

Estimating Your Solar Potential

&

A Energy Conservation Strategy

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The Technologies

- Solar Pool Heating
- Solar Water Heating (thermal)
- Photovoltaics



Solar Thermal



Photovoltaics NAH 2007



Pool Heating Potential

- Most widely used of all technologies
- Costs and sizing depends on pool size and orientation \$3K - \$5K
- Adds 4-5 months to swimming season
- State rebate of \$100.00

Solar Thermal

- The “No Brainer” of all. The most cost effective technology.
- Cost varies due to family size, orientation and climatic zone
- Virtually eliminates the second single largest consumer of energy in your home (15% or more)
- State rebate of \$500, Federal Income Tax Credit of 30% and Utility credits starting @ \$450.00 (contributing to 40 to 50% of the cost)

Solar Thermal

- In new construction when incorporating a solar thermal system into the mortgage the savings will be greater than the increase in the mortgage cost.
- Thus a positive cash flow.
- Plus, you receive a \$500 State rebate and a 30% Federal Income tax credit
- Now, that's a "No Brainer"

Photovoltaics

- The “Sex Symbol” of Solar!
- This technology is globally used and only becoming regionally recognized
- Potential is great but at this time, cost prohibited. Incentives are changing this.
- Installed by early adopters, leaders of the community
- State rebate of \$4 per watt (a 2kW minimum size), 30% Federal income Tax Credit (\$2K cap), Utility credits are available
- Incentives pay for nearly 40% of installed costs
- Support is needed to encourage an RPS.

Energy conservation and environmental impact

- Solar Thermal (water heating) saves 2800 kWh per year or creates the equivalent of 2800 kWh per year.
- They are Hybrid, they generate or they conserve.. best of both worlds!
- The offset of Green House Gases are:
 - 1.445 lbs. of Carbon Dioxide, .004258 lbs. of sulfur Dioxide and .0025 lbs. of Nitrogen Oxide for every solar water heater installed

Environment/conservation

- By installing a solar water heater you can offset the emissions of 3 cars per year



Recommendations

- Require all public buildings to be fitted with solar
- Reinststate solar property tax exemption
- Create a Public Benefits Fund. Last year Mason Dixon performed a poll in Florida and 78% of the respondents agreed to pay \$1 per month toward a fund that would raise over \$200 million dollars towards a fund that all Florida residents could use to purchase solar energy systems.
- Create a RPS with a 2% set aside (minimum) for solar thermal. Our Gov. has proposed a 20% by 2020 for renewable (coal & nuclear are not renewable!)

Stewardship & Legacy

- We all have the responsibility to our children & grandchildren to leave them with the opportunity to succeed when it comes to energy. Invest in their future. Public Benefits Fund.
- Energy is a “National Security” issue. We need to more independent.
- Remember we are to be good stewards.

More Information

- www.flaseia.org
- www.flaseref.org
- www.dep.state.fl.us/energy/incentives
- www.fsec.ucf.edu
- www.dsireusa.org

Thank you

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