DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

MEXICO

PROGRAM TO SUPPORT ENERGY STORAGE SYSTEMS IN MEXICO (GESP)

(ME-G1029)

PROJECT PROFILE

This document was prepared by the project team consisting of: Fernando de Olloqui (IFD/CMF) Team Leader; Leticia Riquelme (IFD/CMF) Alternate Team Leader; Enrique Nieto, Aurea Fuentes, Karina Azar, Adriana Lozano, Claudia Márquez and Tatiana Alves (IFD/CMF); Jacqueline Bueso Merriam (SPD/SDV); Uriel Barrios (CID/CME); Jose Antonio Urteaga (INE/ENE); Ignacio Barragan (LEG/SGO); Gloria Visconti and Fátima López (CSD/CCS); Elee Muslin (INO/FMP); Lourdes Sanchez (VPC/FMP).

Under the Access to Information Policy, this document is subject to Public Disclosure.

PROJECT PROFILE

MEXICO

Ι.	BASIC DATA	
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Project Name:	Program to Support Energy Stor (GESP)	rage Systems in Mexico	
Project Number:	ME-G1029		
Project Team:	Fernando de Olloqui (IFD/CMF) Team Leader; Leticia Riquelme (IFD/CMF) Alternate Team Leader; Enrique Nieto, Aurea Fuentes, Karina Azar, Adriana Lozano, Claudia Márquez and Tatiana Alves (IFD/CMF); Jacqueline Bueso-Merriam (SPD/SDV); Uriel Barrios (CID/CME); Jose Antonio Urteaga (INE/ENE); Ignacio Barragan (LEG/SGO); Gloria Visconti and Fátima López (CSD/CCS); Elee Muslin (INO/FMP); Lourdes Sanchez (VPC/FMP).		
Beneficiary and Executing Agency:	Banco Nacional de Comercio Exterior S.N.C. (BANCOMEXT)		
Financial Plan:	IDB-CTF (Contingent Recovery Investment Grant):	US\$5.4 million	
	IDB-CTF (Non-Reimbursable Investment Grant):	US\$3.6 million	
	Total IDB CTF ¹ :	US\$9.0 million	
Environmental and Social			
Policy Framework:	Applicable Performance Standards:	ESPS 1, ESPS 2, ESPS 10.	
	Impact Classification: Risk Rating	FI Moderate	

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. Problem description and background

2.1 In Mexico, Small and Medium Enterprises (SME) form the bulk of firms in the economy and the most important source of employment across various sectors. Most of the activities in which SME are predominant, such as manufacturing and services, are considered essential in changing the productive structure to help close productivity gaps. In the current, rapidly transforming economic environment, SME need to generate ways to improve the productivity of their businesses by the application of innovation and technological development, particularly through investments that achieve operational efficiency. Energy Efficiency (EE) has been identified as a mechanism for cost reductions in SME. It has been demonstrated that companies can directly influence their energy costs by optimizing production processes, thereby increasing their competitiveness, and help reduce GHG emissions.² This presents an opportunity to stimulate viable

¹ Clean Technology Fund (CTF) is financing for this program, and it is expected to be submitted for approval by June 2023, and will be subject to the Financial Procedures Agreement between IDB and CTF.

² International Climate Initiative (IKI) Alliance Mexico.

sustainable investments that can support firm growth, while contributing to climate change goals.

- 2.2 A significant potential for the deployment of EE lies in Distributed Generation (DG) installations,³ especially in commercial and industrial SME. DG is the most efficient solution to produce energy with reduced costs for firms, as the alternative is to use the national grid to cover their energy demand, which would involve higher operating expenses.⁴ The pairing of these investments with Battery Energy Storage Solutions (BESS)⁵ makes the process even more efficient, as BESS can enable SME to better align power generation with demand, increase resiliency of their self-producer system and reduce energy costs by expanding the use of Renewable Energy (RE), storing excess energy to utilize during peak demand - instead of the more expensive national grid supply - or avoiding demand charges, ensuring any RE produced is not wasted.⁶ Thus, investment in BESS can boost SME operational efficiency while helping to deliver affordability and reliability to their energy systems, subsequently supporting the firm's growth. Moreover, at a macro level, the increasing share of variable RE in energy systems is expected to result in greater need for storage to alleviate intermittency of production and reduce curtailments, given the nature of the resource.
- 2.3 Battery storage has become the most prominent solution because of its quick response, relatively simple installation, and the ability to store several hours of energy. In addition, their scalability allows them to be a viable solution for smaller businesses and installations. As the cost of batteries has decreased,⁷ global investment in them increased by almost 40% in 2020, led by a 60% growth in grid-scale investment. However, investments in behind-the-meter storage fell by 12%, as these are generally financed by households and SME.⁸
- 2.4 All in all, the deployment of BESS at scale can contribute to establish reliable energy services to meet growing demands from sectors critical for economic recovery and growth, while at the same time contribute to countries' climate mitigation commitments. It can also contribute to avoid rising prices for energy sold in the market, by helping reduce grid saturation in periods when electricity demand exceeds the capacity of electricity transmission lines.
- 2.5 **Financial barriers hampering BESS uptake and deployment.** While the local financial sector is solid and well-capitalized, financial depth in Mexico is low relative

