

Institute for Sustainable Energy
at
Eastern Connecticut State University
2009 Projects

K-12 School Building Operators Training

In 2008, the Institute for Sustainable Energy (ISE) developed and launched an operations and maintenance training program for facility maintenance and management personnel in seven K-12 public school systems and in partnership with the Connecticut School Building and Grounds Association leadership group. ISE utilizes a whole building, all fuels approach and an integrated portfolio of programs and funding sources for implementing the K – 12 School Building Operations Training. ISE engaged school maintenance personnel in multiple energy related topics, including; energy and cost management, energy auditing, improvements to lighting, building envelope, HVAC, building automation systems, adding distributed generation and renewable energy and utilizing high performance building standards. In 2009, the effort will be expanded to offer two more sessions engaging 8 to 10 school systems. Also, energy savings attained from the 2008 program will be assessed in fall 2009.

Building Code Training

This annual program is designed to leverage the professional training and energy expertise of ISE in a manner which both assists in enforcing changes made in the codes and complements the Companies' marketing of CEEF and CCEF programs. This is a joint cooperative effort of ISE with: Department of Safety – Training Division, Office of the State Building Inspector, CL&P and UI and NEEP to provide a training program which increases awareness, knowledge and enforcement of the energy related components and the Connecticut Energy Code including provisions of the 2006 International Energy Conservation Code (IECC) and ASHREA 90.1 - 2004. In 2009, 4 to 6 sessions will be held with special emphasis placed on utilizing computer compliance software and enforcing new High Performance Building Standards.

www.CTEnergyInfo.com and 1 877 WISE USE

The DPUC and ISE work in collaboration to assist customers seeking information on specific energy efficiency programs and initiatives and general energy topics. Utilizing the www.ctenergyinfo.com website to identify the sources of information to respond to requests, the website directs them to the appropriate program or resource, including low income energy assistance programs and resources. Over 8,000 residents log on to the site each month. The website is also utilized as a research source for generating and answering calls to the 1-877-WISE USE hotline when calls are directed to ISE.

Connecticut Energy Education

ISE is engaged in the statewide implementation of the High School Energy Efficiency Curriculum. During the past two years ISE, with the help of our stake holder advisory group, has researched, developed , and launched the www.ctenergyeducation.com website to communicate with and deliver quality energy education materials to high school students and teachers throughout Connecticut. This program will continue to expand its teaching resource material offerings and reach out to Connecticut science teachers through regional workshops and science teacher events. **Keep Connecticut Cool!** formally “Cool It! The Climate Change Challenge,” is starting its third year with ISE serving as the program administrator. All grade 5-12 students in Connecticut are eligible to participate in this program designed to engage groups of students in activities that stimulate interest in climate science and create local solutions to the problem of climate change. Projects can include; saving energy, recycling, using renewable energy, and more. There are no fees to participate in **Keep Connecticut Cool!** Cash prizes will be awarded in late May to the teams who create the best solutions.

Assistance to the CT Technical High School System

ISE is facilitating an initiative with the administration and faculty of the Connecticut's Technical High School System to identify opportunities to revise the systems curriculum to prepare students for future "Green Collar Jobs" in energy efficiency and renewable energy. The program is revising the programs offered in: Carpentry, HVAC, Plumbing and Heating, Electronic and Architectural Drawing. It is also working with the faculty in Automotives to include alternative fuel vehicle instruction. Professional Development for faculty is already underway and programs enhancements will begin to go into effect September 2009. Plans for constructing a zero-carbon building by each school are scheduled for 2010.

Green Campus Initiative

This initiative is designed to leverage the "Green Campus" experience and resources developed at the Institute since the 2005 CT Climate Change Action Plan was developed. It guides colleges and universities in a manner which complements the Companies' delivery of energy conservation programs to Connecticut's college campuses. In 2009, ISE has been assisting the CSU campuses develop energy management and greenhouse gas reduction plans required under the Presidents Climate Challenge. ISE is actively working with the Connecticut Community Colleges, Connecticut's seventeen Regional Technical Vocational Schools, UConn Branch Campuses and a number of interested Connecticut's private educational campuses.

High Performance School – Circuit Rider

The CCEF has launched an initiative to encourage local school systems to design and build new schools and renovation to high performance building systems. The project also has a goal of encouraging integrated renewable energy systems in 50% of all new school construction projects. CCEF has selected ISE to serve as the initial point of contact for local school officials in seeking technical and financial assistance in designing HP Schools. ISE has developed a database tracking new school construction activity and provide knowledgeable speakers to present to boards of education, building committees and school officials. During 2009, ISE continues to provide outreach to individual school systems, as well as participate in statewide conference discussing high performance building standards for schools.

Sustainability Model and Green Jobs

ISE plays a key role in developing a Sustainability Model and Plan for the city of Bridgeport. This plan calls for the implementation of energy efficiency improvements to public buildings and housing, creation of green building standards, the installation of renewable energy systems and the training and deployment of 1000 residents in Green Collar Jobs. ISE is a resource to all state agencies and communities in Connecticut on developing training for Green collar Jobs.

Biofuel Outreach Program

ISE supports the development of a biodiesel infrastructure in Connecticut. ISE has completed the development of a website called www.CTBiofuelInfo.org describing the biofuel technology and Connecticut's initiative to promote Biodiesel for transportation and heating fuel. In 2009, ISE will conduct education and outreach workshops to private fleet operators, municipalities, and local boards of education in Connecticut who seek to utilize biodiesel for heating and transportation applications. In addition, ISE is working with producers of yellow grease and producers of biodiesel to direct waste grease feedstock into Connecticut's biodiesel production.