



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Million Solar Roofs: Market Development through Local Partnerships

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Million Solar Roofs Initiative (MSRI): Partnerships Are Key

- MSRI partnerships reduce barriers, leverage funding, coordinate with community programs
- DOE: member of each partnership
 - Supplies outreach, coordination, technical assistance through laboratories
- Geographic and stakeholder diversity among partnerships





What is a Million Solar Roofs State or Local Partnership?

- Representative of a geographic area – state, regional, or local
- Consists of a minimum of three participating members
 - State and/or local government agencies
 - Utilities
 - NGO's
 - Developers/builders
 - Anyone interested
- Dedicated to the development of a solar market in their to facilitating community
- Committed the installation of at least 500 solar energy systems (electric and thermal) by 2010



Funding to Support Partnerships: Approximately \$2.6M/Year

- State and Local Partnership Solicitation: In FY03, 78 applications plus 12 new partnership applications
 - 35 Awards made; 11 in the Seattle Region; 5 in California
- Discretionary funding to regions
- Interstate Renewable Energy Council for Communications Support
- National Renewable Energy Laboratory/Sandia National Laboratories for Technical Support



Partnership Constituency 2003

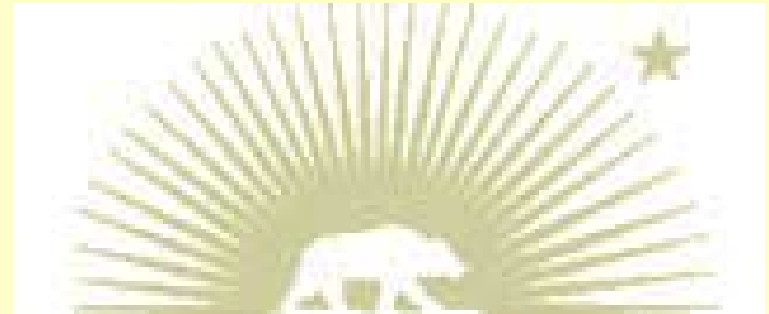


- 70+ partnerships with more than 1,200 participating organizations



California MSR Partnerships

- Alameda County Solar Partnership
- State of California – BII
- City of Anaheim
- City of Los Angeles – LADWP
- County of Humboldt – RCEA
- County of Marin
- City of Sacramento – SMUD
- San Diego County – SDREO
- City and County of San Francisco
- Bay Area Solar Consortium
- City of Santa Monica





Partnership Example: San Diego Regional Energy Office Partnership

MSRI grants totaling \$150,000:

- Facilitated PV capacity growth from 12 systems (33kW) in 1999 to 862 systems (1,182 kW) in 2003
- Initial grant leveraged community program for PV, including approx. \$40 million to date.
 - \$15 million rebates annually
- With assistance from SDREO, Shea Homes incorporates solar in tract housing
 - 115 PV systems and 309 solar water heaters in 3 housing developments
 - Other builders using solar: Pardee Homes, Standard Pacific, KD Development, Michael Crews Development



Shea Homes Community, San Diego, California



California Partnerships: A Sampling of Their Actions

- The City of Anaheim
 - Educational Seminars/workshops for educators
 - Website development, including virtual tour of Anaheim PV systems
- Marin County
 - Public outreach, including movie theater PSAs
 - Solar Homes Tour
 - Training/community events
 - Website development, including technical assistance and information
 - Localized Solar Study
- San Francisco
 - Public Outreach
 - Solar Cities Summit



California Partnerships: A Sampling of Their Actions, Cont.

- Bay Area Solar Consortium
 - Developing tools for installing solar on schools
 - Resolution of issues re: “taxable rebates”
 - Supporting the development of an incentive program for SHW
 - Developed BASC Website to share information with members
 - Developed process for tracking installations in the Bay Area
- Humboldt County (Redwood Coast Energy Authority)
 - Developing outreach tools for local residents, businesses, financial institutions, and schools
 - Providing training opportunities for building professionals
 - Development of financing options
 - Developing a regional solar installation plan for public facilities
 - Recommending changes to land use codes that could ease the installation of solar energy systems



A Few Lessons Learned

- Competition can be a driver
- Even a small percentage of demand can be significant
- Successful programs can come in all shapes and sizes
- Public policies can support or hinder solar
- Systems are getting larger
- Schools are popular



MSRI System Size Increasing

Larger system size means lower transaction costs.

- Fala Direct Marketing, Long Island NY, 1 MW
- Alameda County Jail, Dublin CA, 1 MW
- Springerville AZ, 1 MW, Tucson Electric
- Twentynine Palms base, financed by Johnson Controls, 1 MW
- Janssen Pharmaceuticals, Philadelphia PA, 700 kW
- Arizona Public Service, 1.2 MW (to be 5 MW when completed)



Alameda County Jail, California



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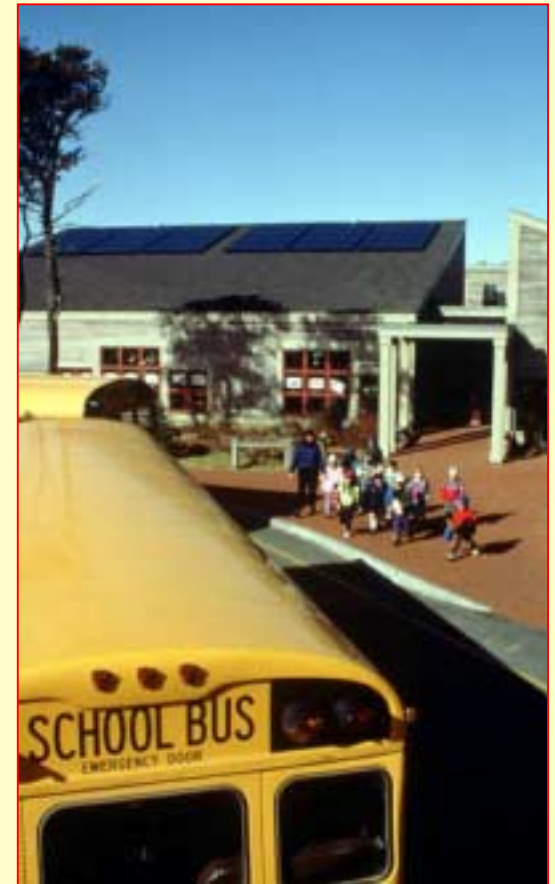


Solar for Schools

- 500+ schools with solar installations and educational materials
- Many school installations funded through utility green pricing programs
- Colleges and universities purchase green power through student contributions



Jacksonville School, Florida



Nantucket Elementary School, Massachusetts



Next Steps

- Build on MSRI successes and Continue conference call seminar series and peer-to-peer exchanges
- Continue to help strengthen partnerships
- Evaluate what we have learned and explore how MSR can grow as a program to respond to changing nature of the industry and consumer demand.



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DISCUSSION