

National Forum on Renewable Energy Regulation

Success factors for PPAs in Mexico

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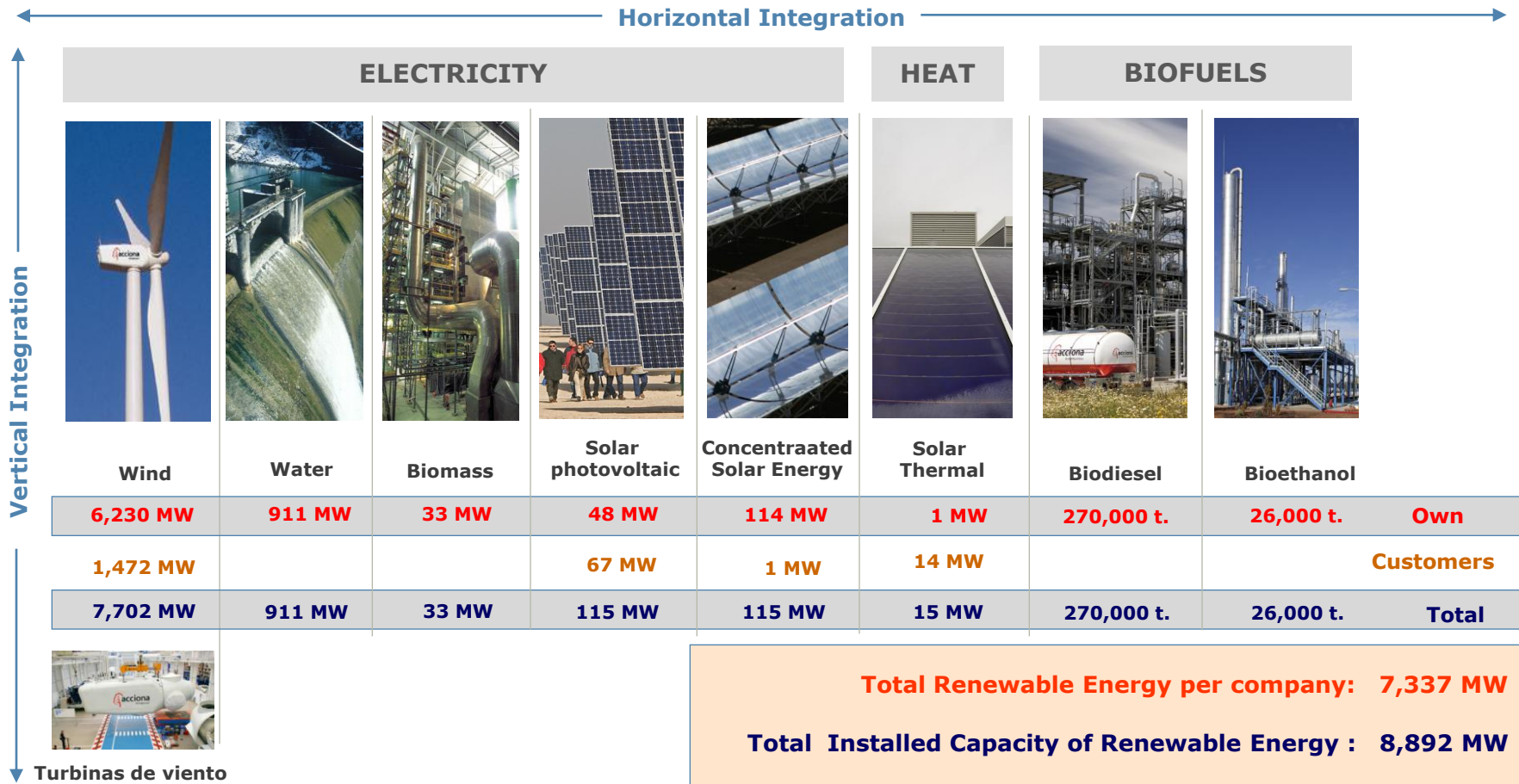
March 7, 2012

