

Landfill Gas to Energy Project

Fact Sheet



Developers

AC Landfill Energy, LLC (ACLE), a joint venture of DCO Energy and South Jersey Industries.

Project Cost

\$3 million

Funding Assistance

- \$513,000 grant from New Jersey Board of Public Utilities
- \$2 million low interest loan from New Jersey Economic Development Authority
- \$375,000 grant from the New Jersey Department of Environmental Protection



The landfill gas to energy plant began powering operations in March 2005 at the Atlantic County Utilities Authority (ACUA) Howard "Fritz" Haneman Environmental Park located in Egg Harbor Township.

Environmental Impacts

Landfill gas is approximately 50 percent methane, a potent greenhouse gas. Landfill gas is also a source of smog and odor problems. By capturing and using landfill gas, air pollution is reduced and an otherwise wasted source of energy is used. When working at full capacity this project can handle approximately 1,200 cubic feet per minute of gas produced by the landfill. With two generators fully operational, the 3.5 megawatt system is capable of generating 27,000,000 kWhs/yr, enough to power 2,757 homes.

Using landfill gas reduces the need to use more polluting forms of energy, such as coal and oil. Landfill gas is also the only type of renewable energy that directly reduces pollution to the atmosphere. Since landfill gas occurs naturally, the Atlantic County Utilities Authority is putting to use a fuel that occurs naturally by collecting it and converting it to energy. Landfill gas to energy projects generate electricity more than 90 percent of the time, 24 hours a day, seven days a week.



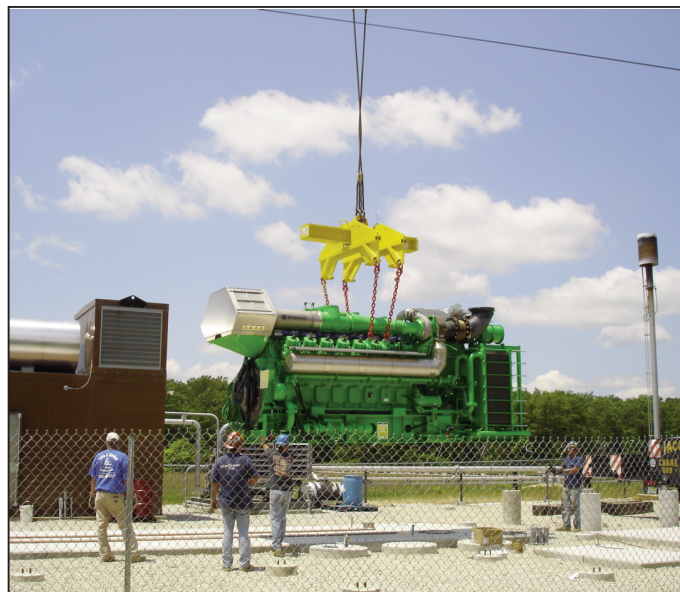
Atlantic County Utilities Authority
www.acua.com

The National Solid Waste Management Association (NSWMA) recently issued a report detailing how much the solid waste industry has done to reduce greenhouse gas emission over the past 30 years. Greenhouse gases, including carbon dioxide and methane, drop heat once they are released into the atmosphere.



In 1970, net greenhouse gas emissions from municipal solid waste activities totaled 60.5 metric tons of carbon dioxide equivalence, according to the NSWMA. By 2003, this figure had declined to 7.8 tons of carbon dioxide equivalence. The emission reduction has occurred while the amount of municipal solid waste has nearly doubled.

The report attributes the reduction to several factors. First, the industry has increased its collection and control of landfill gas through engineered landfills. Second, recycling and composting have deferred materials that would otherwise end up in landfills. Third, more and more landfill gas is being captured and converted into electricity as in the case of ACUA's landfill.



The second generator began operating in August 2006.

The report goes on to describe the ways in which the solid waste industry may continue to curb its greenhouse gas emissions. Among the initiatives are; using bioreactor landfills, using compost as landfill cover and the continued use of hybrid vehicles and biodiesel vehicles, all of which have been implemented by the ACUA.

The US Environmental Protection Agency estimates that by the end of 2018 there would be 632 landfill gas energy recovery programs operating in the United States capable of generating 2,132.4 MW, which is the equivalent of powering approximately 1.28 million homes.



How does it work?