³ DG refers to electricity generation close to where it will be used (on-site generation).

⁴ DG systems have a number of other advantages, including reduced transmission and distribution losses, improved grid stability and security, and reduced environmental impact.

⁵ BESS are a type of energy storage systems consisting of one or more batteries that use kinetic energy to store and release electricity as needed. Throughout this proposal, BESS will refer to those used to store excess energy from renewable sources.

⁶ International Renewable Energy Agency (IRENA), "<u>Behind-The-Meter Batteries – Innovation Landscape</u> <u>Brief</u>", 2019.

⁷ Battery costs declined by around 70% between 2015 and 2022 and are expected to continue to fall. IEA, "Sustainable Recovery", World Energy Outlook 2020 Special Report, 2020.

⁸ International Energy Agency (IEA), <u>"World Energy Outlook"</u>, 2021. Battery storage systems deployed at the consumer level – that is, at the residential, commercial and/or industrial premises of consumers – are typically "behind-the-meter" batteries, because they are placed at a customer's facility.

to other major economies in Latin America.⁹ Total financing to firms reaches only 24.1% of Gross Domestic Product (GDP) and small firms account for just 15% of total financing to firms in the private sector.¹⁰ Also, while new credit granted to large companies has stabilized, smaller companies continue to show a larger reduction in their portfolio levels.¹¹ As is the case in the rest of the region, data confirms that local SME face particularly greater credit constraints at base, which is exacerbated during periods of macroeconomic contraction.

- 2.6 Regarding the gender gap, surveys suggest that 30% of microenterprises and SME are owned by women -compared to a 13% average share in Latin America- and that 35% of these firms are partially or fully credit constrained, compared to 28% of those owned by their male counterparts.¹² Additionally, only 3.9% of women microenterprises and SME, report using banks to finance investments, compared to a 17.4% share in the case of men.¹³
- 2.7 In addition to these structural conditions in the financial system, financing SME BESS investments generally face particular obstacles due to: (i) higher upfront costs and longer maturities, when compared with other productive investments; (ii) a lack of familiarity with energy storage technology and the complexities involved in designing its various arrangements; and (iii) a relatively limited, albeit sufficient, market for sector providers (fairly restricted to developed countries).¹⁴ All these factors translate into more complex financial structures and/or risks that are hard for the financial system to assess.
- 2.8 From a demand side, opportunities for energy savings exist, with the energy intensity of Mexico's economy higher than the Organization for Economic Co-operation and Development (OECD) average and showing only a limited improvement since 2000. As the cost of battery storage continues to decrease, SME can have greater financial incentive to develop BESS alongside RE. Existing market evidence suggests that small battery storage solutions make financial sense, that a pipeline of viable projects already exists and that constructing solutions behind-the-meter is possible under current regulation.¹⁵ As margins for battery storage services improve and become more predictable, the energy storage market will eventually attract more debt financing. Until then, concessional financing can facilitate its penetration and scaling-up through interventions that help demonstrate commercial project viability and mitigate real and perceived risks to encourage finance. National Development Banks (NDB) are relevant in this regard, as they can afford greater appetite than commercial banks to assume risks,

⁹ Domestic credit by banks as a percentage of GDP is 28.5% for Mexico, compared to 44.7% in Peru, 51.5% in Colombia, 62.8% in Brazil and 87.2% in Chile. <u>World Bank Open Data</u>, "Domestic credit to private sector by banks (% of GDP)", 2010-2020.

¹⁰ Bank of México (BANXICO), "Reporte de Estabilidad Financiera – Primer Semestre 2022".

¹¹ BANXICO, op cit. The report categorizes "smaller firms" as non-financial private companies not listed in the Mexican stock Exchange with historical maximum credits of less than 100 million Mexican pesos.

¹² World Bank, "MSME Finance Gap", 2017.

