

Can power **15,665** homes | **24.1** total installed gross megawatts | Carbon sequestered by **930,919** acres of U.S. forests CO<sub>2</sub> emissions from **6,090** railcars' worth of coal burned | CO<sub>2</sub> emissions from **127,795,779** gallons of gasoline

## FACT SHEET Richland Creek, Oak Grove and Pine Ridge



PROJECT TYPE:	Landfill-gas-to-energy
LOCATIONS:	Winder, Buford & Griffin, Georgia
OFF-TAKER:	Georgia Power
TIMELINE:	All contracts executed by January 2015 Bond financing closed June 2015 Reached commercial operations May-August 2016

#### **OVERVIEW**

Three landfill-gas-to-energy (LFGTE) plants combine to generate 24.1 total installed gross megawatts, representing the largest LFGTE portfolio in Georgia. Located on landfills outside of Atlanta, the plants are capable of powering up to 15,665 homes and contain a total of 11 Jenbacher J616 reciprocating engine generators. Each site employs an identical design, construction and appearance.





### **KEY PARTNERS**

- Mas Energy, LLC is an international renewable energy systems developer and the project's developer and operator. The company secured the landfill-gas rights, financing, negotiated all project agreements, and oversaw all permitting, regulatory compliance, design, construction and operations.
- Cube District Energy/Mas
   Georgia LFG, LLC are the

   entities that own all three plants.
   Mas Georgia LFG is owned by Cube
   District Energy, a portfolio company
   of I Squared Capital, an independent
   global infrastructure investment
   manager focusing on energy,
   utilities, and transport in North
   America, Europe, and select high
   growth economies. I Squared Capital
   has offices in New York, Houston,
   London, New Delhi, Hong Kong
   and Singapore.
- **Republic Services** is the owner of the three landfills and supplier of landfill gas.
- Georgia Power has a 20-year off-take agreement.
- Crowder Construction Company provided engineering, procurement and construction (EPC) services.
- **GE/Nixon Energy** provided 11 Jenbacher J616 reciprocating engine generators along with on-going operations and maintenance.

# Richland Creek, Oak Grove and Pine Ridge (continued)

### HOW ENERGY IS GENERATED

The plants feature a gas collection and control system, owned and operated by Republic Services, which captures methane gas from a landfill. Methane, a greenhouse gas that is more than **20 times more potent than carbon dioxide**, is naturally produced as organic waste breaks down anaerobically in landfills. The system converts the gas to clean-burning fuel.





### WHAT IS AN LFGTE SYSTEM?

LFGTE systems reduce reliance on nonrenewable energy resources, such as coal or petroleum. According to the U.S. Environmental Protection Agency, every three megawatts of energy generated by LFGTE systems prevents the equivalent of carbon emissions that would result from 16.6 million gallons of gasoline. In addition to their environmental benefits, LFGTE systems' online reliability is typically more than 90 percent. The systems also act as long-term price and volatility hedges against fossil fuels.

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