

Biogas Fuel Cell Power Plant Comes Online

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A California water utility has switched on a 2.8 megawatt (MW) power plant that runs on biogas generated on-site - the largest in the world.

Fuel cells enable the water recycling plant to convert waste biogas into electricity - all produced on-site.

Waste biogas is created through anaerobic digestion of wastewater biosolids at a water recycling plant in Ontario, California, run by Inland Empire Utilities Agency, which serves 850,000 residents in San Bernardino County. It also produces high quality heat in a [combined heat & power \(CHP\)](#) configuration.

FuelCell Energy (Nasdaq: FCEL) supplied the fuel cells. They convert biogas to electricity through an electrochemical process that also reduces nitrogen oxide, sulfur dioxide and particulate matter emissions by 70%-90%.

"This 2.8 megawatt fuel cell power plant is the world's largest power plant operating on renewable on-site biogas. Our fuel cell technology provides what other megawatt-class power generation products can't, which is efficiently converting biogas into continuous power right where the biogas is generated and in a manner that is virtually absent of pollutants," says Chip Bottone, FuelCell Energy CEO. "This project is a win for everyone involved, particularly the citizens of California that benefit from privately financed carbon-neutral power generation."

This isn't the first biogas plant to run on FuelCell Energy's fuel cells. [Three fuel cell power plants in the San Diego area](#) use purified biogas from a wastewater treatment plant as the primary electricity source.

"The fuel cell allows Inland Empire to move closer to its strategic energy plan goal to go 'Gridless by 2020' with almost no capital outlay by the Agency. Our plan is to minimize our dependency on energy purchased from the grid, and to be able to operate completely off the grid during peak energy usage periods," says Terry Catlin, president of the board.

The installation was designed and financed by Anaergia Services under a 20-year power purchase agreement. Anaergia is behind more than 1,600 similar projects globally, including a new facility in the UK that will convert 30,000 tons of food waste from London a year into renewable energy.

The [fuel cell industry had its most successful year ever in 2011](#) and is on pace to grow 61% this year, with 176 MW in shipments forecast across all applications.

Large stationary installations such as this one are driving much of the growth, as businesses and municipalities seek to reduce their dependence on the grid.

For example, [AT&T recently more than doubled its fuel cell installations](#) through a 7.5 MW contract with [Bloom Energy](#), bringing total capacity to 17.1 MW. [eBay is another high profile customer](#), along with [Apple](#), Owens-Corning, Urban Outfitters, Google, Wal-Mart, Staples and Coca-Cola.

And [CBS Studios has invested in the technology from another player. UTC Power.](#)

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