¹³ World Bank, "Enterprise Survey".

¹⁴ While providers remain primarily internationally-headquartered, adequate local presence in Mexico exists for commercial and residential storage solutions, storage connected to and outside the network, battery and software manufacturers.

¹⁵ Mexico Business News, "In Times of Uncertainty, Energy Storage Is the Answer", 2023; "Energy Storage: <u>Power Outage Solution for Industrial Clients</u>", 2022. A proposal-specific analysis on the market and potential demand for BESS by SME will be developed for the POD.

especially in the case of smaller firms, and mobilize financial resources.¹⁶ NDB are also crucial to facilitate access to national and international climate finance funds, and in combining all available sources of funds efficiently, within the framework of the energy transformation process.¹⁷ As of March 2022, Mexican NDB outstanding balance of direct and induced financing was equivalent to 27.4% of the total financing of the banking sector and the share of financing to the private sector is 76%.¹⁸

- 2.9 Among Mexican NDB, BANCOMEXT focuses on financing export and import activities to the private sector, both directly and via other Financial Institutions (FI). BANCOMEXT institutional strategy endeavors to offer targeted products and set goals related to the promotion of technological development and the adoption of best practices to mitigate impacts on climate change. In 2021, BANCOMEXT issued a sustainable bond for US\$500 million, which represents the first subordinated bond issuance with a sustainable label in Latin America.¹⁹
- 2.10 Justification and additionality. This Program addresses the problem of lack of financing for BESS investments of SME (¶2.5-¶2.7) by incentivizing these through a financial structure that will allow to mitigate the operational and financial risks, supporting a gradual scale-up of these innovative investments. Storage technologies will play a revolutionary role in the advancement and adoption of DG at different scales and are becoming increasingly attractive and demanded investments (¶2.8) but remain hindered by an absence of financing lines. In accordance with BANCOMEXT's institutional strategy (¶2.9), it would support its efforts in creating a specific financing line that would pair DG investments with BESS. In this regard, the program complements a Bank loan and technical cooperation that support DG project financing (¶2.15), forming part of a comprehensive strategy to enable financing of new markets, proving their viability, and generating a demonstration effect to the financial system. This program is in line with the country's energy and finance policies. In 2016, the Ministry of Energy published an Agreement detailing the first strategy for the Energy Transition Law. which recognizes the importance of batteries in terms of energy security and the achievement of climate change goals through the facilitation of renewable generation technologies.

B. Intervention proposed

2.11 **Objectives.** The general objective of the program is to contribute to SME operational efficiency and environmental goals by promoting the deployment of sustainable investments. The specific objective is to pioneer financing flows to SME investments in BESS, particularly in EE projects.

¹⁶ Smallridge, D., et al., "The Role of NDB in Catalyzing International Climate Finance", IDB, 2013; De Olloqui, F. et al., "<u>Bancos Públicos de Desarrollo ¿Hacia un Nuevo Paradigma?</u>", IDB, 2013; Chelsky, J. et al., <u>"Investment Financing in the Wake of the Crisis: The Role of Multilateral Development Banks"</u>, World Bank, 2013.

¹⁷ Carlino, H., et al., <u>"El Papel Central del Financiamiento en el Acuerdo de París y las Oportunidades para los Bancos Nacionales de Desarrollo</u>", IDB, 2017.

¹⁸ BANXICO, op cit.

¹⁹ BANCOMEXT, <u>Annual Report 2021</u>.

