

# Fuquay-Varina Solar PV Array Case Study

*"We are excited to have commissioned the Fuquay-Varina project as it further enables ESA to be part of North Carolina's sustainable energy solution, providing clean, renewable solar energy."*

*-Jeffrey Burkett, President*



ESA Renewables, LLC (ESA) developed, built and commissioned a 500kW solar PV system in Fuquay-Varina, North Carolina. The project was secured through a Power Purchase Agreement (PPA) with Progress Energy. The Fuquay-Varina array is the largest SunSense solar system in operation in Wake County, North Carolina. It is expected to generate energy equivalent to what is annually consumed in 83 average North Carolina homes.

The Fuquay-Varina system is a grid connected solar power plant situated on the rooftop of a local building. Installing solar on a previously unused space, such as a rooftop, adds asset value to the building, provides residual income to the building owner, and creates local jobs in the community. The Fuquay-Varina system aids in North Carolina's mission to provide sustainable, affordable power to their citizens.

**Location:** Fuquay-Varina, North Carolina  
**Utility:** Progress Energy  
**System Size:** 500kW  
**Footprint:** 55,867 sq ft  
**Scope of Work:** EPC, O&M and Monitoring  
**Construction Start Date:** November 2011  
**Construction Completion Date:** December 2011  
**Modules:** Canadian Solar CS6P-P 250  
**Inverters:** Advanced Energy Solaron 500 kW  
**Monitoring System:** ESA Renewables  
**Annual output:** 650,000 + kWh  
**Annual CO<sub>2</sub> avoided:** 60,000 + kg



**ESA Renewables, LLC**