

Solar America Cities

Brown to Green: Make the Connection to Renewable Energy

U.S. Department of Energy

Solar Energy Technologies Program

Solar America Cities

Accelerating Solar on a Local Level

Dick Fate, Sandia Tiger Team Lead



<http://www.solar.energy.gov>

Email: refate@sandia.gov



DOE's Approach to Solar Market Transformation



GOAL Reduce market barriers to, and promote market expansion of, solar energy technologies through non-R&D activities.

Activities

- Solar America Board for Codes and Standards
- State Technical Outreach
- Utility Technical Outreach
- Solar America Cities
- Solar America Showcases
- Workforce Development
- Solar Decathlon

Solar America Cities



GOAL Accelerate solar adoption in the nation's electricity load centers by supporting cities' innovative efforts.



Solar America Cities contribute to DOE's goal of making PV cost-competitive with conventional grid electricity by 2015.

Solar America Cities

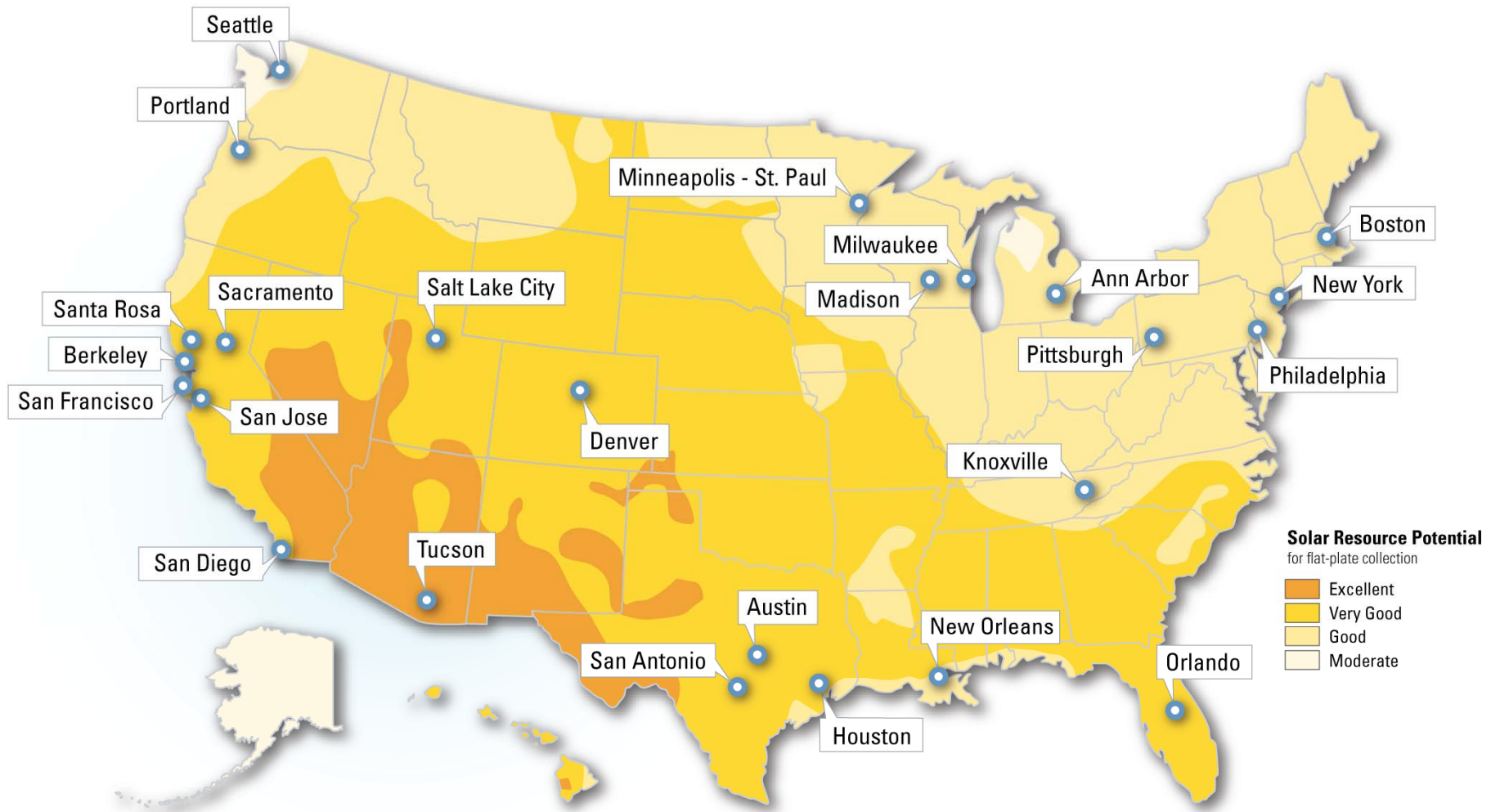


SELECTION PROCESS

Competitive awards granted to cities of 100,000 or more **committed** to:

- achieving a **sustainable solar infrastructure**
- through a **comprehensive, city-wide approach**
- that **facilitates mainstream adoption** of solar
- and **serves as a model** for other cities to follow.

