

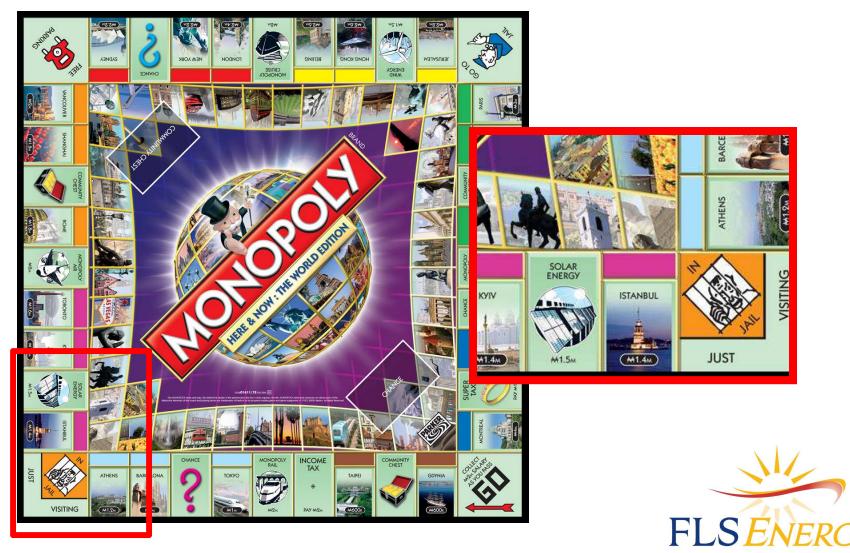
Proven Solar Performance



Financial Realities of Renewable Energy for Sustainable Tourism

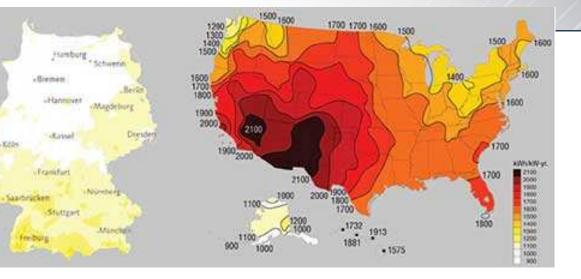
> Joanna Malcolm joanna@flsenergy.com www.flsenergy.com

