

Efficiency Maine and the Community College Workforce Development Initiative: TJV as of 10/7/10

Through a grant from the American Recovery and Reinvestment Act (ARRA), four Maine community colleges are implementing energy efficiency and renewable energy workforce development programs. The intent behind these grants is to:

- A. Provide training and education in occupational fields related to energy efficiency and renewable energy.
- B. Support certification in these fields that will link to future career development such as degree programs.
- C. Encourage on-campus “laboratories” that will provide experiential training in energy efficient practices and related technologies.
- D. Tailor programs to proven Maine workforce needs
- E. Encourage collaboration and communication among the community college system in addressing these workforce needs.

Provided below are brief overviews of the four campus programs:

Eastern Maine Community College (EMCC), in partnership with United Technologies Center, the neighboring regional public technical secondary school, and in collaboration with the University of Maine and other institutions within the Maine Community College System, will develop a hands-on academic laboratory program in Building Science, a component of the College’s vision to implement new degree programs that respond to the changing educational and workforce development needs of our community. The proposed laboratory program builds upon existing programs, is vertically aligned with programs at the technical high school and the University of Maine, complements existing programs at other Community Colleges, and is connected to existing workforce training programs. The only full-scale laboratory facility in Maine, for demonstrating building science principles and for training weatherization related skills to College students and workforce training program participants, is proposed.

Kennebec Valley Community College (KVCC) will enhance and expand education and training opportunities for Mainers in energy efficiency and renewable energy management. Grant funds will support the development and implementation of the *Renewable Energy Management (REM)* program component of the College’s Energy Services and Technology Center. The Center will serve the region and the State of Maine as the premiere centralized resource for training and education for energy efficiency and renewable energy technology. KVCC’s goal is to accelerate the development of the sustainable energy industry in Maine by coordinating, enhancing and training a skilled energy efficiency and renewable energy workforce. The Energy Services and Technology Center provides education and training capacity vital to fulfill the goals of the State of Maine’s Comprehensive Energy Plan, 2009-2010, and will:

- Forge strong industry, education and government partnerships with entities that have a stake in energy efficiency, renewable energy technology and the broader “green energy” economy.
- Provide access to a comprehensive, coordinated curriculum which provides a one-stop approach to energy education.
- Provide access to expert customized classroom and distance learning on theory, inventory, evaluation, planning, design, construction, installation and maintenance of renewable energy concepts such as passive solar, solar thermal, biomass/wood, micro-turbines, geothermal, heat pumps and other energy efficient and renewable technologies for residential and commercial applications.
- Train skilled technicians ready to meet the growing workforce demands in the rapidly expanding field of energy efficiency and renewable energy technology.

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- Research and develop energy efficient and renewable energy technologies, products and services in a state-of-the-art training center designed around LEED standards.
- Strengthen and grow Maine's network of companies, education providers, state agencies, industry associations, non-profits and others who are working to build Maine's green economy.

Northern Maine Community College (NMCC) will infuse green energy concepts across its construction and transportation program clusters through a three-pronged approach:

- Revise the current building energy systems curricula across the construction cluster programs of study to include green energy, building methods, energy audits and weatherization of existing structures.
- Strengthen building science, to include renovation of space for a building science laboratory space.
- Purchase equipment to strengthen the College's wind power technology program, the first of its

Northern Maine Community College maintains strong partnerships with institutions among four-year universities such as the University of Maine at Presque Isle, University of Southern Maine, Husson College, and University of Maine at Fort Kent. The college also maintains strong working relationships with the region's CareerCenters (WIA) and Job Corps Center (Loring).

Academic partnerships, including transition agreements with articulated and dual credit, exist between NMCC and the secondary career and technical education schools in Caribou, Presque Isle, St. John Valley in Frenchville, Houlton, Van Buren, Region III in Lincoln, and the United Technologies Center in Bangor. Building on these strong existing partnerships, NMCC will work with all five centers in Aroostook County, as well as centers with energy career opportunities around the state, for green energy capacity building activities. In concert with the College, the secondary centers will support career exploration activities which will help CTE students understand the viability of this industry sector.

Similarly, the College will use this project to serve the needs of learners within the community, whether that is re-training after a job loss, initial training after graduation from high school, or specific content training enabling a worker to upgrade his traditional knowledge and skills with new green knowledge and strategies.

Southern Maine Community College (SMCC) will establish the Sustainability and Energy Alternatives Center and Program, an education and workforce training effort dedicated to interdisciplinary learning in building science and clean energy technology. The Program will train Maine people across program trades in the theory and practice of building science, energy efficiency, weatherization and renewable energy. The Program is designed to prepare Maine people to help create and fill the jobs in Maine's new energy economy and incorporates the highest standards of learning and a strong emphasis on work ready credentials and nationally recognized certifications. SMCC will also:

Establish the Sustainability and Energy Alternatives Center (SEA)

SMCC will renovate an existing building and establish the SEA Center. The Sea Center will be equipped with a pressurized house and building science and renewable energy equipment. The Center will: 1) Offer high-quality, hands-on building science and sustainable energy education programs, 2) Provide up-to-date continuing education programs for existing workers along career pathways that lead to state and national certifications in energy efficiency and sustainable

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technology, and 3) Build demand for energy efficient services by providing ongoing public education programs, including seminars on state and federal incentives. Center staff will coordinate trainings, seminars and open houses and partnerships with other training organizations.

Establish a Sustainability Advisory Board of Practitioners and Educators

SMCC will create a permanent advisory board including but not limited to current clean energy practitioners and employers, education and training partners, community-based organizations and SMCC faculty and staff. The Sustainability Advisory Board will guide the development of the Program, continue to align trainings with recognized certifications and keep the Program adaptive and responsive to workforce needs.