- Single component: Financing Credit Guarantees. CTF resources will be used 2.12 to finance a revolving credit guarantee fund managed by BANCOMEXT to partially cover loans granted by either BANCOMEXT itself or an intermediary FI, to SME investing in projects with BESS. BANCOMEXT operates as both first and second tier lender, depending on the size of the borrowing SME; smaller firms are serviced through second tier operations. The program contemplates using both modalities. The resources will be deposited in an existing guarantee fund, a trust that administers BANCOMEXT's various guarantee instruments, that will have its own separate accounting for the program. Due to its revolving nature, program resources from guarantees that are not executed will remain in the fund until they are ultimately utilized (¶2.17). Partial credit guarantees are intended to help improve the risk profile of investments to reduce financing cost for the borrower and net exposure of BANCOMEXT and its network of FI, increasing the attractiveness of the financing. To address the gender financial gap (¶2.6), a specific allocation of at least 10% of program resources will target women SME.²⁰
- 2.13 **Results and beneficiaries.** The program's logic proposes that by providing guarantees to FI to cover for SME loans for BESS projects, funds will be leveraged to expand credit for the sector. In turn, additional access to finance will enable investment and deployment of BESS, contributing to the sustainable growth of SME, along with associated benefits from both productivity and climate standpoints. Preliminary, program results may include amount of guaranteed credit for BESS by SME, savings in energy costs by SME financed and annual GHG emissions avoided.
- 2.14 Direct beneficiaries of the program will be SME²¹ investing in BESS paired with solar photovoltaic (PV) DG projects²² in the industrial and commercial sector. The program will be primarily focused on beneficiaries financed under the Global Credit Program to Support Economic Recovery in Mexico (¶2.15),²³ under which PV project pipeline development efforts are currently on-going. The guarantee facility will be used to support project financing by BANCOMEXT or eligible financial intermediaries under BANCOMEXT's policies. Specific procedures, technical and financial criteria for beneficiary loans will be described in the Operating Regulations. On a preliminary basis, it is estimated that the guarantee fund could support some 200 projects, based on assumptions on a maximum size per DG installation (500kw), available resources for DG loans (US\$92 million, ¶2.15), the additional capital cost of BESS, and the expected leverage of the guarantee fund.²⁴

²⁰ <u>ATN/OC-18036-RG</u> complements the program to its alignment with gender, by supporting BANCOMEXT's efforts to develop policies and financial products geared towards identifying and improving access to finance to women led SME.

²¹ As defined by Mexican government institutions.

²² The storage solution draws power from the PV generation source and, in some cases, directly from the grid in off-peak hours.

²³ While the use of program resources in transactions contracted under the <u>5455/OC-ME</u> is not mandatory, it is expected that the majority of the funds will support this portfolio, given the consistencies with its characteristics and eligibility criteria.

²⁴ It is estimated that the underlying DG investment and loan, including BESS, will not exceed US\$1 million. On a preliminary basis, the maximum guarantee is estimated at 70% of the loan amount.

- 2.15 **Complementarity with other IDB operations.** In December 2021, the Bank approved the Global Credit Program to Support Economic Recovery in Mexico (5455/OC-ME), with BANCOMEXT as borrower, having the specific objective of supporting the inclusive economic recovery of SME in the manufacture and tourism sectors, and its dependent firms, through long term financing for productive investment, including investment for energy efficiency. Total financing for the program will be US\$319 million,²⁵ including IDB's Ordinary Capital resources (US\$310 million) and reimbursable resources from the CTF for US\$9 million. Of the total resources, US\$92 million, including all CTF funds, will be used to finance energy efficiency investments, namely in DG. The guarantee facility under this proposed Program will ease the deployment of the resources of program 5455/OC-ME, while promoting the development of innovation through energy storage solutions, as well as increasing the leverage of local resources and the GHG avoided as a result of investments financed. The program considers that the DG and BESS investments are financed together and simultaneously. Also, CTF funded a Technical Cooperation (TC) ATN/TC-18688-ME that supports this process, related to institutional strengthening for evaluation and management of energy efficiency projects.
- 2.16 **Financial instrument.** The program is proposed as an Investment Grant financed with resources from the CTF, specifically as part of the <u>Global Energy Storage</u> <u>Program</u> (GESP). Of these resources, US\$5.4 million is a Contingent Recovery Investment Grant,²⁶ provided by CTF, and US\$3.6 million is a Non-Reimbursable Investment Grant. The total amount (US\$9 million) will be applied to the guarantee facility under the single component.
- 2.17 **Execution mechanism.** The beneficiary and executing agency of the program will be BANCOMEXT, which has the necessary administrative, fiduciary and control mechanisms to provide and maintain a transparent and effective administration of the program. Resources will be channeled through BANCOMEXT, acting as fiduciary manager of the guarantee fund, set up as a revolving facility: in case of default, program resources will be used to reimburse the amount of the credit covered by the guarantee; if the loan is repaid, resources committed under its guarantee will be released so that they can be used to issue guarantees for new BESS projects. In proposing this solution, the IDB follows CTF guidelines in recommending a necessary grant element that is tailored to the additional cost and risk premium of this relatively new type of PV+BESS investment. A 3-year execution period for the program is foreseen, in line with 5455/OC-ME. There is prior experience with BANCOMEXT acting as executor of prior operations (loans 4666/OC-ME and 3563/OC-ME, both of which have published Project Completion Reports with satisfactory results, qualifying BANCOMEXT's performance as excellent).
- 2.18 **Strategic alignment.** The program is consistent with the Second Update of the Institutional Strategy (AB-3190-2) and aligns with the challenge of Productivity and Innovation, by supporting the financing of SME's investments in energy efficiency that also allow for greater productivity. It also aligns with the crosscutting issues

²⁵ In December 2022, a disbursement was made for US\$150 million.

