

KSI Quality Policy

“Create and promote renewable energy products that improve the Earth’s environment and are safe to mankind. Make KSI the world leader in renewable energy products and services by putting our customers first, doing the job right the first time and by practicing continuous improvement.”

THE NEW VALUE FRONTIER



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Opportunities for Distributed Solar Energy in Louisiana



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KYOCERA Solar – Global Company

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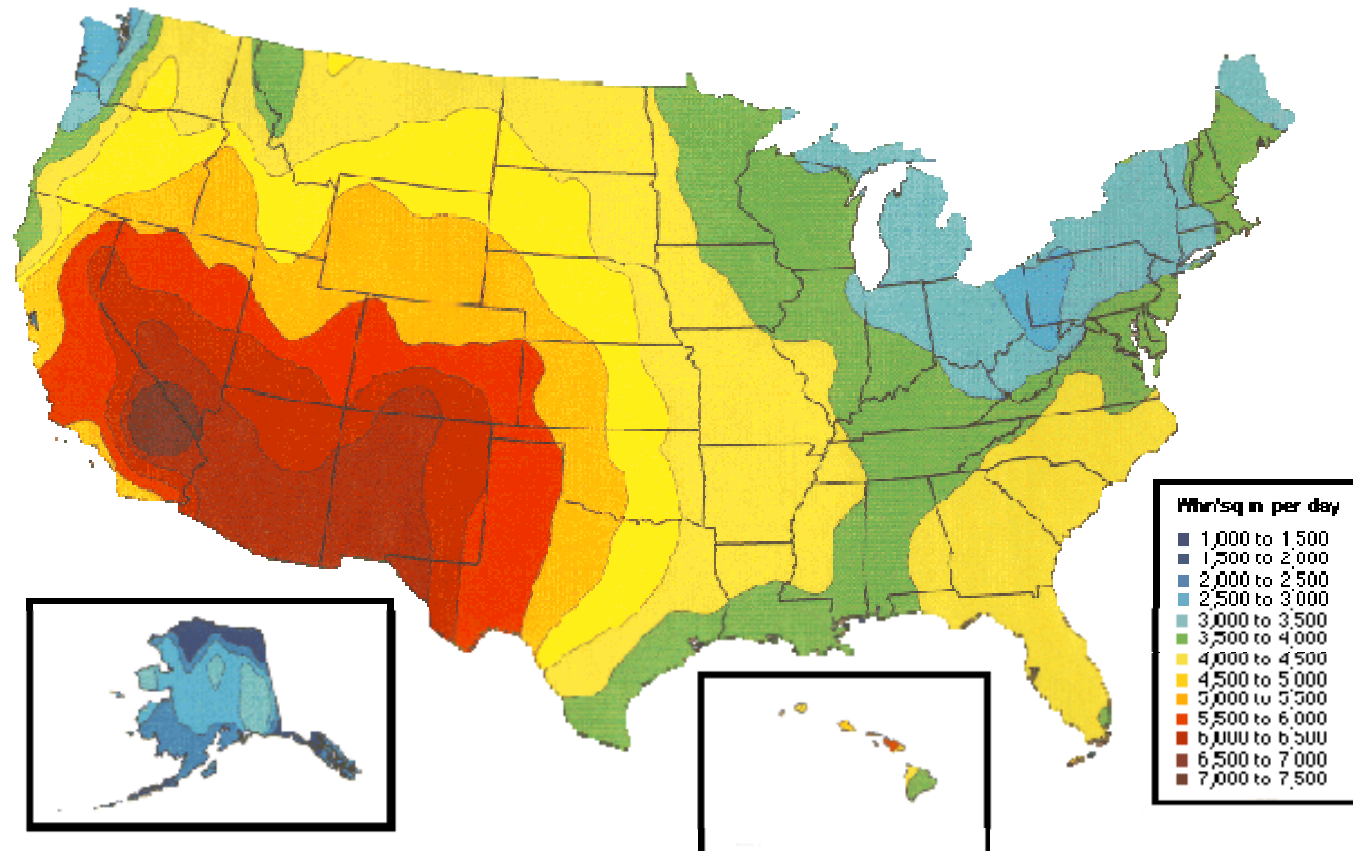
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Solar Map