The Solar Age Has Dawned

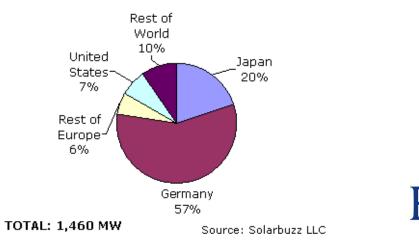


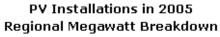
MAKING SOLAR MAINSTREAM

Solar Light Levels



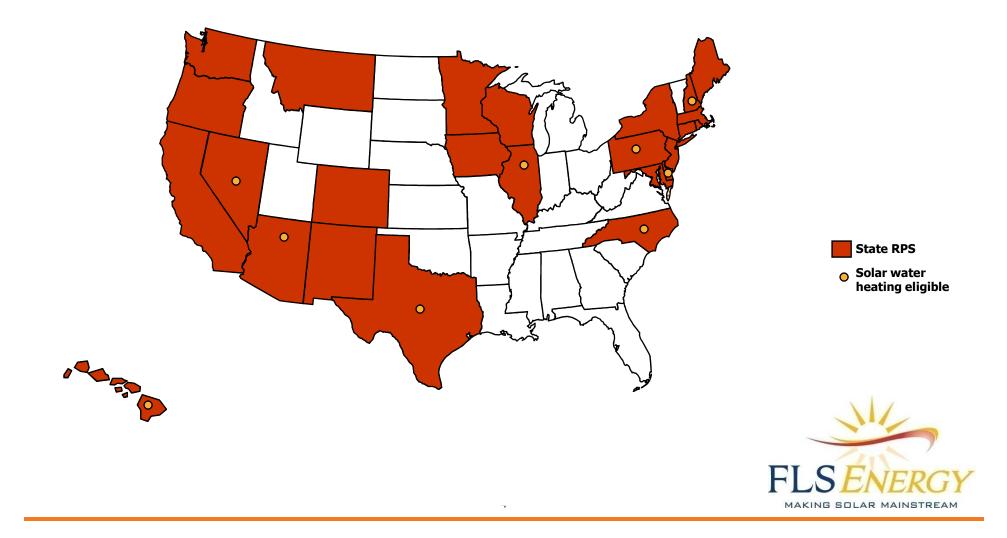
Solar PV Market







National Renewable Portfolio Standards



Market Opportunity

Cost comparison of electricity technologies

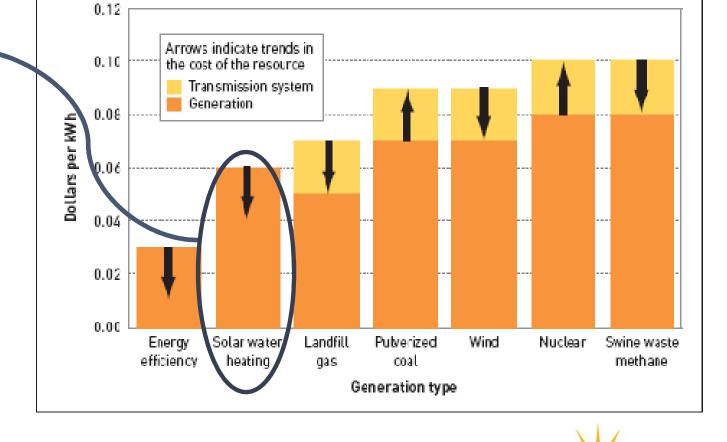
Hotels

- Restaurants
- Military Bases
- Dormitories
- Hospitals
- Laundries
- Health Clubs
- Fire stations
- Car Washes



5





Benefits of Solar Energy

- Reduction in Utility Bills
- Cost-effective investment
 - 3 10 year ROI
 - 25+ year system life
- Tax incentives
 - 30% federal tax credit; 35% NC
 - Accelerated depreciation
- Earn LEED Points
 - As many as 5 points
- Marketing Opportunities
- Environmental Benefits
 - Reduces fossil fuel consumption
 - Emits no pollution
- Improved energy security



The Market Place Restaurant, Asheville, NC



Solar Energy Options for Attractions & Accommodations



Proximity Hotel, Greensboro, NC

Solar Thermal (Hot Water)

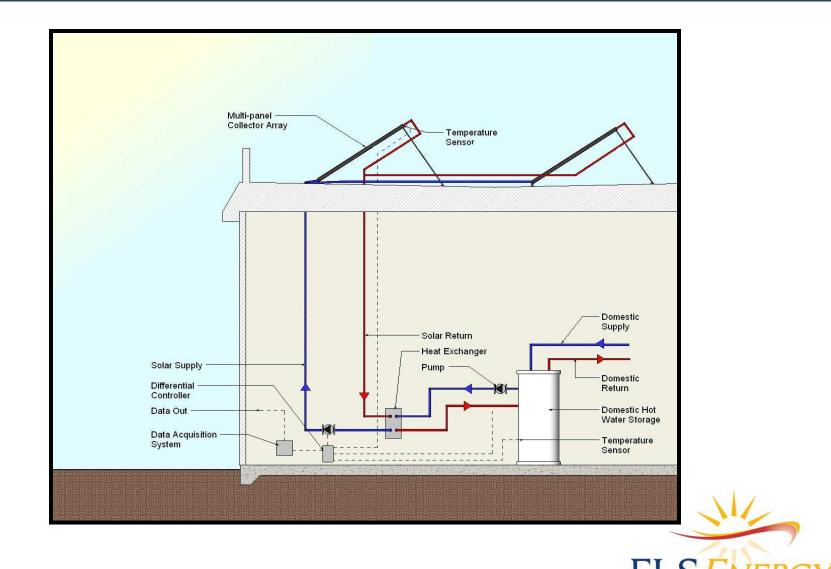


Natural Science Center of Greensboro, NC

Photovoltaic (Electric "PV")

