

"Mexico's Green Development Bank: NAFINSA's Energy Efficiency Experience"



Mexico's Structural Reform Agenda

The main goal of the structural reforms is to foster productivity and growth.

Energy Reform

- Improves energy sector's productivity and investment.
- Will reduce energy prices and foster the use of clean energy.

Financial Reform

- Improves the rule of law, promoting efficiency in credit creation.
- Promotes competition and access to better and more competitive financing conditions, benefiting small and medium enterprises (SME).

Telecom Reform

• Stronger institutional framework that promotes competition and investment.

Anti – Trust Reform

Fosters competition and investment.

Fiscal Reform

- Increases public revenues.
- Reduces oil dependency and increases infrastructure investment.
- Increases the Federal Government's capacity to provide better and more efficient infrastructure and public education services.

Labor Reform

Provides flexibility and promotes formality.

Education Reform

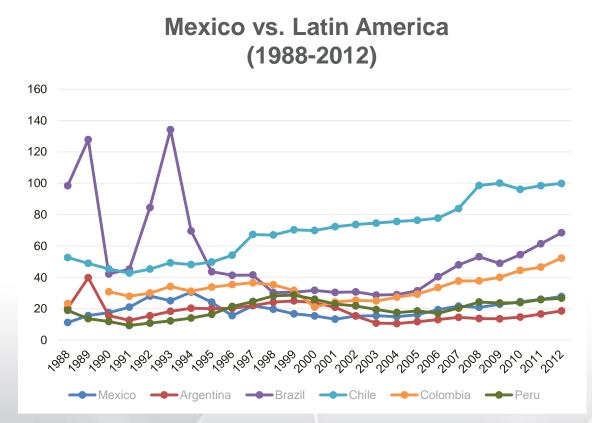
• Improves human capital formation.

The importance of the Financial Reform

Mexican Private Debt

(27 % of GDP in 2012)

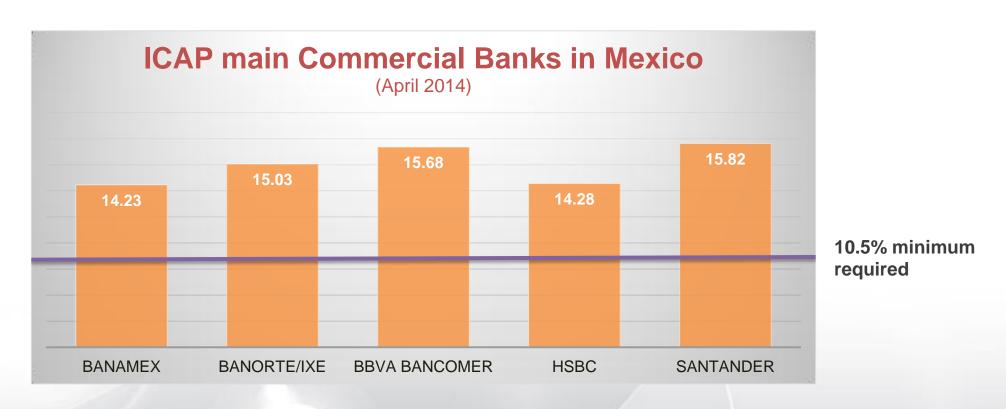




Source: World Bank's World Development Indicators

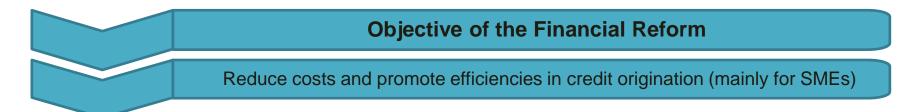
The Importance of the Financial Reform

By the end of April, the capitalization ratio (ICAP) of commercial banks was of 15.62%, 5% more of the 10.5% minimum required by the Basel Committee on Banking Supervision.



Source: Comisión Nacional Bancaria y de Valores, 2014

The **Financial Reform** promotes credit in a stable and well capitalized financial system.



