Hudson Valley Community College's Workforce Development Institute: The Center for Energy Efficiency and Building Science

Building a Green Collar Workforce for New York's ENERGY STAR® Programs ACEEE Conference March 17, 2010



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Today's Outline

- Provide brief history of funding sources and training development
- Review current course offerings
- Coming attractions





CEEBS Funding Sources

 New York State Energy Research and Development Authority (NYSERDA)

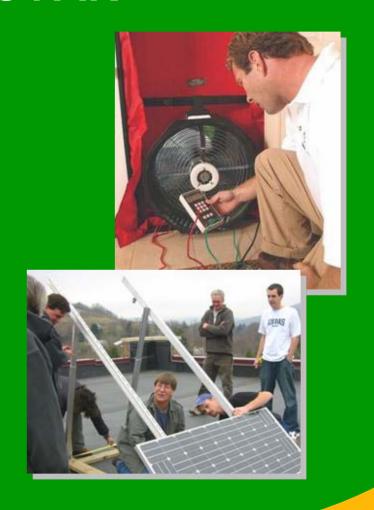
Long Island Power Authority (LIPA)

 US Department of Labor: Community Based Job Training (CBJT) Grant



New York's Home Performance with ENERGY STAR®

- Whole-house approach to energy conservation
- Need market (homeowners)
- Need qualified contractors





Training History

- Conferences and lectures
- 2000: Course development begins
- 2001-2006: OCM BOCES develops building science curriculum
 - Training delivered across state with centrally located training staff
- 2007-Present: Hudson Valley Community College







Hudson Valley Community College 2007-Present

- Creates Center for Energy Efficiency and Building Science (CEEBS)
- Creates Learning Centers across NY State
- Develops new instructors at Learning Centers





CEEBS

12 Current Sites:

- Association for Energy Affordability (NYC)
- Broome Community College (Binghamton)
- Bronx Community College (Bronx)
- Erie Community College (Buffalo)
- Fulton-Montgomery Community College (Johnstown)
- Hudson Valley Community College (Troy)
- Onondaga Community College (Syracuse/MF)
- Onondaga-Cortland-Madison BOCES (Syracuse/SF)
- SUNY Canton (North Country)
- Westchester Community College (Downstate)
- Monroe Community College (Rochester)
- SUNY Ulster (Mid-Hudson Region)





Best Practices Identified Standards Set



Certification of Competency

Curriculum Developed Training Provided



Contractor Training and Accreditation - Build Infrastructure

- 1. Classroom and Field Training
- 2. Testing and Certification
- 3. Financial assistance is available to reduce Contractor's costs of training, certification and accreditation



Building Science Curricula

- Single-family
 - Basics of Building Science*
 - Building Analyst
 - Envelope Professional**
 - Basics of Air Sealing and Insulation*
 - Heating Professional
 - Cooling Professional
 - Home Energy Rating System (HERS) Rater
 - Home Performance Sales & Marketing

- Multifamily
 - MultifamilyBuilding Analyst
 - MultifamilyBuilding Operator
 - Hydronic Heating Design Specialist (pilot)



*Denotes new curriculum
** In revision

Building Performance Training CoursesCertificate Program

Building Analyst – 36 Instructional Hours

A "Whole House" Performance-Based Approach 24 Hours – Classroom Instruction 12 Hours – Field Training

Envelope Professional – 30 Instructional Hours

Advanced Building Envelope Diagnostic, Evaluation, and Upgrade Skills

12 Hours – Classroom Instruction
18 Hours – Field Training

Building Performance Training Courses Certificate Program

Heating Professional – 35 Instructional Hours

Advanced Heating System Diagnostic, Evaluation, and Repair Skills

14 Hours – Classroom Instruction

21 Hours - Field Training

Cooling Professional – 16 Instructional Hours
 Designed for Experienced Heating Contractors.
 This course is also known as Air Conditioning and Heat Pump Specialist



Building Performance Training CoursesCertificate Program

 These courses may be taken individually for BPI Certification or as the entire curriculum towards a College Certificate (In Process for Fall 2010)

 Integration of Building Analyst into High School Construction Technology curricula is in process



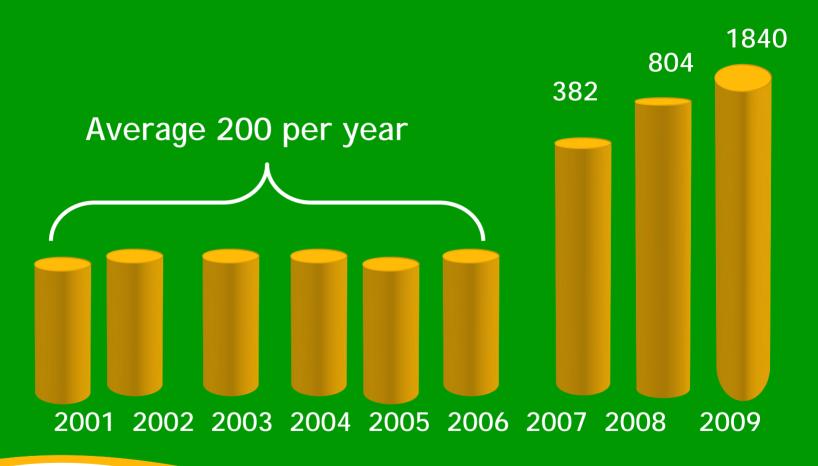
New Building Science Curricula

- Basics of Building Science
 - Offered both online and in classroom format
 - Equivalent to 15 instructional hours
 - Preparatory for Building Analyst training

- Basics of Air Sealing and Insulation
 - Offered in both classroom/field and classroom/lab format
 - Requires basic knowledge of building science



Students Trained Annually





2007-2008-2009 Enrollment

	Number Enrolled	Number Enrolled	Number Enrolled
Course	2007	2008	2009
Building Analyst	217	449	947
Envelope Professional	55	128	495
Heating Professional	39	37	133
Cooling Professional	17	8	67
HERS Rater	11	15	49
Multifamily BA	43	131	126
Sales and Marketing	0	21	0
SPE Heating Professional	0	15	6
Pilot-Basic Air Sealing& Ins			6
Pilot-Building Science-Online			11
Total Enrollment	382	804	1840

Community-Based Job Training Grant

- Awarded \$1.97 million (3 year grant) Feb. 2009
- To Create a Workforce for "Green Economy Jobs"
- Focus is on the Emerging, Underemployed, Unemployed Workers
- Provides for Skills Training in Energy Efficiency
- Results in Industry Certifications and/or Associate Degree
- Grant Outcomes: 3,700 Participants Served
 3,400 Receiving Certificate or Degree

Coming Attractions

- BPI Heating Professional training for HVAC high school programs
- For-credit classes at the postsecondary level
- "Single Point of Entry" certification classes
- Building Science Online Training
- Basic Air Sealing and Insulation Technician training
- Re-entry training (CBJT)
- Additional New Courses (Fall 2010)





Training Information and Schedule

HVCC: (518) 629-4111 ceebs@hvcc.edu
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