

## Secretaría de Medio Ambiente y Recursos Naturales

# Methane to Markets M2M - Mexico

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## **Climate Change and Mexico's Efforts**

- Main environmental challenge for the 21st Century.
- Mayor treat for global development and human wellbeing.
- Mexico particularly vulnerable to the effects of climate change.
- Mexico has joined most international efforts to face climate change.
- Mexico's policy to face Climate Change:
  - National Development Plan
  - National Strategy for Climate Change
  - Special Programme for Climate Change
- Mexico is willing to:
  - Reduce emissions in 50% by 2050 with respect to 2000, depending on:
    - Financing and Technical Assistance



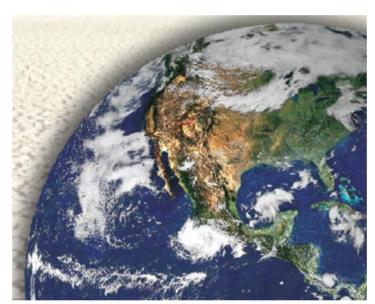


## Special Programme for Climate Change (PECC)



PECC published on August 28th, 2009.

- Long term vision (mitigation and adaptation)
  - Address to modify social behaviour and a long term policy according to international efforts.
- Mitigation
  - Actions to build inventories on energy generation; energy use; agriculture and forestry; waste management; and industry.
- Adaptation policies
  - Systems approach: human and natural systems; and risk analysis
- Trans-sectoral policies to support mitigation and adaptation efforts:
  - Foreign policy; capacity building; economics of climate change; education and training; information and communication; and research and technological development.

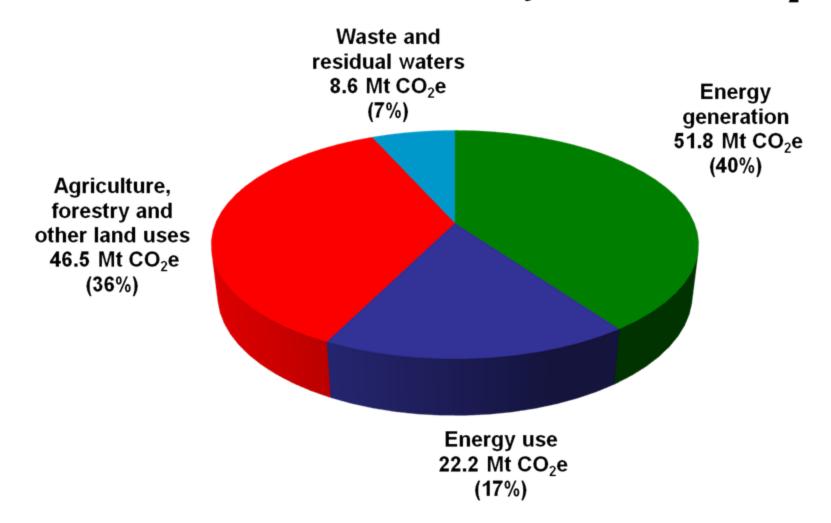




## PECC's Mitigation Goals 2008 - 2012



#### Accumulated reductions by 2012: 129 MtCO<sub>2</sub>e





### **Mexico's Methane Potential**

#### Coal mining:

- 56.1 million cubic meters of methane per year (7 years projects)
- 392.7 million cubic meters of methane total
- 606,630 Tons CO<sub>2</sub>e per year for the life of the project (7 years)
- 4'246,411 Tons CO2e total



#### Oil & Gas:

- Emission of approx. 64.0 million Tons CO₂e by 2010
- 111.4 million Tons CO<sub>2</sub>e by 2020
- 34,930 Ton CO2e/year, over the next 3 years in estimated emission reductions from the implementation of a series of projects in PEMEX.





