

Executive Summary

The launch of the Methane to Markets Partnership in November 2004 committed the United States, along with 13 other countries, to advancing cost-effective, near-term methane recovery and use as a clean energy source. Public and private sector organizations around the world are now working together with government agencies to facilitate project development at agricultural operations, coal mines, landfills, and oil and gas systems. This collaboration is yielding important benefits, including enhanced economic growth and energy security, improved air quality and industrial safety, and reduced greenhouse gas (GHG) emissions.

The U.S. government plays a leading role in the Partnership. Six major agencies and departments across the federal government are providing technical expertise and leadership on the Partnership's Steering Committee and subcommittees; facilitating communication and outreach activities by serving as the Partnership's Administrative Support Group (ASG); and working with other Partner Countries, the private sector, and other organizations to develop and support methane recovery projects around the world. In fiscal year 2005, the U.S. government provided \$5.4

million for Methane to Markets projects and activities. This contribution has leveraged significant resources from other Partner Countries, development banks, the private sector, and members of the Project Network. For example, a coal mine methane (CMM) project in Jincheng, China, received funding from the U.S. government for pre-feasibility and planning studies and is now set for full-scale implementation with international investments totalling \$235 million.

To date, our resources have been used in creating the foundation for future project development as well as advancing near-term methane recovery and use opportunities. The United States is supporting technology demonstrations and pre-feasibility and feasibility studies at potential project sites; addressing market, institutional, and other barriers to project development; and building capacity through technology transfer and training. These efforts are directly leading to the future implementation of full-scale projects in numerous countries, which, if fully implemented, will result in estimated annual emission reductions of approximately 5 million metric tons of carbon dioxide equivalent (MMTCO₂E).

In the landfill sector, the U.S. government is developing a global database of landfill gas (LFG) project opportunities to help countries and project developers from around the world identify potential project sites. In addition, the United States has trained Russian professionals in LFG project development and provided seed funding for LFG projects in Mexico and Brazil. These projects are expected to reduce emissions by 45,000 and 500,000 metric tons of carbon dioxide equivalent (MTCO₂E) per year, respectively.

In the coal mining sector, the U.S. government has developed a global overview



The Methane to Markets Partnership Expo, Fall 2007

The Methane to Markets Partnership Expo will showcase the Partnership's achievements and global opportunities for methane recovery and use. The event will provide a forum to:

Highlight methane capture and use technologies and services.

Showcase project opportunities to potential investors.

Discuss the key technical, policy, financing, and regulatory issues related to project development.

document profiling key coal producing nations and opportunities for coalbed methane (CBM) and CMM project development. The United States is also compiling data for a global database on coal mine project opportunities, providing training in China, and funding a Ukrainian coal mine safety and emission reduction project that is expected to reduce emissions by an estimated 100,000 MTCO₂E per year.

In the oil and gas sector, the U.S. government, in cooperation with industry partners, is sharing its technical expertise and



experience by sponsoring technology transfer workshops in Colombia and Russia. The United States is also working with Petróleos Mexicanos (PEMEX) in Mexico to launch two pilot projects that have the potential to reduce methane emissions by approximately 120,000 MTCO₂E per year. These efforts not only bring local project opportunities to the international community but also build local capacity to advance project development.

The U.S. government is also involved in an array of demonstration projects in the agriculture sector, ranging from large industrial-scale manure waste management systems in China to smaller household- and village-scale systems in Thailand and Vietnam. As well as methane emissions, these projects will reduce water and air pollution caused by confined livestock production and improve public health in areas that may be affected by livestock production.

Active involvement by experts from private sector entities, financial institutions, and non-governmental organizations is essential to the success of the Partnership. Currently, more than 350 experts from

these organizations are participating as Project Network members, whose expertise and experience have been vital to fostering development of methane capture and use projects.

In the coming year, the United States will work to expand collaboration with Partner Countries and Project Network members to accelerate methane recovery and use throughout the world. One important focus of these efforts will be to ensure the successful development of the 2007 Methane to Markets Partnership Expo, an event that will bring together the investment, project development, and government communities. In addition, the United States will work with other Partners to enhance our ability to track our collective progress and communicate our results.

Sustained effort and focus on methane recovery and use by the U.S. government, Partner Countries, and the Project Network will lead to significant, near-term progress in reducing emissions. By working collaboratively with the public and private sector, we can reduce global methane emissions while developing new sources of clean energy that provide economic, environmental, and health benefits.