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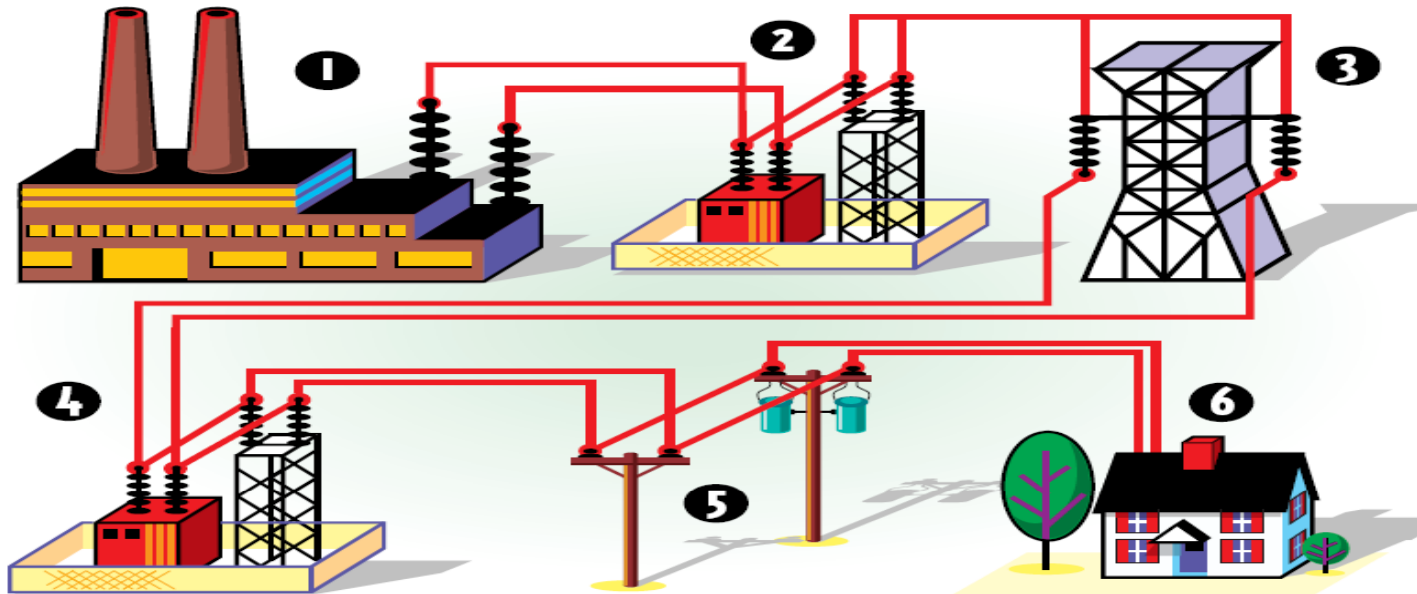
Average daily solar radiation, 1961-1990



Energy from the sun on a surface directly facing the sun.

Layout of the Power Grid: Distributed PV Provides Customer Power Without Stages 1 to 5

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When electricity leaves a power plant (1), its voltage is increased at a “step-up” substation (2). Next, the energy travels along a transmission line to the area where the power is needed (3). Once there, the voltage is decreased or “stepped-down,” at another substation (4), and a distribution power line (5) carries the electricity until it reaches a home or business (6).

Source: Edison Electric Institute, *Key Facts: A Look at the Electric Power Industry*, Section 3, available online at:
http://www.eei.org/industry_issues/industry_overview_and_statistics/nonav_key_facts/index.htm

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Benefits of Distributed Solar Energy



- Provides Clean Energy
- Provides Peak Shaving Power Reducing Investment Needed for Peaking Plants
- Reduces Cost Volatility
- Reduces Dependence on Imported Fuels
- Alleviates Grid Congestion
- Ratepayers Monies Assigned to the RPS are Leveraged
- Creates Local High-Tech Industries
- Improves Energy Security (De-Centralization)

Economic Benefits of Distributed Generation

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- Creates Jobs
(Manufacturing, Distribution, Installation, and Service)
- Generates Tax Revenues
- Decreases Spending on Procuring Energy or Fuel from Outside the Local Economy
- Monies Saved on Electricity Go Back into Local Economy



DarMar Residence by Carlson Solar

Policies Needed to Support Solar D.G.



