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SECRETARÍA DE MEDIO AMBIENTE
Y RECURSOS NATURALES

Mexico and the Global Methane Initiative

Global Methane Initiative

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National Goals on GHG emission mitigation

(Special Program for Climate Change - PECC)

- National total GHG emissions: 748 $MtCO_2e$ @2010[1]
- National GHG mitigation goals: 30 % @ 2020; 50 % @ 2050.
  - Regarding Methane emissions:
    - Reducing methane emissions from wastewater plants, landfills, and the oil and agriculture sectors.
      - 2018 goal: 161,724 tCH_4/year.

1) National GHG Emissions Inventory 1990-2010

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Mexico's participation in the GMI

- Founding partner in 2004.
- Participant in all the Subcommittees: Oil and Gas, Waste Water, Agriculture, Waste, Coal Mines.
  - Co-chair in the Oil and Gas Subcommittee.

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OIL AND GAS

Current and focus for future actions

Fugitive emissions mitigation:

- **NAMA on emissions in upstream oil storage tanks.**
  - Draft project proposed by GMI is been reviewed by PEMEX.
  - Final document in December 2014.

National goals regarding GHG emission mitigation:

- Reduce fugitive emissions from exploration, production, processing and distribution of natural gas.
- Energy efficiency actions, for example: Implementation of GHG reduction projects on PEMEX operations (energy efficiency, operational efficiency, and gas burning, venting and utilization).

AGRICULTURE

Current and focus for future actions

Focus on the development of technical standards for design, construction and installation of anaerobic digester systems:

- **Mexico Sustainable Rural Development Project (MSRDP)**
  - 589,772 CO_2e emissions reduced between 2009 – 2013 (WB/GEF-funded).
  - 317 digesters installed.
- **Handbook of Best Practices for Anaerobic Digester Systems**
  - Designed for producers and local governments.

National goal regarding GHG emission mitigation:

- Promote sustainable technologies for the productive processes of agribusiness.

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WASTE

Current and focus for future actions

Focus on biogas capture for electricity generation:

- 238 landfills nationwide (2012)
  - 6 landfills generating a total 90.3 MW
  - 9 landfills controlling biogas emissions by flaring (with CDM registration).
  - 3 landfill sites with anaerobic digesters for organic waste management.

National goal regarding GHG emission mitigation:

- Promote proper management of solid waste through dumpsite closure, landfills construction, anaerobic digesters installation and operative organisms for long term planning .
  - 2018 goal: 20,833 tCH_4/ year.

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WASTE WATER

Current and focus for future actions

Focus on biogas capture for electricity generation:

- 16 waste water treatment plants (total capacity of 26.52 m^3/s).
  - 4 plants generating electricity.
  - 12 plants with anaerobic digesters.

Atotonilco Waste Water Treatment Plant:

- The largest in Latin America: $23m^3/s + 12m^3/s$; 390 acres; sludge digestion (2,297 t/day; 643 t/day dry); net mitigation of 145,000 tCO_2e.
- Construction 80%; operations start in 2015.

National goal regarding GHG emission mitigation:

- Increasing wastewater treatment.

COAL MINES

Current and focus for future actions

Focus on coal mine methane (CMM) capture for electricity generation:

- Recovery and managing CMM.
  - 295.16 $MtCH_4$/year from 3 coal mines in Coahuila (NW Mexico) with 7.95 MW total capacity.

New national regulations:

- The Hydrocarbons Act derived from the recent Energy Reform, mandates on exploration and extraction of CMM.

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FUTURE OF GMI

Mexico is interested in:

- Collaborating in achieving GMI partnership goals.
- Continue as co-chair of the Oil and Gas Subcommittee (PEMEX), as well as participation in Agriculture, Waste and Coal Mines Subcommittees.

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FUTURE OF GMI

Future work on:

- Identification of opportunity areas for methane emissions mitigation; capacity building and technical support.
- Defining specific projects to face local emissions generation, to differentiate GMI from CCAC goals regarding agriculture sector.
  - For example: recovery from livestock manure (GMI) *vs* agricultural burning (CCAC).
- Defining specific projects to face local emissions generation, to differentiate GMI from CCAC goals regarding waste management sector.
  - For example: specific projects for strategic locations (GMI) *vs* planning and capacity building (CCAC).
- Explore opportunity areas for methane emissions mitigation from the mining sector.
- Participating on the definition of roles and new TOR.