

Industrial Technologies Program

State of Michigan Regional Delivery of the DOE Save Energy Now Program to Meet the Goals of EPAct (2005) and EISA (2007)

Industry is a vital part of Michigan's economy. The major industries, primary metals, automotive manufacturers, chemical plants, paper and wood products manufacturers, metal casters, and petroleum refineries account for \$626 billion in revenue and the employment of 2.2 million people in the Rust Belt (Indiana, Michigan, and Ohio). These industries, however, are facing increased global competition that is negatively impacting their economic well being. They are also extremely energy-intensive, which is adding further strain on an already difficult situation.

Project Description

The overall objective of this project is to meet the *Energy Policy Act of 2005*'s goal of reducing energy intensity by 25 percent in 10 years, the Energy Independence and Security Act of 2007's goal of improving energy efficiency in order to lower dependence on foreign oil, and Michigan's Senate Bill 213, which requires energy providers to develop energy optimization strategies that will reduce statewide The Michigan Energy Office has devised a plan that will help industrial manufacturers in the state alleviate some of this strain through increased outreach and education on industrial energy efficiency. Together with a robust team of academia, state offices, and energy efficiency organizations, the team will establish the Michigan Industrial Energy Center (MIEC). MIEC will help Michigan industry through energy efficiency education and certification, performing energy assessments, technology deployment, and executing a comprehensive outreach plan.

energy consumption 1 percent annually. The project further seeks to improve the global competitiveness of the primary metals, automotive manufacturers, chemical plants, paper and wood products manufacturers, metal casters, and petroleum refineries by helping them identify and implement energy efficiency improvements that will reduce costs in their facilities.





Benefits

- Establishment of the Michigan Industrial Energy Center, a resource to help Michigan manufacturers identify and implement energy efficiency measures
- Reduction in energy intensity and carbon emissions in industrial plants in Michigan
- Increase in deployment of energyefficient technologies
- Implementation of improved and more comprehensive energy education and certification for new and experienced industrial managers

Applications in Our Nation's Industry

This project will establish a partnership among academia, state offices, and energy efficiency organizations that will continue to help reduce the energy intensity of industrial manufacturers in Michigan. At the end of the project period, the team's efforts are estimated to result in at least a 7.5 percent overall reduction of industrial energy intensity in the state.

INDUSTRIAL TECHNOLOGIES PROGRAM

The Michigan collaborative will work toward these objectives through increasing communications, conducting energy assessments, hosting trainings, providing assistance for project implementation, demonstrating/deploying technology, and applying a complete outreach plan. Specific tasks include the following:

- The centerpiece of the team's work will be the establishment of the Michigan Industrial Energy Center (MIEC). This self-sustaining center will ensure the long-term implementation of project activities.
- The Michigan team will deploy a marketing and outreach strategy that will increase awareness of the Industrial Technologies Program's (ITP) industrial tools and resources. This plan has a strong emphasis on networking, which will help the team disseminate this information. The plan also consists of outreach to local/regional media.
- A Web site will be developed that will contain ITP resources, tools, local and regional energy efficiency information, and information on financing energy efficiency improvements.
- The team will also develop training and certification for new and current industrial energy managers. Training will be offered both online and during a two-day workshop at either Western Michigan University (WMU) or University of Michigan (UM). Participants will receive a certificate of completion from DOE.
- Energy assessments are also a key component of the project. Qualified specialists from UM and WMU will

conduct energy assessments in Michigan industrial facilities to identify areas that are using energy inefficiently and to recommend ways in which to lower energy intensity. Follow up will be conducted in 6-, 12-, and 24-month intervals to quantify actual energy and cost savings.

- Plants that achieve substantial energy savings will be recognized by DOE.
 The Michigan team will also send press releases about their success to the local media.
- The team will host a demonstration of a waste heat recovery technology. In addition, one member of the project team, Renewable Energy Systems (RES), will help select plants to implement new energy-efficient technologies. RES will actively measure energy savings and support deployment of the new technologies among other industries.

Progress and Milestones

The project's planned tasks include:

- Conducting 25 energy assessments
- Hosting six education and certification trainings
- Deploying ongoing outreach efforts to local, regional, or national media and associations
- Creating one central Web site to house local, regional, and national energy efficiency resources and tools
- Establishing the MIEC to ensure ongoing effort toward reducing industrial energy intensity in the state.

Primary Investigator

Energy Office, Michigan Department of Labor and Economic Growth, Lansing, MI

Project Partners

DTE Energy, Detroit, MI Renewable Energy Systems, Ann Arbor, MI Shepherd Advisors, Lansing, MI University of Michigan College of Engineering, Ann Arbor, MI Western Michigan University, Kalamazoo, MI

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 adiverse portfolio of energy technologies

For Additional Information

Please contact: Roger Doherty Energy Office, Michigan Department of Labor and Economic Growth P.O. Box 30221 611 W. Ottawa Lansing, MI 48909 Phone: 517-241-6224 Fax: 517-241-9822 E-mail: dohertyr1@michigan.gov