- Net Metering
- Financial Incentives
- Solar Friendly Electricity Tariffs
- Renewable Energy Credits



New Jersey Solar

Financial Incentives

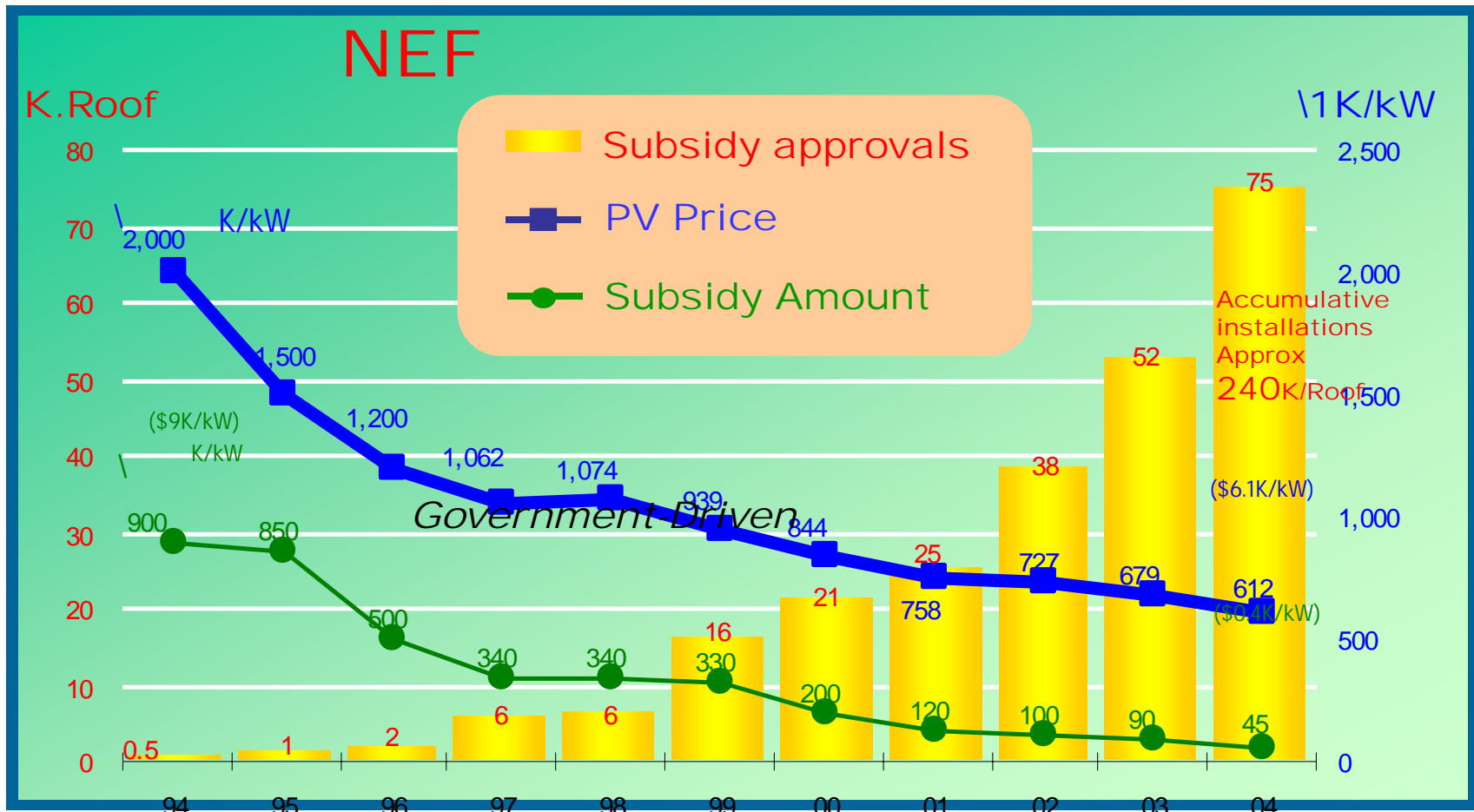
- Tax Credits
- Tax Exemptions
- Rebates based on system cost
- Rebates based on expected output
- Payment stream based on output - \$/kWh
 - Performance Based Incentives (PBI)
 - Feed-in Tariffs (FIT)

