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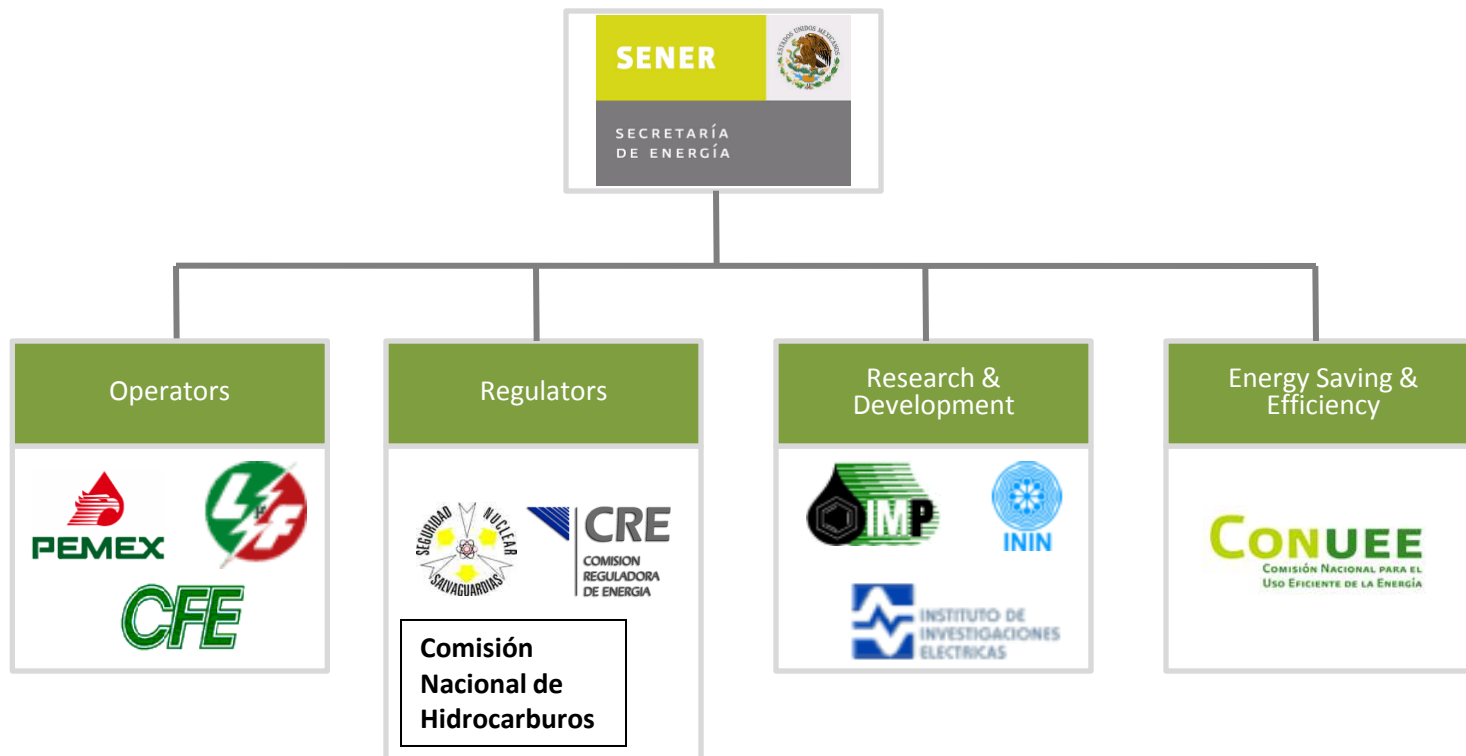
# Renewable Energy in Mexico

August 2009



**Vivir Mejor**

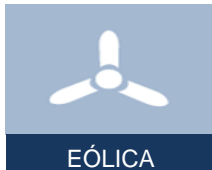
# Estructura del sector energético mexicano