²⁶ The corresponding CTF instrument is a Contingent Finance Guarantee, with an annual recurring charge of 25 bps, and is executed upon non-performing loans by SME. It has a 20-year maturity.

of: (i) Institutional Capacity and the Rule of Law by supporting BANCOMEXT in developing the credit guarantee facility which strengthens their financial structuring capacity. Also, this process will be complementarily supported by ATN/TC-18688-ME (¶2.15); (ii) Environmental sustainability, by targeting DG projects with BESS that contribute to cleaner and more efficient energy and (iii) Gender equality, by contributing to address the gender financial gap with a targeted allocation of 10% (US\$900,000) of program resources to women SME. The program aligns with IDB's Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (GN-2609-1) and the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (GN-2710-5), by supporting BESS projects that increase RE distributed generation. By the same standard, it is consistent with the Climate Change Sector Framework Document (GN-2835-3) and the Energy Sector Framework Document (GN-2830-3). It also aligns with the Institutions for Growth and Social Welfare Strategy (GN-2587-2), by increasing access to credit through local financial institutions. The program is aligned with IDB's Country Strategy (CS) with Mexico 2019-2024 (GN-2982) in its priority area of boosting investment, specifically contributing to the strategic objective of strengthening access to credit.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **IDB experience.** The IDB has extensive experience with financing sustainable 2226/OC-ME, SME. Loans 2671/OC-ME energy projects by and 2843/OC-ME. carried out the CCLIP ME-X1010 under with Nacional Financiera (NAFIN), provided medium and long-term financing for private investment projects by SME. Derived from the government's drive to reduce GHG emissions, these programs focused on RE projects, showing exceptional results in terms of leverage and new capacity installed.
- 3.2 **Lessons learned.** Lessons will be reflected in the following ways: (i) leveraging capacities developed within BANCOMEXT through programs successfully executed or under implementation, particularly in the financial management of sustainable energy projects (¶2.17); (ii) the importance of properly targeting and identifying an instrument (guarantee) to meet the specific needs (mitigating risks of financing BESS projects in the context of economic recovery) of strategic sectors (SME in the industrial and commercial sectors); and (iii) use of complementary Technical Cooperation activities to support the consolidation of a pipeline of eligible projects that ensures portfolio readiness and inclusiveness (¶2.15).

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

4.1 The operation is classified as Financial Intermediation under the Environmental and Social Policy Framework (GN-2965-23). The Environmental and Social Risk Rating (ESRR) of the operation has been initially assessed as Moderate, related to short-term, localized impacts that can be mitigated with standard and known measures. The operation will not finance activities on the IDB Environmental and Social Exclusion List, activities that directly contribute to them, or subprojects of substantial or high risk. All potential indirect and contextual impacts and risks will

be analyzed in detail during the environmental and social due diligence to confirm the ESRR. During the due diligence process, an Environmental and Social Management System (ESMS) of the program will be established to manage the classification, approval, implementation, and monitoring of credits financed by the program. The results of the due diligence will be synthesized in the Environmental and Social Review Summary that will define the environmental and social requirements of the program and will be integrated into the program's OR.

V. OTHER ISSUES

5.1. **Risks.** The program's overall risk rate is medium-low, and a medium-high risk has been identified as BESS involve relatively new technologies that are costlier than a simple DG system that may hinder demand for BESS and its financing. To mitigate this risk, the program is supported by the complementary TC <u>ATN/TC-18688-ME</u> that provides BANCOMEXT institutional and operational support for EE and DG financing, designing the financial structure, including guarantees, that mitigate risk and support demand for these projects.

VI. RESOURCES AND TIMETABLE

6.1 Distribution of the POD for Quality and Risk Review (QRR) is expected on April 7, 2023, approval of the Draft Loan Proposal by the Operations Policy Committee (OPC) on May 31, 2023, and consideration of the Loan Proposal by the Executive Board of Directors is expected by July 26, 2023. It is estimated that a budget of US\$77,000 and 1.08 FTEs are required to complete preparation of the proposal (Annex IV).

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¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.



