Berkeley Lab and the Clean Energy Group

CASE STUDIES OF STATE SUPPORT FOR RENEWABLE ENERGY

Information, Training, Education, Project Facilitation, and Technical Assistance in Wisconsin

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CASE SUMMARY

Case Description

Wisconsin has gone to greater lengths than most states to raise awareness and shepherd new renewable energy projects to completion through education, marketing, training, and project facilitation (technical assistance and project "hand holding"). This is especially true if one considers the small overall size of the Wisconsin fund. The Wisconsin fund believes that its efforts in these areas have been essential. This case highlights that experience.

Innovative Features

Wisconsin's program administrator identified a string of eight steps on the road to project success: awareness, information, training, facilitation, technical assistance, financing, finding a contractor, installation. The first five of these have received particular emphasis in Wisconsin.

- Wisconsin's program features a full-time project facilitator that provides free phone consultations through a toll-free call center, offers on-site renewable energy audits and site assessments, and otherwise undertakes whatever "hand-holding" is necessary to bring a project to completion.
- In addition, workshops and educational events provide training for both individuals and businesses.
- This broad range of services support Wisconsin's other program components, including grants for feasibility studies and cash-back rewards on installed projects.

Results

The 4-year pilot program in the Northeastern section of the state has proven the value of providing these services, with both the quantity and quality of potential projects coming through the pipeline increasing over time. As a result, virtually all of the programmatic elements in the area of project facilitation and technical assistance have been carried over into the new statewide program, which is just getting underway.

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http://eetd.lbl.gov/ea/ems/cases/

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www.cleanenergyfunds.org

CASE STUDY DETAILS

In 1998 the Wisconsin Public Service Corporation asked the Wisconsin Department of Administration (DOA) to administer its renewable energy programs during a 2-year pilot period. The resulting program, called the Demand-Side Applications of Renewable Energy Program (DSARE), was funded at less than $1 million per year. DSARE was subsequently extended through 2002, until a statewide program (funded at roughly $4.5 million/year for renewables) could be implemented.

Both the DSARE program and the new statewide program emphasize customer-sited renewable energy projects, and incorporate both electricity generation and thermal applications. The DOA initially focused on renewable energy market preparation and infrastructure building activities. Using a "shotgun" approach, the DOA targeted many different facets of the market with small competitive grants for marketing, education, business development, and technical assistance. Later phases of the DSARE program also included a "resource acquisition" component, with targeted financial incentives for renewable energy installations.

The new statewide program currently has three main components: (1) information, training, and education; (2) project facilitation and technical assistance; and (3) financial assistance for qualified projects. This case study focuses on the first two components, which are somewhat unique to Wisconsin and could be relevant to state funds that have a goal of transforming the market for renewable energy. Since most of Wisconsin's new statewide programs in the area of project facilitation and technical assistance are similar to those offered through the DSARE pilot program, this case study discusses these program offerings somewhat generically.

Information, Training, and Education

Wisconsin's program strives to be a renewable energy information clearinghouse, having produced fact sheets on renewable technologies, case studies of successful projects, and a "yellow pages" listing of renewable energy businesses in Wisconsin – all accessible from the program's website (http://www.focusonenergy.com). In addition, the program features a toll-free call center to answer consumers' questions and provide referrals to other information sources or renewable energy vendors.

The program also co-funds workshops and training programs for consumers, building professionals, students, and educators. These have been well received: the Midwest Renewable Energy Association (MREA) has been able to fill all spaces at numerous workshops on renewable energy topics ranging from PV installation to masonry stoves; the Energy Center of Wisconsin (ECW) has held many successful daylighting workshops for architects and building professionals; and the Wisconsin Environmental Education Board (WEEB) has solicited a handful of education programs, including renewable energy curriculum development for K-12 schools.

Educating the public about the program itself was accomplished via targeted TV commercials, radio ads, brochures, posters, articles, print ads, a 30-minute video, and public presentations. While the success of this effort was lower than perhaps expected, this marked the first time a professional marketing firm had been hired to promote renewable energy in Wisconsin.

Project Facilitation and Technical Assistance

To overcome the high transaction costs associated with planning and installing renewable energy projects, Wisconsin's program has placed special emphasis on project facilitation and technical assistance. Both an initial baseline survey of renewable energy businesses conducted at the start of the program as well as a follow-up evaluation survey (see separate case study on Wisconsin's program evaluation efforts) showed a strong interest among the renewable

energy community in having the fund provide such services.