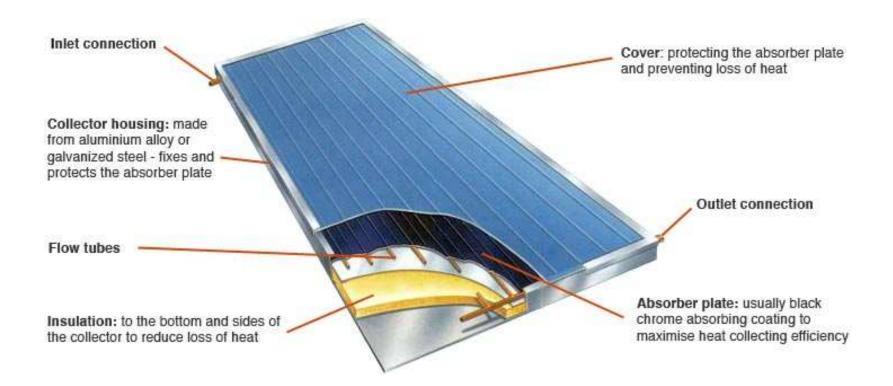


How Solar Thermal Works



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Solar Thermal Flat Plate Collectors





Solar Hot Water System Costs

Avg. Cost: \$90K - \$450K, 1000 gallon – 5000 gallon

Federal Grant Program:

30% of project. No more than 50% of your total tax liability. Can take over 5 years.

NC State Tax Incentives:

35% of project. No more than 50% of your total tax liability. Must be taken in 20% increments over 5 years.

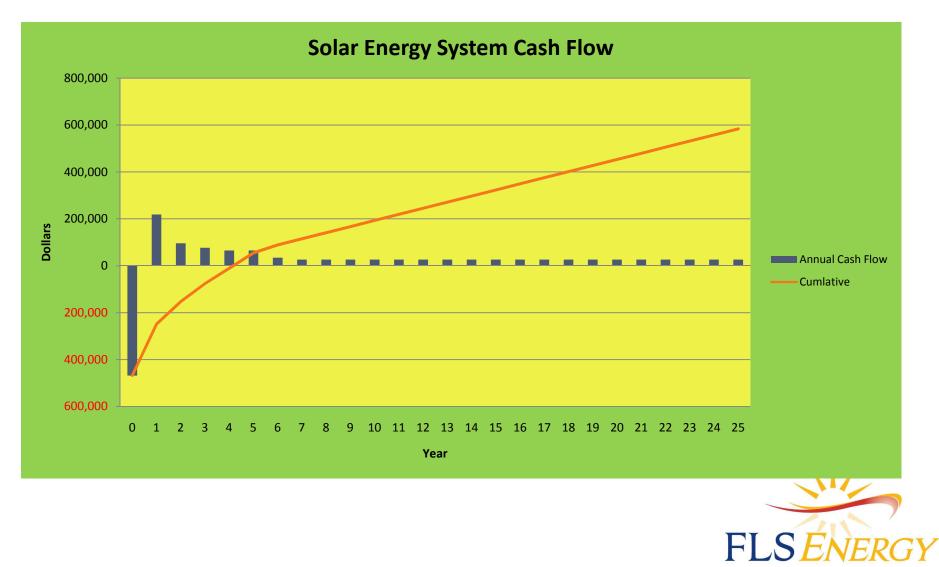
Accelerated Depreciation:

