“Financing for CC Mitigation measures”

Sustainable Energy and Climate Change Unit

Technical Workshop of Science and Policy of Short-lived Climate Forcers

Mexico City, September 10th, 2011
Presentation Outline

- Sustainable Energy and Climate Change Initiative
- Financing Climate Change and Sustainable Energy
  - Support to Mexico’s Climate Change Agenda
  - Capacity building in Climate Change Financing from National Development Banks
  - Financing CH4 Measures in Agriculture: Uruguay, Mexico
  - Biodigesters Network & Knowledge-sharing platform: Red BioLAC
IDB: Sustainable Energy and Climate Change Initiative – SECCI–

Sustainable Biofuels Development
   (Energy and Food Security)

SECCI

Renewable Energy and Energy Efficiency

Access to Carbon Markets

Adaptation to Climate Change
IDB: Climate Change and sustainable energy support

**Tools**
- Project Finance
- Specialized Consultancy
- Technical Cooperations
- Investment Grants
- Financing and Guaranties

**Beneficiaries**
- Federal Governments
- Local Governments
- Private Sector
- Public Private Partnerships (PPPs)
- NGOs
IDB: Financing Climate Change and Sustainable Energy

**Public Sector**
(Sovereign Guaranteed Operations)

- Federal Government
- Development Banks

**Private Sector**
(Non-Sovereign Guaranteed Operations)

- Corporate Finance
- Project Finance
- Finance Sector
The Bank leads in the region an extensive agenda on climate change:

- **Energy Efficiency and Non-Conventional Renewable Energy investments.**
- **Policy Based Loans (PBLs) supporting the inclusion of climate change in national policies.**
- **Development of Carbon Development Plans.**
- **Development of decision-support tools for adaptation actions.**
- **Sustainable transport program for LAC.**
- **Adaptation plans in the water sector.**
- **Innovative financial instruments working with development and commercial banks.**
- **Vulnerability and economic impact studies in main development sectors.**
## Support to Mexico’s Climate Change Agenda

### 1. Technical Cooperations

<table>
<thead>
<tr>
<th>Technical Cooperation</th>
<th>Beneficiary</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study on economic impacts of Climate Change (Stern - Mexico)</td>
<td>SHCP /SEMARNAT</td>
<td>Executed</td>
</tr>
<tr>
<td>Supporting CONUEE (Comisión Nacional para el Uso Eficiente de la Energía) to design the National Sustainable Energy Use Program (PRONASE - Programa Nacional para el Aprovechamiento Sustentable de la Energía (PRONASE))</td>
<td>CONUEE</td>
<td>Executed</td>
</tr>
<tr>
<td>Supporting CRE (Comisión Reguladora de Energía) to implement Regulation on Renewable Energy</td>
<td>CRE</td>
<td>Executed</td>
</tr>
<tr>
<td>Facilitating Mexico’s Special Climate Change Program (PECC - Programa Especial del Cambio Climático)</td>
<td>SEMARNAT</td>
<td>Executed</td>
</tr>
<tr>
<td>Supporting Mexico’s Climate Change Agenda with a Consulting Group</td>
<td>SEMARNAT</td>
<td>In Process</td>
</tr>
</tbody>
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## Support to Mexico’s Climate Change Agenda

### 1. Technical Cooperations

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<tr>
<td>Preparation of State Climate Change Program in Yucatan, Tabasco (PEACCs - Programas Estatales de Acción ante el Cambio Climático)</td>
<td>SEMARNAT-INE/State</td>
<td>In Process</td>
</tr>
<tr>
<td>Preparation of State Climate Change Program in Oaxaca, Campeche and Tamaulipas (PEACCs - Programas Estatales de Acción ante el Cambio Climático)</td>
<td>SEMARNAT-INE/State</td>
<td>In Design</td>
</tr>
<tr>
<td>Facilitating studies on feasibility of sustainable projects</td>
<td>NAFIN</td>
<td>In Process</td>
</tr>
<tr>
<td>Promoting and Development of Local Wind Technologies in Mexico ¹)</td>
<td>Instituto de Investigaciones Electricas</td>
<td>In authorization</td>
</tr>
<tr>
<td>Institutional support of NAFIN’s sustainable projects and climate change unit ²)</td>
<td>NAFIN</td>
<td>In authorization</td>
</tr>
</tbody>
</table>

1) GEF resources
2) CTF resources
Support of Mexico’s Climate Change Agenda

2. Financing

a) Policy-Based Loans (PBL) - Executor: SEMARNAT

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>200 M US $</td>
</tr>
<tr>
<td>2009</td>
<td>400 M US $</td>
</tr>
<tr>
<td>2011</td>
<td>400 M US $</td>
</tr>
</tbody>
</table>

Objectives:
- Macroeconomic Stability
- Promote National Climate Change Policy
- Strengthening Institutions to implement Climate Change Policies
- Promote the country’s participation in Carbon Markets and financial instruments to reduce GHG emissions
- Promote evaluation instruments as well as instruments to reduce vulnerability and risks associated with Climate Change
Support to Mexico’s Climate Change Agenda

