ADVANCED MANUFACTURING OFFICE

Midwest States Save Energy Now Partnership Program

The Illinois Department of Commerce and Economic Opportunity's State Energy Office, in cooperation with the University of Illinois at Chicago's Energy Resources Center, is leading a team of academia, utilities, industrial manufacturers, and state energy offices that will help reduce industrial energy intensity in eight Midwestern States. The Midwest team's approach consists of implementing a comprehensive outreach strategy to engage company participation. The team is conducting energy assessments to help companies identify energy saving opportunities, as well as promoting energy-efficient technologies that can be used to help reduce energy costs. Another primary focus of this effort is to work with program partners to provide direct and webinar-based training opportunities for industrial entities in seven Midwestern States.

In addition, the Midwest team is identifying resources to help fund energy efficiency projects at manufacturing plants. This includes working with individual companies, state energy offices, utilities, and trade associations to provide companies with technical assistance and information on U.S. Department of Energy (DOE), state, and utility financial incentive programs for capital investments in energy efficiency projects.

Finally, the team is helping to test the elements of the American National Standards Institute (ANSI) accredited Superior Energy Performance (SEP) certification program that is using the recently released ISO 50001 energy management standard, which will help plants implement an energy management system of continual improvement.

The Midwest was awarded a three-year funding project from DOE in August 2009, with an additional award utilizing American Recovery and Reinvestment Act (ARRA) funding. The original goals for the effort were focused on bringing the tools, best practices, technologies, and other resources developed by DOE's Advanced Manufacturing Office (AMO)—and specifically its *Save Energy Now* initiative—to a regional and state level. This concept was developed to encourage more industrial participation, especially from smaller and midsize industrial facilities, utilizing DOE resources and providing a clearer road map for larger regionally based industrial entities to coordinate efforts among Midwestern state programs.

To achieve that objective, the program is conducting trainings, webinars, conferences, and other educational events that promote federal, state, local, and utility funding programs to industrial clients. Additionally, the program promotes Industrial Assessment Centers (IACs); the Economy, Energy, and Environment (E3) Initiative; *Save Energy Now*; and Level I facility assessments.



Project Description

Funding Amount: \$898,537

Funding Source: U.S. Department of Energy, Advanced Manufacturing

Office

Funding Amount: \$500,000

Funding Source: American Recovery and

Reinvestment Act

Program Period: 8/1/2009 to 7/31/2012

Project Success Highlights

- Conducted or assisted with more than 70 assessments in the region.
- Planned, developed, and conducted the Illinois Save Energy Now Industrial Forum in April 2010 in Chicago that attracted 160 attendees.
- Completed Industrial Energy Efficiency Forums in cooperation with Energy Offices in Illinois, Indiana, Iowa, Missouri, and Minnesota, and continued plans for similar forums in Michigan and Ohio based on the template developed for Illinois.
- During the third quarter of 2010, staff developed a procedure to assist industrial entities in establishing measurements related to their carbon footprint. This effort was driven by requests from several clients to develop information for their customers and their supply chains.

Primary Investigators

State Energy Office of the Illinois Department of Commerce and Economic Opportunity and the University of Illinois at Chicago's Energy Resources Center, Chicago, IL

Project Partners

Ameren Illinois Utilities, St. Louis, MO Ameresco, Oak Brook, IL

Ameresco, Oak Brook, IL

American Foundry Society

Atlas Tool and Die Works, Inc., Lyons, IL

Bradley University, Peoria, IL

Chicago Manufacturing Center, Chicago, IL

City of Chicago Department of Environment, Chicago, IL

Commonwealth Edison, Chicago, IL

Progress and Milestones

Activity Description	Goal	Completed to Date (AMO)	Completed to Date (ARRA)
Assessments	200	76	76
Identified Energy Savings (Trillion Btu)	15.3	6.3	6.3
Implemented Energy Savings (Trillion Btu)	10.4	4.1	4.1
Trainings	12	16	16
Individuals Trained	1400	1102	1102
Pilots / Demonstrations	5*	9	9
Plants Impacted	900	600	600
(As of June 2011)	-	-	-

