

MEXICO

PROJECT PROFILE (PP)

I. BASIC DATA

Project Name:	CTF Renewable Energy Financing Facility for Mexico		
Project Number:	ME-L1109		
Project Team:	Ramon Guzman, ICF/CMF; Team leader; Leticia Riquelme, CMF/CME, Alternate Leader; Fernando De Olloqui, ICF/CMF; Annabella Gaggero, ICF/CMF; Claudio Alatorre, INE/ECC; Martina Stamm, INE/ECC; Juan Roberto Paredes, INE/ENE; Gloria Coronel, PDP/CME; Raul Lozano, PDP/CME; Miriam Garza, CID/CME; Ernesto Monter, VPS/ESG; and Juan Carlos Perez-Segnini, LEG/SGO.		
Borrower and Executor:	Nacional Financiera, S.N.C.		
Financial Plan:	CTF:	US\$	70 million
Safeguards:	Identified policies:	B.02, B.07, and B.13	
	Classification:	B.13	
Related Projects:	ME-X1010 resources (Support to Business Development in Mexico) will co-finance eligible projects under the program.		

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. The low-carbon potential of the energy sector in Mexico

- 2.1 Increasing the amount of power obtained from renewable energy (RE) sources is one of the priorities established in Mexico's [National Development Plan](#). As RE power generation contributes to both the diversification of the country's energy matrix and the mitigation of climate change, it is included in both its [Energy Sector Program](#) and its [Special Climate Change Program](#) (PECC). Mexico emitted 715.3 million metric tons (Mt) of carbon dioxide equivalent (CO₂e) in 2006. This makes it the world's thirteenth largest greenhouse gas (GHG) emitter. When only energy sector emissions are considered, it is the largest GHG emitter in Latin America. The PECC sets forth the goal of reducing GHG emissions in 2050 to 340 Mt CO₂e, or 50% of year 2000 level. Wind power represents a major development opportunity in the country, due to its generation potential, estimated at least at 33,000 MW, out of which 6,250MW are from excellent wind quality resources with speeds of more than 8.5m/s. Besides wind power, other renewable energy sources have significant untapped potentials: Small hydropower capacity (less than 10 MW) is [estimated](#) at approximately 3,000 MW, unexploited potential of base-load geothermal energy is estimated at over 1,500 MW, and unexploited capacity for biomass is estimated at 9,000 MW. Solar energy

potential is substantial, and its technologies (concentrated solar power and photovoltaic) are already competitive in some specific niches.

- 2.2 The current development of wind, small hydropower, and biomass projects in Mexico relies primarily on projects that fall into the self-supply modality, with consumers and generators (in different locations) as shareholders. The Regulatory Commission (CRE) has authorized RE self-supply projects with a combined capacity of 2,521MW (Dec 2010). A breakdown of the most important projects envisaged, by technology, is as follows:

RE Source	Number of projects	Authorized Capacity	Estimated Investments
Hydros	9	159MW	US\$ 188 Mio
Minihydros(<10MW)	6	37MW	US\$ approx. 40Mio
Biogas	1	6MW	US\$ 5.7 Mio
Wind	16	1,928MW	US\$ 3.8bn
Bagasse	4	108MW	US\$ 130 Mio

- 2.3 Access to financing remains one of the roadblocks to implement these authorized projects. Financing is hindered by a number of sector-specific factors including: i) high upfront costs; ii) weak or misunderstood credit profiles of potential projects; iii) banks' aversion to extending credit to unfamiliar lines of business; and iv) lack of specialized expertise in analyzing and structuring clean energy projects.
- 2.4 The Mexican strategy on Climate Change was incorporated into the IDB Country Strategy for Mexico (Nov2010-Dec2012). It also is consistent with our Sustainable Energy and Climate Change Initiative (SECCI) and with the IDB Goals under GCI-9.

