



GREEN

Real Estate Summit 2011

Presented by BOMA-Atlanta



Going Green In Georgia

**Financial Incentives and
Business Drivers**

**Wilson Mallard
Green Energy Manager**



What does it mean to be “Green”?

Sustainability

Energy Efficiency

Renewable Energy





Clean Energy in Georgia

- Georgia Power is committed to finding solutions that meet Georgia's needs for reliable and economic electricity:
- Energy Efficiency
- Renewables
- Nuclear





What is Renewable Energy?

- Renewable energy utilizes natural resources such as sunlight, wind, tides and geothermal heat, which are naturally replenished.

Solar



**Low-Impact
Hydro**



Wind



Landfill Gas



Geothermal



Biomass





Energy Industry Policy Update



- **The Integrated Resource Plan (IRP) is a tool to meet the long-term needs of Georgia Power's future generation in a reliable and economic manner**
- **The 2010 IRP was approved in 2010**
 - 7 Demand Side Management (DSM) programs were certified
 - 1 MW solar self-build project was approved
- **No Federal RPS or Carbon Cap and Trade**
- **State of Georgia Clean Energy Property Tax Credit**



Federal and State Incentives

■ Federal

- Investment Credit
- Production Credit
- Energy Efficiency

■ Georgia

- Investment Credit
- Green Loans

DSIRE
SOLAR

solar policy
information



FEDERAL

Incentives/Policies for Renewables & Efficiency



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Business Energy Investment Tax Credit (ITC)

Last DSIRE Review: 06/09/2010

Program Overview:

State: Federal

Incentive Type: Corporate Tax Credit

Eligible Renewable/Other Technologies: Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Biomass, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, CHP/Cogeneration, Solar Hybrid Lighting, Microturbines, Geothermal Direct-Use

Applicable Sectors: Commercial, Industrial, Utility, Agricultural

Amount: 30% for solar, fuel cells and small wind;*
10% for geothermal, microturbines and CHP*

Maximum Incentive: Fuel cells: \$1,500 per 0.5 kW
Microturbines: \$200 per kW
Small wind turbines placed in service 10/4/08 - 12/31/08: \$4,000
Small wind turbines placed in service after 12/31/08: no limit
All other eligible technologies: no limit



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Incentives/Policies for Renewables & Efficiency



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Renewable Energy Production Incentive (REPI)

Last DSIRE Review: 01/18/2011

Program Overview:

State: Federal

Incentive Type: Performance-Based Incentive

Eligible Renewable/Other Technologies: Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal

Applicable Sectors: Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative, Native Corporations

Amount: 2.2¢/kWh (subject to availability of annual appropriations in each federal fiscal year of operation)

Terms: 10 years

Expiration Date: 10/01/2016 (in-service date)

Web Site: <http://apps1.eere.energy.gov/rep1>

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myDSIRE

Energy-Efficient Commercial Buildings Tax Deduction

Last DSIRE Review: 11/01/2010

Program Overview:

State: Federal

Incentive Type: Corporate Deduction

Eligible Efficiency Technologies: Equipment Insulation, Water Heaters, Lighting, Lighting Controls/Sensors, Chillers, Furnaces, Boilers, Heat pumps, Central Air conditioners, Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows, Doors, Siding, Roofs, Comprehensive Measures/Whole Building

Applicable Sectors: Commercial, Construction, State Government, Fed. Government, (Deductions associated with government buildings are transferred to the designer)

Amount: \$0.30-\$1.80 per square foot, depending on technology and amount of energy reduction

Maximum Incentive: \$1.80 per square foot

Equipment Requirements: Not specified, but building must be certified as meeting specific energy



Federal and State Incentives

■ Federal

- Investment Credit
- Production Credit
- Energy Efficiency

■ Georgia

- Investment Credit
- Green Loans

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Clean Energy Tax Credit (Personal)

Last DSIRE Review: 04/16/2010

Program Overview:

State: Georgia

Incentive Type: Personal Tax Credit

Eligible Renewable/Other Technologies: Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Geothermal Heat Pumps

Applicable Sectors: Residential

Amount: 35%

Maximum Incentive: Solar hot water: \$2,500
PV, active space heating, wind energy: \$10,500
Energy Star-certified geothermal heat pump: \$2,000

Equipment Requirements: Solar thermal collectors must meet SRCC certification OG-100 or FSEC-GQ-80. Solar thermal residential systems must meet SRCC OG-300 or FSEC-GP-5-80.