^{*} Superior Energy Performance Demos

The objective of the program is to encourage energy assessments, best practices, and capital investments for energy efficiency at industry partner facilities and in corporate offices. During the first part of the project period, the Midwest team has made significant progress. Program staff has visited with six Midwestern state energy offices, given presentations at numerous regional and national events, and developed working partnerships with a variety of trade industrial associations, including the Illinois Manufacturers' Association, the Tools and Manufacturing Association, and the American Foundry Association. In addition, new partnerships have developed with the Indiana and Minnesota Technical Assistance Programs sponsored by National Institute of Standards and Technology (NIST) and DOE. Staff also has worked closely with area utilities and state energy offices to identify and promote industrial incentive and technical assistance programs in order to encourage capital investment energy efficiency projects.

The program has conducted a number of its planned educational events, including 11 webinars and five Industrial Energy Forums in the region.

Under the scope of the project, a *Save Energy Now* Midwest Partnership website has been developed. This website provides up-to-date program information to program partners and industrial clients and provides pertinent links to AMO's website and other industrial efficiency information sources. It also presents an opportunity for industrial clients to register for program services. This website can be viewed at www. saveenergynowmidwest.org. In May 2011, the program partnered to create an additional website designed for Ohio industries and operated by the Ohio *Save Energy Now* program.

Project Partners - continued

Grumman/Butkus Associates, Evanston, IL

Illinois Manufacturer's Association, Oak Brook, IL

Indiana Office of Energy and Defense Development, Indianapolis, IN

Industrial Council of Nearwest Chicago, Chicago, IL

Iowa Office of Energy Independence, Des Moines, IA

Johnson Controls, Milwaukee, WI

Michigan State Energy Office

Midwest Energy Efficiency Alliance, Chicago, IL

Minnesota Office of Energy Security, St. Paul, MN

Missouri Department of Natural Resources

Miura Boiler Company

Northern Indiana Public Service Company, Merrillville, IN

Ohio Department of Development, Columbus, OH

Primera, Chicago, IL

Purdue University, West Lafayette, IN

Schreiber, Green Bay, WI

Tooling and Manufacturing Association, Park Ridge, IL

University of Illinois at Chicago, Chicago, IL

Benefits

- Decrease in industrial energy intensity in the Midwest by 10.4 trillion Btu over the duration of the project.
- Reduction in regional carbon emissions by 1.3 million tons.
- Training for Midwest manufacturers that will provide them with skills to reduce energy intensity, reduce waste, and improve overall plant system performance.

Applications in Our Nation's Industry

This Midwest project will enhance a partnership among academia, utilities, industrial manufacturers, and state energy offices to build off of existing work to help reduce the energy intensity of industrial manufacturers in the Midwest Region. The Midwest team's work will reduce regional industrial energy intensity by 7.5% during the project period.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

The Midwest States Industrial Energy Efficiency Partnership Program has made a strong start against its assessments goal. Assessment activities in progress or completed as of March 2011 include the following:

- Recruiting participants and participating in assessments relating to state and federal ARRA solicitations. For example, program staff was involved in conducting or reviewing 24 assessments related to the State of Illinois Large Energy User ARRA-funded grant program and six assessments related to its Green Manufacturing grant program.
- Assisted four applicants with assessments related to the DOE Combined Heat and Power (CHP) solicitations.

- Identified 17 clients for IAC assessments.
- Assisted with three *Save Energy Now* assessments and two E3 assessments with the Illinois Manufacturing Extension Program.
- Conducted 11 Level I industrial assessments in Illinois and Indiana. This effort is a recent pilot effort to ascertain the cost effectiveness of the one-day Level I assessment strategies.
 Staff is continuing a review of this effort to determine follow-up activities to encourage energy efficiency investments by the participating industrial clients.

For Additional Information:

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