A professional facilitator was hired at the start of the DSARE program to essentially do whatever was needed to get projects installed. Within this broad charge, specific duties have included: explaining the program to potential customers; tracking leads and making referrals to contractors; providing phone consultations; offering renewable energy audits to homes, farms, and businesses; site assessments; system options; financing advice; business plan development; early project planning; proposal writing assistance; project feasibility assessment; and speaking engagements.

Renewable energy audits are subcontracted out to MREA, which offers free phone consultations to homes and businesses, information about financing, and site visits to assess renewable energy potential (there is a $50 fee for site visits). MREA will answer basic questions, give rough cost estimates, send fact sheets, identify relevant web sites, and provide a list of renewable energy installers and suppliers in Wisconsin. For more in-depth information about specific installation requirements, MREA will make arrangements for a site visit by a consultant (typically a renewable energy vendor). The site visit includes a basic analysis of energy needs, recommendations for energy efficiency measures to be undertaken in tandem with the renewable energy project, identification of siting options, a general cost estimate, and outlining the next steps towards system installation. In exchange for their participation, consultants are paid a monthly stipend plus performance incentives (which in general have not completely covered their costs).

In the non-residential sector, the fund offers Technical Feasibility Study Grants, which are intended to increase the ability of businesses to make informed decisions about renewable electricity by decreasing the technical uncertainties of implementing renewable energy systems. These grants provide cost-sharing assistance of up to $20,000 on a competitive basis for technical assessments of complex renewable energy projects and technologies. Examples of eligible projects include: feasibility, technical, economic, and regulatory evaluation studies for proposed or existing renewable energy systems, as well as design, commissioning, and energy performance contracting support for renewable energy projects. These grants represent a "next step" beyond the feasibility assessment provided by the professional facilitator, and projects can seek assistance from the professional facilitator when preparing proposals.

Results

Interim and final evaluations of various phases of the DSARE pilot program have consistently ranked training, project facilitation, and technical assistance as valuable program components. These evaluation reports have also noted process-related changes that have led to an increase in the quality and quantity of projects in the pipeline. For example, in the first phase of the pilot program, inquiries received by the toll-free call center were typically either unfocused or else unrealistic (about the project's feasibility, about the level of incentive offered, etc.). The project facilitator noted, however, that once a process for pre-screenings and referrals from subcontractors was in place, the quality of inquiries improved considerably. Now under the statewide program, the call center is fielding 75-100 calls per week on average. The program has also offered financial facilitator assistance to non-residential customers, with little success, and has made changes to that program in response. Renewable energy audits and site assessments have also been fine-tuned over the years, and the new statewide program now offers a team of trained auditors prepared to provide much more specific and useful information than had been provided during the pilot program. Facilitators and other administrators believe that the new statewide program will result in a significant increase in demand for their services, as customers of Wisconsin's wealthier and more progressive urban areas become eligible to participate.

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About this Case Study Series

A number of U.S. states have recently established clean energy funds to support renewable and clean forms of electricity production. This represents a new trend towards aggressive state support for clean energy, but few efforts have been made to report and share the early experiences of these funds.

This paper is part of a series of clean energy fund case studies prepared by Lawrence Berkeley National Laboratory and the Clean Energy Group, under the auspices of the Clean Energy Funds Network. The primary purpose of this case study series is to report on the innovative programs and administrative practices of state (and some international) clean energy funds, to highlight additional sources of information, and to identify contacts. Our hope is that these brief case studies will be useful for clean energy funds and other stakeholders that are interested in learning about the pioneering renewable energy efforts of newly established clean energy funds.

Twenty-one total case studies have now been completed. Additional case studies will be distributed in the future. For copies of all of the case studies, see:
http://eetd.lbl.gov/ea/ems/cases/ or http://www.cleanenergyfunds.org/

About the Clean Energy Funds Network

The Clean Energy Funds Network (CEFN) is a foundation-funded, non-profit initiative to support the state clean energy funds. CEFN collects and disseminates information and analysis, conducts original research, and helps to coordinate activities of the state funds. The main purpose of CEFN is to help states increase the quality and quantity of clean energy investments and to expand the clean energy market. The Clean Energy Group manages CEFN, while Berkeley Lab provides CEFN analytic support.

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