

## Save Energy Now Indiana

In 2008, Indiana ranked fifth in the nation for industrial energy consumption at 1,302.1 trillion Btu, according to the Energy Information Administration of the U.S. Department of Energy (DOE). Because the industrial sector consumes approximately 45% of the total energy in Indiana, it therefore has the greatest opportunity for improvement. The Indiana team—which consists of academia, utilities, industrial manufacturers, and the state energy office—is implementing a multifaceted approach to lower industrial energy consumption by 36 trillion Btu at the end of the project period (a 7.5% overall reduction in industrial energy intensity). This approach consists of working with manufactures to identify energy saving opportunities, providing training on tools to help analyze system specific opportunities, and utilizing technology demonstrations to educate companies about technologies available to reduce energy consumption. In addition, the team is piloting the new ISO 50001 Energy Management Standard and the DOE Superior Energy Performance (SEP) manufacturing facility performance program. The team has designed a public outreach effort that will recruit Indiana manufactures into the program, as well as disseminate the program's results.

To accomplish its goals, the Indiana team has put in place a plan to perform public outreach; organize trainings; host workshops; conduct energy assessments, technology demonstrations, and commercialization; and pilot American National Standards Institute (ANSI) standards for plant certification.

As part of its training plan, the team established the Industrial Energy Efficiency Practitioner (IEEP) worker certificate program, which is a full engagement model that teaches workers how to identify, quantify, justify, and implement cost savings projects. The IEEP requires a company to develop a team of project champions who learn how to conduct their own energy savings opportunity assessments, perform root cause analyses, make business cases, and document implementation.

The team has also developed a project to improve the commercialization of industrial energy efficiency technologies among local vendors and manufacturers. To accomplish this, the program has partnered with many of Purdue University's technology centers and Purdue Research Park—the University's commercialization affiliate—to develop a new pathway to faster commercialization for newly developed technologies with the potential to save energy in manufacturing.

<sup>1</sup>U.S. Energy Information Administration. 2009. Indiana State Profile Consumption Data: <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=IN#Consumption>. Accessed June 15, 2011



### Project Description

**Funding Amount:** \$900,000

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

**Program Period:** 11/1/2009 to 10/31/2012

### Project Success Highlights

- Exceeded year one goals for number of assessments conducted and number of training events held.
- Identified 842,000 million Btu in energy savings in year one, leading to implemented energy savings of 78,000 million Btu in year two.

### Primary Investigators

Purdue University Technical Assistance Program, West Lafayette, IN  
Indiana Office of Energy and Defense Development, Indianapolis, IN

### Project Partners

Drug Plastics and Gas Company, Inc., Oxford, IN  
Duke Energy, Charlotte, NC  
Haynes International, Inc., Kokomo, IN  
Hoosier Energy REC, Inc., Bloomington, IN  
Indiana Industrial Energy Consumers, Inc., Indianapolis, IN  
Indiana Manufacturing Extension Partnership, West Lafayette, IN  
Indiana Michigan Power, Fort Wayne, IN  
Indiana Municipal Power Agency, Carmel, IN  
Indiana University-Purdue University, Indianapolis, IN  
Indianapolis Power and Light Company, Indianapolis, IN  
National Association of Power Engineers- Indianapolis Chapter # 4, Indianapolis, IN  
Peerless Pump Company, Indianapolis, IN  
Purdue University Discovery Park Energy Center, West Lafayette, IN  
Purdue University Technical Assistance Program, West Lafayette, IN  
Purdue University Technology Centers, West Lafayette, IN  
University of Dayton, Industrial Assessment Center, Dayton, OH  
University of Illinois at Chicago, Energy Resource Center, Chicago, IL  
University of Illinois at Chicago, Regional Application Center, Chicago, IL  
Wabash Valley Power Association, Indianapolis, IN

## Progress and Milestones

Activity Description	Goal	Completed to Date
Assessments	42	18
Identified Energy Savings (Trillion Btu)	7.78	1.217
Implemented Energy Savings (Trillion Btu)	3.6	0.304
Trainings	75	42
Individuals Trained	2,000	638
ISO 50001 Demonstrations	2	2
Plants Impacted	500	342

(As of June 2011)

The Indiana team is making strong progress against its year one goals. The team has completed 12 energy surveys in year one and an additional six in the first half of 2011, bringing the total number of assessments to 18 for the project period to date.

The team has also exceeded its goals for trainings in the first year. Through publicly held workshops, the program has reached a significant number of Indiana’s industrial companies and workforce. In support of these efforts, the team held the following events in the first quarter of 2011:

### Events: First Quarter 2011

Workshop	Quantity to Date	Number of Companies Engaged	Number of Workers Attending
Motor Systems*	1	13	20
Fan Systems (FSAT)*	1	10	14
Pumping Systems (PSAT)*	1	15	30
PSAT Qualified Specialist*	1	11	14
Compressed Air Fundamentals*	5	69	125
Process Heating (PHAST)*	1	10	16
Green Manufacturing	18	69	133
Other Purdue TAP EES Workshops	7	142	182
	35	260	534

\* BestPractices™ workshops

### Benefits

- Decrease industrial energy intensity in Indiana by a minimum of 7.5% during the project period.
- Reduce the state’s carbon emissions by 496,000 tons during the project period.
- Develop a center of excellence for Indiana manufacturers to help identify and implement energy efficiency measures.

### Applications in Our Nation’s Industry

This project will expand a partnership among academia, state offices, and utilities that will continue to help reduce the energy intensity of industrial manufacturers in Indiana. The industrial energy efficiency project will reduce industrial energy intensity and its associated carbon emissions throughout the state.

### 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 team is engaged with two Indiana manufacturers piloting the new ISO 50001 Energy Management Standard and the SEP manufacturing facility performance program. Upon completion of the demonstration projects in late 2011, the team will launch the program statewide.

### For Additional Information:

**Molly Whitehead**  
 Grant Specialist  
 Indiana Office of Energy Development  
 One North Capitol, Suite 700  
 Indianapolis, IN 46204  
 Phone: 317-233-0541  
 Fax: 317-232-8995  
 E-mail: [mwhitehead@oed.in.gov](mailto:mwhitehead@oed.in.gov)