



POWERING DEVELOPMENT WITH METHANE

The Partnership Methane to Markets Partnership (M2M) for reduced global methane emissions.

The Goal To advance the recovery and use of methane as a valuable clean energy source, and to decrease greenhouse gas methane emissions, increase energy security, enhance economic growth, improve local air quality, and improve industrial safety.

The Result In Thailand, M2M has helped reduce an estimated 90,000 metric tones of CO₂ equivalent of methane emissions from twelve swine farms in the Bangkok area. Participating farmers benefit from the project by using the methane as a local energy resource and the dried digestive sludge as a crop fertilizer. M2M has also partnered with the World Bank to deploy over 100 anaerobic digester projects in Southeast Asia, with an estimated methane reduction potential of 500,000 metric tones of CO₂ equivalent.

How they did it M2M projects involve capturing and using methane as a clean energy source. The partnership is focused on four sectors - agriculture (manure management and agricultural waste), coal mines, landfills, and oil and gas systems. In the agriculture sector, methane emissions are captured from the anaerobic decomposition of manure, and waste from agricultural facilities.

In China, a project funded by the World Bank is underway at The Global Environment Facility to manage livestock waste. The project will be replicated in other countries and will contribute to the protection of one of the world's most biologically diverse regions. In India, a project funded by the United States Environmental Protection Agency (EPA) is underway to capture methane from distillery and winery waste. In the Republic of Korea and Mexico, the EPA has funded ongoing projects to capture methane from agriculture wastes.

Outlook Methane emissions from agriculture are expected to increase significantly over the next 10 years, due to an increase in size of animal livestock populations resulting from an increased demand for meat and dairy products. It is estimated that 10 per cent of emissions from manure could be avoided at no cost, and 60 per cent could be mitigated at low cost, using cost effective technology such as anaerobic digesters.

M2M has agriculture projects underway in a number of countries including China, Mexico, Colombia, India, Brazil, Vietnam, and Thailand. Projects include anaerobic digester demonstrations, capacity building workshops, training sessions, and overcoming institutional and regulatory barriers.

Background Methane now accounts for 14 percent of all greenhouse gas emissions, with about 60 percent of total methane emissions coming from human-related activities. Methane is 23 times as effective at trapping heat in the atmosphere as carbon dioxide, and has a relatively short atmospheric lifetime of approximately 12 years. These characteristics make methane emissions reductions effective at mitigating global warming in the near term.

The Methane to Markets partnership was launched on 16 November 2004, at a Ministerial Meeting in Washington, D.C., where 14 national governments signed on as partners. Eighteen national governments and over 400 private organizations currently participate in partnership's activities in the agriculture sector.

For more information on the M2M Partnership see:

<http://webapps01.un.org/dsd/partnerships/public/partnerships/1551.html>

For more information on the CSD 17 Partnerships Fair see:

http://www.un.org/esa/dsd/dsd_aofw_par/par_csdfair17.shtml