2. Financing
   b) Climate Investment Funds: Clean Technology Fund (CIF: CTF)

   Investment Plan for Mexico represents USD 500 million of concessional resources which will be combined with public, private and carbon market resources in Energy Efficiency, Renewable Energy and Transport

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount</th>
<th>Projects and Status</th>
</tr>
</thead>
</table>
| World Bank: 250M | * 200M for transport, approved  
* 50M for Energy Efficiency, approved |
| IFC: 50M | * 15.6M for a wind power plant project, approved  
* 14.4M for another wind power plant project, pending approval  
* 20M for energy efficiency projects, pending approval |
| IDB: 200M | * 53.38M for private sector projects in Renewable Energy, approved  
* 50.6M for the Sustainable Housing Program with SHF, in preparation  
* 71.62M for the Financing Renewable Energy program with NAFIN, in preparation  
* 24.4M for the Energy Efficiency Program with private banks, pending approval of SHCP |
**La Mata- Ventosa**

  
  - Self-Supply System for the Offtaker Walt-Mart of México.
  
  - Financed by IDB, IFC, US-Eximbank and CTF/CIF.

**Eurus**

- **Wind Power Plant Project** promoted by Acciona (España), for **200MW**, cost: US$525 million.
  
  - Self-Supply System for the Offtaker Cemex.
  
  - Financed by IDB, IFC, CTF/CIF and other development and private banks.
**IDB: Participation in Sustainable Projects**

**Facilitating the funding of Renewable Energy projects**
- Through IDB’s credit line – CCLIP – granted to NAFIN

**Facilitating the funding of “Programa de Cooperación Financiera para la oferta de vivienda sustentable en México” (Sustainable housing Program)**
- Through IDB’s credit line – CCLIP – granted to Sociedad Hipotecaria Federal
- Financed by IDB, KfW, CTF/CIF
Finance: Support Climate Change Financing from National Development Banks

• Design and implementation of technical assistance to National development Banks in order to contribute to the development of mechanisms to support carbon finance, energy efficiency, renewable energy projects, and recently AFOLU projects.

• Dialogue events with the participation of National Development Banks in the Region
State promoted Hog farms Manure Management Program in Yucatan to reduce GHG emissions and improve water quality

**Objective:** Reduce pollution of the aquifer and the emission of GHG by implementing appropriate technological alternatives in order to treat the wastes in 156 small & medium-sized hog farms. Moreover, strengthen farms capacities to meet solid and residual water regulations.

**Project components:**
- Definition of technological alternatives.
- Census of hog businesses.
- Socio-economic financial feasibility studies/CDM.
- Preparation of final design, detailed engineering and support packages.
- Implementation of the comprehensive project support to pig farmers.
- **There is the potential to structure the project with a carbon finance approach to account for the emissions reductions.**
Fostering Energy Efficiency in agriculture within the Private Sector

• Supports project development through
  1. identification of energy efficiency measures in the design of all facilities and equipment
  2. planning for the capture and use of biogas (ie. plant that will capture methane from the cattle manure, powering a 3 MW power plant)
  3. technical assessment of energy balance and development of alternative integrated projects
  4. identification of alternatives for treatment of effluents from the digesters
  5. economic evaluation of integrated projects developed in the energy balance

• Estancias del Lago S.R.L. is working to develop a fully-integrated, export-focused dairy operation that will implement a highly-efficient free-stall dairy model. The Project -promoted through a private sector A loan- will also grow cattle feed and process cattle manure into fertilizer and into energy via methane capture, resulting in a highly-integrated and efficient operation.
IDB sponsored the creation of this platform

- Share information and experiences among the participating institutions in RedBioLAC
- Identify and overcome technical, environmental, social and economic barriers
- Propose projects, ideas and mechanisms to disseminate the technology of biogas digesters in LAC
- Build partnerships that facilitate the adoption of technology digesters.
- Continuing research and dissemination among partners
- Promote the incorporation of other organizations, institutions and researchers in the field of bio-digesters.
- Promoting actions to influence and impact of policies related to the digesters.
Thank you!

Gmelina Ramírez-Ramírez
Climate Change Expert
Sustainable Energy and Climate Change Unit

IDB Mexico
Tel.: (55) 9138-6200 ext.206252
Email: gmelinar@iadb.org
Annex:

AMDEE - Asociación Mexicana de Energía Eólica
CFE - Comisión Federal de Electricidad
CONUEE - Comisión Nacional para el Uso Eficiente de la Energía
CRE - Comisión Reguladora de Energía
FONADIN - Fondo Nacional de Infraestructura
IBRD - International Bank of Reconstruction and Development (World Bank Group)
IFC - International Finance Corporation (World Bank Group)
INE - Instituto Nacional de Ecología
NAFIN - Nacional Financiera
PBL - Policy-Based Loans
SAGARPA - Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación
SECCI - Sustainable Energy and Climate Change Initiative
SEDESOL - Secretaría de Desarrollo Social
SEMARNAT - Secretaría de medio ambiente y recursos naturales
SHCP - Secretaría de Hacienda y Crédito Público
SHF - Sociedad Hipotecaria Federal