Comments/Restrictions: Energy conditions to be met for federal tax incentives from the state of the

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What's New?

myDSIRE

Georgia Green Loans Save & Sustain Program

Last DSIRE Review: 05/27/2010

Program Overview:

State: Georgia

Incentive Type: Other Incentive

Eligible Efficiency Technologies: Lighting, Chillers, Furnaces, Boilers, Heat pumps, Central Air conditioners, Caulking/Weather-stripping, Building Insulation, Windows, Doors, Custom/Others pending approval. Yes; specific technologies not identified, Energy Star Appliances

Eligible Renewable/Other Technologies: Solar-powered Appliances

Applicable Sectors: Commercial

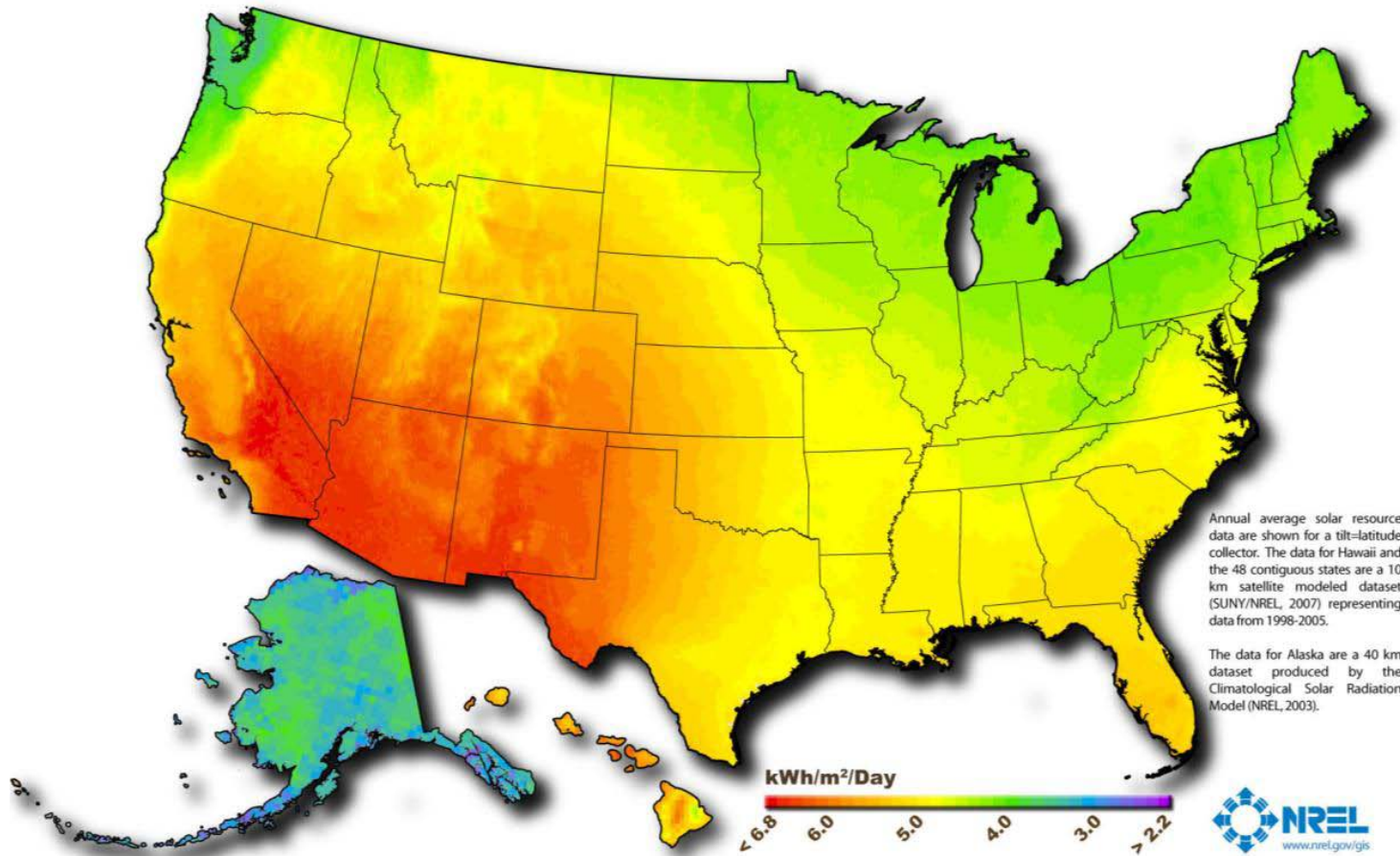
Funding Source: GEFA Grant (ARRA-SEP)

Start Date: 4/1/2010

Web Site: <http://www.georgiaagreenloans.org>



U.S. Solar Potential



Author: Billy Roberts - October 20, 2008

This map was produced by the National Renewable Energy Laboratory for the U.S. Department of Energy.