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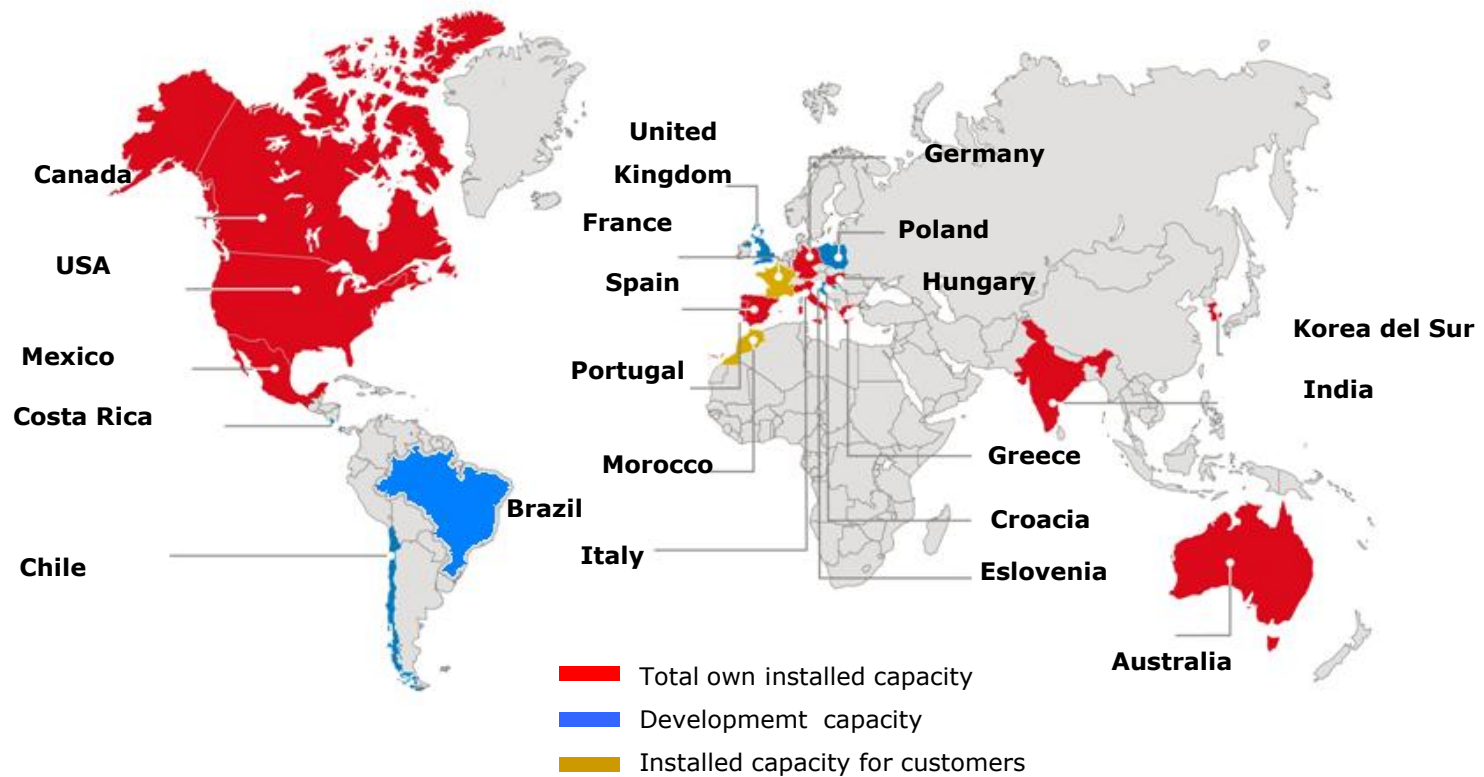
1. Acciona Energía

This is the only leading company in all viable renewable energy sources



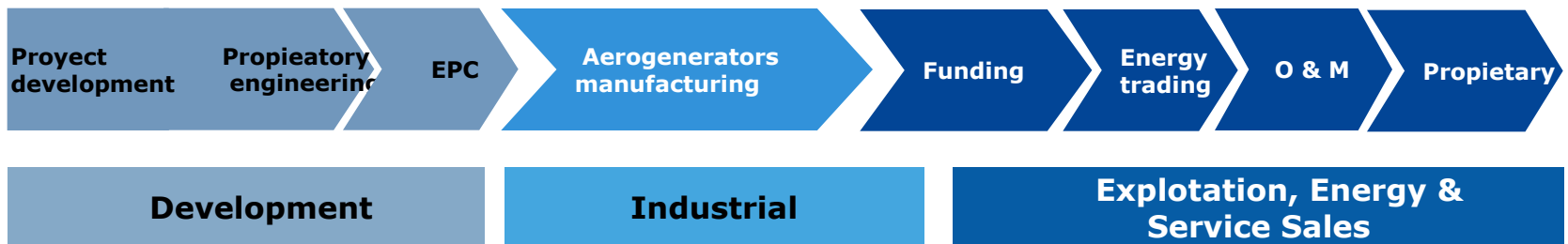
Data at 31.12.2009. The firm has 100 MW additional of cogeneration.

