



# Landfill Gas Energy Fueling the Economy and a Sustainable Energy Future While Improving the Environment

**L**andfill gas (LFG) energy projects have been around since the late 1970s, providing sustainable alternative energy in the form of electricity and alternative fuel to citizens, businesses, and industry. In 2004 alone, more than 375 operational LFG energy projects in 38 states supplied:

- 9 billion kilowatt hours of electricity, and
- 74 billion cubic feet of LFG to end users.

The estimated annual environmental benefits and energy savings associated with these operational projects are equivalent to:

- Planting 19,000,000 acres of forest, or
- Preventing the use of 150,000,000 barrels of oil, or
- Removing the CO<sub>2</sub> emissions equivalent to 14,000,000 cars, or
- Offsetting the use of 325,000 railcars of coal.

LFG energy projects also have a substantial impact on economic growth and cost savings. A typical 3 megawatt LFG electricity project is estimated to have the following national benefits (direct, indirect, and induced) during the construction year:

- Increase the output of the U.S. economy by more than \$10 million.

- Increase U.S. employee earnings by more than \$3 million (e.g., wages, salaries).
- Employ more than 70 people (expressed in full-time equivalents per year).

These projects bring significant cost savings and long-term energy price stability to LFG end users:

- BMW Manufacturing expects a savings at their Greer, SC plant of more than \$1 million per year.
- General Motors expects savings of more than \$5 million per year from their 5 current LFG projects.
- SC Johnson estimates \$1 million in savings per year at its plant in Racine, WI.
- The NASA Goddard Space Flight Center expects to save taxpayers more than \$400,000 per year from its LFG project in Greenbelt, MD.

However, much remains to be done. EPA estimates that more than 600 other landfills present economically attractive opportunities for project development, with the potential to generate an additional 1,500 megawatts.

LFG energy - utilizing an otherwise wasted resource to benefit the environment and the economy!

EPA's Landfill Methane Outreach Program (LMOP) is a voluntary assistance and partnership program that promotes the use of LFG as a renewable energy source. By preventing emissions of methane - a powerful greenhouse gas - through the development of LFG energy projects, LMOP helps businesses, states, and communities protect the environment and build a sustainable future. Over the past ten years, LMOP has assisted in the development of over 285 LFG energy projects. As of December 31, 2004, LFG projects with LMOP involvement have cumulatively prevented more than 3.1 million tons of methane from entering the atmosphere. For more information about LMOP, visit [www.epa.gov/lmop](http://www.epa.gov/lmop).