Operation Information

Operation Name		
Program to Support Energy Storage Systems in Mexico (GESP)		
Operation Number	ME-G1029	

Operation Details

Organizational Unit	IDB Sector/Subsector
IFD/CMF	FINANCING FOR ENVIRONMENTAL SUSTAINABILITY
Type of Operation & Modality	Original IDB Amount
IGR /	\$9,000,000.00
Executing Agency	Borrower
US-IDB	
ESG Primary Team Member	Team Leader
	Fernando De Olloqui
Toolkit Completion Date	Author
22/02/2023	Jessica Eileen Arango Laws (Esg Guidance Service)
Applicable ESPSs with requirements	
ESPS 1; ESPS 2; ESPS 10	

Operation E&S Classification Summary

Environmental and Social Impact Categorization (ESIC)		FI	
Disaster and Climate Change Risk Classification (DCCRC)		Low	
Environmental and Social Risk Rating (ESRR) Moderate			

Summary of Impacts / Risks and Potential Solutions

The FI will support sectors with low level of direct impacts expected (e.g. non E&S relevant sector).

The FI will support sectors with low level of indirect/cumulative impacts expected (e.g. non E&S relevant sector).

The FI activities eligible for financing will be associated with moderate level of direct impacts (e.g. moderate health and safety risks).



The FI activities eligible for financing will be associated with low level of indirect/cumulative impacts.

The Borrower/Executing Agency has good organizational capacity and competency for E&S management and potential existing E&S management systems.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have low direct impacts.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have low indirect/cumulative direct impacts.

The average amount for sub-project/sub-loans will be more than \$500,000.

There are no contextual risks associated with the sub-projects under the FI (e.g. political instability, oppression of communities, armed forces in the project area).

No natural hazards, such as earthquakes, droughts, landslides, floods, wildfires, or others, including those caused or exacerbated by climate change, are likely to occur in the sub-projects area, and/or these may impact the sub-project, and/or the sub-project may exacerbate the risk from natural hazards to human life, property, and/or the environment.

The FI portfolio or sub-projects will not have impacts or risks on human health and the environment, have GHG emissions, generate waste and/or use pesticides.

The FI portfolio or sub-projects will not have impacts or risks on health and safety of the project-affected people. Impacts on the sub-projects themselves from natural hazards and climate change and/or risks associated with human rights.

The FI portfolio or sub-projects will not negatively impact people due to land acquisition.

The FI portfolio or sub-projects will not have significant impacts or risks on biodiversity and ecosystem services and/or introduce (intentionally or accidentally) alien, or non-native, species of flora and fauna.

The FI portfolio or sub-projects will not impact Indigenous Peoples.

The FI portfolio or sub-projects will not impact cultural heritage.

The FI portfolio or sub-projects will not negatively affect people due to their gender, sexual orientation or gender identity.

ESPS 1 - Assessment and Management of Environmental and Social Risks and Impacts

The Executing Agency will prepare and maintain an Environmental and Social Management System (ESMS) for the operation as defined under ESPS 1.

ESPS 2 - Labor and Working Conditions

The FI portfolio or sub-projects will not have impacts or risks associated with child labor or forced labor in the workforce.

ESPS 10 - Stakeholder Engagement and Information Disclosure



The Borrower will prepare a stakeholder engagement framework/plan for the lifetime of the program.

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MEXICO PROGRAM TO SUPPORT ENERGY STORAGE SYSTEMS IN MEXICO ME-G1029

INITIAL ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY February 2023

> This document was prepared by: Aurea Fuentes (IFD/CMF) with the support of the Project team leader: Fernando de Olloqui (IFD/CMF)

Initial environmental and social review summary		
Operation Data		
Operation Number	ME-G1029	
IDB Sector/Subsector	IFD/CMF	
Type of Operation & Modality	Investment Grant	
E&S Impact Classification	FI	
Environmental and Social Risk Rating	Moderate	
Disaster and Climate Change Risk Rating	Low	
Borrower	Banco Nacional de Comercio Exterior S.N.C. (BANCOMEXT)	
Executing Agency	BANCOMEXT	
IDB-CTF Grant Amount (and total project cost)	IDB-CTF (Contingent Recovery Investment Grant): US\$5.4 million IDB-CTF (Non-Reimbursable Investment Grant): US\$3.6 million	
Applicable ESPS with requirements	ESPS 1; ESPS 2; ESPS 10.	
Executive Summary		

Executive Summary

According to the Environmental and Social Policy Framework, the operation is classified as Financial Intermediation (FI). The Environmental and Social Risk Rating (ESRR) has been assessed as Moderate, primarily related to short-term, localized impacts that can be mitigated with standard and known measures. This rating shall be confirmed during the environmental and social due diligence (ESDD).

