

## Purdue TAP EES Program 2008 Year End Report and Update

As we begin 2009 and finish the paperwork for 2008, it seems like a good time to reflect on the past year and give all of our program partners and supporters an update on the success of energy efficiency and sustainability program.

As you will see in the numbers below, the scope of the program expanded several fold over 2007. With the rollout and piloting of the Energy Efficiency Practitioner program in the North-Central Indiana WIRED Region (Workforce Innovation in Regional Economic Development), Energy Efficiency Services (EES) began assisting companies on a wholesale basis. We also invested in our staff and resources: EES now has two Certified Energy Managers on staff and has acquired sufficient equipment to conduct plant energy analyses.

### Program Organization

EES is housed within the Purdue TAP Indiana Manufacturing Extension Partnership (MEP) Center. The Center is part of the National Institute of Standards and Technology Manufacturing Extension Partnership Center (NIST MEP) program that provides lean manufacturing training and implementation services statewide. Though the Center and the greater TAP organization, we have access to all things Purdue and NIST.



We had four major initiatives this past year.

- ❑ Our on-going statewide effort to provide awareness and training activities that includes workshops, energy savings opportunity surveys, and technical assistance
- ❑ The Industrial Assessment Initiative: we received a grant from the US DOE to begin the transition of the currently federally organized Save Energy Now – Energy Savings Assessments (ESA) program to a state implemented program (more on this exciting new initiative later)
- ❑ WIRED Energy Efficiency: piloting of the Industrial Energy Efficiency Practitioner (***Practitioner***) program in 14 north-central Indiana counties
- ❑ WIRED Green Workforce Certificate program: piloting a new program in that provides workers with awareness and training in sustainable business practices



Jon Guenin our Industrial Energy Efficiency Specialist concentrated on the WIRED programs while I focused on the statewide efforts. We have also used several contractors to provide instruction at workshops, analysis in energy audits, and expertise in developing new training material development.

A great deal of our time was spent helping companies save energy cost through the **Practitioner** program. This program is designed to create a team of energy efficiency champions within a company. Rather than perform an energy audit, we teach the team to conduct one themselves. Ultimately, the team has the tools to identify and quantify an opportunity and then make the business case to invest in a solution.

22 companies in the WIRED region participated in the piloting of this program. The results are very impressive. With nine companies reporting:

- ❑ \$1,258,770 energy cost saved
- ❑ 8,133,677 kWh reduction
- ❑ 107,677 MMBtu reduction
- ❑ 8.5 % average reduction in energy intensity

The Practitioner program is now available statewide and can be packaged with other cost-reducing services from Purdue TAP such as LEAN and Green.

### **Program Funding**

The program transitioned from a single funding source, the U.S. Department of Energy (DOE) Industrial Technology Program (ITP), to a program funded through several sources. We continue to receive funding and support from the Indiana Office of Energy Development (OED), Indiana's state energy office and embassy for US DOE programs. Funding received as a sub-grantee of the North-Central WIRED program comes from the U.S. Department of Labor; support for the Green Supplier Network (GSN) program comes from the U.S. Environmental Protection Agency (US EPA) and the U.S. Department of Commerce NIST MEP. ***That's four federal agencies we are leveraging!***



We have also expanded our provision of services under a cost-recovery formula that allows us to provide public workshops and on-site training.

And of course we could not have organized so many workshops this year without the support of so many hosting and sponsoring organizations - an extra "Thank You!" to the following organizations for their support in 2008:

- ❑ Citizens Gas
- ❑ Energy USA
- ❑ Hoosier Energy REC
- ❑ Indiana-Michigan Power
- ❑ Indiana Municipal Power Authority
- ❑ Indianapolis Power & Light Company
- ❑ Indiana WIRED
- ❑ Inventrek Center

- ❑ Jay County REMC
- ❑ Subaru of Indiana Automotive (SIA)
- ❑ Sullair Corporation
- ❑ TipMont REMC
- ❑ Wabash Valley Power Association
- ❑ White County REMC

All told, the in-kind and cash contributions to our 2008 Workshop Series exceeded \$89,225!