B. Clean Technology Fund (CTF)

- 2.5 Recognizing the urgent need to scale-up investment in activities to tackle climate change, 14 advanced economies established the Climate Investment Funds (CIF) in 2008. The CIFs are composed of two international funds: the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF). As of 31 January 2010, contributors had pledged US\$6.9 billion to these funds for the next three to four years, with US\$4.4 billion for the CTF and US\$2.5 billion for the SCF. The CTF aims to provide 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. Investments for the promotion of: i) renewable energy, ii) sustainable transport, and iii) energy efficiency, are eligible under the CTF.
- 2.6 The CTF is governed by a Trust-Fund Committee (TFC), with representatives of the donors and the recipient countries. The World Bank is the Trustee of the funds and hosts the administrative unit. CTF financing is channeled through five MDBs, including the IDB, which was designated Implementing Entity on June the 8th

2010. The MDBs participate in the governance of the funds through the MDB Committee.

- 2.7 [Mexico's CTF Investment Plan](#) was presented by the Government of Mexico to the CTF for approval, and endorsed by the CTF TFC on January 27, 2009. This Investment Plan (IP) outlines the strategy, sectors, and objectives to be implemented by IDB and the World Bank Group, leveraging additional resources.¹ The IP includes US\$125 million of concessional CTF resources for IDB RE programs. A first IDB [RE program](#), approved in November 2009, included 50 Million USD for financing private sector projects, as well as a number of technical assistance activities.

C. Objectives of the CTF Renewable Energy Financing Facility for Mexico

- 2.8 The objective of the program is to enable Mexico to implement its strategy to increase the share of RE sources in its overall generation and reduce GHG emissions. In order to make it possible, the existing financing gap for renewable energy projects needs to be filled i) through the provision of competitive loans directly to the project developers, and/or ii) mobilizing financing from the commercial banks by providing developers with liquidity facilities to cover eventual cashflow gaps during the life of the projects.
- 2.9 On account of the high investment costs in RE power plants, only a limited number of projects may benefit from these resources, though the program will seek to maximize its impact in terms of the number of ventures. Eligibility will be determined by NAFIN and the IDB team, according to a pre established set of conditions (technological, geographical, size factors). Monitoring and evaluation of the results of the program will meet IDB criteria but will also consist of a specific reporting obligation to CTF. The limited number of projects and the availability of unequivocal indicators (installed power, power generated, GHG emissions avoided) make monitoring and evaluation a relatively straightforward matter.

D. Background information

- 2.10 This profile refers solely to the approval necessary for the IDB to manage US\$70 million of CTF resources. These will be combined with US\$70 million from the CCLIP for the Support of Business Development in Mexico (ME-X1010), approved in November 2009 for an amount of US\$1.2 billion (from the existing program, ME-L1051, or from an eventual new operation under the CCLIP) The CTF Trust Fund will not approve the operation unless it deems IDB resources are readily available to match CTF dollar per dollar. Moreover, in order to get the approval of the CTF resources, the Bank will have to present a detailed program

¹ A minimum leverage ratio of 1:1 of CTF concessional finance to MDB finance is required by the CTF Trust Fund Committee.

to the CTF Trust Fund Committee². The Bank will also follow all its internal procedures for the approval of the operation by the Board of Directors.

E. NAFIN's role in scaling up renewable energy financing

- 2.11 NAFIN is a national credit institution established to promote savings and investment and to channel financial and technical support for Mexico's industrial and economic development. IADB has a long history of relations with NAFIN. The Mexican government has designated NAFIN as one of the entities that will support its GHG reduction efforts through a new Sustainable Climate Change Projects Unit that will assist projects with private sponsors to reduce GHG emissions. NAFIN is best positioned to leverage the existing CCLIP with resources from the Clean Technology Fund (CTF) and with NAFIN's own funding to scale up the impact of the multilateral initiatives involved. NAFIN is a solvent institution with exemplary risk management practices and the full backing of the Mexican government. In December 2010, its assets stood at Mex\$299 billion, including a credit portfolio of almost Mex\$123 billion. Net worth totaled Mex\$16.3 billion. Over the past two years NAFIN increased its activity and expanded its balance sheet to counter the decline in economic activity due to the financial crisis, and yet managed to generate a net profit of Mex\$1,040 million in 2010. Capital, cash, and reserves amount to a comfortable financial position.
- 2.12 IDB would be playing the critical role of linking the international funding sources for Climate Change mitigation with growing demand in Mexico. Insofar as CTF resources have to be combined with IDB/CCLIP resources, the Bank would also be contributing to scaling up the impact sought by the international donor community. Moreover, the Bank's know-how would help develop the Mexican financial markets in this field, still in its infancy. The program would also strengthen the capacity of NAFIN to manage the eligible projects according to best international practice in terms of their environmental and social impact.

