

# The Global Methane Initiative

**Building on the Success of the  
Methane to Markets Partnership**

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# Overview

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- Launch of Global Methane Initiative
- Background on Methane
- Approach to Project Development
- Global Methane Initiative in the SEE Region □

# A Global Methane Initiative

*The U.S. and Mexico have initiated an expanded and enhanced global effort on methane called the Global Methane Initiative (GMI)*

## Elements

- The GMI would build on the existing structure of M2M and would be supported by the revised Terms of Reference. Key elements include:
  - Expanded Scope
    - Abatement and avoidance from wastewater treatment, landfills, agriculture
  - Methane Action Plans
    - Ensure that all partner countries commit to develop national methane action plans to coordinate methane reduction efforts at home and abroad.
    - Developed countries provide coordinated assistance to developing countries
    - New Resource Commitments from Developed Country Partners, the International Community and Others in a Position to Do so.

# GMI Continued

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## *Potential Results*

- Over 1500 million tons of CO<sub>2</sub>-eq reductions per year possible at low cost
- With sustained, high level commitment, a global methane effort could deliver substantial reductions
- All existing Partners and activities under M2M will become part of the Initiative.
- The Methane to Markets Partnership program materials will be modified over the coming months to reflect the enhancements and expansions of the Initiative – and a new brand will be developed.
- Additional information on the Initiative can be found at:

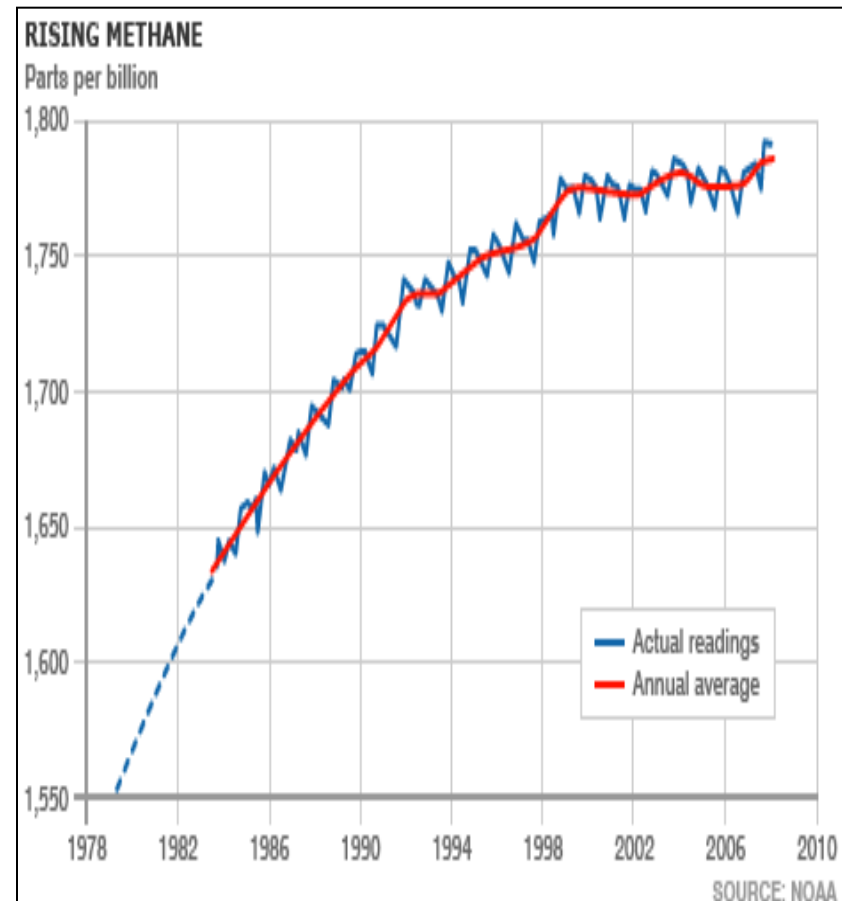
[www.globalmethane.org](http://www.globalmethane.org)

