



## **CTF -DPSP (IV-GESP)**

**PROJECT TITLE: PROGRAM TO SUPPORT ENERGY STORAGE SYSTEMS IN MEXICO**  
**COUNTRY: MEXICO**  
**MDB: IADB**

**Cover Page for CTF Project/Program Approval Request<sup>[a]</sup>  
Global Energy Storage Program (GESP / DPSP-IV)**

<b>Country/Region</b>	Mexico	<b>CIF Project ID#</b>	<b>Auto Generated by CCH</b>
<b>Type of CIF Investment:</b>	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		
<b>Project/Program Title (same as in CCH)</b>	GESP: Program to Support Economic Recovery in Mexico		
<b>Sector/Pillar</b>	<input type="checkbox"/> Enabling Environment <input checked="" type="checkbox"/> Energy Efficiency <input checked="" type="checkbox"/> Energy Storage <input type="checkbox"/> Renewable Energy <input checked="" type="checkbox"/> Renewable Energy/ Energy Efficiency <input type="checkbox"/> Transport		
<b>Technology/Area</b>	<input type="checkbox"/> End Use <input type="checkbox"/> District Heating <input type="checkbox"/> Smart Grid <input type="checkbox"/> Capacity Building <input type="checkbox"/> Multiple <input checked="" type="checkbox"/> Batteries <input type="checkbox"/> Hydro <input type="checkbox"/> Green Hydrogen <input type="checkbox"/> Geothermal <input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Hydropower <input type="checkbox"/> Cookstoves <input type="checkbox"/> Waste to Energy <input type="checkbox"/> Bioenergy <input type="checkbox"/> Mixed RE <input type="checkbox"/> Green Fuels <input type="checkbox"/> Modal Shift <input type="checkbox"/> Vehicle Technologies <input type="checkbox"/> Mass Transit <input type="checkbox"/> Electric Vehicles <input type="checkbox"/> Other ( _____ )		
<b>Project Lifetime (MDB board approval to project closure)</b>	20 years		
<b>Is this a private sector program composed of sub-projects?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Financial Products, Terms and Amounts (same as CCH)</b>			
<b>Financial Product</b>	<b>USD (million)</b>	<b>EUR (million)<sup>[b]</sup></b>	
Grant	2.0		
MPIS	0.1		
Public sector loan – Senior loan			
First loss guarantee			
Second loss guarantee			
Equity			
Senior loan			
Senior loan in local currency hedged			
Senior loan in local currency unhedged ( <b>EXCEPTIONAL REQUEST</b> )			
Subordinated debt/loan/ mezzanine instrument with income participation			
Subordinated debt/loan / mezzanine instrument with income participation local currency unhedged ( <b>EXCEPTIONAL REQUEST</b> )			
Subordinated debt/loan /mezzanine instrument with convertible features			

'Convertible/contingent recovery' grant/loan/guarantee (loans convertible to grants or vice versa)	7.0 <sup>1</sup>	
Convertible Loans (convertible to equity only)		
For loans and guarantees – is this a revolving structure? <sup>[2]</sup> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Specify local currency type here</b>		
Other (please specify)		
<b>Total</b>	<b>\$9.1</b>	
<b>CIF Financial Terms and Conditions Policy</b>	<a href="#">Link</a> Is this request in accordance with the CIF Financial Terms and Conditions Policy?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if no, please specify detailed information under the justification section)	
<b>Justification (exceptional request)</b>		
N/A		
<b>Implementing MDB(s): IDB</b>		
MDB Headquarters-Focal Point:	Gloria Visconti / Mariel Juárez	
MDB Task Team Leader (TTL):	Fernando De Olloqui	
<b>National Implementing Agency: BANCOMEXT</b>		
Country Focal Point/s	Hector Luna	
<b>Brief Description of Project/Program (including objectives and expected outcomes)<sup>[c]</sup></b>		

<sup>1</sup> Contingent finance guarantee.

<sup>2</sup> With a revolving structure, after the loan or guarantee matures, instead of returning the funds to the Trustee, the funds are redeployed as a new loan or guarantee.

