

# **Group Blazes the Trail to Achieving Energy Efficiency**

## **Texas pilot study may lead to plant certification program**

Back in 2001, energy managers from refineries, chemical plants and corporations in the Houston area came together with the help of the U.S. Department of Energy (DOE), the State of Texas, and the University of Texas to form a group dedicated to promoting plant energy efficiency. That group, called Texas Industries of the Future (TIOF), had, as its first objective, to plan an Energy Showcase, featuring plants that conducted site-wide energy efficiency projects. The 2002 Texas Showcase was supported mainly by the DOE and Texas in a joint effort to jumpstart the energy efficiency project.

After the Showcase, the energy managers stayed together with the help of Kathey Ferland, the TIOF project manager who represented the University of Texas through the Center for Energy and Environmental Resources. Ferland kept the group active by organizing energy workshops open to all plant and corporate personnel in Houston. In 2006, TIOF had its second Showcase featuring projects started by the plants themselves.

Even with their local success, the energy managers thought that more could be done on a national level if there was more recognition, both publicly and throughout their own companies, for having a plant become more efficient. TIOF thought a plant certification program initiated by industry and supported by state and federal agencies with help from the universities could put energy efficiency on equal terms with renewable energy and planned mandatory carbon-reduction projects. The message was simple. Plants deserve credit for being the most efficient or implementing projects that significantly decrease inefficiencies. Reducing greenhouse gases by improving efficiency should be considered the same as reducing greenhouse gases by installing windmills.

The program was modeled after the successful OSHA Voluntary Protection Program (VPP). The idea is that a set of standards and best practices could be created as a guideline for plants. The plants would administer the guidelines and if they can implement a certain percentage of energy best practices and show energy reduction or prove they're in the top tier of their industry in energy efficiency, then they would be certified as an energy efficient plant. The certification program would allow all industries to have standards through which a corporation can benchmark its plants against those in its industry. A certification program can be used as an argument to why mandatory greenhouse gas programs or mandatory carbon reduction programs wouldn't be needed. More importantly, the program would provide the framework to document industry efforts to reduce energy use, which is normally difficult when companies are growing. By having its plants certified, a corporation could show it's at the leading edge in energy technology and would have a competitive edge in an environment of ever-increasing energy prices. Because certification must be renewed every several years, energy changes would become sustainable and losing energy certification would negatively impact corporate image.

When the group first approached the DOE Office of Industrial Technology about the idea, the response was only lukewarm. At the time, the DOE had started a very successful Save Energy Now program (for a recent success in that program, see

[www.ChemicalProcessing.com/articles/2008/111.html](http://www.ChemicalProcessing.com/articles/2008/111.html)) and its limited resources were being used to make that program successful. TIOF went to the State of Texas and received a favorable reception. Texas agreed to pilot a certification program that would allow plants to become certified in the state.

With Texas' backing, the group again approached the DOE and received a more favorable response. In the spring of 2007, the DOE gathered industrial energy managers, including those from the food, automotive, metal and paper industries, to hear about the Texas Pilot Program. Those managers were very skeptical but enthusiastic about the program being industrial-based. The program was named Superior Energy Performance (SEP). Georgia Tech joined the effort along with the American Society of Mechanical Engineers, Environmental Protection Agency Energy Star, U.S. Department of Commerce Manufacturing Extension Partnership, and the American National Standards Institute to help plan standards and guidelines. Compressed air, steam, fired heaters and pumping were the areas chosen for the pilot standards. Industrial managers and government consultants formed committees to discuss how each standard should be written. As of September 2008, the first drafts have been written and will be used on five plants in the Houston area.

The effort of TIOF, Texas, the DOE, and numerous organizations and energy managers from around the country to start this program has been tremendous. You can find more information on how you and your plant can participate at

[www.superiorenergyperformance.net](http://www.superiorenergyperformance.net) and [texasiof.ces.utexas.edu](http://texasiof.ces.utexas.edu).

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