Global Presence in strategic markets



En toda la cadena de valor

Vertical Integration



Actividades



2. Energy Sector in Mexico

The energy sector in Mexico is growing

Energy consumption in Mexico has had an average annual growth of 3.6%.

Electricity Production:

245,000 million kWh (2008 est.)
World ranking: 15

Electricity Consumption

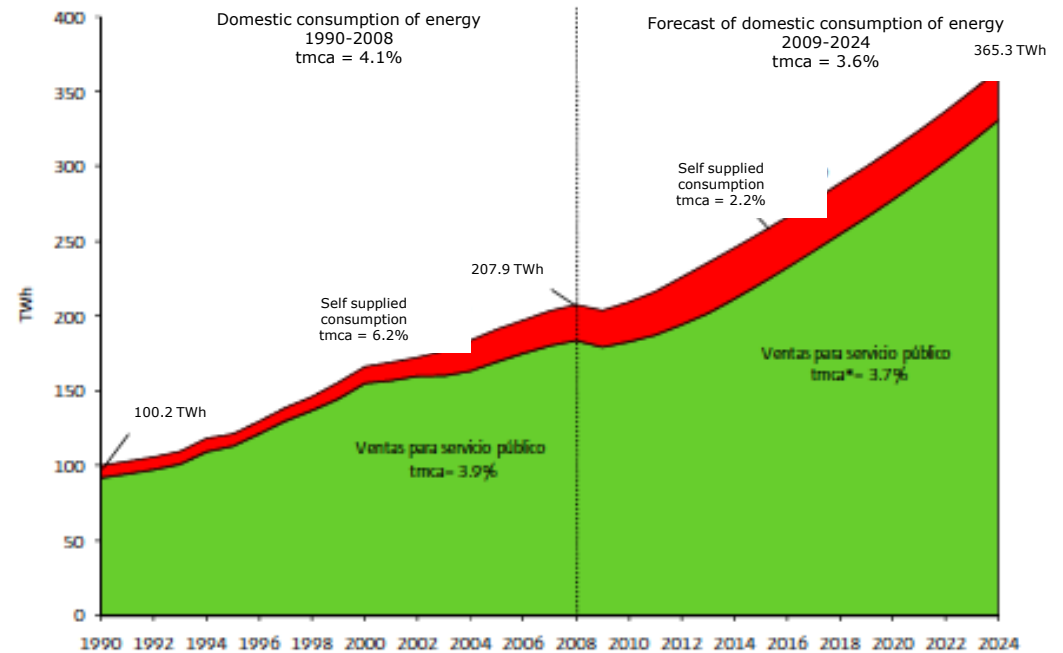
181,500 million kWh (2009 est.)
World ranking: 19

Job Generation:

Agriculture: 13.7%
Industry: 23.4%
Services: 62.9%

Estimated energy consumption

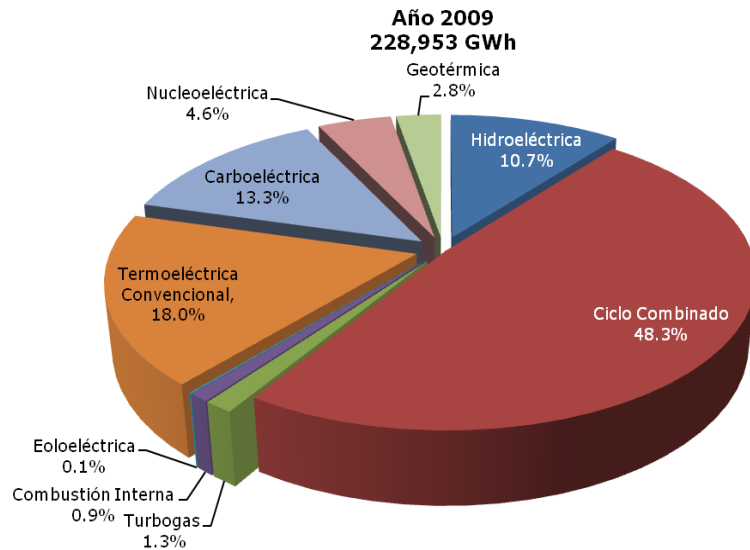
Historical & prospective domestic consumption of energy, 1990-2024
TWh