Storage technologies are set to play a crucial role in the development and adoption of renewable energy at various scales. They are also increasingly becoming attractive and highly sought-after investments. As the margins for battery storage services improve and become more predictable, the energy storage market will eventually attract more capital and debt financing. Until that happens, concessional financing can be used to facilitate its penetration and scaling-up through various interventions that can help demonstrate commercial project viability, mitigate real and perceived risks, and encourage finance. National Development Banks (NDB) are particularly relevant in this regard. They can assume greater risks than commercial banks, especially in the case of smaller firms, and mobilize financial resources. NDBs are also essential in facilitating 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.

In the current rapidly changing economic environment, Small and Medium Enterprises (SMEs) need to find ways to increase the value and productivity of their businesses. One way they can do this is by applying innovation and technological development, specifically through investments that achieve operational efficiency, such as energy efficiency (EE) projects. By combining EE investments from renewable sources with Battery Energy Storage Solutions (BESS), firms can achieve more efficiency in their projects. BESS can enable SMEs to better align power generation with demand, increase the resiliency of their self-producer system, and further reduce energy costs by expanding the use of Renewable Energy (RE), storing excess energy to utilize during peak demand, and avoiding demand charges. This investment in BESS can boost SME operational efficiency while also 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 Mexico's energy systems is expected to result in a greater need for storage to alleviate the intermittency of production and reduce curtailments, given the nature of the resource.

Investment in BESS is often faced with challenges due to higher upfront costs, longer maturities as compared to other productive investments, lack of access to suitable long-term financing, and traditional forms of collateral. Additionally, there is a lack of familiarity with storage technology and the complexities involved in designing its various arrangements. Lastly, the market for sector providers is relatively limited, which is restricted to developed countries. All these factors translate into more complex financial structures and risks that are hard for the financial system to assess.

To address the barriers, the [Program to Support Energy Storage Systems in Mexico](#) will incentivize SMEs to invest in BESS through a financial structure that can mitigate the technological and financial risks. The program offers guarantees that will execute defaults on the sub-loans due to the underperformance of the PV+BESS projects. In other words, if the energy savings generated are not sufficient to repay the sub-loans, these guarantees will come into effect.

CTF resources will be used to finance a credit guarantee fund, managed by BANCOMET, to partially cover sub-loans granted by either BANCOMET itself or a financial intermediary (FI) to SMEs investing in solar PV Distributed Generation (PV) projects paired with BESS. Partial credit guarantees are intended to help improve the risk profile of investments by covering the performance of the PV+BESS project and reducing financing costs for the borrower and net exposure of BANCOMET and its network of FIs. In proposing this solution, the IDB follows CTF guidelines and recommends a necessary grant element that is tailored to the additional risk premium of this relatively new type of PV+BESS investment.

BANCOMET will provide lending services to SMEs as first or second-tier lender, depending on the size of the borrower. The program offers both modalities. Once the contractual and eligibility conditions are met, program resources will be available to establish the guarantee fund within an existing trust that administers BANCOMET's various guarantee instruments. The fund will have its own separate accounting for the program.

The guarantee fund will have the complete amount of the program resources (US\$9 million) available at the outset once all program eligibility requirements are met. Of this total: (i) Tranche I resources (US\$2 million), financed with the CTF

Grant, will be disbursed to BANCOMEXT for the guarantee fund with a maximum disbursement period of three years; and (ii) Tranche II resources (US\$7 million), financed with the CTF Contingent Finance Guarantee, will be made available to the guarantee fund for their use to guarantee sub-loans, but will be drawn upon and disbursed from the IDB on demand, as required during the 20-year term of this type of grant instrument, when the guarantees are executed by there being defaults on the sub-loans. This will allow for an optimization of the leveraging potential of guaranteed scheme. At the end of the program's guarantee obligations, remaining CTF resources that have not been executed will be reimbursed by the IDB to the CTF. As a special contractual requirement, during a period of three years from the date of eligibility, BANCOMEXT will be obliged to report on the program's indicators and targets associated with the specific objectives (outlined in the Results Matrix). During this period, it is expected that the guarantee fund will support a minimum of PV+BESS projects and installed energy capacity.

The project will enable investment and deployment of BESS, contributing to the operational efficiency and sustainable growth of SMEs, along with associated benefits from both productivity and climate standpoints.

