



Methane to Markets

United States Government Update Landfill Gas Activities

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Methane to Markets Partnership Overview

- Advances recovery and use of methane as a valuable clean energy source
- Encourages development of **cost-effective** methane recovery and use opportunities in
 - coal mines, landfills, oil and gas systems and agriculture (manure waste management)
- Private companies, multilateral development banks and other relevant organizations participate by joining the **Project Network** – *over 500 organizations now participating*
- 18 Partner Countries

Argentina	Italy
Australia	Japan
Brazil	Korea
Canada	Mexico
Colombia	Nigeria
China	Russia
Ecuador	Ukraine
Germany	United Kingdom
India	United States



Methane to Markets: U.S. Commitment

- Pledge of \$53 million over five years
- To date, the U.S. has:
 - Provided more than \$5 million to support a wide range of projects and activities.
 - These investments, if fully implemented, will result in estimated annual emission reductions of approximately 5 million MTCO₂E.
 - U.S. investments have leveraged over \$235 million in public and private sector contributions.
 - Continued significant work in all four Methane to Markets sectors (agriculture, coal mines, landfills, and oil and gas).



U.S. Involvement: 2006 Landfill Highlights

- U.S. EPA co-sponsored LFG workshops and training seminars in Russia, India (with USAID), and Ukraine.
- Pre-feasibility study and pump test completed in Ensenada, Mexico; two studies underway (January '07) in Ecuador.
- U.S. EPA spearheaded development of global database of disposal sites and LFG project opportunities.



M2M Partnership in Action



Ensenada pump test



Loja, Ecuador – taking field measurements



Ukraine Workshop and site visits



Delhi LFGE Workshop

U.S. Involvement: 2006 Highlights (con't)

- **Grant Solicitation**
 - U.S. EPA issued a RFP to fund methane recovery and use projects and activities.
 - Total estimated amount is \$2,500,000.
 - Up to 20 cooperative agreements, at \$25,000 to \$300,000 per award.
 - Estimated project period: May 2007 - May 2009.
 - The deadline closed January 3
 - Received ~100 applications requesting over \$20 million in funding for projects and activities in 20 countries!

Landfill Lessons Learned

- There are serious technical hurdles regarding basic landfill management and landfill gas system O&M that must be overcome in most developing countries.
- Lack of awareness of all LFG uses.
- Contractual disputes (e.g., gas rights) must be addressed.
- Political change presents unique challenges.
- Carbon credits are driving most projects.

U.S. Involvement: Looking Forward

- Developing projects that achieve direct and rapid emission reductions.
- Building capacity, providing training, and overcoming technical, policy, and market barriers
- Planning the Partnership Expo.
- Finalize and launch international landfill database in early 2007

Key Priority for 2007: Partnership Expo

- 28 October - 1 November 2007, Beijing, China
- Key Objectives
 - Showcase methane project opportunities, identify projects with financing opportunities from all country Partners
 - Showcase methane recovery and use technologies and services
 - Sector tracks on key technical, policy, financial, and other project development issues
- Participating organizations are those interested in methane recovery and use project development
 - Project developers
 - Financial institutions
 - Equipment manufacturers/vendors
 - Site and/or project managers
 - Non-governmental organizations
 - National and international policy makers, etc.

Upcoming Activities

- **M2M Grant solicitation review and awards**
 - Total estimated amount is \$2,500,000.
 - Up to 20 cooperative agreements, at \$25,000 to \$300,000 per award.

- **Next Landfill Subcommittee Meeting**
 - 2-4 May 2007
 - Cologne, Germany
 - In conjunction with 2007 Carbon Expo

For More Information...

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