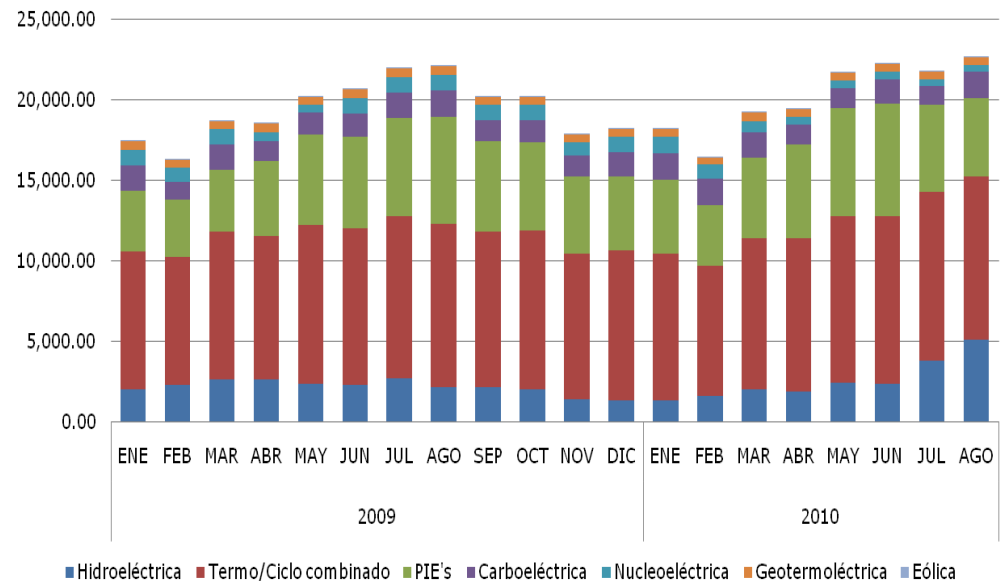
* Debido al carácter atípico de 2009, la tasa media de crecimiento anual está referida a 2008.
Fuente: Sener y CFE

ELECTRIC ENERGY SECTOR IN MEXICO

Generación bruta del servicio público por tipo de tecnología (GWh)



Generación Bruta de Energía Eléctrica (GWh)



(1) Domestic Energy Strategy 2009-2024, SENER

MEXICO HAS THE WILL

MEXICO: Sound Legal Framework and Government Support

- The Mexican Government acknowledges that the current energy supply and consumption patterns of the economy are not sustainable and incompatible with the mitigation goals for Climate Change.
- Challenge: **Energy Security**
- Solution: **The need to diversify the energy portfolio**
- In 2006 The Energy Reform included the **Ley de Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética** that was passed
 - Fosters the use of renewable energy sources and clean technologies
 - Strengthens the Ministry of Energy and the Energy Regulating Commission (Comisión Reguladora de Energía) and Sustainable Use of Energy

