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# CHALLENGES TO LANDFILL BIOGAS PROJECTS IN MEXICO

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#### **M2M PURPOSE**

Promoting projects that capture and profit biogas in order to reduce efects of GHG

#### M2M INITIATIVE IN MEXICO

SEMARNAT, in charge of co-ordinating sub-committees tasks and activities. EPA supports M2M through technical assistance and demonstrative projects in order to promote the initiative and create a multiplying effect in interested sectors

#### LANDFILL SUB-COMMITTEE WORKING PLAN INCLUDES:

- ✓ Supporting the making of landfill country assessment
- ✓ Identifying barriers (institutional, legal, economic) to power generation projects.
- ✓ Identifying alternative uses for biogas schemes
- ✓ Making of an international fund guide for biogas projects, including alternatives on commercialising carbon bonds
- ✓ Developing landfill pre-feasibility studies



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#### Barriers to power generation projects

Information sought in order to provide specific support to power mejor generation (e.g., SIMEPRODESO en Monterrey) and biogas burning schemes (e. g. Aguascalientes y León)

#### International funds guide

A specific analysis included in CC programme.

#### Feasibility studies

- ✓ SEMARNAT EPA general format developed; technical and economic assessment included; monitoring and modelling
- ✓ Identification of landfills for pilot schemes (features and potential)
- ✓ Legal paperwork design

Pre-feasibility studies available for Nogales and Saltillo

Both in planning phase for biogas capture and use project implementation

Next sites to be included in prefeasibility phase: Cuautla and Yecapixtla, Morelos



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#### M2M Mexico guidelines



- 1.- To promote closure of open dump land sites including the facilities for combustion or use of biogas
- 2.- To promote 8 potential projects in final dispossal sites
- 3.-To develop a new capture and use model for biogas in Mexico (Monterrey, León, Aguascalientes y Ciudad Juárez)
- 4.- To make and update the project list according to interest, market niches and national and regional priorities
- 5.- Some cities analised are
  - a) NOGALES
  - b) SALTILLO
  - c) HERMOSILLO
  - d) CUAUTLA
  - e) NUEVO LAREDO
  - f) YACAPIXTLA
  - g) ATIZAPAN DE ZARAGOZA
  - h) ENSENADA



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### **CDM Projects**



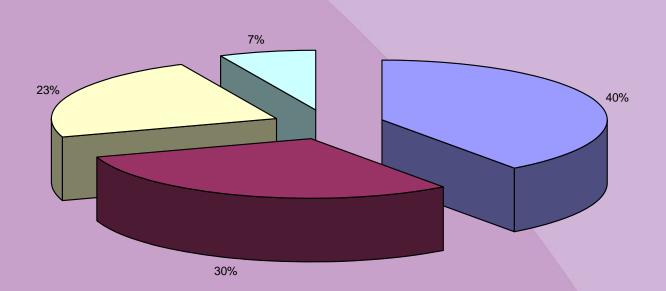
Methane projects in draft: 40%

Methane registered projects: 23%

New methane projects: 7%

Methane projects being assesed: 30%

#### PROYECTOS MDL











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## **Potential market**

Vivir Mejor

CDM projects: 30

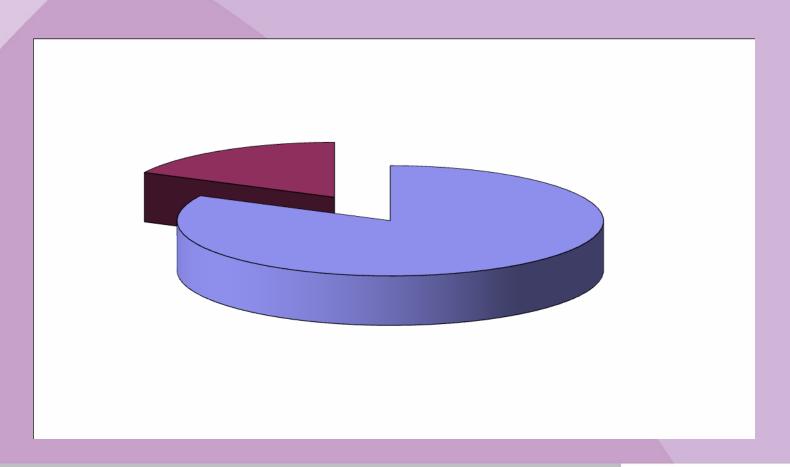
CDM potential projects: 141





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## Some constraints to M2M projects



- 1. Insuficient enforcement to comply with regulations
- 2. Land tenure conflicts
- 3. Energy law prevents private selling of electricity
- 4. Insuficient knowledges of local authorities on Carbon Markets
- 5. M2M experience in Mexico has focused only in Prefeasibility and feasibility studies and supporting biding process



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## Some opportunities to M2M projects





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- 1. 87% of viable landfills still not covered
- A new Waste National Programme with new policies which promotes openness to the markets and stringent messures for GHG control
- 3. A new Climate Change National Programme with specific issues regarding methane from landfills and agriculture facilities
- 4. Prefeasibility studies financed by BANCOMEXT and BANOBRAS
- 5. National programmatic framework for landfills in process by Bancomext
- 6. Increased interest of local authorities













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