1) Improving the rule of law

- ✓ Facilitating the execution of guarantees
- ✓ Strengthening the bankruptcy law (limits the use of subsidiary debt in corporate bankruptcy procedures)

2) Promoting competition

- ✓ Mobility of loan guarantees
- ✓ Prohibition of tied loans
- ✓ Enhanced credit information

3) Providing a new mandate for Development Banks

- ✓ Greater regulatory and financial flexibility for the operation of the institutions.
- √ Financial market development
- √ Financial inclusion
- ✓ Conditions to increase the provided credit.

4) Preserving a strong financial sector

- ✓ Basel III in the law
- ✓ Promote international best practices (liquidity, macro prudential, bail-in, etc.)

The **Energy Reform** promotes competition and investment in the sector.

Oil

- New framework for the exploration and extraction contracts
- Risk sharing with the private sector
- All downstream activities are liberalized
- Transparency on costs, bidding rounds, proceeds received, etc

PEMEX

- Greater managerial and budgetary autonomy
- Tax burden to be reduced from 79 to 65%
- Partnerships with private institutions
- Stronger corporate governance
- 20% minimum stake in crossborder projects

Electricity

- Generation and commercializing activities are open to the public
- Joint ventures in transmission and distribution between CFE and private companies
- CENACE responsible for the operational control of National Electric System

Federal Commission of Electricity (CFE)

- CFE will become more independent and productive
- Greater managerial and budgetary autonomy
- Tax treatment as a private company
- · Workers' rights guaranteed
- Freedom to form partnerships

Mexican Oil Fund

- The Fund will manage income obtained from contracts to strengthen national finances
- Managed by Banco de México
- Long-term savings up to 10% of GDP
- The excess will be allocated in oil and gas projects and social development

Transparency

- Contract bidding rounds shall be made public in real time
- Companies must disclose costs and receipts from state owned companies.
- Procedures of state owned entities shall be public

Regulatory Bodies

 Main regulator of energy industries in Mexico shall be the National Hydrocarbons Commission (CNH) and the Energy Regulatory Commission (CRE)

Sustainability

- The "National Security Agency of Environmental Protection" shall be constituted and will be responsible for implementing measures to prevent disasters or accidents and impose penalties
- The use of renewables will be promoted

Guiding Principles of the Energy Reform

The state is the only owner of the hydrocarbons found in Mexican territory.

Open market environment: promoting free competition between state owned and private enterprises under equal conditions.

Strengthening of regulatory bodies and other related agencies.

Comprehensive transformation of PEMEX and the National Commission of Electricity (CFE) into state-owned productive enterprises.

Widespread transparency and clear accountability.

Sustainability and environment protection.

NAFIN's mission

- For over 80 years, NAFIN has encouraged financial and economic projects to promote Mexico's development, particularly for the country's sustainable and strategic projects.
- Mexico's potential to generate renewable energy is one of the most robust in the world. Even before
 the energy reform was approved, NAFIN fostered projects related to renewable energy.
- In 2014, NAFIN announced a fund of 26 billion Mexican pesos (2 billion USD) for financing SMEs interested in making business in the energy industry.



NAFINSA Renewable Energy Bank

Clean Energy

- Wind
- Solar
- Hydro
- Geothermal

Non Renewable Energy

- Gas pipelines
- Cogeneration



NAFINSA a Green Development Back

- Renewable Energy
- Federal Government's Financial Agent
- Energy Investment Fund (ENERFIN)
- Program for PEMEX Suppliers and Contractors Development



Renewable Energy Program

NAFINSA oversees projects financed by international financial institutions to support Renewable Energy and **Energy Efficiency programs.**