Japanese Model

- World's most successful model – Japan
- Based on yen/DC Watts
- Residential program limited to 3kWts per household
- Net metering + utility purchase of solar kWhs at retail prices
- Solar tariff available
- Federal program successfully ended in 2005
- 1GW + installed in Japan

Japanese Model: Subsidy

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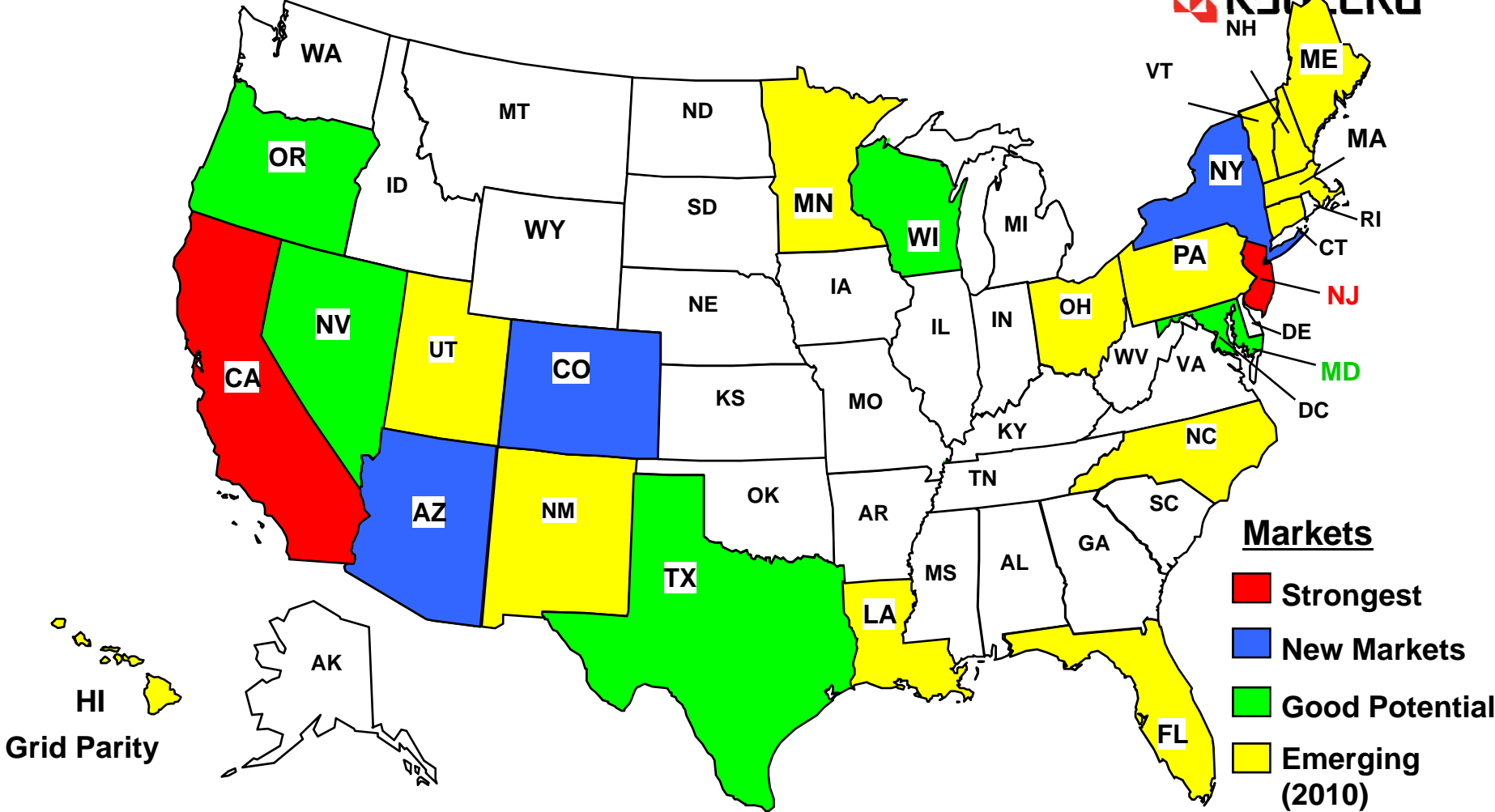


