

Northeast Solar Heating and Cooling Instructor Training Project at Kennebec Valley Community College



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Project

- **Develop and deliver** a nationally accepted SHC train-the-trainer program designed around industry standards. Participants will be eligible to pursue NABCEP certification.
- **Training activities will target** instructors from technical high schools, community colleges, baccalaureate programs, trade associations, union apprenticeship programs, and other private industry training programs in: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont (Northeast).
- **Instructors will be drawn from:** plumbing, heating, HVAC, engineering technology, environmental technology and other building-related programs.
- **Training will be delivered through** a variety of methods including classroom, laboratory, polycom and “on the road” via KVCC’s mobile solar energy systems training unit.

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Phase I: January 2010 – June 2011

- **Needs Assessment/Expanded Territory**
- **Facility Renovation/Lab Construction** – renovate a former carpentry lab area to house the SHC training lab.
- **Mobile Laboratory** – Procure and establish a mobile solar energy systems training unit to expand the impact of the project and provide access to instructors throughout the Northeast.
- **Hire Faculty** - Conduct an extensive search to hire a qualified faculty member to teach the curriculum for SHC.
- **Advisory Council** - Establish a Program Advisory Council that will provide input to the curriculum development process, market professional development opportunities and identify additional resources for the project.
- **Curriculum Development** - Modify existing curriculum to develop train-the-trainer programs in SHC .
- **Regional Outreach Plan** – After needs assessment, create a four year regional outreach plan which provides training opportunities for instructors on campus at KVCC and through the use of mobile, video conferencing, and online opportunities.
- **Collaboration with the National Consortium**

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Partners

- **Connecticut:** CT Clean Energy, Connecticut Career and Technical High Schools, Connecticut Community College System, Connecticut Association of Plumbing Heating Cooling Contractors, Local 777.
- **Maine:** Efficiency Maine, Maine Community College System, Maine Career and Technical High School System, University of Maine, Associated Builders and Contractors of Maine, Local 716 and 659, Plumbing Heating Cooling Contractors of Maine.
- **Massachusetts:** Massachusetts Regional Vocational Technical High Schools, Massachusetts Community College System, Massachusetts Association of Vocational Administrators, Local 4, 12, 537 and 550, Plumbing Heating and Cooling Contractors of Massachusetts.
- **New Hampshire:** New Hampshire Regional Career and Technical Centers, Community College System of New Hampshire, Local 131, Associated Builders and Contractors of New Hampshire, New Hampshire Plumbing and Mechanical Contractors Association.
- **New York:** SUNY Community College System, NYC Community College System, Boards of Cooperative Educational Services of New York, Locals 1, 7, 13, 21, 22, 73, 112, 267, 373, 773, New York State Association of Plumbing Heating and Cooling Contractors, NYSERDA.
- **Rhode Island:** Rhode Island Career and Technical High Schools, Community College of Rhode Island, Local 51, Rhode Island Plumbing Heating Cooling Contractors Association.
- **Vermont:** Vermont Career and Technical High Schools, Vermont Technical College, Vermont Community College, Renewable Energy Vermont, Efficiency Vermont, Associated Builders and Contractors of Vermont, Local 693.

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Trainees

Instructors will be drawn from the following curriculum areas:

- Plumbing Technology
- Heating Technology
- Plumbing and Heating Technology
- Heating, Ventilation, and Air Conditioning Technology
- Engineering Technology
- Environmental Technology

Training and professional development opportunities include:

Qualified Solar Heating & Cooling Instructor Certificate: Course curriculum is designed around NABCEP Task Analysis and successful completion will provide eligibility for the NABCEP Solar Thermal Installer Exam.

What's New in Solar Energy Systems: short-term, continuing education opportunities on changes in solar technology.

Regional Solar Technology Forums: provide networking opportunities for instructors, employers, economic and workforce development professionals and other stakeholders in the field of solar installation workforce development.

Training Estimate: 700-1,000 instructors during the five year project period, assuming two instructors are trained from each of the 400 providers in the region during the grant period.

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Model Approach

Market Permeation

All instructors who are eligible to take advantage of the training program are provided that opportunity in a manner which is accessible, attainable, affordable, and non-restrictive. This will allow knowledge transfer to be easily absorbed and diffused from a low concentration of the region to a high concentration of the region. To accomplish this, KVCC will:

- 1) provide mobile laboratory training opportunities in various locations throughout the Northeast to increase geographic proximity;**
- 2) subsidize the cost of training for participant affordability; and**
- 3) provide Continuing Education Units (C.E.U.s) that instructors can use towards re-certification/licensure/professional development.**

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Needs and Requests

- Project Approach/Delivery
- Curriculum Models, Standardization, Experience
- Technology Experience , Recommendations, Options
- Course Delivery/Diversity
- ISPQ Accredited Continuing Education Provider Certification Process
- Site Visits

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