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Sustainable Energy Coalition Factoid #2

EESI Release: May 2006

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ANNUAL INSTALLATIONS OF ROOFTOP PHOTOVOLTAICS COULD POWER HUNDREDS OF THOUSANDS OF HOMES AND BUSINESSES BY 2010

In March 2005, the Energy Foundation released a study, "PV Grid Connected Market Potential in 2010 Under a Cost Breakthrough Scenario," prepared for them by Navigant Consulting and Clean Energy Research. The study was completed in September 2004 and claims to be the first of its kind to do an assessment and estimate of the rooftop solar photovoltaic market potential on a state-by-state basis.

The state-by-state analysis concludes that the potential U.S. market for grid-connected solar rooftop PV could reach 2,900 MW per year by 2010, assuming that the solar industry can achieve a "breakthrough" price of \$2.00-\$2.50 per installed watt. This would be enough new electricity, brought online in just one year, to power more than 500,000 average U.S. homes.

Moreover, the study found there is enough suitable rooftop space on residential and commercial buildings to sustain this annual level of growth.

Residential and commercial rooftop space in the U.S. could accommodate up to 710,000 MW of solar electric power (if all rooftops were fully utilized, taking into account proper orientation of buildings, shading from trees, HVAC equipment, and other solar access factors). For comparison, total electricity-generating capacity in the U.S. today is about 950,000 MW.

"Solar energy has seen impressive expansion -- 36% compounded annual growth for the global solar industry since 1999 -- but it has far, far greater potential," said David Wooley, Vice President at the Energy Foundation. "This new report illustrates that PV could make a significant contribution to future electricity supply in this country. This potential justifies state and federal support in the near term to stimulate new PV manufacturing investment, accelerate growth in system sales, and help reduce the cost of PV systems."

Key findings from the study show that in 2010:

- At \$2.00-2.50 per installed watt, the annual market potential for grid-connected residential and commercial building PV applications is estimated at 2,900 MW, representing an annual market of about \$6.6 billion (equipment and installations).
- The Pacific and Mid-Atlantic regions together would account for 52% of the potential residential and commercial sector demand.
- California alone has the potential for about 40% of the total building rooftop market potential-through a combination of favorable sunlight levels and high retail energy prices.
- Other distributed forms of PV electric generation, including ground-mounted PV, car ports, curtain walls (a type of commercial building window), and awnings could further add to the potential identified by Navigant Consulting.

"Unlike most other power generation technologies, PV can be installed on the existing building infrastructure," said Lisa Frantzis, Director, Navigant Consulting. "This study shows that the available rooftop area can provide enough space to power a significant portion of U.S. electricity needs."

For additional information, or to download the complete study, go to

http://www.ef.org/documents/PV_pressrelease.pdf

<http://www.ef.org/documents/EF-Final-Final2.pdf>

<http://www.ef.org/documents/EF-Final-Final2.pdf#search='PV%20Grid%20Connected%20Market%20Potential%20in%202010%20Under%20a%20Cost%20Breakthrough%20Scenario'>

[http://www.navigantconsulting.com/A559B1/navigantnew.nsf/vGNCNTByDocKey/PP0_DE7549B3828/\\$FILE/EF-NCI-FinalReport-PV-MarketOutlook2005.pdf#search='PV%20Grid%20Connected%20Market%20Potential%20in%202010%20Under%20a%20Cost%20Breakthrough%20Scenario'](http://www.navigantconsulting.com/A559B1/navigantnew.nsf/vGNCNTByDocKey/PP0_DE7549B3828/$FILE/EF-NCI-FinalReport-PV-MarketOutlook2005.pdf#search='PV%20Grid%20Connected%20Market%20Potential%20in%202010%20Under%20a%20Cost%20Breakthrough%20Scenario')

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