Total apx. 25% of system cost, over 5 years

www.dsireusa.org

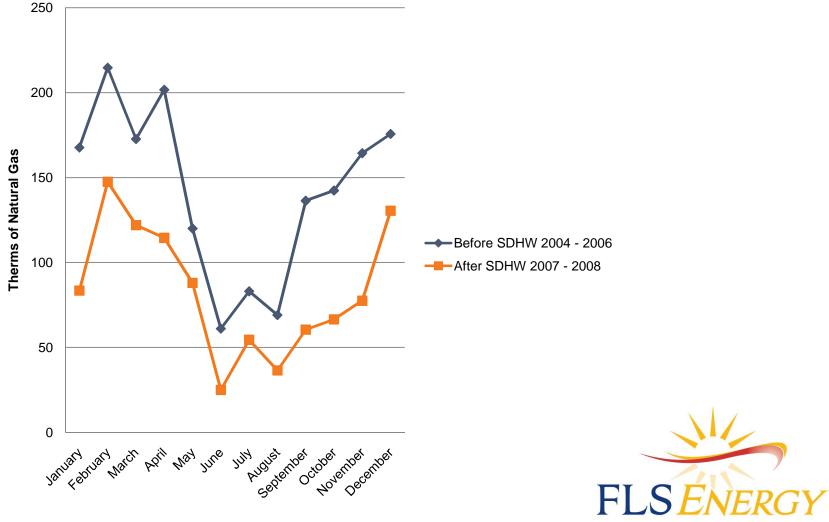


Return on Investment: 100 panel, 5000 gallon



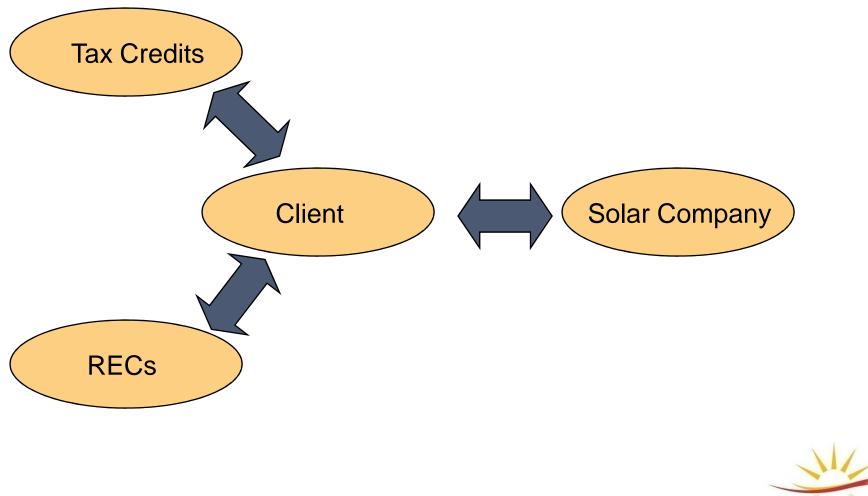
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Guilford College, Shore Hall, 600 Gallons

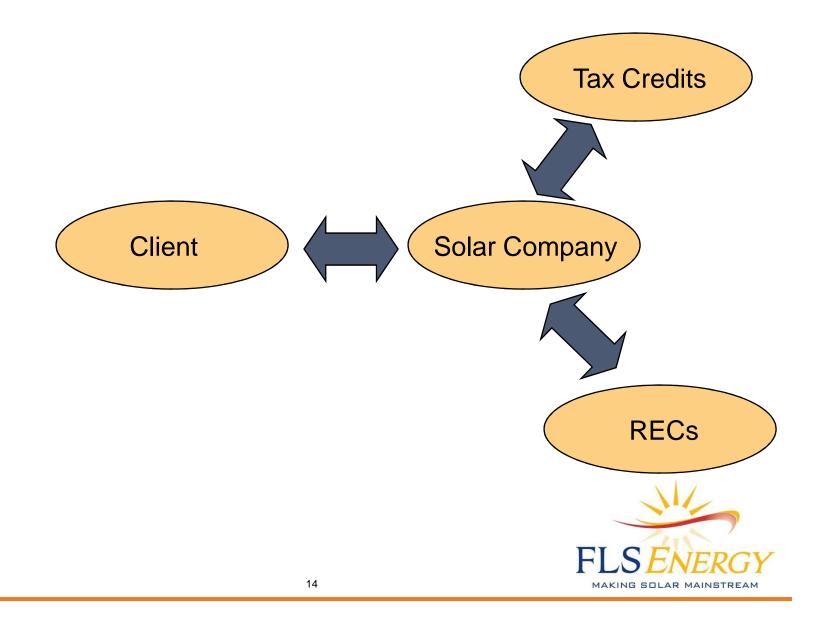


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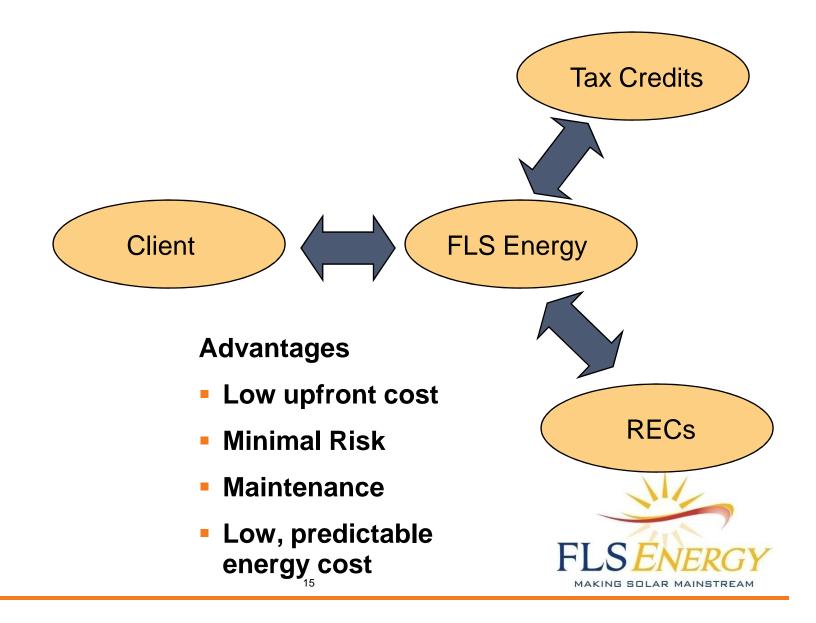
Purchase Model