Customer Options to Sell Renewable Energy to GPC

- SP-1 (Solar Purchase Tariff)
 - Single Directional Metering – 100 kW size limit per location
 - 17.00¢ per kWh, Waiting list to participate
 - Cap recently increased to 4.4 MW

- RNR (Renewable and Non-Renewable Resources)
 - 100 kW size limit per location (10 kW for Residential)
 - Bi-Directional Metering – offset usage and sell excess back at avoided cost

- QF (Qualifying Facilities)
 - Greater than 100 kW, less than 80 MW
 - Georgia Power purchases energy at our avoided cost rate



Customer Options to Buy Renewable Energy




4 Green Energy Program Options:



1. **Standard Green Energy:** \$3.50 per 100 kWh block; no solar or wind resource requirement
2. **Premium Green Energy:** \$5.00 per 100 kWh block; 50% solar
3. **Large Volume Purchase Option:** Available on a customer-specific basis; must purchase at least 90,000 kWh per month
4. **Special Event Purchase Option:** Allows for one-time purchases for events such as concerts, sporting events, conventions, etc.



Why Buy Green Energy from Georgia Power?

- Support the development of **local** renewable energy
- **Local** economic impact
- Green-e certified 
- Easy to purchase and pay with GPC – a simple contract and a new line item on your bill
- Ability to aggregate purchases for all customer locations served by Georgia Power

Committed to protecting Georgia's environment

Centers for Disease Control and Prevention

Robins Air Force Base

IKEA Wholesale, Inc.

TOTO USA

CIBA VISION

DeKalb County School System

Georgia Power is proud to recognize these customers as the largest participants in our Green Energy program. By investing in green energy, they are helping the advancement of electricity generated from environmentally friendly sources, like landfill gas-to-energy and solar. Most importantly, the use of green energy helps the environment. To learn more about our Green Energy program, call 1-888-891-1825 or visit georgiapower.com/greenenergy.





Energy Efficiency Programs

▪ Residential Programs

- Energy Audits
- Lighting & Appliance
- High Efficiency New Homes
- Existing Homes Program
- Refrigerator Recycling Program
- Water Heating

▪ Commercial Custom Incentive Program

▪ Commercial Prescriptive Incentive Program



Commercial Custom Incentive Program

- Provides an incentive for large facilities that go beyond single lighting measures and standard lighting efficiency practices
- Rebates are available for projects that result in energy savings in the facility's lighting systems
- Includes the installation of high-efficiency lighting equipment and lighting control systems

Facility Type	Incentive	Maximum per facility
Commercial facility	\$0.05/kWh	\$5,000
Tax exempt commercial facility	\$0.05/kWh	\$10,000



Commercial Prescriptive Incentive Program

- Provides rebates for the purchase of high-efficiency equipment installed
- Reduces the cost to upgrade to high-efficiency equipment over standard efficiency options
- Focuses on small to mid-size businesses
- Grouped into four categories:
 - High-efficiency lighting (upgrades to T8/T5 fluorescent lighting, CFLs, high efficiency HID lighting and sensors)
 - High-efficiency HVAC equipment
 - Building envelope (duct sealing, sealing infiltration leaks and reflective roofing)
 - High-efficiency equipment and controls (high efficiency electric water heating, cooking equipment, etc.)



Helpful Links

- **General Solar Info -**
<http://www.georgiapower.com/spotlightsolar/home.asp>
- **Solar Demonstration Project-**
<http://buildingdashboard.com/clients/southernco/>
- **Distributed Generation -**
http://www.georgiapower.com/green/dist_gen.asp
- **Qualifying Facilities -**
<http://www.georgiapower.com/smallpowerproducers.asp>
- **Green Energy Options-** <http://www.georgiapower.com/green/>
- **Commercial Energy Efficiency Programs -**
<http://www.georgiapower.com/commercialsavings/>



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Green Energy

Show Your Commitment to the Environment

Help improve the environment without leaving the house. Now it is easier than ever to support environmentally friendly energy generation from sources like the **sun** and **biomass**. Just **sign up** for Georgia Power's Green Energy Program and join a growing community of Georgians who support our environment and help generate more renewable power in Georgia.



Benefits of Green Energy

Learn about how the Green Energy Program benefits residential, commercial and industrial customers.



Solar Buy-back Options

Learn how your home or business can sell renewable energy generated on-site back to Georgia Power.



Frequently Asked Questions

Refer to a list of frequently asked questions to become more familiar with the Green Energy Program.



Green News Newsletters

Sign up to receive the Green News newsletter as well as access the Green News archive to stay informed about renewable energy from Georgia Power.



Green Energy's Renewable Resources

Learn about the renewable energy sources that supply Georgia Power's Green Energy Program.



Georgia Power's Green Energy Program is regulated by the Georgia Public Service Commission and is also Green-e Energy™ certified by the Center for Resource Solutions. Green-e Energy is the nation's leading independent certification and verification program for renewable





So Why Go Green?