European Models

- Based on feed-in tariff
- Based on system performance / system output
- Utilities purchase solar kWh at rates 2x or more higher than retail rates
- German pioneered feed in tariff method
- 837MW installed in 2005 (more than 5GW installed to-date)
- German fastest growing PV market worldwide
- Other European & Asian countries expected to emulate the German model

States with Solar Programs

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- Federal Income Tax Credit thru 2008 – Needs Extension
- California still leads the way.

U.S. States with Active PV Programs

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STATE Calendar Year	Mkt size	Comments
California	200MW + estimated market size for 2008	<ul style="list-style-type: none"> •California Solar Initiative (CSI) - \$3 Billion budget from CPUC to install 3GW or 1 million PV systems by 2017 •Incentives to be reduced to zero over life of CSI •Upfront rebates for systems up to 50kW •PBI program for systems >50kW. In 2009, PBI moved to >30kW •Municipal utilities to set up programs similar to CSI
New Jersey	N/A 27MW reserved from 2005 plus new	<ul style="list-style-type: none"> •\$5/watt rebate for small systems. Rebate declines as system size increases •Program oversubscribed •NJBPU to switch from rebate to PBI – Solar Renewable Energy Credits (SREC program) •Residential systems to keep rebates
New York (LIPA)	1+MW	<ul style="list-style-type: none"> •\$3.75 watt rebate, \$4 million/ year Federal tax credits.
New York - NYSERDA	2MW potential	<ul style="list-style-type: none"> •Rebate program in design process.
Arizona	3MW + minimum potential	<ul style="list-style-type: none"> •Rebates at \$3/watt •Utilities may allocate \$10-\$10 million for 2007 & 2008 •PBI to be set up for large commercial systems
Texas (Austin)	700kW	<ul style="list-style-type: none"> •\$4/watt rebates. Updated funding for 2006 not available as of Dec. 30 2005. •\$5 million budget for 2006, which can increase in June '08.

U.S. States with Active PV Programs

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STATE Calendar Year	Mk size	Comments
Texas – RPS – Through 2015	(200MW potential set aside for PV)	<ul style="list-style-type: none"> •TX PUC to begin proceeding to implement 500MW non-wind renewable energy. To be resolved by June 2006.
Oregon	1.1 MW Installed in '06	<ul style="list-style-type: none"> •New tax credit of up to \$6,000 carried over 4 years with \$1,500/year. •\$2 - \$2.25/watt rebates.
Washington	N/A	<ul style="list-style-type: none"> •Feed-in tariff: \$0.15/kWh; \$0.54 more for first 10 years if equipment produced in WA.
Wisconsin	N/A	<ul style="list-style-type: none"> •22.5cents/kWh feed in tariff •Up to \$25K rebates
Massachusetts	1.4 MW Installed	\$2.75/watt rebate
Maine	N/A	<ul style="list-style-type: none"> •\$3/watt for first 2kW, \$1/wat for up to the 3rd kW.
Nevada	14.6 MW Installed	<ul style="list-style-type: none"> •\$5/watt - \$2 million budget
Colorado	12.5 MW Installed	<ul style="list-style-type: none"> •RPS requires investor-owned utilities to draw on renewable energy for 20% of their electricity supply by 2020, from 10% by 2015. • \$4.25/watt rebates for small systems . Combination upfront rebates with Renewable Energy Credit purchases
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U.S. States with Active PV Programs