Program operation 2011 - 2013

- Wind Farm
- Photovoltaic
- Hydroelectric
- Geothermal



IADB as the implementing agency of the CTF

USD 70 Million



IADB

USD 250 Million



NAFIN

USD 70 Million





Supported Projects

- 1. **DEMEX 1**
- **DUCTOS DEL ALTIPLANO**
- 3. EOLIATEC DEL ISTMO (EDI) 6. MAREÑA
- 4. EURUS

- 5. GENERADORA ELECTRICA **SAN RAFAEL**
- 7. SERVICIOS COMERCIALES DE ENERGÍA

Total Investment

USD 3,370.62 Million

ER 13.0845 MXN/USD Dec.31, 2013

Mexican Government Financial Agent

In its role as the Government's Financial Agent, NAFIN has negotiated, hired, monitored and managed **energy projects** worth **USD 362.1 million**:



Project on Efficient Lighting and Electric Appliances

 To increase and promote the use of energy efficiency technologies in Mexico, at the residential level, in order to support the government's aim of mitigating climate change.

Project on Energy Efficiency in Municipalities

• To support the development of a municipality strategy addressed to promote energy efficiency and consumption, and identify investment opportunities that could generate greater benefits, such as energy savings, and GHG reduction.

Project on the Development of Sustainable Energy Technologies for Climate Change

- To improve the capacity of advanced clean energy technology in Mexico's public and private sectors.
- To strengthen the trading of advanced clean energy technologies by providing financial incentives to the private sector
- To foster the reduction of greenhouse gas emissions.

Lighting And Electric Appliances Efficency Program: Background

- In 2002, the Federal Government implemented the Energy Saving Financing Program through the Electricity Saving Trust Fund (FIDE), National Commission of Electricity (CFE) and NAFIN.
 - ✓ The total amount operated between 2003 and 2008 was up to 5,000 millions pesos, which benefited 700,000 end users.
 - ✓ The Program had savings of 143 MW and 2,131 GW/Hrs, and generated 1,950 direct employments and 9,325 indirect employments.
- In January 2009, the Federal Government, through the Ministry of Energy, published the "National Agreement for the Family's Economy and Employment" whereby the operation base was set up to instrument the "Lighting and Electric Appliances Replacement Program".
- In February 2009, NAFIN, as borrower, started the operation of the "Electric Appliances Replacement Program" through FIDE as executing agency.
- During the COP 16 (United Nations Climate Change Conference) meeting held in Cancún, México, in December 2010, the Ministry of Finance and NAFIN signed the Agreements with KfW and the World Bank. The Mexican institutions became the borrowers, and the international financial organizations the lenders of the Clean Technology Fund and the Global Environmental Facility, which partially financed the "Lighting and Electric Appliances Replacement Program".

Components



Component 1: Replacement of Incandescent Bulbs (IB) with Compact Fluorescent Lamps (CFL) in low-to-medium income homes.

