



Coca-Cola Trigeneration Landfill-Gas-to-Energy Facility



MAS ENERGY PLANT NAMED ONE OF SIX TOP RENEWABLE PLANTS WORLDWIDE, RECEIVES EPA AWARDS



Mas Energy, an international renewable energy systems developer, has received multiple industry awards for its most recent project, a trigeneration landfill-gas-to-energy facility for Coca-Cola. *POWER Magazine* ranked the project **one of six top renewable plants worldwide**, and the U.S. Environmental Protection Agency (EPA) recognized the plant twice, including a **2012 Project of the Year** award by the agency's Landfill Methane Outreach Program.

As the project's developer, owner, and operator, Mas Energy acquired the landfill-gas rights, secured financing, negotiated agreements, and oversaw all permitting, regulatory compliance, design, construction and operations.

PROJECT OVERVIEW

- 6.5-megawatt system
- Trigeneration or combined cooling, heat, and power (CCHP) system
- Supplies electricity, steam, and chilled water
- Generates at least 48 million kilowatt-hours of on-site biomass energy annually
- Methane gas is captured from a nearby landfill and piped to the facility via a six-mile pipeline
- "Qualifying Facility" status certified with the Federal Energy Regulatory Commission, self-certified as a small power plant
- Qualified for Section 1603 grant and Qualified Energy Conservation Bonds allocation

Since becoming operational in March 2012, the project has:

- Operated under required contract heat rates and above required contract availability
- Produced approximately 3% above the implied contractual minimum on a net output basis to date

AWARDS



POWER MAGAZINE: ONE OF SIX RENEWABLE "TOP PLANTS" WORLDWIDE

www.powermag.com/issues/cover_stories/5181.html

POWER Magazine named Mas Energy's facility as one of its 2012 renewable "Top Plants." According to the magazine, Top Plants "have distinguished themselves as industry leaders for either their best-of-class operating records, environmental performance, unique technology, or importance to their local community."

The magazine described the plant as "**a genuine renewable energy leader** that uses treated landfill gas as an energy source for its operations," and "the long-term energy cost reduction for this Coca-Cola plant is what makes it a winner for the long haul."

The Mas Energy facility was recognized alongside five other highly noteworthy projects, including the world's largest hydroelectric plant, Three Gorges Dam, Yangtze River, in Hubei Province, China.



EPA LANDFILL METHANE OUTREACH PROGRAM: 2012 PROJECT OF THE YEAR

www.epa.gov/lmop/partners/award/2012.html

The EPA recognized Mas Energy's facility as one of its Landfill Methane Outreach Program Projects of the Year. The EPA said, "Constructing a 6-mile, dedicated LFG pipeline, permitting three engines in a severe ozone non-attainment area, and meeting a deadline to receive a U.S. Treasury Section 1603 grant did not deter Mas Energy from developing a unique project that provides Coca-Cola's Atlanta Syrup Branch facility with a continuous supply of renewable electricity, steam, and chilled water."

EPA GREEN POWER PARTNERSHIP: 2012 LEADERSHIP AWARD FOR ON-SITE GENERATION

www.coca-colacompany.com/media-center/press-releases/epa-recognizes-coca-cola-refreshments-among-nations-top-green-energy-users



Mas Energy's landfill-gas-to-energy system was a key factor in Coca-Cola earning the No. 3 spot on the EPA's list of the largest on-site green power generators. EPA's Green Power Partnership recognizes organizations for their support of alternative energy to reduce their environmental impacts.

Brian Kelley, Chief Product Supply Officer for Coca-Cola Refreshments, said that "investing in energy efficiency projects like the landfill-gas-to-energy system creates multiple benefits. It helps The Coca-Cola Company meet our environmental sustainability goals while reducing costs in our manufacturing process."

MEDIA ARTICLES

WASTE MANAGEMENT WORLD: "TRIGENERATION: THE REAL THING"

www.waste-management-world.com/articles/print/volume-13/issue-6/features/ tri-generation-real-thing.html

From the article:

"We realise we can't do this alone and we don't believe for a moment that we have all the answers," Muhtar Kent, chairman and CEO of The Coca-Cola Company, commented in his introduction to the company's latest sustainability report. "**Partners, in this day and age, are an absolute must**. The scope and scale of today's challenges demand cooperation across what we like to call the golden triangle of government, business and civil society."

Mas Energy's Atlanta tri-generation landfill gas facility is a perfect example of the type of partnerships which Coca-Cola, and a host of other multi-national household names, will be increasingly turning to in a bid to change their CSR ambitions into reality. For well positioned clean-tech companies that already represents a huge opportunity, and it looks set to grow.

WASTE MANAGEMENT WORLD: "LANDFILL GAS TRIGENERATION PLANT SUPPLIES HEAT, POWER AND COOLING TO COCA-COLA"

http://www.waste-management-world.com/articles/2012/09/landfill-gas-trigeneration-plant-supplies-heat-power-cooling-to-coca-cola.html



POWER ENGINEERING INTERNATIONAL: "EPA HAILS FIRST US TRI-GEN LANDFILL-GAS-TO-ENERGY SYSTEM"

www.powerengineeringint.com/articles/2012/08/epa-hails-first-us-tri-gen-landfill-gas-to-energy-system.html



MSW MANAGEMENT: "MAS ENERGY DEVELOPS U.S.'S FIRST-EVER TRI-GENERATION LANDFILL-GAS-TO-ENERGY SYSTEM"

www.mswmanagement.com/MSW/Articles/Mas_Energy_Develops_USs_FirstEver_ Trigeneration_La_18637.aspx



EDC MAGAZINE: "FIRST U.S. TRI-GENERATION LANDFILL-GAS-TO-ENERGY SYSTEM CREATED"

www.edcmag.com/articles/94638-first-trigeneration-landfill-gas-to-energy-system-created



BIOMASS MAGAZINE: "LANDFILL GAS RANKS COCA-COLA THIRD IN EPA GREEN POWER USERS"

http://biomassmagazine.com/articles/7932/landfill-gas-ranks-coca-cola-third-in-epa-green-power-users