<b>Consistency with CTF investment criteria</b>	
a. Potential GHG emissions savings	The program projects 2,952 tCO <sub>2</sub> e from the implementation of the project until 2026.
b. Cost-effectiveness	A cost-benefit analysis was carried out to assess the viability of the program. The analysis calculates program net benefits and costs assumed to not otherwise accrue to the economy in the absence of the program. This analysis validates the program's creation of significant net benefits, projected for a 22-year period, using a 12% discount rate, yielding a Net Present Value (NPV) of MX\$99.46 million (US\$5.23 million).
c. Demonstration potential at scale	The CTF provides scaled-up financing for public and private sector projects that contribute to the demonstration, deployment, and transfer of low-carbon technologies with significant potential for GHG emission reductions. Through second-tier structure and increased access to credit, the program is expected to have a positive demonstrative effect, since the portfolio enabled helps establish viable business models and a track record for other SME, bringing up their confidence to invest more in PV+BESS and helping improve the development of the local energy storage market.
d. Development impact	Besides the main objective of contributing to the SMEs' operational efficiency and environmental goal, as the project is considered a pilot, it promotes the development of innovation in financial and technological solutions to improve the competitiveness of SMEs, supports the leverage of local resources, and reinforces the impact of reducing emissions.
e. Implementation potential	It is estimated that the guarantee fund could support a minimum of 70 PV+ BESS projects, including the average size per DG installation, the estimated capital cost of PV and BESS technology, and the average size of DG sub-loans financed with available complementary resources.

f. Additional costs and risk premium	Partial credit guarantees are intended to help improve the risk profile of investments by covering the performance of the PV+BESS projects and hence the energy savings generated, which will reduce financing costs for the borrower and net exposure of BANCOMEXT and its network of FI, increasing the attractiveness of the financing. In proposing this solution, the IDB follows CTF guidelines in recommending a necessary grant element that is tailored to the additional risk premium of this relatively new type of PV+BESS investment.
<b>Additional CTF investment criteria for private sector projects/ programs</b>	
g. Financial sustainability	N/A
h. Effective utilization of concessional finance (including a detailed analysis on how the proposal meets the minimum concessionality principles, and on how it is aligned with the blended concessional finance principles)	N/A
i. Mitigation of market distortions	N/A
j. Risks	N/A
<b>For DPSP projects/programs in non-CTF countries, explain consistency with FIP, PPCR, or SREP Investment Criteria and/or national energy policy and strategy.</b>	
N/A	
<b>Social Inclusion and Stakeholder Engagement</b>	
Final beneficiaries of the program will be SMEs investing in BESS paired with PV projects, including Energy Services Companies (ESCO) or other specialized firms offering Energy-as-a-Service schemes. The program will be primarily focused on final beneficiaries financed under the Global Credit Program to Support Economic Recovery in Mexico, under which pipeline development efforts for PV projects are currently ongoing.	
<b>Gender Considerations</b>	
<b>Gender Analysis</b> (Please insert the text from the project document on the analysis of gaps in access to services, markets, and jobs by women in relation to the project sectors)	Regarding the gender gap, Mexico has abundant data disaggregated by sex for financial inclusion at the individual level, but the country still lacks adequate gender monitoring systems when it comes to firms. 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. Additionally, only 3.9% of women microenterprises and SME report using banks to finance investments, compared to 17.4% in the case of men.

