AACC SEED Webinar:

Building Quality Workforce Development Programs for Real Energy Efficiency Jobs

September 22nd 2011
AACC’s SEED Initiative

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Building Quality Workforce Development Programs for Real Energy Efficiency Jobs
September 2011
Submitting Questions

- To submit a question, type the question in the **text field** and press your **Enter/Return** key.
  - Please enter the name to whom the question is directed.

- Your name and your question will appear on your screen, indicating successful submission.

- Questions are directly transmitted to presenters—no other participants will see your questions.
Practice: Attendance

In the chat room, please type:

• your name,

• the name of your organization

• your location, and

• the number of people attending with you today.
A coordinated national strategy to support community colleges in building a green and sustainable economy

Supported by the Kresge Foundation
Speakers

• Benjamin Goldstein, U.S. Department of Energy
• Pat Fox, Interstate Renewable Energy Council
• Roger Ebbage, Lane Community College (OR)
Why This Topic

• Many of our colleges are in the residential weatherization and/or energy auditing space now (80+% offer course(s), 50+% offer certificate/degree)*

• Confusing and uncoordinated emergence of credentials

• Significant placement challenges

*of those colleges that identified offering a green-related course or program
Collaboration between DOE and home performance industry

- Combined DOE/Weatherization Assistance Program (WAP) 30-year history with 2,000 industry members involved
  - DOE collected industry knowledge with the understanding that industry best knows the market and how to execute

Consists of three components

1. Guidelines for Quality Work
2. Guidelines for Effective Training
3. Guidelines for Professional Certifications

Critical to DOE efforts to reduce U.S. energy consumption and strengthen the home energy upgrade market
Project goals:
• Certify a highly-skilled workforce
• Build a stable, growing industry

To meet these goals we must:
• Define *work quality* for U.S. home energy upgrades
• *Train workers* what they should know and be capable of doing
• Provide *certifications* that verify worker qualifications and help workers differentiate and market themselves
### Components, Benefits, & Outcomes

#### Guidelines for Home Energy Professionals Project

##### The Components

<table>
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<tr>
<th>Guidelines for Quality Work</th>
<th>Guidelines for Effective Training</th>
<th>Guidelines for Professional Certifications</th>
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<tbody>
<tr>
<td>Defines high-quality work and the outcomes it should achieve</td>
<td>Outlines what workers should know and be capable of after training</td>
<td>Delivers a framework for certifying bodies to verify worker certifications</td>
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##### The Deliverables

| Standard work specifications, produced for public use | Accreditation process for training centers and curriculum | Certifications for home energy professionals |

##### The Benefits

| Industry credibility is enhanced through quality work that delivers durable upgrades with consistent energy savings | Workers, consumers, and employers benefit from strong training that produces highly skilled professionals | Skilled professionals receive credentials that differentiate them in the market and assure consumers and employers |

##### The Outcome

Highly-skilled workforce servicing a growing home energy market
Professional Certifications

Four certifications that enable professionals to move across the field and enhance skills in a customized career path.

Energy Auditor
Installer/Technician
Crew Leader
Quality Assurance Inspector
Accreditation

• Is given to the **training provider**

• Verifies that the training provider and their curricula provide a standard in both its operations as well as facilities

Certification

• Is given to **individual workers**

• Certifies that an individual has the knowledge, skills, and abilities to perform a certain job

• Is issued by an independent, **third-party certification body**
Accredited training providers hold the key for the Guidelines for Home Energy Professionals project.

DOE enlisted Interstate Renewable Energy Council (IREC) to accredit training programs that equip workers with strong skills.

Accreditations deliver consistency and third-party validation across all training providers and curricula.
The National Renewable Energy Laboratory (NREL) issued a competitive solicitation for a certifying body to develop tests and four certifications

- Building Performance Institute (BPI) was selected to expedite delivery

Certifications create nationally-consistent credentials that employers and consumers can trust surrounding professional knowledge and skill

Four certifications are under development:

- Energy Auditor
- Installer/Technical
- Crew Leader
- Quality Assurance Inspector
Professional certifications provide assurance of skills, high-performance work, and energy-saving results

- Each of these reduce call backs and improve profitability for employers

Certified workers have a competitive edge in the market place and are better prepared to deliver high-quality work and customer satisfaction
What’s Next

Guidelines:

• Single Family Standard Work Specifications updated and open for additional comments later this year
• Multifamily Standard Work Specifications open for comments in the coming months

Accreditations

• IREC is accepting applications for training provider accreditations at www.ispqusa.org

Certifications

• Pilot certifications set to roll out in early 2012

Training

• Training providers can begin leveraging tools to develop curricula and gain accreditation
• Sign up for regular project updates: wip.energy.gov/retrofit_guidelines.html
The IREC ISPQ Credentialing Program

Supporting effective workforce development

Pat Fox, Director of Operations
Interstate Renewable Energy Council

September 2011
Who is IREC...

Since 1982, IREC has worked with industry, government, educators, and other stakeholders to ensure that the broader use of renewable energy is possible, safe, affordable and practical.

