## ADVANCED MANUFACTURING OFFICE

# Ohio Center for Industrial Energy Efficiency

Ohio is home to energy intensive industrial manufacturing sectors, such as steel, metal casting, glass, and forging. The state represents 6% of the nation's manufacturing output, with industrial energy usage ranking fourth in the nation at approximately 1,375 trillion Btu. Energy Industries of Ohio and the Ohio Energy Office, as well as their project partners, have established the Ohio Center for Industrial Energy Efficiency (the Center) to inform industrial facilities about U.S. Department of Energy (DOE) Advanced Manufacturing Office (AMO) Save Energy Now industrial energy efficiency resources. The Center has adopted AMO's goal to reduce industrial energy intensity in the state 2.5% each year of the three-year project period, or 7.5% overall. To meet this objective, the project will provide industrial companies with energy assessments; implementation assistance; energy management training; outreach and marketing services; and technology development, demonstration, and commercialization.

The project is establishing partnerships among DOE, state and local government, universities, end users, and utilities to reduce industrial energy intensity. The Center seeks to integrate the project into Ohio's state industrial efficiency program to enable continued operation after the three-year federal funding period.

### **Progress and Milestones**

Activity Description	Goal	Completed to Date
Assessments (All Types)	19	32
Identified Energy Savings (Trillion Btu)	-	1.47
Implemented Energy Savings (Trillion Btu) *	-	0.309
Trainings	3	3
Individuals Trained	-	94
Pilots / Demonstrations		3
Plants Impacted	-	35

<sup>\*</sup> Includes projects that are in progress and completed.

(As of June 2011)

Efforts to establish the Center have met or exceeded all milestones. An active Advisory Committee has been established and regularly holds meetings. The Advisory Committee also has conducted two recognition events for companies that received Energy Saver and Energy Champion awards from AMO in the past. The three-phase assessment program has successfully



#### **Project Description**

Funding Amount: \$891,546

Funding Source: American Recovery and

Reinvestment Act

Program Period: 9/30/2010 to 12/31/2013



#### **Project Success Highlights**

- Development of an Advisory Committee that holds regular quarterly meetings.
- Completed 12 Phase I and six Phase II assessments, as well as four energy savings assessments. Six companies have submitted assistance applications for Phase III implementation projects.
- Conducted two recognition events for Energy Savers and Energy Champions—one in 2009 and one in 2010. Approximately 300 attendees were present at each event.
- Delivered three AMO BestPractices trainings to 100 participants.

#### **Primary Investigators**

Energy Industries of Ohio, Independence, OH Ohio Energy Office, Columbus, OH

#### **Project Partners**

Air Power USA, Pickerington, OH

American Electric Power Co., Columbus, OH

Case Western Reserve University, Center for Melting Efficiency and

Thermal Technology, Cleveland, OH

Duke Energy, Cincinnati, OH

Energy Information Systems, Dayton, OH

First Energy, Akron, OH

JCC Energy-Solutions, LLC, Akron, OH

University of Dayton, Industrial Assessment Center, Columbus, OH

Columbia Gas of Ohio, Middleberg Heights, OH

Dominion East Ohio, Cleveland, OH

Ohio Cast Metals Association, Columbus, OH

Ohio Manufacturer's Association, Columbus, OH

completed 15 Phase I assessments, six Phase II assessments, and four energy savings assessments—two on the Process Heating Assessment and Survey Tool (PHAST), one on steam systems, and one on compressed air systems.

In addition, assistance was provided to six companies that completed Phase I and Phase II assessments and prepared applications for Phase III implementation support from the State of Ohio. These applications total more than \$5.4 million in energy efficient investments (more than \$2.2 million in state support) that are projected to save in excess of 348,000 million Btu per year. Each of these projects has been funded and is in progress.

The program held two recognition events in conjunction with the Ohio Energy Management Conference in February 2010 and February 2011. During these events, 16 Energy Savers and Energy Champions (an AMO award distinction) were recognized, and approximately 300 attendees were present at each event.

Three AMO BestPractices trainings have been conducted—one each on Pump Systems, Compressed Air Systems, and PHAST. There were a total of 100 attendees that attended training sessions.

#### For Additional Information:

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#### **Benefits**

- Projected energy savings totaling 5.4 trillion Btu per year at the end of the three-year project period.
- Anticipated emissions reduction of approximately 300,000 tons of carbon dioxide per year at the end of the three-year project period.
- Increased energy efficiency educational opportunities through training sessions and outreach services.

#### **Applications in Our Nation's Industry**

This project will establish partnerships among DOE, state and local governments, universities, end users, and utilities to reduce industrial energy intensity in Ohio and provide industrial companies with energy assessments; implementation assistance; energy management training; outreach and marketing services; and technology development, demonstration, and commercialization.

#### 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.