### **Mexico's Methane Potential**



#### Agricultural:

- Swine Production: Biogas production is nearly 4,100 million of m3/year.
- Dairy Production: Biogas production is over 264.5 million of m3/year.
- Swine Production: Reduction potential is 36.6 million Ton CO2e/year.
- Dairy Production: Reduction potential is 2.4 million Ton CO2e/year
- 143 methane recovery and use projects in swine and dairy farms participating in the CDM Programme,
- Reduction potential of 3,490 million ton CO2e/year.







#### **Mexico's Methane Potential**

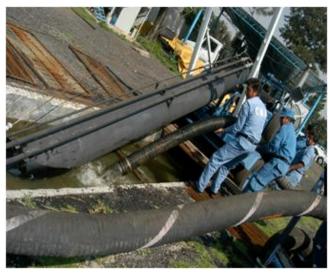
#### Landfill:

- At least 85 potential sites for biogas recovery and use
- Potential of 31 million Tons CO<sub>2</sub>e.
- 5 prefeasibility studies
- Total emission reduction potential of these projects is 281,000 Tons CO<sub>2</sub>e/year

#### Waste Water Treatment:

- Currently 35 % of waste water is treated
- 2 cities treat 100% of their residual waters
- At least 40 potential waste water treatment plants for methane recovery and use.
- 60 % of water treated for 2012 (national goal)
- Morelia, Aguascalientes, Queretaro and Monterrey, among possible projects with high potential.

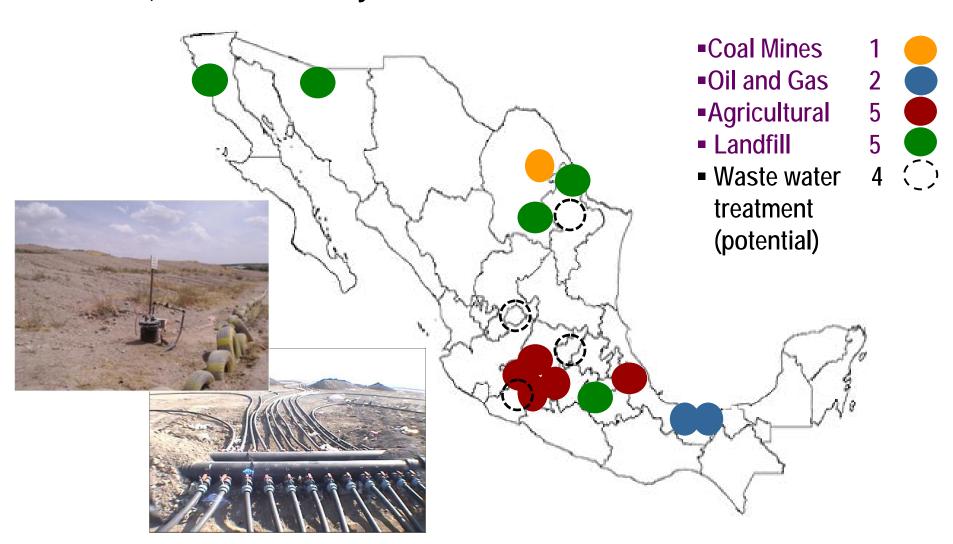




## M2M Current Projects in Mexico



■ Mexico, member country since 2005





#### The Future of the M2M Iniciative ...



- Consolidated international network addressed to:
- Support local capacity building addressed to local governments, potential investors, industrial enterprises, farmers, mining industry and developers.
- Develop a set of best practices and implementation guidelines for project development and implementation.
- Develop schemes to replicate pilot projects developed under the M2M Initiative at national, regional or international level.
- Promote recovery and use of methane as source of clean and cheap energy for local production.
- Reach the interest of national and international financers and developers.









#### The Future of the M2M Iniciative









- Promote the implementation of a larger number of projects in the different areas of the Initiative.
- Integrate new areas to the Initiative, such as water treatment.
- Facilitate financing for pilot projects in new areas feasible for the widening of the iniciative.
- Promote broader carbon markets.
- Promote the participation of projects in regional and international carbon markets.
- An International network that supports worldwide policies and efforts to reduce GHG emissions, to use methane as a clean source of energy and face climate change.

**Methane to Markets**