, as stipulated in Appendix 4 of the IDB Policies, it will use its own procurement methods which have been deemed compatible with IDB Policies. Before project contracting and procurement begins, the Executing Agency must submit the project Procurement Plan for the IDB/MIF’s approval, which should be updated, annually and when there are changes in the methods or goods or services to be procured. Given that the Diagnostic of Executing Agency Needs (DNA) generated a low level of need/risk classification, the review of procurement and contracting processes for the project will be conducted ex-post and on an annual basis.

1. Information Disclosure and Intellectual Property
   1. **Information Disclosure.** Since this project deals with sensitive information on Banamex clients, portfolio and business strategy, certain Banamex internal documents will remain confidential, such as those related to financial aspects with the final beneficiaries and related parties.
   2. **Intellectual Property**. The Executing Agency will keep the intellectual property and other rights of the materials and products strongly connected with their core business. As part of this Project the MIF will keep the intellectual property and other rights of the materials and products necessary to promote the replication and scale up the project.
   3. For the purposes of replication and lessons learned, Banamex will also grant a license to the Bank for the use of those products, and in the case these products contain confidential information, Banamex will provide with the information necessary for statistical and project monitoring purposes (which will also be made available to the public by the MIF, subject to its policy on disclosure of information).

1. Data source: OECD (2007) and INEGI (2009). [↑](#footnote-ref-1)
2. OECD, SMEs in Mexico: Issues and Policies. 2007, OECD Paris. [↑](#footnote-ref-2)
3. Deutsche Gesellschaft für Internationale Zusammenarbeit- GIZ (2012) “Recomendación estratégica sobre tecnologías y subsectores como orientación para sustentar acciones de eficiencia energética en el sector SME). [↑](#footnote-ref-3)
4. Nacional Financiera (NAFIN) is the national development bank of Mexico, FIDE is the Fideicomiso para el Ahorro de la Energia and SENER is the Secretary of Energy. [↑](#footnote-ref-4)
5. The ITESM is currently developing an on-line platform for SME efficient use of resources through the MIF project (ME-M1077), “Pilot Program for MSME competitiveness through the implementation of sustainable practices in the supply chains of Walmart and FEMSA”. The on-line platform and other knowledge products of ME-M1077 will be used in this project ME-M1088. [↑](#footnote-ref-5)
6. Initial conversations with Banamex refer to equipment providers such as GE, Phillips or other companies with strong market share in Mexico. [↑](#footnote-ref-6)
7. In economics, total factor productivity is a variable that accounts for the effects of output growth in a given economy that is not caused by inputs of labor or capital and that can be attributed to higher productivity and a measure of technological dynamism [↑](#footnote-ref-7)
8. Source: <http://reports.weforum.org/global-competitiveness-report-2012-2013/> p.33; p256 9th pillar: technological readiness and 12th pillar: innovation. [↑](#footnote-ref-8)
9. GIZ (2012) “Recomendación estratégica sobre tecnologías y subsectores como orientación para sustentar acciones de eficiencia energética en el sector PyME”. [↑](#footnote-ref-9)
10. Climatescope 2012 <http://www5.iadb.org/mif/Climatescope/2012/img/content/pdfs/eng/Climatescope2012-report.pdf> [↑](#footnote-ref-10)
11. According to FIDE, SMEs under the commercial tariffs 2 and 3, tariff OM and HM and agricultural users under tariff 9 would be classified as SMEs for electricity consumption matters. Tariff 2 corresponds to electricity demand of less than 25KWH per month; Tariff 3 and OM correspond to electricity demand of less than 100KWH/month and tariff 9 and OM correspond to electricity demand above 100KWH/month. [↑](#footnote-ref-11)
12. GIZ (2012) “Recomendación estratégica sobre tecnologías y subsectores como orientación para sustentar acciones de eficiencia energética en el sector PyME” p.59. [↑](#footnote-ref-12)
13. Bank credit extended to the private sector in Mexico amounted for 27% of GDP in 2012 which is low compared to other neighboring countries: Brazil 69%, Colombia 49%, Chile 73,2% or Costa Rica 49% (2011 number for Costa Rica).