# GMI Continued



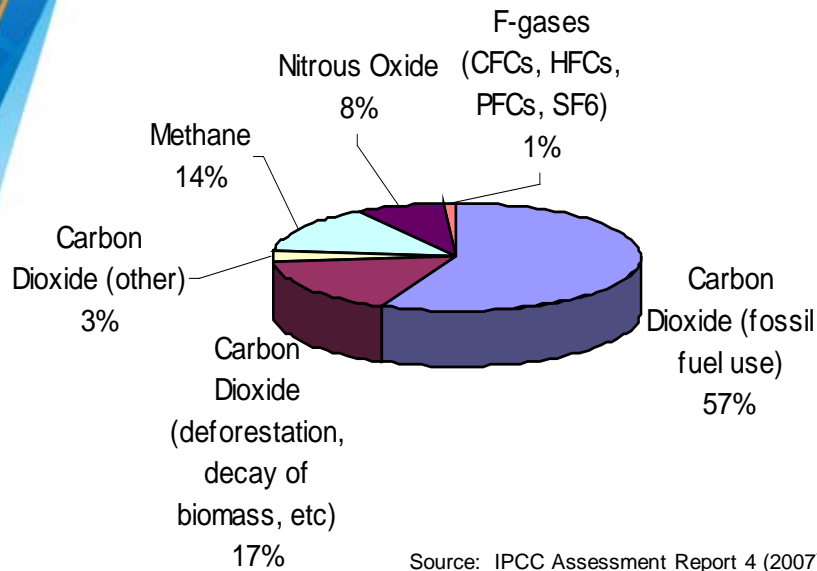
# Reducing Methane is Essential in Fighting Climate Change

- Methane is the second most important GHG
  - 100-year GWP = 23
  - Lifetime = 12 years
- Concentration of methane in the atmosphere has increased by 150% in the last 260 years
- Anthropogenic methane emissions are expected to rise 23 percent by 2020
- Methane reductions are critical and can be cost-effective

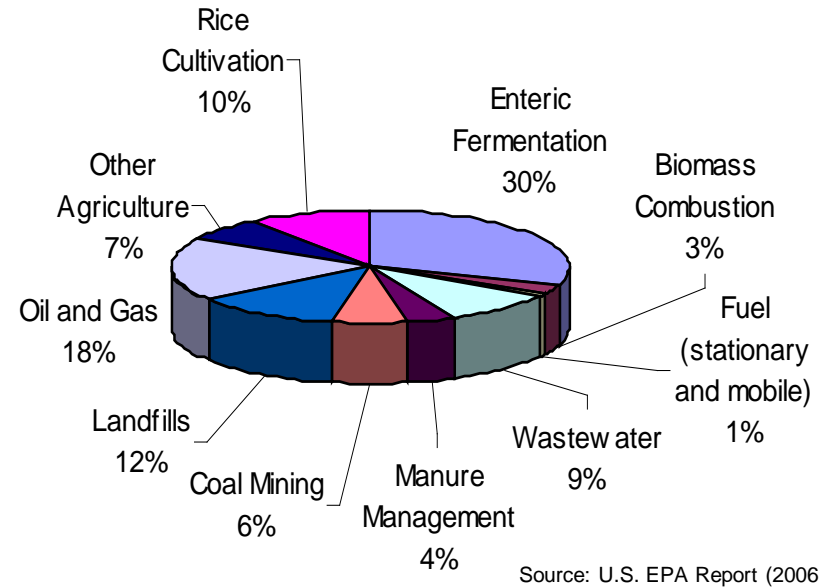


# Methane Emissions Profile

**Global Anthropogenic GHG Emissions by Gas (2004)**



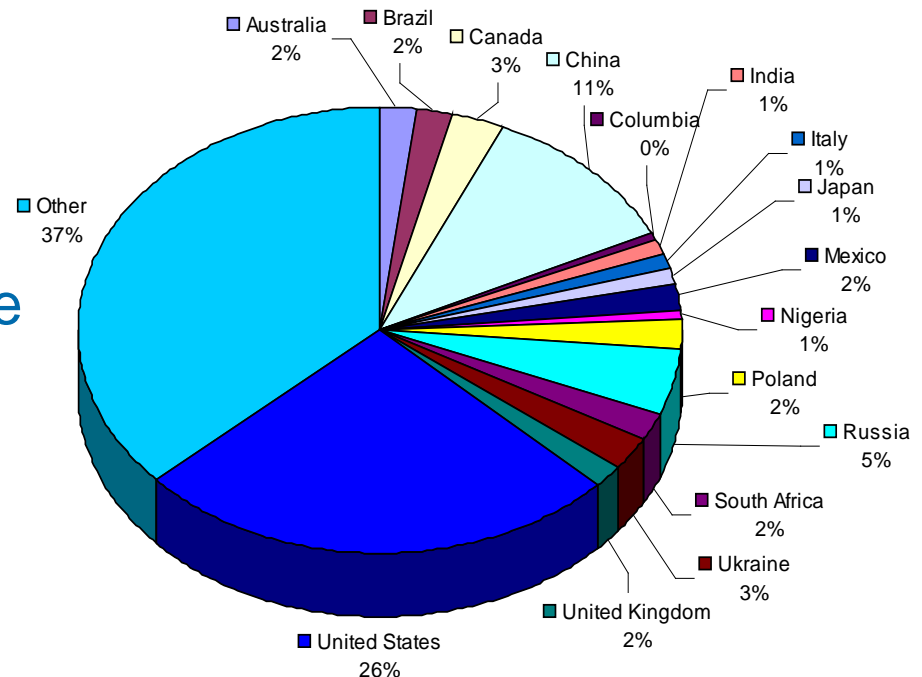
**Global Anthropogenic Methane Emissions by Source (2005)**