Easier, more affordable connection to the grid

Best practices for states, municipalities, utilities

Uniform Guidelines & Standards
Current Awardees
- PV
- Solar Thermal
- Small Wind

Letters of Intent
- PV
- Solar Thermal
- Small Wind
- Energy Efficiency/Weatherization
IREC ISPQ Program

OUR GOAL
Quality Training

Application
Assessment
Award
Maintenance
It’s all about quality...

Students: Learn the right skills

Employers: Confidence in hiring

Consumer: Quality work
IREC ISPQ - Value

- Sends a signal to students, employers, and government officials that training standards have been met.

Quality assessment of curriculum

Assurance of program quality and value

NREL: Dennis Schroeder
Six IREC ISPQ Credentials

- Training Program Accreditation
- Continuing Education Accreditation
- Independent Master Trainer Certification
- Affiliated Master Trainer Certification
- Independent Instructor Certification
- Affiliated Instructor Certification
Letter of Intent → Application submission → IREC reviews application for completeness → IREC Nominates Auditor

Desk Audit Report → Iteration → Start Desk Audit → Auditor confirmed

Onsite Audit → Auditor recommendation submitted → Award Committee Review and Decision → Maintenance: Annual Reports
IREC ISPQ International Standard 01022

Workplace Knowledge, Skills and Abilities

Safety, codes, core competencies

Facilities, tools, safe practices
Evidence of Requirements

Policies and Procedures

Linkage with Industry

Management, financial fitness

Resources

Safe practices

Job Descriptions

Task Analysis basis for curriculum or syllabus

Facilities

Examinations

Tools & equipment
Curriculum aligns with Job Task Analysis

- Quality Program
- Qualified Instructors
- Facilities
- Tools & Equipment
- Sound Administration
- Robust Curriculum
Approved JTA’s

- Energy Auditor
- Installer / Technician
- Crew Leader
- Quality Control Inspector
- PV Installer
- Solar Thermal Installer
- PV Technical Sales
- Small Wind Installer
Resources
ASSURING QUALITY FOR RENEWABLE ENERGY & ENERGY EFFICIENCY TRAINING

www.irecusa.org
Pat Fox
patfox@irecusa.org

IREC ISPQ
(518) 621-7379
The Northwest Energy Education Institute

Eugene, Oregon
Why We **All** do this Work!

It is impossible to stress how important improving energy efficiency is and how great an impact it can have on mitigating climate change and reducing our energy bills – now!

It is truly “the first fuel” – the energy source that costs the least to install, has no emissions, is in infinite supply, and can be generated with a flick of a finger – also known as turning (stuff) lights off!

Thomas Friedman : Hot, Flat, and Crowded 2009
Two Separate Paths for NEEI Energy Training:

2-Year AAS Degrees
Lane Community College

Training Opportunities for Professionals
Two-year AAS Degrees
(Associates of Applied Science)

- Energy Management (since 1980)
- Renewable Energy Technology (since 2003 – ISPQ Accredited)
- Water Conservation Technician (since 2008)
- Resource Conservation Management (2009)

Program Student Population has Tripled (from 30 to 90) in the Last Four Years!!
The Interstate Renewable Energy Council is pleased to announce that Lane Community College has been awarded the ISPQ Accreditation credential for their Renewable Energy Technician Program.” July 31, 2007

The Institute for Sustainable Power, Inc. (ISP) is a non-profit organization, incorporated in 1996, to coordinate, develop, and maintain international standards for the evaluation and qualification of renewable energy (RE), energy efficiency (EE), and distributed generation (DG) training providers.
Value of Accreditation:

- Industry Accreditation Lets Our Students Know that Curriculum is in Line w/National Standards.
- Accreditation Allows Our Faculty to Target Nationally Recognized Knowledge, Skills, and Abilities (KSA) when Preparing Course Content.
- Industry Accreditation is an Asset when We Compete for Grants.
Advice to New/Existing Energy Efficiency and Renewable Energy Programs:

Have Your Course Developers Address the Accreditation KSAs when Developing a New Course!

Be Prepared for a Thorough Program Review by the ISPQ Auditors!

• Community Colleges have a Portion of the Accreditation Requirements in Place!

Have YOUR Program Stand Out!
Questions?
New SEED Resources and Upcoming Opportunities

- **New Toolkit**: *Creating an Environment for Growing Green Jobs: Community Colleges Shaping State and Local Energy Policies*

- **Next webinars**: *Rural-based Green Jobs: What’s the Community College Role? (early Nov); Cutting Edge Hybrid Vehicle Training (Nov 30)*

- **Peer-to-peer Workshop**: at AACC’s Workforce Development Institute (Jan 25 2011)

Keep up to date at [www.theseedcenter.org](http://www.theseedcenter.org) (sign up for the newsletter)
Last Chance!

NCCET/NCWE Annual Conference:
Growing the Workforce for a New American Economy—
October 22-25 in St. Louis

http://www.nccet.org/page/NCWENCCET1