# Energy Sector and the Mexican Economy

- Contributes to close to 8% of GDP
- Source of approximately 40% of fiscal income
- Represents 15% of exports
- Provides employment for 274,000 people:
  - Pemex 53%
  - CFE 29%
  - LFC 14%
  - Others 4%
- Key provider of inputs to other industrial sectors

# Normative Framework for Renewable Energy in Mexico



## Normative Framework:

For electricity-related applications of renewable energy, there are specific contracts that entail:

- Interconnection Contract for Renewable Energy Sources
- Income Tax Law
- Law for the Use of Renewable Energy and the Financing of Energy Transition
- Law for the Promotion and Development of Bioenergy

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- Environmental Law
  
- Electricity Self-supply
- Net Metering*  
(solar energy at small scale)
- Open access to transmission and distribution grids

# Renewable Energy Potential in Mexico

## Estimated Potential



- Oaxaca
- Baja California
- Zacatecas
- Hidalgo
- Veracruz
- Sinaloa
- Yucatán



10,000 MW  
capacity

## Actions

Construction of infrastructure and expansion of the grid to interconnect 2,473 MW.

Average radiation of 5kWh/m<sup>2</sup>



Agua Prieta II: combined cycle with parabolic solar collectors.

# Renewable Energy Potential in Mexico (2)

## Estimated Potential

## Actions



Centrals <10 MW potential  
3,250 MW

Strengthen rural electrification  
through mini hydroelectric plants



1,400 MW (4th place worldwide).

- Cerro Prieto-V 32 MW
- Los Humeros II 46 MW
- Los Azufres 150 MW
- Cerritos Colorados 75 MW



- Between 2,635 and 3,771 Petajoules p.a.
- 3,000,000 MWh p.a. with sugarcane bagasse

The CRE has issued 54 permits  
for electricity-generation plants  
that use biomass and biogas →  
498 MW.

# Mecanismos that foster the use of Renewable Energy

The government has established instruments to promote the use and development of wind power...

- ❑ **Zero Tariff** to equipment used for R&D and/or that prevents pollution (Fracc. 9806.00.02 y 03).
- ❑ **Accelerated Depreciation** to infrastructure projects that use renewable energy sources (Income Tax Law, art. 40 - XII): up to 100% in one year.
- ❑ **30% Fiscal Credit to R&D** (CONACYT) (Income Tax Law, art. 219).
- ❑ **Interconnection Contracts for Intermittent sources of electricity** (Energy Regulatory Commission).
- ❑ **Kyoto Protocol: Clean Development Mechanism**
- ❑ **Interconnection Contract for small scale solar power** (net-metering)

## Mecanismos that foster the use of Renewable Energy (2)

- With the objective of expanding the scope of Renewable Energy sources, the Ministry of Energy produced the **Special Program for the Use of Renewable Energy**
- Concurrently, the Ministry of Energy works towards the definition of the framework and objectives for the operation of the **Fund for Energy Transition and the Sustainable Use of Energy**.

## Mecanismos that foster the use of Renewable Energy (3)

In 2008 and 2009, the legal framework for renewable energies underwent significant change:

- Law for the Promotion and Development of Bioenergy
- Law for the Use of Renewable Energy and the Financing of Energy Transition
- Law for the Sustainable Use of Energy
- Regulation for the Law for the Promotion and Development of Bioenergy
- National Strategy for Energy Transition and the Sustainable Use of Energy
- Special Program for the Use of Renewable Energy

# Mecanismos that foster the use of Renewable Energy (4)

Currently, the following instruments are being finalized:

- Regulation for the Law for the Use of Renewable Energy and the Financing of Energy Transition
- Regulation for the Law of Sustainable Use of Energy
- National Program for the Sustainable Use of Energy
- National Bioenergy Program
- Interministerial Strategy for Bioenergy
- Special Program on Climate Change
- National Inventory for Renewable Energy
- Contract Models for Renewable Energy



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