

Center for Sustainable Practices - Summer 2008 Update

Energy Conservation & Renewable Energy

Energy Auditor Training & Certification

The Center for Sustainable Practices, with generous support from the Vermont Office of Economic Opportunity, the Blittersdorf Foundation, the Vermont Community Foundation and the Northfield Savings Bank organized and implemented a 9-day, intensive **Energy Auditor Training course** during July. Eleven individuals participated in the program including seven Sustainable Design and Technology Bachelor's students; two sponsored by the Office of Economic Opportunity; one recent college grad with a goal of making weatherization his career; and a Construction Practices and Management faculty member. The training, provided by experienced professionals from VEIC, prepares participants to earn Building Performance Institute (BPI) certifications as a *Building Analyst*, *Heating Professional* and/or *Envelope Professional*. Most participants are currently employed as **summer interns** in Community Action Council weatherization programs.

Energy Efficiency and Renewable Energy Workforce-Training

Funding obtained by Senator Leahy from the U.S. Department of Labor is providing the Center for Sustainable Practices and Vermont Tech's Technology Extension Division the opportunity to develop and deliver workforce-training programs that help Vermonters conserve energy, save money and move towards renewable energy. Working with various partners, we are developing **weatherization training and certification** modules that will offer certification training in energy efficiency with an eye towards decreasing heating costs and use of fuel oil. We anticipate delivering installer and crew chief certification trainings beginning in January of 2009. We are also considering a **photovoltaic installer's course** to be delivered later in 2009.

Renewable Energy Service Learning

The Center for Sustainable Practices and the Central Vermont Community Action Council are pursuing grant funding to train student interns to install **solar hot air** units in the homes of low-income Vermonters. The units are inexpensive, easy to install, and could save \$500 – 600 of heating oil per year (at last year's prices!).

Anemometer Loan Program

The Anemometer Loan Program helps Vermonters determine whether wind power will work for them. Students, faculty and staff install anemometer towers at residents' properties and provide them with wind feasibility reports based on measurements. All towers installations for 2008 have just been completed. To date, the Anemometer Loan Program has tested 20 sites across Vermont. Early results can be seen at www.vtc.edu/wind.

Energy Education Outreach

In May, grade 6-8 students from the Orange public schools came to the Randolph Center campus for a week of technical activities. Faculty and staff helped students build **solar hot water panels** and test them using pumps powered by photovoltaic panels. This year's solar theme followed last year's building of simple wind turbines. Much fun was had by all!

The **Renewable Energy** and **Green Building** tracks of Vermont Tech's new **Sustainable Design and Technology B.S. Program** support energy-related capstone projects, internships and service learning projects and seeks to educate Vermonters about energy conservation and renewable energy through outreach projects.

Moving to renewable heat and power for the campus

We have conducted a feasibility study that examines heating the Randolph Center campus with **wood chip energy**. We are also working with the Vermont Environmental Consortium, Vermont Sustainable Jobs Fund and the Central Vermont Solid Waste Management District, with funds provided by Senator Leahy through the Department of Energy, to conduct a feasibility study for heating and powering much of the campus with a manure and **biomass methane digester**. The project would also serve as a demonstration project for the state. The study is funded by grants from the Vermont Agency of Agriculture and the U.S. Department of Energy.

CSP is in the final stages of raising funds to purchase a **biomass pellet boiler** that would be used to heat the Red School House (not part of our central heating system). The boiler would also be used by the Biomass Energy Resource Center and students to test mixed pellet fuels made from locally grown grasses and wood.

Diversified Agriculture and Local Foods

Vermont Tech is proposing a new bachelor's of science program in **Diversified Agriculture** that would enroll students in the fall of 2009. This new program builds on the college's long and successful history of practical and hands-on agriculture education and existing programs. The program will embrace all forms of agriculture that are suited to Vermont's unique combination of soils, topography and climate and will seek to bridge the gap between conventional and other forms of farming. Business planning and management will be critical aspects of an education that will include dairy farming, vegetable, fruit and crop production, grass-fed meats, and production of value added agriculture products.

This year, college staff, faculty and students have greatly expanded the size and scope of the Randolph Center campus' **market garden**. This summer, garden produce is being sold to the community via a **Wednesday Night Farmer's Market** held on campus. Local farmers are invited to sell their produce at the market, and volunteer workers are paid in harvest shares. Extra produce will be donated to the local food shelf, and we expect our 2008 contributions to increase significantly.