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Strategies for Increasing Renewables Use in Mexico

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7 February 2003

Renewables share of TPES

	1990	2000
Canada	16.1	16.8
Mexico	11.1	10.4
USA	5.2	4.8
Czech R	0.3	1.4
Germany	1.6	2.6
Poland	1.6	4.2
UK	0.5	1.1

Source: IEA

Renewables share of electricity production, excluding hydro.

	1990	2000
Canada	0.8	1.3
Mexico	4.2	3.1
USA	2.1	2.1
Germany	0.6	2.5
Greece	0.0	0.8
Spain	0.4	3.3
UK	0.4	1.3

Source: IEA

Mexico – Gross electricity generation from Renewables (GWh)

	1990	1995	2000
TEG (TWh)	122.7	152.5	204.4
Total	28602	33203	39518
Hydro	23478	27528	33133
Geo	5124	5669	5901
Biomass	0	0	433
Biogass	0	0	9
SPV	0	0	29
wind	0	6	13

Source: IEA

In 2001, Mexico imported

Natural gas	11%
LPG	29%
Gasoline	26%
Heavy oil	20%

Renewables Potencial

- 50% of World total energy supply by 2050
- 30% of Mexican total energy supply by 2025
- 45% Mexican total electricity supply by 2025
- GHG emission level in 2025 equal to 1990 in Mexico

General Energy Barriers

- Lack of knowledge about financial situation
- 35% federal income comes from PEMEX
- Implications of the SCJN decision on private investment
- Wrong purchase policy on minimum cost
- Not considering different social and environmental costs by energy source

General Energy Policies

- Energy Sector under State control
- Vertical integration of public and private companies
- Incorporation of Renewables in the Constitution
- Compulsory assessment of sustainable development impact for energy projects
- Special fund for RDD on Mexican renewables technology

For the Mexican power sector fifteen strategies have been presented to improve its operation

Some are basic for renewables

Twenty policy options which might be
effective in accelerating the adoption of
renewable energy technologies

Document prepared for CEC in February 2002

- Market Failures and Market-Based Mechanisms
 - Thirteen Mandatory Mechanisms
 - Seven Voluntary Mechanisms

Background paper: Market-based mechanisms for Carbon sequestration, energy efficiency and renewable energy in North America – What are the options?

- New energy policies for increasing access to supply energy markets and energy services in rural areas and for the urban poor
- Establishment of a consistent and comprehensive system for monitoring renewables production and consumption
- Internalization of environmental, social and macro economic costs of energy into energy markets

Renewables Strategies (2/2)

- Redesign of current environmental policies to encourage companies to replace existing, polluting technologies with clean renewables at a future specified date
- Establishment of renewable portfolio standards for electric power generation with an increasing percentage of renewables required over time
- Removal of impediments for adding distributed sources generally to the grid, by making the transmission and distribution system open to all producers regardless of size

- To establish a public and private economy in the Mexican energy sector
- Gradual but consistent change in the organization of the Mexican power sector
- Certainty for risk capital investment
- Enhanced global efficiency by allowing competition
- Compulsory assessment of sustainable development impact for energy projects
- Viable mechanisms for incorporating renewables

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