



Project Details

Contract Type: Renewable Energy; Cogeneration

Technology Type: Biogas

Facility Size: 190 MGD

Project Size: 5.6 MW

Energy Savings: \$12 million over the 16 year period

About the Philadelphia Water Department

The Philadelphia Water Department serves the Greater Philadelphia region by providing integrated water, wastewater, and stormwater services. The utility's primary mission is to plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high quality drinking water, to provide an adequate and reliable water supply for all household, commercial, and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively.

Learn more at

www.phillywatersheds.org

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal, all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America and the United Kingdom.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit www.ameresco.com.



Biogas engine generator

Customer Benefits

Ameresco and the Philadelphia Water Department (PWD) partnered together to design - build and maintain an innovative wastewater biogas-to-energy facility located in Philadelphia, PA. The Northeast Water Pollution Control Plant (NEWPCP) biogas project generates electricity and thermal energy for use on-site, fueled mainly by biogas from the NEWPCP digesters. The \$47.5M project, designed to generate 5.6 MW of power, is expected to reduce PWD energy costs by over \$12 million over the course of the 16 year contract.

A natural byproduct of sewage treatment, biogas can be refined and utilized as a fuel for generators or equipment. Currently, half of the biogas generated from the wastewater treatment process is used to heat processes at the NEWPCP. The biogas project is used as a ready source of renewable energy. This not only save money, but also provides a secure source of green energy for NEWPCP.

Through this public-private partnership between Ameresco and the City, the City of Philadelphia takes one large step to achieving its goals as outlined in Mayor Nutter's Greenworks Plan. The \$47.5 million project, designed to generate 5.6 MW of power, is expected to receive \$17 million in incentives, reducing the cost to the ratepayers.



Biogas digesters



Biogas cogeneration facility



Biogas cogeneration dryers

Environmental Benefits

Through its partnership with Ameresco, the City is expected to save the equivalent of 27,870 metric tons of CO2 per year. The green benefit from this carbon reduction is roughly equal to:

- ~ 4,833 cars taken off the road for one year
- ~ 5,390 acres of pine forest absorbing carbon

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Accolades

"Recovering the hidden fuel in our wastewater treatment processes helps to diversify our energy portfolio, while improving the environment through innovative, green technology. The Northeast Cogeneration facility demonstrates PWD's national leadership in transforming the traditional wastewater plant into the resource recovery facility of the future."

- Howard Neukrug, Water Commissioner
Philadelphia Water Department

Services Provided

The Philadelphia Water Department is a progressive organization that recognizes the value and importance of environmental stewardship while cutting costs and improving infrastructure. As a part of this contract, Ameresco developed an Economic Opportunity Plan that brought green jobs to the local community.

Ameresco utilized digester gas to reduce on-site energy costs.