# radiance solar

HIGH PERFORMANCE SOLAR POWER SYSTEMS

**DESIGN • ENGINEERING • CONSTRUCTION** 



## **Our Proven Track Record**

• Established in 2007, and with over 150 completed projects, we are a leading provider of high-performance solar bringing the critical experience necessary to to deliver top-tier systems at every scale.

## **Our Comprehensive Capabilities**

• Our accredited team of professionals in the fields of structural and electrical engineering, architecture and and solar installation enable us to take on the unique challenges of any project.

## **Our Business Insight**

• We bring analysis and perspective on the most current business issues and financial considerations that impact our clients' investment.



#### **Ensuring Maximum Performance**

For clients with solar power systems already up and running, Radiance Solar offers service plans that ensure your system is always performing at maximum efficiency.

O&M Plans are customized based on client needs and include:

- Module Cleaning
- Scheduled Inspections
- •Custom Reporting
- •Comprehensive System Performance Analysis



### **Partial Client List**



### **Partial Client List**





#### Benefits of Solar

- Safe
- Reliable
- Low Cost No Fuel Risk
- Clean No air quality, CO2 or Water Impact



#### Benefits of Solar

- Energy savings
- Capacity cost savings
- Grid support savings
- Customer benefits
- Financial/Security benefits/savings
- Environmental cost savings
- Social benefits



#### The Benefits of Solar: Dramatic Price Drops in Module and Installation

#### **PV EXPERIENCE CURVE, 1976-2012** 2012 \$/W 100 1976 **PV MODULE PRICES HAVE FALLEN 80% SINCE 2008** 20% IN 2012 ALONE 1985 10 \*\*\*\*\*\*\*\*\*\*\*\* 2003 2006 1 2012 2012 0.1 10 1 100 1.000 10.000 100.000 1.000.000 historic prices (Maycock) MW experience curve Chinese c-Si module prices (BNEF) -Thin-film experience curve First Solar thin-film module cost radiance

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Solar Snapshot: **KEY TRENDS AND ISSUES** 

## Which companies are integrating solar?



## Solar Snapshot: **KEY TRENDS AND ISSUES**







## Camilla Solar Plant

South Georgia's First Utility Scale Solar Project • Camilla, GA



#### 20 MW FACILITY

- Design, engineering and DC construction provided by Radiance Solar
- 68,542 Trina Solar Modules
- 314 SMA Tri-power Inverters
- 260 Shoals Technology Combiner Boxes
- 286,436 Helical Piles, manufactured and installed by Cantsink Atlanta
- 26.5 MWh annual production
- Feeds into Georgia Power's grid at 12 KV
- Project developed by Origis Energy and awarded through the Georgia Power's Advanced Solar Initiative





## **Woodland Solar Power Plant**

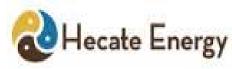
1 Mw Solar Power Plant • Woodland, GA





#### **1 MW FACILITY**

- Design, engineering and DC construction provided by Radiance Solar
- 3,542 Renesola Solar Modules
- 24 SolarMax Inverters
- Shoals Technology Combiner Boxes
- Helical Piles, installed by Cantsink Manufacturing
- 1.325 MWh Annual Production
- Developed by Hecate Energy for Georgia Power Advanced Solar Initiative





## **Rocky Creek Solar Farm**

One of Georgia's First Solar Power Plants • Upson County, GA



#### **1 MW FACILITY**

- Design, engineering and DC construction by Radiance Solar
- 3,542 Talesun 285 W Modules
- 161 22-Panel Arrays on Solar Flexrack Mounting
- 483 Cantsink Helical Piles
- 2 Satcon 500 480V Inverters
- 13 Shoals Technology Combiner Boxes
- 1.325 MWh Annual Production
- Feeds into Georgia Power transformer and distributed via their grid at 12kV
- Project developed by:





## **Shaw Industries**

Carpet Manufacturing Facility • Cartersville, GA



#### **1 MW PV SYSTEM**

- One of the largest commercial/manufacturing solar projects in the Southeast.
- Roof mounted system: Arrays installed on a one degree standing seam roof at a five degree tilt.
- 3,700, 270 watt Solar World Panels (US Made)
- SMA TriPower, Three-Phase Inverters
- Annual power production of 1.4 million kWh
- Participating in Georgia Power's Advanced Solar Initiative.