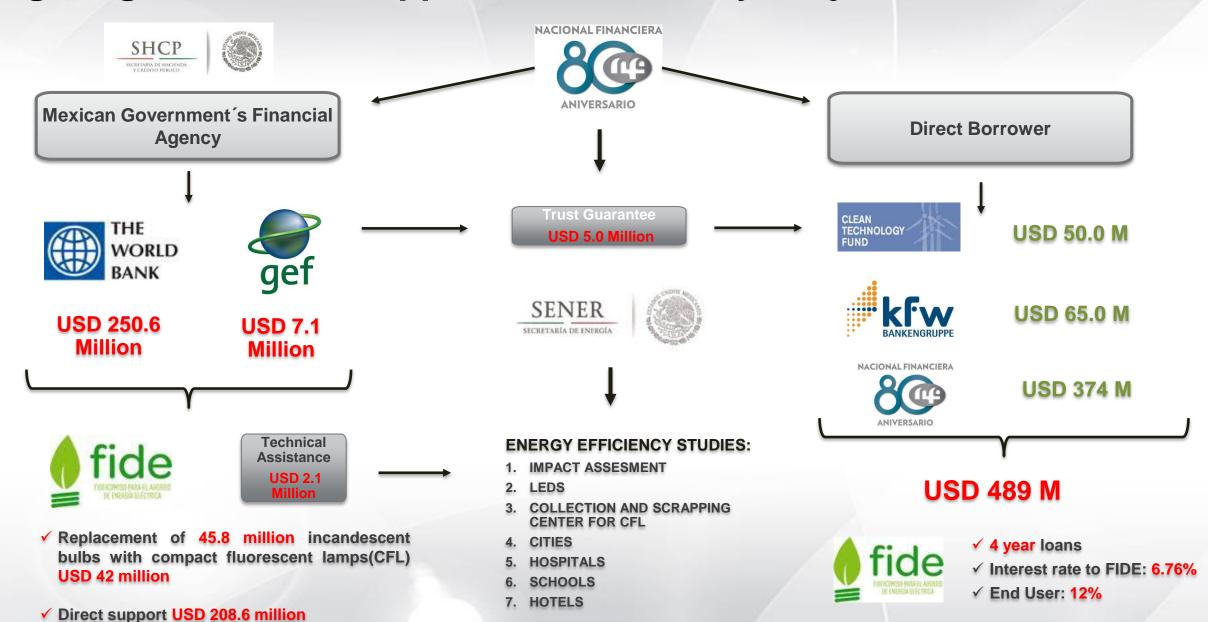


Component 2: Incentives to encourage the replacement of old and inefficient electric appliances at homes.



Component 3: Technical assistance and institutional strengthening.

Lighting and Electric Appliances Efficiency Project



Impact and Results

Lighting and Electric Appliances Replacement Program 2009 - 2013

Replacements

- 45 million incandescent bulbs with LFC
- Approximately 1.8 million old and inefficient refrigerators and air conditioners replaced.

Households Support

 7.4 million low— to — mediumincome households through free CFLs and discount vouchers.

Energy Savings

 36,394.26 GW/h per year, which equals avoiding 17.7 millions Ton CO2/GW/Hrs emissions of pollutants

Credit Conditions

- Fostering and capitalizing FIDE as technical and financial intermediary
- Amount: up to \$ 9,000.
- Term up to 4 years.
- Fixed rate 12%.
- Collection through energy bill.
- Guarantee to IF: 10% first loss.

















Energy Investment Fund (ENERFIN)

The new Revenue Law on Hydrocarbons dictates that the Federal Government, through the development bank, will establish financing mechanisms such as funds that enable Mexicans (individuals and companies) to invest in the activities related to the hydrocarbon industry.

The investment fund aims to transmit, the financial benefits from the private sector's participation in the exploitation of hydrocarbons, to the Mexicans.

Characteristics

- •NAFIN's Investment Energy Sector Fund is the **first fund** authorized by the new Fund Law, which resulted from the recently approved Financial Reform.
- •NAFIN's Fund Operator (**OFINSA** for its acronym in Spanish) will **manage** the Fund, and implement its investment strategy.
- •The Fund will have **investments and capital** contributions from the Development Bank.
- •The **distribution** of this Fund will be done through brokerage, fund operators and banks.
- •Mexicans (individuals and companies) can acquire shares from this Fund through different mechanisms. Individuals, through cetesdirecto, can obtain shares from 100 pesos (\$ 8 USD) to 10

million pesos (\$800,000 USD), and companies can do so through a specific account and 24 distributors.

- The Fund will **invest** in the country's state-owned productive companies and private enterprises that maintain market values of debt and equity in the energy sector. In addition, the Fund will invest in the products authorized by the National Retirement Savings Commission (CONSAR for its acronym in Spanish).
- It is a **long term** Fund, with liquidity of at least one month.
- Since it is an equity fund, it doesn't require a credit rating.
- Fees will vary from 0.25% to 1.00%, depending on the series.

Program for PEMEX Suppliers and Contractors Development

Objective

To provide credit to current and potential companies participating in PEMEX's supply chain in order to support their development.

Amount

Up to 20 million pesos (1,500,000 USD) for working capital and acquisition of fixed assets

Credit Type:

Based on the intermediary product



NAFINSA

MEXICO'S GREEN DEVELOPMENT BACK

