

Market Acceleration

Beyond traditional solar technology research and development (R&D), the U.S. Department of Energy (DOE) is working to actively address and remove solar market barriers. The DOE Solar Energy Technologies Program (SETP) Market Acceleration subprogram is catalyzing market development through a diverse portfolio of activities that includes stakeholder education, policy analysis, and technical assistance.

Meeting the Challenges

From inconsistent utility practices to inadequate financial incentives and policies, and complex, expensive installation and financing mechanisms to a shortage of well-trained solar installers, the domestic solar market faces significant challenges.

SETP is successfully meeting these challenges through a comprehensive portfolio of analysis, stakeholder engagement, and partnerships, as demonstrated in the following Market Acceleration activities.

Federal, State, and Local Government Assistance

Solar America

Local governments are critical allies in accelerating the deployment of solar electricity. SETP has partnered with 25 U.S. cities to promote comprehensive strategies for increasing solar energy use. These Solar America Cities (SAC) are engaging local decision makers; exploring innovative solar financing options; streamlining permitting processes and updating building codes; and educating their residents and businesses on the benefits of solar energy.



Credit: Sherril Shields, Florida Solar Energy Center/PIX 16606

To increase the quality and availability of instruction for solar system installers, the DOE provides funding to regional training providers, such as the Florida Solar Energy Center.

In 2009, DOE awarded \$10 million in American Recovery and Reinvestment Act (ARRA) funding for SAC special projects to bring innovative programs and concepts to scale for replication nationwide. DOE expanded the scope of SAC in 2010 through a \$10 million partnership with the International City-County Management Association and ICLEI – Local Governments for Sustainability, to educate thousands of local governments nationwide on solar best practices. SETP maintains a comprehensive collection of best practices in Solar Powering Your Community: A Guide for Local Governments, available at www.solaramericacities.energy.gov.

State Technical Engagement

DOE engages with state decision makers through innovative trainings, workshops, and technical assistance programs. Through its Solar Boot Camp, SETP has developed a customizable turnkey training curriculum for legislative staff, utility regulators, and other state stakeholders. DOE's State Technical Assistance Team capitalizes on the expertise of DOE staff, national labs, and partners to provide customized technical assistance for states' most complex solar implementation issues. DOE also partners with the National Association of Regulatory Utility Commissioners to support targeted technical assistance projects for state utility commissions.

DOE will continue to expand its state technical engagement efforts through a multi-year funding opportunity available in 2010.

Federal Technical Engagement

To support accelerated federal sector deployment, in 2010, DOE published Procuring Solar Energy: A Guide for Federal Facility Decision Makers, providing up-to-date lessons

learned in solar procurement. DOE also is working directly with the General Services Administration to facilitate more than 12 megawatts (MW) of on-site solar generation for 25 federal sites nationwide.

Utility Technical Engagement

SETP is collaborating with utilities nationwide to identify and address the unique obstacles facing utilities as they consider introducing solar to their energy portfolios. These efforts are enhanced by its partnership with the Solar Electric Power Association (SEPA), which allows DOE to maximize its impact in the utility sector. Recent examples of collaboration include peer-to-peer exchanges, solar workshops for rural electric cooperatives, and sponsorship of SEPA's annual Utility Solar Conference.

DOE will continue to expand its utility technical engagement efforts, with an emphasis on municipal utilities and electric cooperatives, through a multi-year funding opportunity available in 2010.

Ensuring a Skilled Solar Workforce

A well-trained workforce is critical to a successful solar market, ensuring high-quality installations, cost reductions, and continued consumer acceptance of solar technologies. With \$10 million in ARRA funds, the Solar Instructor Training Network was created to increase the quality and availability of instruction in photovoltaics and solar heating and cooling systems. Participating Regional Training Providers are enabling local educational institutions to expand high-quality solar training programs to support the rapidly developing solar market. Over the life of the five-year project, up to 1,400 instructors will be trained with the cumulative capacity to train up to 170,000 students.

SETP collaborates with the Interstate Renewable Energy Council to support outreach, accreditation of training programs, and certification of master trainers. In addition, SETP supports the North American Board of Certified Energy Practitioners to advance quality industry credentialing.

Providing Solar Market Insights

DOE supports critical data gathering and analysis efforts to track solar market development and provide independent insight on emerging issues. DOE publishes analyses on key topics such as solar economics, installation trends, labor market trends, and innovative financing approaches.

Solar Program Priorities

Market Acceleration is one of four subprograms in the DOE Solar Energy Technologies Program (SETP), along with Photovoltaics, Concentrating Solar Power, and Systems Integration. The SETP subprograms focus on accelerating the advancement of solar energy technologies to make solar electricity cost competitive with conventional forms of electricity by 2015. To learn more about SETP activities, visit www.solar.energy.gov.