F. Program structure and approval process

- 2.13 The Bank is expecting to achieve formal approval of the CTF resources for the program by the CTF TFC in July 2011. In order to be able to propose the envisioned program to the CTF governing body, the program needs to have received eligibility from the IDB and clearance in the QRR. After CTF approval, the IDB COW will have to provide the final approval of the project. The CTF also has a specific policy on the financing products it offers and their terms, including a cost recovery fee for the IDB.
- 2.14 The Bank anticipates utilizing the combined US\$140 million³ to provide attractive financial terms to ensure NAFIN meets its goals and to maximize the social and

² The President's Committee assigned INE/ECC as CIF Focal Point to work in close collaboration with colleagues across departments according to their respective roles and responsibilities.

³ Subject eventually to approval by the Board of a second operation for US\$70 million under the CCLIP ME-X1010 if needed.

environmental impact of the projects to be financed. The program considers using a mix of instruments by NAFIN: i) direct loans with market competitive or concessional rates from NAFIN to renewable energy project developers; and ii) liquidity facilities (contingency lines) that will finance unexpected cash flow shortages in the project level, hence lowering the risk perceived by financial institutions to finance those projects.

- 2.15 This operation is linked to a number of technical assistance activities included in the previous IDB CTF RE Program⁴, intended to improve the RE regulatory environment and bring projects to a bankable stage.

III. SAFEGUARDS AND FIDUCIARY RISKS

- 3.1 Fiduciary risks are contained in view of the involvement of NAFIN in the development of the Mexican Climate Change strategy, the extensive consultative work carried out and the priority attached to renewable energy by the public sector actors. Moreover, in the context of the approval of ME-L1051 (first operation under the CCLIP) a review of NAFIN's institutional capacity was performed using the Bank's SECI tool which resulted in developed capacity and low risk in all areas of the SECI. Were fiduciary risks to be identified during the preparation of the Project, the Project team would propose mitigation measures, including the possibility of hiring an individual advisor or an advisory firm to ensure program execution.
- 3.2 RE projects deliver long-term greenhouse gas (GHG) emission reductions and are considered as climate friendly projects. However, hydro, wind and biomass projects can have other adverse environmental or social impacts. These effects can only be determined on a project basis. The Bank will define with NAFIN an adequate framework to safeguard the proposed RE projects and to ensure compliance with the IDB environmental and social policies. Please refer to the Environmental and Social Strategy (Annex III) for additional information.

IV. RESOURCES AND TIMETABLE

- 4.1 In order to continue with the preparation of the project, US\$68,200 in administrative funds will be needed for missions and preparatory work. Further TC resources from the CTF and/or from the CCLIP ME-X1010 may be needed to comprehensively address social and environmental issues. The Draft Loan Proposal is expected to be approved by the Operations Policy Committee (OPC) by September 5th, 2011; and the Loan Proposal presented to the Board by October 12th, 2011. Dates are contingent to the approval of the proposed operation by the CTF.

⁴ This includes ME-T1161, ME-T1162, ME-T1164, and ME-T1168, as well as a development plan for local communities. In addition, a migratory bird cumulative impact assessment was carried out with resources from the IDB's SECCI Fund.

SAFEGUARD POLICY FILTER REPORT

PROJECT DETAILS	IDB Sector	CAPITAL MARKETS-FINANCIAL MARKET DEVELOPMENT
	Type of Operation	Financial Intermediation/Global Credit
	Additional Operation Details	
	Investment Checklist	Generic Checklist
	Team Leader	Guzman Zapater, Ramon (RGUZMAN@iadb.org)
	Project Title	CTF Renewable Energy Financing Facility for Mexico
	Project Number	ME-L1109
	Safeguard Screening Assessor(s)	Gaggero, Annabella (ANNABELLAG@iadb.org)
	Assessment Date	2011-04-12
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	Type of Operation	Loan Operation	
	Safeguard Policy Items Identified (Yes)	The operation is in compliance with environmental laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
		The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
		Operation for which ex-ante impact classification may not be feasible. These loans are: Policy-based loans, Financial Intermediaries (FIs) or loans that are based on performance criteria, sector-based approaches, or conditional credit lines for investment projects.	(B.13)
	Potential Safeguard Policy Items(?)	No potential issues identified	
	Recommended Action:	Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s), including B13, for guidance. No project classification required. Submit Report and PP (or equivalent) to ESR.	
	Additional Comments:		