### **Accomplishments and Impact**

32 workshops  
 18 presentations  
 492 workers trained  
 606 workers engaged  
 312 companies engaged  
 16 opportunity surveys  
 3 energy audits  
 Over \$5 million in potential energy cost savings identified



### **Program Partners**

In addition to the utilities and businesses that sponsored our workshops and that are listed above, I'd also like to thank the following organization for their support of our program in 2008:

- ❑ ArcelorMittal Steel USA
- ❑ American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), Fort Wayne Chapter
- ❑ B&B Air
- ❑ Indiana Chamber
- ❑ Indiana Industrial Energy Consumers, Inc. (INDIEC)
- ❑ Indiana Office of Energy & Defense Development (OED)
- ❑ Indiana Office of Utility Consumer Counselor
- ❑ Indiana Society of Healthcare Engineers (ISHE)
- ❑ Indiana WIRED
- ❑ National Association of Power Engineers, Indianapolis Chapter
- ❑ Productive Energy Solutions, LLC.
- ❑ Society of Manufacturing Engineers (SME)
- ❑ Southwestern Indiana Business Roundtable
- ❑ Wisconsin Energy Conservation Corp.

There have been many, many more companies and organizations that have participated and assisted our program that I'm sure I've omitted. Again, thank you to all.

## **Plans for 2009**

Last October, in support of the Indiana Energy Development Office, we responded to a solicitation from the US DOE for funding in fiscal years 2010-2012. Should our proposal be accepted, our program will grow to provide a larger portfolio of energy assessment options, public workshops, onsite training, and implementation assistance. We will also expand our awareness efforts through organized demonstrations of emerging technologies and piloting of new sustainable business standards being developed by ANSI and ISO.

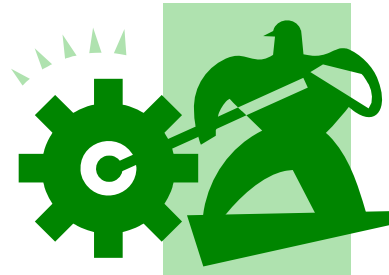
### **I would like to thank the many organizations that are supporting this application:**

Aleris International, Citizens Gas, Drug Plastics, Energy USA, Hoosier Energy REC, HP Alloys, Indiana Industrial Energy Consumers, Inc., Indiana Michigan Power, Indiana Municipal Power Association, Indiana Office of Energy Development, Indianapolis Power & Light Company, Peerless Pumps, Purdue Applied Energy Laboratory, Purdue Energy Center, Purdue Research Park, Richard G. Lugar Center for Renewable Energy, The Tech Group, University of Dayton Industrial Assessment Center, University of Illinois at Chicago Energy Resource Center, and Wabash Valley Power Association

These companies and organizations have pledged **\$94,900 of in-kind and \$48,000 cash cost share support** of our proposal!

We are also diving headfirst into “Green Workforce”. We started on this journey last January with several faculty members beginning the development of a program for the WIRED region. The development of the Green Workforce Generalist training module was finished in December. This one-day interactive workshop teaches the many concepts of “green” through a participatory simulation. We will be piloting this program in the WIRED region and throughout the state in 2009.

Development of the Green Workforce Specialist began in earnest in the fourth quarter and will be completed mid-year 2009 with final SME testing in December. Much like the Energy Efficiency Practitioner program, the Green Workforce Specialist is intended to create a team of champions within a company that have the knowledge and skills to identify projects and propose solutions. As with all of our programs, the emphasis is on implementation. TAP is measured by all of its stakeholders on the economic impact it makes on the State of Indiana. As you can see, in 2008, EES continues to fulfill that mission.



A couple of closing thoughts – our staff didn't save any energy or money listed above. It is the people we engage that truly make the difference. They step up and take on additional challenges when already overwhelmed by day-to-day demands. Our appreciation and thanks to them for making the extra efforts and participating in our program. Second: we could not have the statewide reach with only a couple of people. We have a great support staff within TAP and especially within the Indiana MEP Center. It is a wonderful thing to work with so many dedicated and thoughtful people every day.

Thank you again for your continued support of TAP Energy Efficiency Services. Please feel free to contact me with any questions or suggestions. We look forward to working with all of you in the weeks and months ahead.

Best regards,

**Ethan Rogers**

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