<b>Gender Activities</b> (Please insert the text describing gender-specific activities included in the project)	To address the gender financial gap, a specific allocation of at least 10% of program resources (\$900,000) will target women SME. The allocation for women SME was established conservatively based on the following considerations: (i) prior to the program BANCOMEXT has not granted any funds to BESS; and (ii) there is no data available on the share allocated to women SME in BANCOMEXT portfolio overall.
<b>Gender Indicators</b> (Please insert the text on selected gender specific indicators, including annual targets. from the Project Log Frame that the project is committing to report on)	Guarantees provided by BANCOMEXT with program resources to SME owned or led by women (US\$ million). The Annual target is 0.04 in the first year of the project, 0.14 in the second year, 0.72 in the third year and 0.9 by the end of the project.
<b>For projects/programs with activities in countries assessed as being at moderate or high risk of debt distress, macro-economic analysis to evaluate the potential for the CTF project or program to impact the country's debt sustainability</b> N/A	
<b>For public sector projects/programs, analysis of how the project/program facilitates private sector investment</b> BANCOMEXT focuses on financing export and import activities to the private sector – 90% of firms supported by BANCOMEXT are SMEs –both directly and via other FIs.	
<b>Expected Results (M&amp;R)</b>	
<b>Project/Program Timeline</b>	
Expected start date of implementation <sup>[d]</sup>	June/2024
Expected end date of implementation <sup>[d]</sup>	December/2026
Expected lifetime of project results in years (including beyond project closure)	20 years.
<b>CTF Core Indicators</b>	<b>Project-Defined Indicators/Targets</b>
<i>Please list the corresponding project-defined indicator(s) and report all targets, including disaggregated targets. (See the <a href="#">GESP Program Monitoring and Reporting Toolkit</a> for additional guidance.)</i>	
<b>CTF 1: GHG emissions reduced or avoided (mt CO<sub>2</sub> eq)</b>	
<i>Annual</i>	2,952 tCO <sub>2</sub> e
<i>Cumulative Lifetime</i>	59,040 tCO <sub>2</sub> e
<b>CTF 2: Volume of direct financing leveraged through CTF funding (\$)</b>	<i>Indicator calculated from the co-financing section below</i>
<b>CTF 3: Installed capacity of RE as a result of CTF interventions (MW)</b>	
<i>Wind</i>	
<i>Solar</i>	20.2 MW
<i>Hydro</i>	
<i>Geothermal</i>	
<i>Other/Mixed</i>	
<i>TOTAL</i>	20.2 MW
<b>GESP-Specific Indicators</b>	<b>Project-Defined Indicators/Targets</b>
<b>GESP 1: Energy rating of storage systems installed (MWh)</b>	5,366.7 MWh/YEAR Storage energy rating
<i>Please specify storage technology type (i.e., thermal, mechanical, electrochemical, etc.):</i>	

<i>Please specify location on the energy value chain (i.e., generation, transmission, distribution, stationary end use, mobile end use):</i>	PV+BESS generation	
<i>Please specify if distributed storage or utility scale:</i>		
<b>GESP 2:</b> Power rating of storage systems installed (MW)	4.9 MW	
<b>GESP 3:</b> Policies, regulations, codes, or standards adopted for energy storage solutions (number)		
<i>Please specify if policy, regulation, code, or standard:</i>		
<b>GESP Co-Benefit Indicators</b>	<b>Project-Defined Indicators/Targets</b>	
<i>Please identify one or more expected co-benefit indicators—i.e., other social, economic, environmental benefits beyond the CTF and GESP core indicators—that the project will track and report.</i>		
<b>GESP Co-Benefit</b> (e.g., Gender, employment, energy access, social inclusion, health and safety, competitiveness and industrial development, SDGs):	Guarantees provided by BANCOMEXT with program resources to SME owned or led by women: 10% of program. Investment mobilized by program resources: \$28.1 million	
<b>Please also submit the full project results framework to the CIF Secretariat upon MDB Board approval of the project for consideration of project-specific indicators to track.</b>		
<b>Co-financing</b>		
	<b>Please specify as appropriate</b>	<b>Amount (million USD)</b>
MDB 1		83
MDB 2 (if any)		
Government		
Private Sector		
Bilateral		
Others (please specify)		28.1 (NDB, FI, SME)
<b>Total Co-financing</b>		<b>111.1</b>
<b>CIF Funding</b>		<b>9.0</b>
<b>Total Financing (Co-financing + CIF Funding)</b>		<b>120.1</b>
<b>Proportion of Total Financing for Adaptation</b>		
<b>Proportion of Total Financing for Mitigation <sup>[e]</sup></b>		<b>120.1</b>
<b>Expected Date of MDB Approval</b>		
February 2024		



**NOTES:**

[a] This cover page is to be completed and submitted together with the MDB project/program proposal when requesting CTF funding approval by the Trust Fund Committee.

[b] For products denominated in EUR, please also provide USD equivalent in the column to the left

[c] Please provide the information in the cover page or indicate page/section numbers in the accompanying project/program proposal where such information can be found.

[d] Insert “not applicable” (N/A) if dates cannot be determined at the time of submission (e.g. private sector programs)

[e] Per MDBs’ own Paris alignment climate finance tracking methodologies

**Version: October 2023**

CCH – [here](#)

CIF Website – [here](#)

CIF Pipeline Management and Cancellation Policy - [here](#)

CIF Financial Terms and Conditions Policy updated for FY24 - [here](#)

GESP Program Monitoring and Reporting Toolkit – [here](#)

CTF M&R Toolkit – [here](#)