







March 2004

EPA's Landfill Methane Outreach Program

Meeting the Needs of Corporate Energy Users

The U.S. Environmental Protection Agency's (EPA's) Landfill Methane Outreach Program (LMOP) is committed to helping corporate energy users develop and promote landfill gas energy (LFGE) projects. LMOP is a voluntary assistance and partnership program that promotes the use of landfill gas as a renewable energy source. By preventing emissions of methane—a powerful greenhouse gas—through the development of LFGE projects, LMOP helps businesses, states, and communities protect the environment and build a sustainable future.

LMOP works in partnership with corporations to gain a greater understanding of their energy needs and environmental goals. LMOP also provides opportunities to pass on advice and information and identifies possible areas for further collaboration.

LMOP Works Hands-on with Companies Considering and Using LFG

- LMOP approached *BMW Manufacturing Corporation* (BMW) about using LFG at their Greer, South Carolina manufacturing plant after identifying a nearby candidate landfill. LMOP and its Partners assisted BMW with technical and permitting issues, and today, BMW produces 25 percent of the plant's electricity and up to 100 percent of its thermal needs using LFG-fired turbines. BMW expects a savings in their South Carolina plant of more than \$1 million per year, as well as providing a hedge against fluctuating natural gas prices. BMW's LFGE project was the recipient of LMOP's 2003 Project of the Year Award.
- LMOP provided General Motors Corporation (GM) with assistance related to permitting issues, promotional support, and public recognition for their LFGE development efforts

"The General Motors Fort Wayne Assembly Plant is actively involved in finding new and inventive ways to help the environment and reduce energy cost. A constructive relationship with the EPA's Landfill Methane Outreach Program provides such a means to accomplish GM's goals. Working together, both parties are able to achieve the benefits of using a renewable energy source while improving the environment in the communities where we live and work. I would highly recommend using the knowledge and resources available through the EPA's Landfill Methane Outreach Program."

David Shenefield Site Utilities Manager, General Motors

at four assembly plants. At a GM truck assembly plant in Fort Wayne, Indiana, EPA supplied certificates of recognition and assistance for a project ribbon-cutting ceremony. In addition, GM's plant in Orion, Michigan received LMOP's 1999 Project of the Year Award. In 2003, GM received LMOP's Energy Partner of the Year Award. GM expects a savings of more than \$500,000 per year for each project.

- For *Interface*, LMOP provided technical support and continues to identify candidate landfills for additional LFGE projects at Interface facilities. In fact, Interface is moving forward with a direct-use project at its corporate headquarters in LaGrange, Georgia.
- When SC Johnson converted their longstanding LFGE project from a boiler operation to a combined heat and power application, permitting issues arose that endangered the project. LMOP helped SC Johnson overcome the barriers by identifying and working with appropriate parties at the regional and

Achieving Yearly Environmental Benefits

Taken together, the annual environmental benefits achieved by using LFG at BMW's Greer, SC facility, GM's Fort Wayne, IN truck assembly plant and Orion, MI plant, and SC Johnson's Racine, WI facility are equal to:

- Removing emissions equivalent to 47,700 cars
- Planting 64,600 acres of forest
- Preventing the use of more than 500,000 barrels of oil
- Heating 60,000 homes

national level. Today, the company is producing LFGgenerated electricity and steam for its Racine, Wisconsin plant. SC Johnson estimates \$1 million in net savings per year.

LMOP offers a broad range of products and services that can be customized to help meet the particular needs of your company's facility and energy managers, marketing and media relations professionals, and other key decision makers.

Project Evaluation. LMOP can provide your company with targeted, project-specific support. For example, LMOP can generate tailored LFG modeling analyses, conduct preliminary feasibility studies, and assess the economic feasibility of specific LFGE projects. LMOP has also developed LFGcost, a tool that LMOP uses to help Partners evaluate the economic and technical feasibility of many LFG technologies, including turbines, reciprocating engines, and direct gas use systems.

Project Financing. LMOP helps companies think creatively about funding options and find answers to tough financing questions. LMOP's *Funding Landfill Gas Projects: A Guide to State, Federal, and Foundation Resources* offers information on innovative state, federal, and foundation funding resources

for LFGE projects, such as low-interest loans, grants, renewable energy trust funds, and property, sale, and use tax exemptions.

Technical Resources. LMOP offers products and services that can guide companies through the LFGE project development process once the feasibility of a project has been established. These include the *LFGE Project Development Handbook*, which provides step-by-step project development guidance, including economic analysis, choosing project partners, and environmental permitting. In addition, LMOP offers technical fact sheets on a range of topics, including how to adapt boilers to utilize LFG, LFG combined heat and power applications, and using microturbines powered with LFG.

Project Marketing. LMOP will recognize your company's participation in LFGE projects and commitment to the environment. LMOP provides templates for customized posters and brochures, participates in ribbon-cutting events, and helps develop and place articles in the national and local press. In addition, LMOP has developed a Web-based Communications Toolkit, where Partners can download marketing and outreach materials—such as flyers, posters, and press releases—and customize them to promote their own LFGE projects.

Regulatory and State Partner Assistance. LMOP works closely with its Partners to stay on top of critical issues affecting the LFG industry. Through its monthly newsletter and other timely communications, LMOP provides Partners with the most current information on regulatory and legislative initiatives, LFG project funding opportunities, and renewable energy market developments. LMOP is committed to discussions with federal, state, and local regulators to smooth potential permitting hurdles and address right-of-way concerns. LMOP can connect your company with our network of federal, state, and local regulatory contacts to help overcome barriers to LFGE project implementation.

Join the LMOP Network!

Become an LMOP Partner today by signing a voluntary memorandum of understanding. For more information about LMOP, call 1-888-782-7937 or visit our Web site at www.epa.gov/lmop.

For assistance, call or email the following LMOP representative for your state:

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