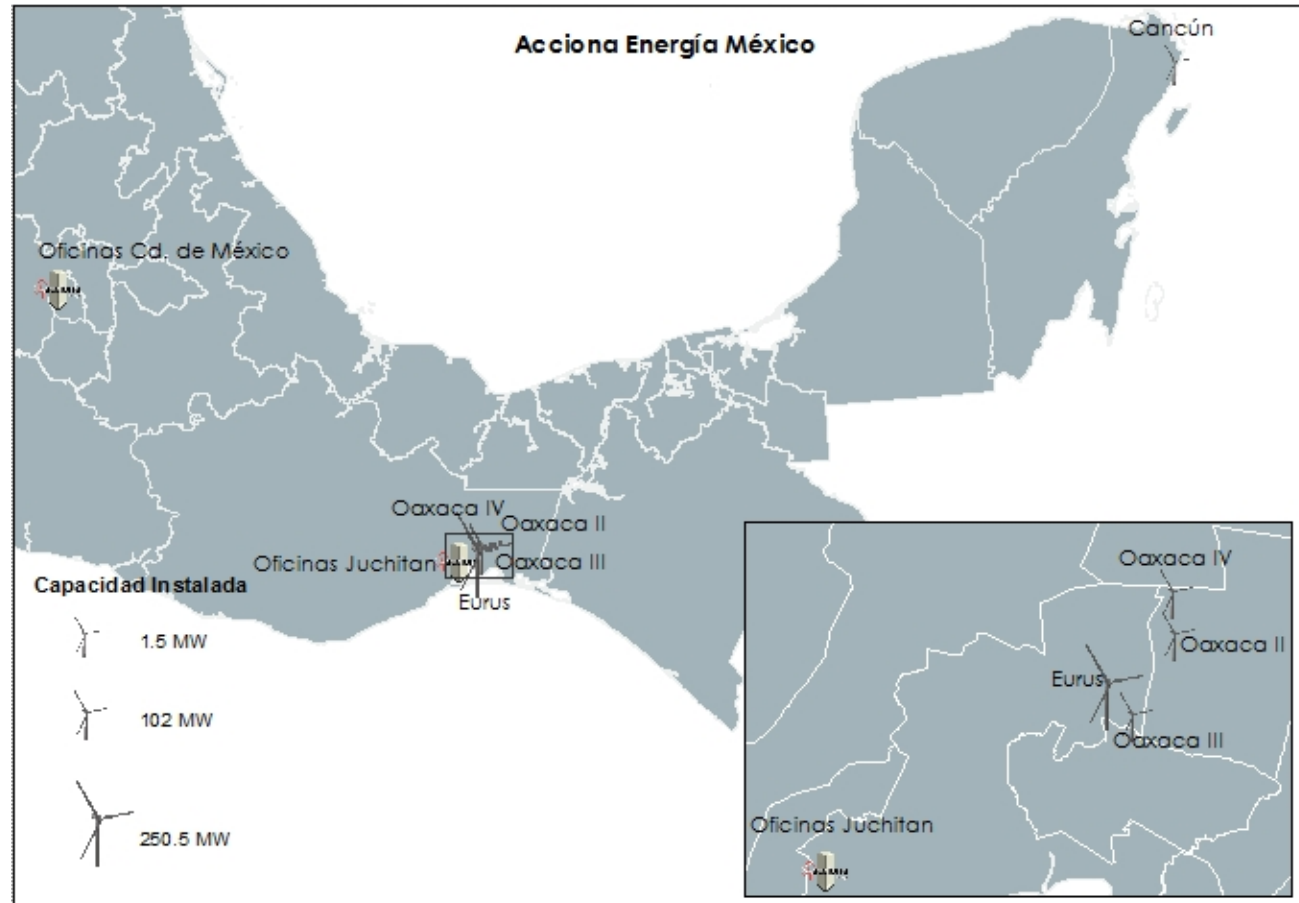
3. Wind Energy in Mexico

Electric Energy Generation Modes

- **Self supply (PPA)**
- **Cogeneration**
- **Independent Power Producers (IPP)**
One facility generation > 30 MW, exclusively sells to CFE or exports.
- **Small Power Producers (PPE)**
Energy generation allocated to:
 - < 30 MW, CFE is the only recipient
 - Small rural communities < 1 MW
 - < 30 MW allocated for exports
- **Imports**
- **Exports**

Note: The CFE powers are transmission, transformation, distribution and sales.

Acciona Energy Projects in Mexico



Acciona in 2012: operating 558 MW

	Capacity (MW)	Location	Project type	Commercial operation
OPERATION				
P. Eurus Wind	250,5 (1)	Oaxaca	Self supply	January 2009
P. Cancún Wind	1,5	Quintana Roo		Nov 2011
P. Oaxaca II Wind	102	Oaxaca	IPP	Feb. 2012
P. Oaxaca III Wind	102	Oaxaca	IPP	January 2012
P. Oaxaca Wind IV	102	Oaxaca	IPP	March 2012
Total	556,5			

(1) Total project amounts 300 MW

3. PPAs

Power Purchase Agreements

ADVANTAGES:

- ✓ Funding: 20- year agreeemnt with CFE
- ✓ Resembles the International Marketplace.
- ✓ Your customer is not necessarily your partner.
- ✓ Reliable system: on the way to industrialize the renewable energy sector in Mexico.
- ✓ Ensured evacuation



Power Purchase Agreements

OPPORTUNITY AREAS:

- ✓ Flexibility before technology breakthroughs
- ✓ Bidding bases: customized to market reality
- ✓ Coordination with other agencies
- ✓ State government commitments where projects are being developed



5. Conclusions

Conclusions

Renewable energy is viable in Mexico:

- Growing country
- Growing energy demand
- Adequate regulatory framework
under customization
- Abundant resources
- Available funding



Conclusions

All project types are required:

- PPE (small producers)
- Self supply Projects
- IPPs

Next steps:

- Capped rate plans
- IPPs for several consumers
- Technology diversification
- Renewables should no compete against fossil fuels



Conclusions

- We must keep on fostering the integration of renewable energy to the Domestic Electric System
- We should join efforts with those of the Comisión Federal de Electricidad (electricity board), bidding the required confidence and implementing national security.