ASSESSOR DETAILS	Name of person who completed screening:	Gaggero, Annabella (ANNABELLAG@iadb.org)
	Title:	Project Assistant
	Date:	2011-04-12

ESTRATEGIA AMBIENTAL Y SOCIAL

1. **El Programa.** Este Programa fondado con recursos del IDB CTF Trust Fund, financiará proyectos de generación eléctrica a partir de energías renovables. El fomento de este tipo de proyectos y la provisión de recursos blandos para los mismos se deriva de la agenda internacional de mitigación del Cambio Climático y constituye una de las prioridades del Plan Nacional de Desarrollo de México, como queda recogida en la planificación de medio ambiente y energía. Los proyectos elegibles para esta financiación combinada CTF/IDB son fundamentalmente parques eólicos y mini hidráulicas a las que NAFIN canalizaría los recursos como banca de primer piso o actuando en segundo piso.
2. **Categorización de Impacto Ambiental.** Dado que Nafin canalizará los recursos fungiendo como intermediario financiero, el presente Programa se cataloga de acuerdo con la Política de Medio Ambiente y Cumplimiento de Salvaguardas del BID (OP 703) como un instrumento flexible de préstamo para el cual la clasificación de impactos ambientales ex ante no es factible, ya que no se conocen los proyectos específicos de energía renovable a ser financiados y por ende no se puede categorizar su impacto ambiental y social potencial.
3. **Impactos Ambientales y Sociales.** Se prevé que los proyectos de generación eléctrica a partir de energías renovables resulten en reducciones de gases de efecto invernadero y por lo tanto generen impactos positivos en la lucha contra el cambio climático. Sin embargo, los proyectos de energía renovable como plantas eólicas, pequeñas hidroeléctricas pueden causar impactos ambientales y sociales adversos al medio ambiente, tales como mortandad de aves y murciélagos en proyectos eólicos, o deteriorar el volumen y calidad de agua en el caso de hidroeléctricas. La severidad y magnitud de los impactos estará en función de la ubicación, tamaño y tecnología y a las características específicas de cada proyecto en particular. De la misma manera, los impactos sociales de procesos de adquisición de tierras, derechos de paso y cambios de uso de suelo así como impactos indirectos y acumulativos serán resultado de cada caso particular.
4. **Precedente inmediato.** El Banco, a través de su ventanilla privada y con recursos CTF, ha financiado dos proyectos eólicos en México; el proyecto Eurús con una capacidad de 250 mega watts (MW) y el proyecto La Ventosa con una capacidad de 67.5 MW, que dada las características de cada planta, fueron clasificados respectivamente como de Categoría A y B por su impacto ambiental. Como soporte del proyecto Eurús, y con recursos principalmente de CTF, se abordaron cuatro Cooperaciones Técnicas (TCs) destinadas a fortalecer las capacidades de gestión ambiental en NAFIN, estudiar el impacto económico y social del proyecto, preparar un plan de desarrollo para las comunidades locales beneficiarias del mismo, estudiar el impacto ambiental sobre las aves, y al estudio del entorno regulatorio para proyectos de biomasa. Como resultado el Banco tiene conocimiento de los retos que implica desarrollar grandes proyectos eólicos en el Istmo de Tehuantepec.