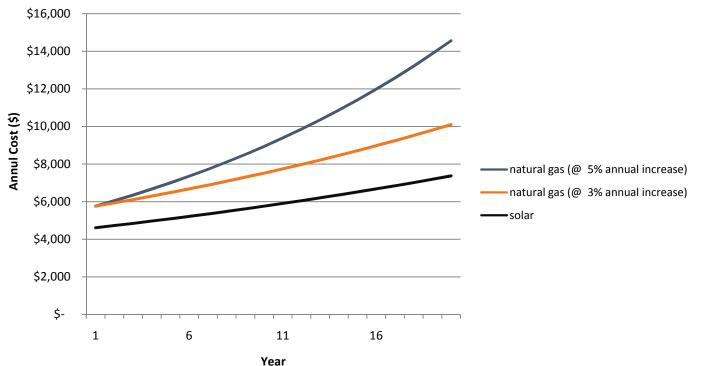
Solar Energy Purchase Agreement (SEPA)



Solar Energy Purchase Agreement (SEPA)



Lock in Low, Predictable Solar Energy Prices



Based on Given Amount of Hot Water

Savings of Solar vs Natural Gas



Proximity Hotel Greensboro, NC LEED Platinum Certified





Hilton Asheville Biltmore Park, Asheville, NC 1st for Hilton Brand





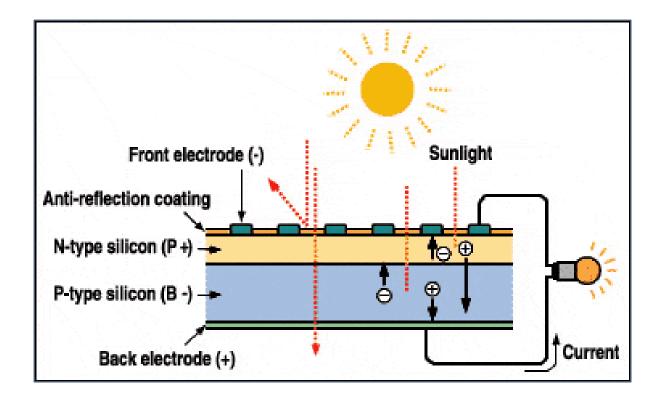
Courtyard Marriott Downtown

Greenville, SC Largest solar thermal system in SC





How Solar PV Works



What is a kWh? Watts * time = kWh 100 watt CFL * 10 hours = 1kWh



PV System Costs

Avg. Cost: \$50K - \$1.25M, 10 kW system – 250 kW system

Federal Grant Program:

30% of project. No more than 50% of your total tax liability. Can take over 5 years.

NC State Tax Incentives:

35% of project. No more than 50% of your total tax liability. Must be taken in 20% increments over 5 years.

Accelerated Depreciation:

Total apx. 20-25% of system cost, over several years

Progress Territory customers:

Tie-in to grid and receive \$0.18 per kWh Deduction in bill or check for overage.



PV System Financing

- State and Federal Incentives
- Power Purchase Agreements: PPAs
 - Through private companies
 - Utility Companies
- Site Lease Agreements 3rd party financing



Renewable Energy Certificates RECs

RECs are :

- the environmental attributes of clean energy.
- the premium value of renewable energy beyond the market value of conventional fuels such as coal and nuclear.
- desired by utility companies.
- added value.



Committed to Making Solar Mainstream

"Proximity's solar energy system serves as a businessminded, tangible expression of the company's commitment to the community and the environment. It attracts a clientele that values this commitment."



Dennis Quaintance, Developer Proximity Hotel, 2008





Nothing is as powerful as an idea whose time has come -- Victor Hugo

Want more information about renewable energy for your attraction or accommodation?

The art the

www.eere.energy.gov

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www.dsireusa.org

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