The general objective of the program is to contribute to Small and Medium Enterprises' (SME) operational efficiency and environmental goals by promoting the deployment of sustainable investments. The specific objective is to pioneer financing flows to SME investments in Battery Energy Storage Solutions (BESS), particularly in Energy Efficiency (EE) projects.

Direct beneficiaries of the program will be SME investing in BESS paired with solar photovoltaic (PV) distributed generation projects in the industrial and commercial sector. The program will be primarily focused on beneficiaries financed under the Global Credit Program to Support Economic Recovery in Mexico, under which PV project pipeline development efforts are currently oongoing.

The maximum amount per subproject is expected to be US\$1 million. Most subprojects are expected to have a low socio-environmental risk profile, while some might be of moderate risk.

The potential environmental and social and health and safety impacts associated with the program will be managed with the application of an Environmental and Social Risk Management System ('Program ESMS') that will be based on compliance with applicable national or local law, exclusion criteria, eligibility criteria, among others. (See more detail in the NDAS-1 section).

The conclusions of the ESDD and the program's environmental and social requirements will be described in the final Environmental and Social Review Summary and integrated into the program's

operating regulations (ORP).

Operation Description

The program is comprised of one component, described as follows:

1. Single component: Financing Credit Guarantees. CTF resources will be used to finance a revolving credit guarantee fund managed by BANCOMEXT to partially cover loans granted by either BANCOMEXT itself or an intermediary Financial Institution (FI), to SME investing in projects with BESS. BANCOMEXT operates as both first and second tier lender, depending on the size of the borrowing SME; smaller firms are serviced through second tier operations. The program contemplates using both modalities. The resources will be deposited in an existing guarantee fund, a trust that administers BANCOMEXT's various guarantee instruments, that will have its own separate accounting for the program. Due to its revolving nature, program resources from guarantees that are not executed will remain in the fund until they are ultimately utilized. Partial credit guarantees are intended to help improve the risk profile of investments to reduce financing cost for the borrower and net exposure of BANCOMEXT and its network of FI, increasing the attractiveness of the financing. To address the gender financial gap, a specific allocation of at least 10% of program resources will target women SME.

Environmental and social risks generally associated with BESS in existing GD systems in the context of the operation of a SME in the industrial and commercial sectors are the following:

- Inadequate waste management (incorrect disposal of batteries).

- Energy con	sumption
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Rationale for Classifications/Rating		
E&S Impact Classification	FI – BANCOMEXT will channel the program's resources to a revolving credit guarantee fund managed by BANCOMEXT to partially cover loans granted by either BANCOMEXT itself or an intermediary FI, to SME investing in projects with BESS through direct credit lines, specifically the credit line funded under Program ME-L1300, which has a tailored ESMS in place.	
E&S Risk Rating	Moderate – It is expected that most of the subprojects resources from this program will be of low risk. Some of financed could be of moderate risk. This precategorizati during the preparation stage of the operation. High-ris excluded from financing. Likewise, the eligibility and ex defined will comprise the ESMS of the program in complian	the subprojects to be on will be confirmed k subprojects will be clusion criteria to be
DCC Risk Classification Low – No natural hazards, such as earthquakes, droughts, landslides, floods, wildfires, or others, including those caused or exacerbated by climate change, are likely to occur in the subprojects area, and/or these may impact the subproject, and/or the sub-project may aggravate the risk from natural hazards to human life, property, and/or the environment.		
Use of Borrower E&S Framework No		No
N/A (FI)		
Environmental and Social Performance Standards (ESPS) that apply to the proposed project		
ESPS-1. Assessment and Management of E&S Risks and Impacts Yes		Yes

The elements of the ESMS of the program that BANCOMEXT shall comply with will be confirmed during the ESDD. These elements are based on:

- Compliance with applicable national or local laws or regulations.
- Compliance with the IDB exclusion list.
- Compliance with additional exclusion criteria to avoid direct or indirect impacts of the beneficiary MSMEs' economic activities, for example:

Subprojects categorized as A.

Activities/sectors with higher socio-environmental risk (large-scale agriculture, large-scale construction, extractive industries, etc.).

Subprojects that entail involuntary physical or economic resettlement of people.

Subprojects that may damage cultural sites or critical cultural sites.

Subprojects that entail a negative impact on protected areas or RAMSAR sites.

Subprojects with impacts on indigenous peoples.

Activities involving the introduction or use of alien or non-native species¹.

