



Oil and Natural Gas

Methane is emitted from oil and gas systems as a result of normal operations, routine maintenance, and system disruptions. These emissions can be reduced by upgrading technologies or equipment and by improving management practices and operational procedures. U.S. technical expertise and leadership in this sector is well recognized around the world. In support of the Methane to Markets Partnership, the U.S. government is sharing its technical expertise and experience and working with governments and the private sector to identify and share best practices and cost-effective techniques for reducing methane emissions, improving system efficiency, and delivering more gas to market. Some of the U.S. government's accomplishments in this sector include:

Project Development in Mexico

In 2006, USAID funded two pilot projects with PEMEX, Mexico's state-owned oil company, with significant potential for methane emission reductions. These projects will upgrade compressors used in the gas pipeline transmission system and implement a technology that captures fugitive gas emissions from oil storage tanks. Implementing these two technologies will

result in estimated annual emission reductions of just over 120,000 MTCO₂E. As a first step, PEMEX and USAID are currently gathering baseline measurements at selected locations. PEMEX is also conducting a larger, company-wide analysis to inventory all oil and gas process components and equipment—including wells, dehydrators, pneumatic controls, and valves—and measuring their effectiveness. These pilot projects will shed light on project opportunities in Mexico and serve as model procedures and best practices for other Methane to Markets countries. It is estimated that replication of the pilot projects and other methane emission reductions measures throughout PEMEX can result in lowering annual emissions by more than 4 MMTCO₂E.

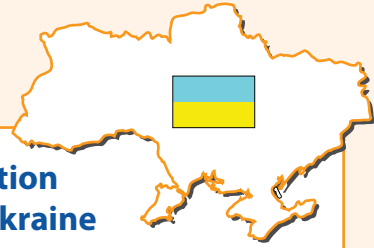




Technology Transfer in Colombia and Russia

To facilitate project development in the oil and natural gas sector, EPA has coordinated and co-sponsored a number of technology transfer workshops on cost-effective emission reduction technologies and pipeline maintenance and repair. Some of these included:

- A 2-day workshop in Bogotá, Colombia, in October 2005, co-sponsored by the Colombian Ministries of Energy and Environment and Occidental Petroleum. This workshop consisted of a series of presentations by oil and natural gas experts. As a direct result of the event, EPA is working with private industry to develop a methane emission reduction project in Latin America. Attendees have also approached EPA to promote similar events in other Methane to Markets Partner Countries, which EPA is actively pursuing.
- A 3-day workshop in Tomsk, Russia, in September 2005, hosted by the Russian Academy of Sciences. The workshop focused on identifying and quantifying oil and gas methane emissions from the Russian and Ukrainian oil and natural gas industry.



Leak Reduction Project in Ukraine

Ukraine has the second largest natural gas transmission system in Europe—35,000 kilometers long, with 171 compressor stations—and a large potential for methane emission reduction projects. Cherkasytransgas, one of the six Ukrainian gas transmission companies, recently won a grant from IUEP to evaluate and implement methane emission reduction technologies and practices at all 23 of its compressor stations. The project will provide an excellent model of best management practices on Soviet equipment for other Byelorussian, Russian, and Ukrainian natural gas companies.

Government Industry Partnerships to Reduce Emissions

The Natural Gas STAR program is a flexible, voluntary partnership between EPA and the U.S. oil and natural gas industry. Through the Program, EPA works with companies that produce, process, transmit, and distribute natural gas to identify and promote cost-effective methane reduction opportunities. Because of the growing importance of global GHG emission reductions and the development of the Methane to Markets Partnership, EPA is launching the Natural Gas STAR International Program, expanding its domestic focus to work with Methane to Markets Partner Countries and international gas companies to identify methane emission reduction opportunities worldwide.