

Categories: ENERGY ACCESS, CLIMATE CHANGE

Featured Solution # 9: Methane Capture and Use

Background: The 120+ case studies collected in the first 21 months of the 2005-2007 CSD Implementation Cycle highlight a number of practical and proven solutions to the energy challenge, one of which is summarized below. The challenge for the remaining three months of the CSD Cycle will be to identify ways to replicate and/or scale up this solution and others.

DESCRIPTION OF THIS SOLUTION	FEATURED RESULTS OF THIS SOLUTION	NEXT STEPS: HOW CAN THIS SOLUTION BE SCALED UP OR REPLICATED?
<p>Methane Capture and Use</p> <p>Cost-effective, near-term methane recovery from agriculture, coal mines, landfills, and oil and gas systems provides a clean energy source for producing electricity, heat, or combined heat and power while at the same reducing greenhouse gas emissions.</p> <p>Case studies from CSD Matrix:</p> <ul style="list-style-type: none"> • Methane to Markets Partnership • U.S. Environmental Protection Agency's Voluntary Methane Program 	<ul style="list-style-type: none"> • In the year 2005, nearly 400 operational landfill gas energy projects in the United States prevented the release of 19 million metric tons of carbon equivalent (MMTCE), the carbon equivalent of removing the emissions from 13.3 million vehicles on the road or planting 19 million acres of forest for one year. • Two pilot projects launched by Petróleos Mexicanos (PEMEX) in México (in cooperation with SEMARNAT, USEPA, and USAID) have the potential to reduce methane emissions by approximately 120,000 MTCO2E per year. • A Ukrainian coal mine safety and emission reduction project is expected to reduce emissions by an estimated 100,000 MTCO2E per year. 	<ul style="list-style-type: none"> • The world's largest coal mine methane project – a 120 MW combined heat and power plant – is being built in Shanxi Province, China. • The U.S. has provided seed funding for landfill gas projects in Mexico and Brazil that are expected to reduce emissions by 45,000 and 500,000 metric tons of CO₂ equivalent (MTCO2E) per year, respectively. • The Methane to Markets Partnership Expo (Oct 30-Nov 1, 2007 in Beijing, China) is the premier international forum for promoting methane recovery and use project opportunities and technologies. <p><u>Partnerships Working to Replicate This Solution</u></p> <ul style="list-style-type: none"> • M2M: Methane to Markets Partnership (www.methanetomarkets.org) : M2M Partners and project network members continually collaborate to promote projects and activities.