- Compliance with environmental, social and health and safety local laws associated with the program.
- Compliance with applying a maximum financing amount per subproject of US\$1 million.
- Compliance with submitting a biannual report on the environmental and social performance of the project, which includes, among others, the amounts disbursed for subprojects and distribution by sector, including average amounts of total financing and by sector, brief description of the use of resources of the subprojects (BESS), and any other relevant environmental and social information on the beneficiary SME, BANCOMEXT and national or subnational regulations.

These requirements will be included in the program's Operating Regulations and shall be approved as a condition for the first disbursement.

ESPS-2. Labor and Working Conditions

Yes

BANCOMEXT is compliant with the national labor legislation of Mexico. The country has ratified most of the conventions of the International Labor Organization, including the Forced Labour Convention, Minimum Age Convention, and Worst Forms of Child Labour Convention.

No solar panels are expected be financed for small-scale renewable energy and energy efficiency subprojects under this program. However, the ESDD will consider the measures already in place under program ME-L1300, which is expected to be the financing source of the photovoltaic modules associated with the BESS of this program; if applicable, forced labor risk mitigation measures will be established and integrated into the program's ESMS under the Bank's action plan on solar panels. BANCOMEXT's compliance with ESPS-2 will be verified during the ESDD.

¹ Pursuant to ESPF, paragraph 20: Intentional or accidental introduction of alien, or non-native, species of flora and fauna into areas where they are not normally found can be a significant threat to biodiversity, since some alien species can become invasive, spreading rapidly and outcompeting native species.

ESPS-3. Resource Efficiency and Pollution Prevention	n	No
The program will not finance economic activities with significant impacts on air, water, and land pollution and hazardous and non-hazardous waste. The construction of large-scale buildings or facilities will not be financed. Most subprojects are expected to have a low E&S risk, which must comply with national legislation.		
ESPS-4. Community Health, Safety, and Security		No
The program will not finance economic activities with significant impacts on people or communities. There will be no funding for large infrastructure or the use of hazardous materials. Most subprojects are expected to have a low E&S risk, which must comply with national legislation.		
ESPS-5. Land Acquisition and Involuntary Resettleme	ent	No
Subprojects that entail involuntary physical or ecorn not be eligible under this program.	nomic resettlement of people,	even temporary, will
ESPS-6. Biodiversity Conservation and Sustainable M Natural Resources	lanagement of Living	No
Subprojects that negatively impact protected area program.	as or RAMSAR sites will not l	be eligible under this
ESPS-7. Indigenous Peoples		No
Subprojects with a negative impact on indigenous peoples will not be eligible under this program.		
ESPS-8. Cultural Heritage		No
Subprojects with a negative impact on cultural heritage will not be eligible under this program.		
ESPS-9. Gender Equality		No
The program is not expected to cause risks and negative impacts based on gender, sexual orientation, among others; on the contrary, to address the gender financial gap, a specific allocation of at least 10% of program resources will target women-led SME.		
ESPS-10. Stakeholder Engagement and Information Disclosure		Yes
Most subprojects are expected to have a low E&S risk, which must comply with national legislation. During the ESDD, the grievance mechanism that BANCOMEXT currently has in place will be analyzed.		
Information Disclosure requirements (for the IDB)		
The E&S documentation of the subprojects will be disclosed as established in national requirements and laws. The IDB will disclose E&S information on the program through its existing processes, including its Project Monitoring Reports (PMR).		
Annexes		
Annex A Environmental and Social Ac		tion Plan (ESAP)
Annex B E&S Requirements		
Annex C E&S Maps		

Annex A. Environmental and Social Action Plan (ESAP)

No Environmental and Social Action Plan is required for this program.

Annex B. E&S Requirements

To be confirmed in the final Environmental and Social Review Summary.

Annex C. E&S Maps

The program's scope to finance SME is the United Mexican States territory.

Study	Date	Reference and Link
Bancos públicos de desarrollo: ¿Hacia un nuevo paradigma?	2013	<u>Link</u>
Investment Financing in the Wake of the Crisis: The Role of Multilateral Development Banks	2013	<u>Link</u>
El Papel Central del Financiamiento en el Acuerdo de París y las Oportunidades para los Bancos Nacionales de Desarrollo	2017	<u>Link</u>
Behind-the-meter batteries	2019	<u>Link</u>
Sustainable Recovery	2020	<u>Link</u>
Annual report 2021	2021	<u>Link</u>
World Energy Outlook	2021	<u>Link</u>
Financial Stability Report	2022	<u>Link</u>

INDEX OF COMPLETED AND PROPOSED SECTOR WORK

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.