

Green News



Your quarterly source for renewable energy information from Georgia Power

Georgia Power signs first Green Energy contract

DeKalb County first supplier for Green Energy program

Georgia Power recently signed a 10-year contract to buy energy produced at a new landfill gas generation plant in DeKalb County. The plant will produce approximately three megawatts of green energy on an annual basis.

The project is expected to begin producing electricity in the fall of 2006. While Georgia Power will continue to negotiate with other vendors to supply green energy at prices low enough to make the program affordable, the DeKalb County contract represents a major step forward. The county's 10-year commitment helps ensure energy resources for Green Energy over the long term.

The Georgia Public Service Commission approved a Green Energy program for Georgia Power in 2003. Under this program, customers who choose to participate pay a \$5.50 premium for each 100-kilowatt-hour block of "green energy" purchased. By participating, customers help advance renewable technologies, which will help lower the cost of technology over time and make renewables more competitive with traditional generation methods.

If you are interested in signing up for Green Energy, visit www.georgiapower.com/greenenergy. Customers who choose to participate will not be billed the premium until electricity is flowing from Green Energy projects.

You cannot be guaranteed that you will receive the actual kilowatts produced by a green energy generation method, but you can rest assured the green energy you are supporting is being produced and delivered to Georgia Power customers.

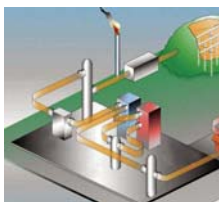


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For more information about Georgia Power's Green Energy Program, visit www.georgiapower.com/greenenergy



The fire station that's also a green power generation station



Union City's new fire station No. 1 is the first fire station in Georgia (and one of very few in the nation) to be designed from the ground up to take advantage of solar power.

Kenneth B. Collins, fire chief, said that when the project architects, Brown Design Group, recommended solar, the reaction was mixed. Now, after more than a year of significant energy savings, everyone is enthusiastic about the decision.

"The electric bills for the new 9,200 square-foot station

"We estimate that we're saving approximately \$5,600 per year in energy costs by going solar," he continued.

"Do-it-yourself" Green Energy

Just about everything about this Union City firehouse is designed for energy efficiency — from well-insulated walls and ceilings to low energy lighting and appliances.

But the real stars of this energy show are the solar panels that generate green energy at the station. "We installed both photovoltaic panels to generate power and a closed loop glycol system to heat our water," Collins explained.

Doug Akin, Georgia Power's Green Energy product manager, worked with Collins and the architects to determine how the energy from the new solar power station would be used.

While this was a first for Union City's Fire Department, it was also a first for Georgia Power. The fire station was Georgia Power's first customer to participate in the solar buy-back provision of the RNR-2 tariff.

Here's how it works: Georgia Power buys all the solar energy



Union City Fire Chief Kenneth Collins says his department saves about \$5,600 per year in energy costs with solar power generation.

the station generates and puts that green energy onto the overall power grid. The station, in turn, buys all its power from Georgia Power. The green power Georgia Power purchases is shown as a credit on the station's monthly bills. The result is reliable power at a significant overall cost savings while also helping the environment.

Low maintenance and high value

In terms of maintenance for the solar system, Collins said, "We don't have to do a thing. It was a very simple process to wire the solar panels together in a series, so it would be easy to replace one if we needed to. But the panels we have now should last between 20 and 30 years."

What's the bottom line on using solar in fire station No.1? "It's been very beneficial for the city," said Collins, who has been chief for five years and has more than 25 years of experience in

public safety. "Energy costs being the way they are, it's going to be even more important in the future to find ways to be more efficient."

The project has been so successful that the fire department is already planning to use solar for its upcoming fire station No. 3. "We will be looking at even more solar features, such as a radiant floor heating system, for the new fire house," Collins said.

When station No. 1 opened last year, it was recognized for its progressive energy systems by Georgia Gov. Sonny Purdew. In a letter to the department, he said, "I am proud of Union City fire station No.1. As the first solar-powered fire station in Georgia, you have made a huge commitment to the environment and to energy conservation. We hope this will be one of many."



Built in 2004, Union City Fire Station No. 1 sports solar panels that were carefully positioned to make full use of the Georgia sun.

No. 1 are running \$195 to \$235 a month," said Collins. "Monthly bills for station No. 2 are \$500 to \$600 per month, and it's a smaller 6,000 square-foot structure."

Cool Weather Tips

With recent energy concerns, each of us needs to do our part to conserve usage.

Here are some easy things you can do to help conserve energy during the fall and winter months:

- When the weather is cool enough to begin heating your home, set your thermostat at 68 (degrees) and leave it there. You can immediately realize a 3 percent to 5 percent decrease in energy use for every degree you adjust the thermostat below your normal setting!
- Open curtains and shades to let the sun warm your home naturally.
- Dress warmly, even indoors. Getting into the habit of wearing a sweater or jacket around the house allows you to set your thermostat a few degrees lower and still stay comfortable.
- Check the caulk and weather-stripping around your windows and doors. If they're not in good shape, replacing them can make a real difference in your power bills.
- Seal around wiring and plumbing penetrations with caulk and expanding foam for larger areas. This helps keep cold outdoor air out.
- Make sure your ductwork is properly sealed. Cracks in joints can increase your bills as much as 30 percent!
- Clean dust from supply and return heating outlets.
- Install programmable thermostats to automatically reduce energy use when you are away.
- Have your heating and cooling system professionally serviced annually to keep them running at top efficiency.

Landfill Gas-to-Energy Project

What sources will supply Georgia Power's Green Energy program?

Potential sources include solar, wind, biomass and hydro.

What is biomass, and how is electricity generated from it?

Initially, Georgia Power will use landfill gas as its primary

form of biomass. Landfill gas, which consists mainly of methane and carbon dioxide, is produced when organic wastes in landfill sites decay. At larger landfills, the gas must be burned, or flared, in order to reduce the hazard arising from gas buildup. Although landfill gas is primarily a pollutant that needs to be controlled, the methane it contains makes it valuable as a fuel for powering an electric generator. This method of producing renewable energy is now regarded as one of the most mature and successful in the field of green power.

How much electricity can a landfill produce?

It depends on the size and age of the landfill, but production tends to range from three to eight megawatts. So, a five-megawatt plant would produce approximately 39 million kilowatt-hours per year — enough to meet the yearly energy needs of about 3,200 homes.

