Case Study

SolarEdge Powers Large New Orleans Housing Project with Solar Energy

The River Garden Apartments' sustainable neighborhood in New Orleans is not only one of the largest solar projects in Louisiana but also among the largest solar neighborhoods in the Southeastern U.S.

The St. Thomas Housing Project, which provided housing to low-income residents, was devastated by Hurricane Katrina. Soon after, several government agencies provided grants in order to revitalize the neighborhood. The River Garden Apartments were built on this location; 420kW of SolarEdge photovoltaic systems were installed on the rooftops of homes in this neighborhood.

Today, stretching eight city blocks and three quarters of a square mile, the River Garden Apartments have transformed into a mixed-income development offering affordable and sustainable housing. The extensive PV installation project was made possible only with SolarEdge's residential PV solution. SolarEdge's unique inverter and Power Optimizer technology was ideally suited for this project as it involved installation of PV systems on multiple rooftops, each with individual configurations and mounting angles.

SolarEdge's design flexibility allows for maximum roof utilization and a significant increase in power harvesting, even in locations with partial shading or obstructions. The ability to maximize power from each module, regardless of string length, module type or mounting angle, was a key factor in the success of the project. The SolarEdge solution enables easy and efficient maintenance of the numerous PV arrays provided by the built-in real-time monitoring of the systems' performance at module level. SolarEdge's Monitoring Platform provides automatic alerts and visually pinpoints underperforming modules on a virtual site layout map.

Another important feature of the SolarEdge system is its holistic approach to safety. SafeDC™ ensures maximum safety for residents, installers, maintenance personnel and firefighters at all times. This is especially important in a period after a hurricane where flying debris from high winds can damage solar systems. With traditional string inverters, damaged arrays could potentially start arc faults and possible home fires. SolarEdge inverters and power optimizers help ensure safe installation and maintinance.

With 10¢ per kWh of electricity, residents of the River Garden Apartments now enjoy reduced electricity bills and long term stabilized electricity costs. The installation of 420kW of residential solar systems was combined into a single project cost, enabling a volume discount which aids in further reducing the cost of electricity. Residents are expected to save about \$50 per month on average in utility costs.





Installation at a Glance

- Installer: Pontchartrain Mechanical Co.
- Systems Designer: Micah Galy
- Installation Date: December 2011
- Location: The River Garden Apartments Sustainable Neighborhood New Orleans, Louisiana, US
- Installed capacity: 420kW
- Modules: 4,395 x MAGE modules (185 MJB, 190 MHUS and 230 PI)
- Power Optimizers: 4395 x OP250
- Inverters: 142 x SE5000A-US 20 x SE3800A-US





"By using SolarEdge technology, we overcame many challenging issues, specifically, installing modules on multiple roofs and different angles, in a safe manner and with reduced maintenance costs. I'm very proud to have partnered with SolarEdge in this unique project because not many neighborhoods in the world are completely covered by solar installations. This revitalized community is now able to sustain itself with reliable energy and will be able to stabilize its energy costs for the long term in a clean and sustainable way."

Micah Galy, Pontchartrain Mechanical Co.

About SolarEdge

SolarEdge is a global leader in smart energy, delivering innovative commercial and residential solutions that power our lives and drive future progress. Leveraging worldclass engineering and a relentless focus on innovation, SolarEdge developed a ground-breaking intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. Today SolarEdge is the world's #1 solar inverter company in revenue with more than 2.3 million SolarEdge intelligent inverters and more than 54 million Power Optimizers installed in 133 countries. SolarEdge addresses a broad range of smart energy market segments through its PV, storage, EV charging, batteries, UPS, and grid service solutions

www.solaredge.com