# Global Landfill Methane Emissions

- Methane is produced and emitted during the anaerobic decomposition of organic material in landfills
- Globally, landfills are the 3rd largest anthropogenic source, accounting for 13 percent of emissions

Global Methane (CH<sub>4</sub>) Emissions (MMTCO<sub>2</sub>e) in 2000



Global Anthropogenic Emissions of Non-CO<sub>2</sub> Greenhouse Gases 1990-2020, U.S. EPA, June 2006



# Cost-Effective Projects Recover and Use Methane

## ★ Sources of Renewable Energy

### ★ Landfills



### Coal Mines



### ★ Wastewater



### ★ Livestock Waste



### Oil and Gas Systems



# Strategic Approach to Project Development

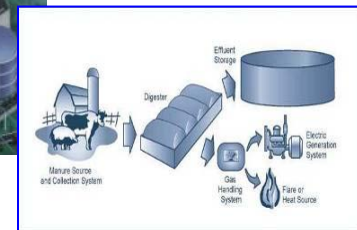
## ■ Strategic Focus

- Target technical assistance and services to countries with greatest project potential
- Initiate capacity building and outreach efforts w/ all GMI countries
- Leverage relationship with World Bank, Asian Development Bank, International Solid Waste Association



## ■ Key Activities

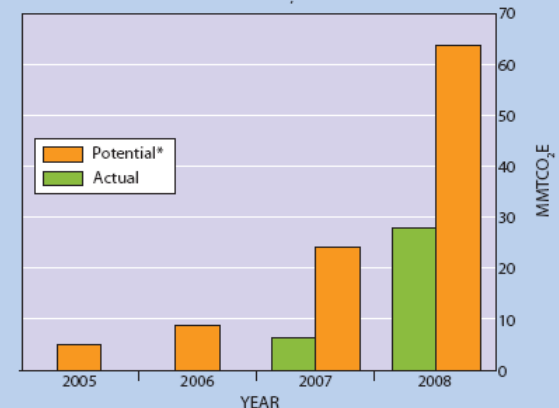
- Technical Assistance and Project Identification
- Data collection, assessment reports, pre-feasibility studies
- Tool Development and Technology Transfer
- LFG generation model, Coal mine methane and Landfill database
- Training and Capacity Building
- Clearing houses, training workshops, study tours, peer matching



# GMI - Delivering Results and a Model for Future Success

- **Delivering Results Today**
  - Supporting 300 projects
  - Reducing emissions by 27 MMTCO<sub>2</sub>e annually, and when fully implemented 63 MMTCO<sub>2</sub>e/year
- **Creating Pathway for Future Success**
  - 80 technology transfer and capacity building events in 23 countries
  - Showcased 225 project opportunities at the 2007 and 2010 M2M Project Expos
  - Developed a suite of tools and technical resources to help overcome barriers to project development
- **Complements UNFCCC**
  - Increases the number and quality of projects entering the carbon market project pipelines
  - Provides technical assistance and capacity building for long-term success

Annual Reduction of Methane Emissions from Partnership Supported Projects, 2005 - 2008



\*Potential emission reductions include actual reductions from Partnership-supported projects now online.



# Significant Benefits of Methane Recovery and Use Projects

## BENEFITS OF METHANE PROJECTS

- Reduced waste of a valuable fuel and important local energy source and
- Improved air quality, water quality and reduced odors
- Reduced greenhouse gas emissions
- Progress toward sustainable development goals
- Economic growth and energy security

## BUT BARRIERS EXIST...

- Lack of awareness of emission levels and value of lost fuel
- Lack of information on and training in available technologies and management practices
- Traditional industry practices
- Regulatory and legal issues
- Limited methane markets and infrastructure
- Uncertain investment climate

# GMI Work In Southeastern- Eastern Europe

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- Bulgaria

- Assessment of major municipal sites – development of business plans for two best prospects
- Will be launching grant to being developing LFGE network for region

- Poland:

- Inventory development – to delineate sites and potential project opportunities
- Instytut Nafty i Gazu (INIG) has developed landfill inventory, performed assessments and Best Technologies Handbook. Will be launching new grant to develop financial assessment software, training and technical assistance to potential sites.

# GMI Work Continued

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- Russia
- Ukraine
- Serbia
  - Have just recently begun work. Will be launching grant for inventory development, study tour, and site assessment

# For More Information . . .

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**[www.globalmethane.org](http://www.globalmethane.org)**

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