5. Nafin no contaba con personal para identificar, evaluar y manejar los aspectos ambientales y sociales asociados a proyectos de esta naturaleza. Sin embargo hoy, Nafin cuenta con la experiencia adquirida durante la financiación del proyecto Eurús sobre el enfoque y requerimientos del BID a este tipo de proyectos. Esto, combinado con el hecho de que los requerimientos del CCLIP vigente implican que el Banco participa en la evaluación y da una eventual no-objeccion a proyectos de alto riesgo ambiental y social, permite una gestión adecuada de los riesgos.
6. **Estrategia para la Debida Diligencia Ambiental y Social.** Consistente con el enfoque para operaciones de intermediación financiera, el Banco realizará el análisis del Programa propuesto en dos niveles; uno a nivel corporación, específicamente la capacidad de Nafin para manejar y aplicar las salvaguardias ambientales y sociales del Banco, identificando la capacidad y experiencia de áreas en Nafin que permitan aplicar las salvaguardias a proyectos e inversiones a ser financiadas con recursos del BID. El otro nivel es en el análisis de los proyectos o inversiones específicas. En este caso y en coordinación con Nafin, se definirán herramientas de gestión que permitan diferenciar los impactos y riesgos de cada proyecto, de los cuales el Banco acompañará la evaluación de los proyectos más complicados o de mayor impacto y riesgo ambiental y social.
7. En el contexto del Proyecto Eurús, la Unidad de Salvaguardias Ambientales del Banco (ESG) estableció las líneas fundamentales para la actuación diligente del Banco en este tipo de proyectos, tales como asegurar que existe información de línea base sobre aves adecuada o que esta se tendrá antes de la construcción de los proyectos, que se implementaran medidas de mitigación, incluyendo acciones para prevenir y reducir la colisión de aves, así como sistemas de monitoreo y paro de turbinas en épocas de migración, líneas que ahora utilizamos como guía tanto para la preparación de este Programa, como para la utilización posterior de los recursos provenientes de la CCLIP ME-L1051, que cofinanciaran 1 a 1 los proyectos elegibles.
8. En todo caso, durante el análisis ambiental y social del Programa se trabajara en:
 - a) Procedimientos de gestión a ser aplicados por Nafin para mitigar los potenciales riesgos sociales de proyectos de energía renovable, incluyendo un sistema que permita evaluar el impacto sobre las poblaciones o comunidades titulares de las tierras rentadas para los proyectos y garantizar el buen uso de los beneficios derivados, asegurar la observación de los principios contenidos en la política de protección de las poblaciones indígenas, garantizar un trato justo en cuanto a las rentas y derechos a obtener, minimizar los impactos del proyecto de central sobre las actividades tradicionales de la comunidad y maximizar el rendimiento social de los beneficios comunes.
 - b) fortalecimiento de la capacidad de NAFIN de gestionar los riesgos ambientales y en general aplicar los procedimientos o el sistema a desarrollarse.
 - c) Definir las características o lineamientos que permitan identificar proyectos de alto riesgo, los requerimientos y el proceso de revisión y eventual no-objeccion del Banco.

A estos efectos, el Programa contempla eventualmente utilizar recursos de la línea CCLIP para el fortalecimiento de la capacidad de NAFIN de gestionar los impactos sociales y ambientales de este tipo de proyectos.

Los resultados del análisis de la operación serán resumidos en el Informe de Gestión Ambiental y Social que definirá los requerimientos ambientales y sociales del Programa.

INDEX OF COMPLETED AND PROPOSED SECTOR WORK

Description	Dates	References or Links
National Development Plan. Pillar 4. Environmental Sustainability (Climate Change)	2007	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921659
National Strategy on Climate Change. Mexico. Executive Summary	2007	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921670
Special Program for Climate Change 2009 – 2012. Mexico	Aug. 28, 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921662
IDB Country Strategy with Mexico. November 2010 – December 2012 (GN-2595-1)	2010	http://sec.iadb.org/Site/Documents/DOC_Detail.aspx?pSecRegN=GN-2595-1
The Clean Technology Fund (CTF)	June 9, 2008	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921664
CTF Investment Plan for Mexico	Jan. 16, 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35938545
Proposal for the establishment of the Clean Technology Fund (CTF) in the Inter-American Development Bank (GN-2571)	May 13, 2010	http://sec.iadb.org/Site/Documents/DOC_Detail.aspx?pSecRegN=GN-2571
CTF Financing Products, Terms, and Review Procedures for Public Sector Operations	May 28, 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921666
Contingent Financing Program for Renewable Energy	Feb. 2011	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35921673
ME-T1161. Assessment of Geothermal Potential in Mexico	Nov. 4, 2010	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35427375
ME-T1162. Feasibility of Biomass Cogeneration Projects in the Sugar Cane Industry in Mexico	Nov. 1, 2010	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?Docnum=35427392
ME-T1164. Study of the macroeconomic and social impacts of the wind energy industry in Mexico	In preparation	
ME-T1168. Capacity Building for NAFIN's Unit of Sustainable and Climate Change Projects	In preparation	