    <http://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS/countries?display=default> [↑](#footnote-ref-13)
14. NAFIN program is further explained in paragraph 1.7 and 1.8 of this document. [↑](#footnote-ref-14)
15. Climatescope 2012: Mexico country profile: <http://www5.iadb.org/mif/Climatescope/2012/img/content/pdfs/eng/Climatescope2012-report.pdf> [↑](#footnote-ref-15)
16. The Fideicomiso para el Ahorro de la Energia (FIDE) is the single largest supplier of credit in Mexico. FIDE has implemented a number of lending programs for energy efficiency including (i) high efficiency appliances (refrigerators) and motors, (ii) high efficiency air conditioning with a credit line from NAFIN in which clients repay loans through their electricity bills (each loan will be credit enhanced by a reserve account equal to 20% of the loan amount funded by the Comision Federal de la Electricidad), and (iii) lending for energy efficiency programs for the industrial sector. [↑](#footnote-ref-16)
17. Programs implemented by the Fideicomiso para el Ahorro de la Energia (FIDE) since 1989 focused on the industrial segment with a specific project on SMEs. In 2011, FIDE published “Recommendations on electricity savings for SMEs”. <http://fide.codice.com/home/interior.asp?cve_sub=30>. [↑](#footnote-ref-17)
18. According to the Ministry of Economy there are more than 5.1 million SMEs. Classification by economic activity is: 47.1% services, 26% commerce, 18% manufacturing and 9% other. Data source: Ministry of Economy and INEGI (2009). [↑](#footnote-ref-18)
19. Other participants <http://www.fide.org.mx/index.php?option=com_content&view=article&id=342&Itemid=224> [↑](#footnote-ref-19)
20. Eligible equipment is defined by characteristics of energy consumption and include the following categories of products: motors, refrigeration systems, air conditioning and lighting systems. [↑](#footnote-ref-20)
21. As defined by FIDE, SME clients under electricity tariffs 2, 3 OM, HM and tariff 9. [↑](#footnote-ref-21)
22. NAMAs are defined at government level and materialize in a set of policies and programs that result in measurable GHGs reductions. [↑](#footnote-ref-22)
23. The only requirement to access credit is to be a formal SME. Formality is granted by registering with the Servicio de Atencion Tributaria (SAT) as proof of formal enrollment. All SME clients in Banamex portfolio are registered with SAT. [↑](#footnote-ref-23)
24. In the WeB project, SCF provides the financing to Itau Unibanco, while the MIF provides technical assistance for developing credit policies, products and services specifically for women entrepreneurs. Similarly, green finance projects could bring together financing and technical assistance to develop clean energy and energy efficiency markets in LAC. [↑](#footnote-ref-24)
25. Competitiveness will be measured in this project in terms of a reduction in energy costs or improved use of energy resources in relative terms in SME economic activities: energy costs/output; energy costs/ hours of operation of new equipment or other ratios that measure relative use of energy. [↑](#footnote-ref-25)
26. The NAFIN-FIDE-SENER initiative is explained in paragraphs 1.7 and 1.8 of this document. [↑](#footnote-ref-26)
27. This portfolio may include motors, refrigeration systems, air conditioning machines, and lighting; these devices are characterized by the efficient use of energy. [↑](#footnote-ref-27)
28. Banamex sales force is denominated within the Bank as “customer executives”. [↑](#footnote-ref-28)
29. The on-line training will leverage on the energy efficiency materials developed for Banamex SME clients but will be adjusted for Banamex audience: i.e. sales force of a financial institution. [↑](#footnote-ref-29)
30. Edufin is the education arm of Banamex. Edufin will be in charge of organizing the workshops, finding appropriate panelists for training and convening the venues for training sessions. [↑](#footnote-ref-30)
31. <http://www.expoknews.com/2013/07/08/ahorrara-banamex-hasta-50-mdp-anuales-por-uso-de-energia-sustentable/> [↑](#footnote-ref-31)
32. “The Economics of Household energy efficiency, Evidence from Mexico’s cash for coolers Program” 2012, by Lucas Davis, Alan Fuchs, and Paul Gertler. [↑](#footnote-ref-32)
33. Competitiveness will be measured in terms of improved use of energy resources in SME economic activities: energy costs/output; energy costs/ hours of operation of new equipment or other ratios that measure relative use of energy. [↑](#footnote-ref-33)
34. <http://www.imf.org/external/pubs/ft/weo/2013/update/02/pdf/0713.pdf> [↑](#footnote-ref-34)