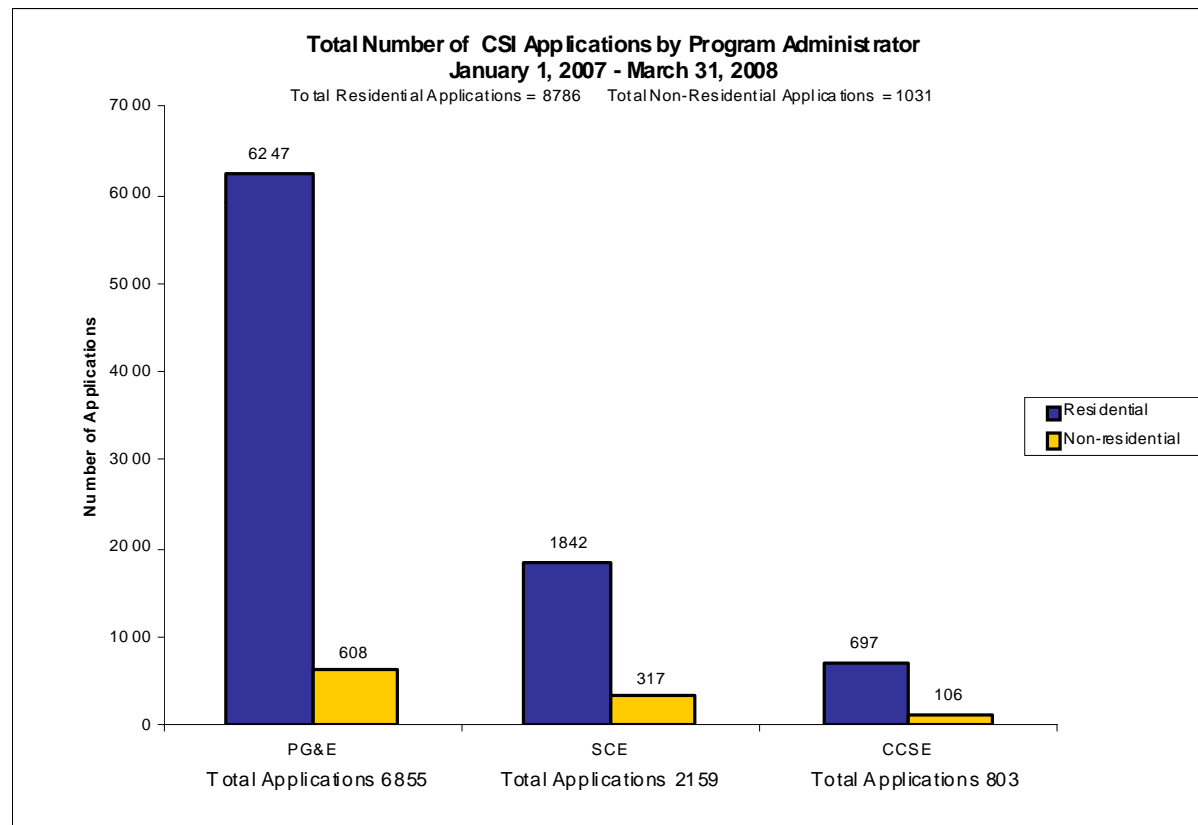
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STATE Calendar Year	Mkt size	Comments
Florida	N/A	<ul style="list-style-type: none"> •\$4.00/DCwatt rebate up to \$20K residential \$ 100K commercial •\$4 million budget. \$10 million may be allocated in 2008 •Solar thermal projects share the budget
Illinois	N/A	<ul style="list-style-type: none"> •30% up to \$10K/project for projects under \$50K in total •\$2 - \$2.25/watt rebates •Funding through April 2007
Louisiana	N/A	<ul style="list-style-type: none"> •50% tax credit for residential & multi-family buildings up to \$25,000

California Experience Can be replicated in Louisiana with Residential PV Market

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Impact of Long-term Programs

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- Investments in Manufacturing
- Stability of Material Supply
- Investments in R&D
- Price Reductions
- Creation of a Self-sustaining Industry



Conclusion

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- The state of Louisiana has great solar resources.
- Photovoltaic energy (PV) Can Be a Significant Contributor to Louisiana's Energy Mix & Economic Development.
- PV Has Potential to Thrive Without Long-term Subsidies, and Become a Self-sustained Industry.
- Distributed Solar Generation Should be Part of the State's Energy Policy.
- Policies Will Make or Break This Promising Technology.