## **Anheuser - Busch Companies**

Brewing Facility • Cartersville, GA



#### 500 kW PV SYSTEM

- Designed, engineering and procurement services provided by Radiance Solar.
- 1,672 Suniva 295 watt modules.
- Advanced Energy Inverter with Shoals Technologies Combiner Boxes .
- Part of the Anheuser-Busch "Our World Responsibility Program.

"Integrating solar would make a big contribution to our environmental goals and would bring additional long-term benefits to the bottom line,"

Al Greenwood, Facility Engineer, Anheuser-Busch.





## **IKEA International**

One of the Largest Commercial Installations in the Southeast • Atlanta, GA





#### 1 MW PV SYSTEM

- Contracted by Strata Solar and Gehrlicher Solar to oversee and install electrical, including AC/DC, inverter, monitoring and interconnection to GA Power.
- 4,312 Yingli 240 W Modules
- 500 and 333 Advanced Energy Solar Inverter
- Solar Magic Revenue Grade Monitoring system and weather station





### The City of Ashburn

#### Largest Municipal Installation in the State • Turner County, GA



#### 300 kW / 4 PV Systems

- Design, engineering and DC construction provided by Radiance Solar
- 227 kW with three ground mounted systems
- 73 kW Roof mounted System
- Suniva Modules
- Solectria Inverters
- Renusol Roof Racking System
- 413,700 kWh annually
- Powers municipal water pump stations and buildings
- Interconnected to Georgia Power.





#### **Providence Hill Farm**

#### Poultry Growing Operation • Jasper, GA



#### 100 kW FACILITY

- Radiance Solar delivered turnkey installation for the roof mounted system.
- Will supply nearly all of the poultry farm's electricity needs.
- 333 Suniva Modules
- 8 SMA Transformerless Inverters
- Will generate 135,000 kWh of power annually.
- Interconnected to Amicalola EMC, and is the largest solar power system in the utility's service area.





## **GA Tech Clough Student Center**

\$90 Million Sustainable Facility • Atlanta, GA



#### 86 kW PV SYSTEM 30 COLLECTOR TH. SYSTEM

- Design, engineering, and construction provided by Radiance Solar
- 358 Suniva 240 W modules on proprietary mounting system
- 14 SMA Sunny boy 6,000 W Inverters
- 30 AET solar hot water collectors with 3,500 gallon storage tanks
- LEED certified building, used as educational tool for students



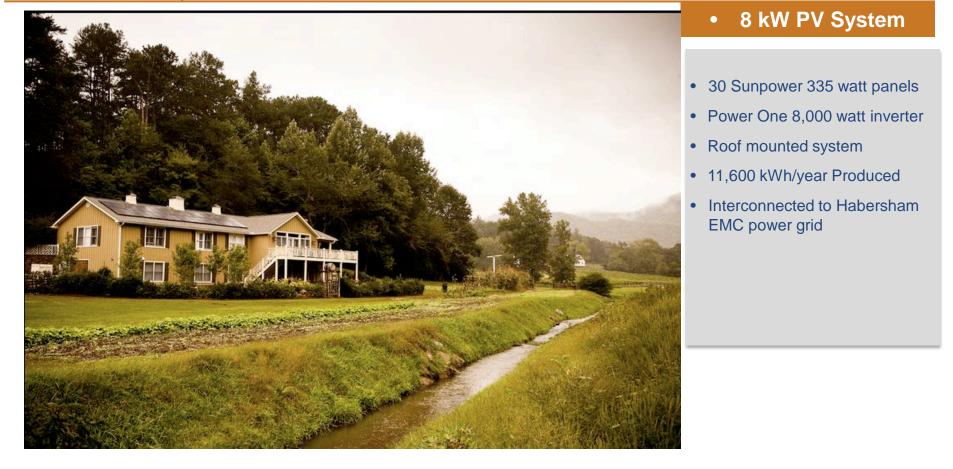






## **Persimmon Creek Vineyard**

Winery Operation • Clayton, Georgia



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