The 25 Solar America Cities



Solar Resource Potential
for flat-plate collection

- Excellent
- Very Good
- Good
- Moderate

Solar America City Partnerships



Financial Assistance:

~\$200,000 per city

Technical Assistance:

~\$250,000 per city

Multi-institutional “tiger teams” of solar experts provide tailored assistance based on city’s needs





Key Barriers to Solar Commercialization

- Lack of communication, information dissemination, and consumer awareness
- Inadequate codes and standards
- Lack of appropriate, consistent interconnection standards
- Lack of equitable and effective net-metering guidelines
- Inconsistent utility rate structure practices
- Complex permitting procedures and fees
- Inconsistent and lack of widespread incentives and other drivers
- Limited education/experience of key building trades with solar technology
- Lack of trained technical personnel, reliable installers, and maintenance services
- Lack of flexible, sophisticated, proven financial approaches

Market barriers increase the price of solar systems and the time before use.
Market transformation activities aim to reduce prices and time,
resulting in widespread deployment.

Solar America City Projects



- Streamlined permitting
- Solar access laws
- Building/zoning code review
- Creative financing programs
- Economic development studies
- Workforce development
- Code official/installer training
- K-12 Education
- Solar Mapping
- Public outreach

What Makes Solar America Cities Unique?



- Federal/City partnership
- Financial assistance PLUS hands-on Technical Assistance to Cities
- Strong City and DOE network facilitates information sharing and replication potential.

Solar America Cities – Maximizing the Network



Outreach Tools

- 2nd Annual Meeting, April 1-3, 2009 in San Antonio
- Solar America Cities website
- Regional workshops

Crosscutting Analysis

- Solar mapping
- Interconnection in area/spot networks
- Creative financing
- Rate structures

Solar America Cities – Going Forward



- Focus on helping 25 partner cities develop sustainable local solar markets

- **Potential New Activities**
 - Solar America Cities Special Projects
 1. Additional funding to cities ready to raise the bar
 - City Technical Outreach
 1. Provides technical assistance to non-Solar America Cities.
 2. Uses a series of learning modules to provide best practices interested cities across the U.S.

New Activities: City Outreach



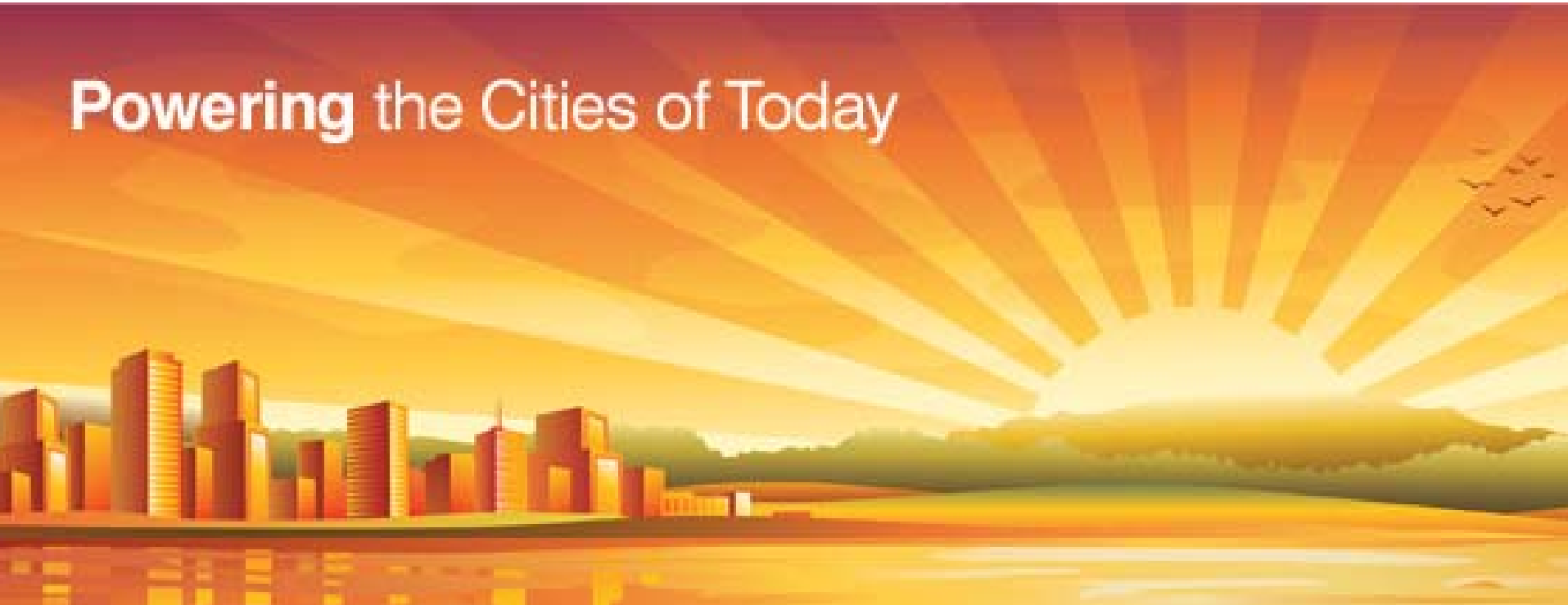
- Provides technical assistance to non-Solar America Cities.
- Uses a series of learning modules to provide best practices to interested cities across the U.S.
- Modules are mostly uniform across cities.
- Informational assistance only; no partnerships formed or financial assistance provided.



Visit us on the Web!



Powering the Cities of Today



www.solaramericacities.energy.gov