

AACC SEED Webinar:

Building Quality Workforce Development Programs for Real Energy Efficiency Jobs

September 22nd 2011





AACC's SEED Initiative



AACC SEED Webinar:
***Building Quality Workforce
Development Programs for Real Energy
Efficiency Jobs***
September 2011

Attendee List (2)

Hosts (1)

- Gary Gonzalez

Presenters (0)

Participants (1)

- Jerry Gonzalez

Chat (Everyone)

Everyone

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

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

- **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**

Guidelines for Home Energy Professionals

U.S. DEPARTMENT OF
ENERGY | Energy Efficiency &
Renewable Energy



Project Overview
September 2011

Project Overview

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

Meeting Project Goals

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

Guidelines for Quality Work

Defines high-quality work and the outcomes it should achieve

Guidelines for Effective Training

Outlines what workers should know and be capable of after training

Guidelines for Professional Certifications

Delivers a framework for certifying bodies to verify worker certifications

The Deliverables

Standard work specifications, produced for public use

Accreditation process for training centers and curriculum

Certifications for home energy professionals

The Benefits

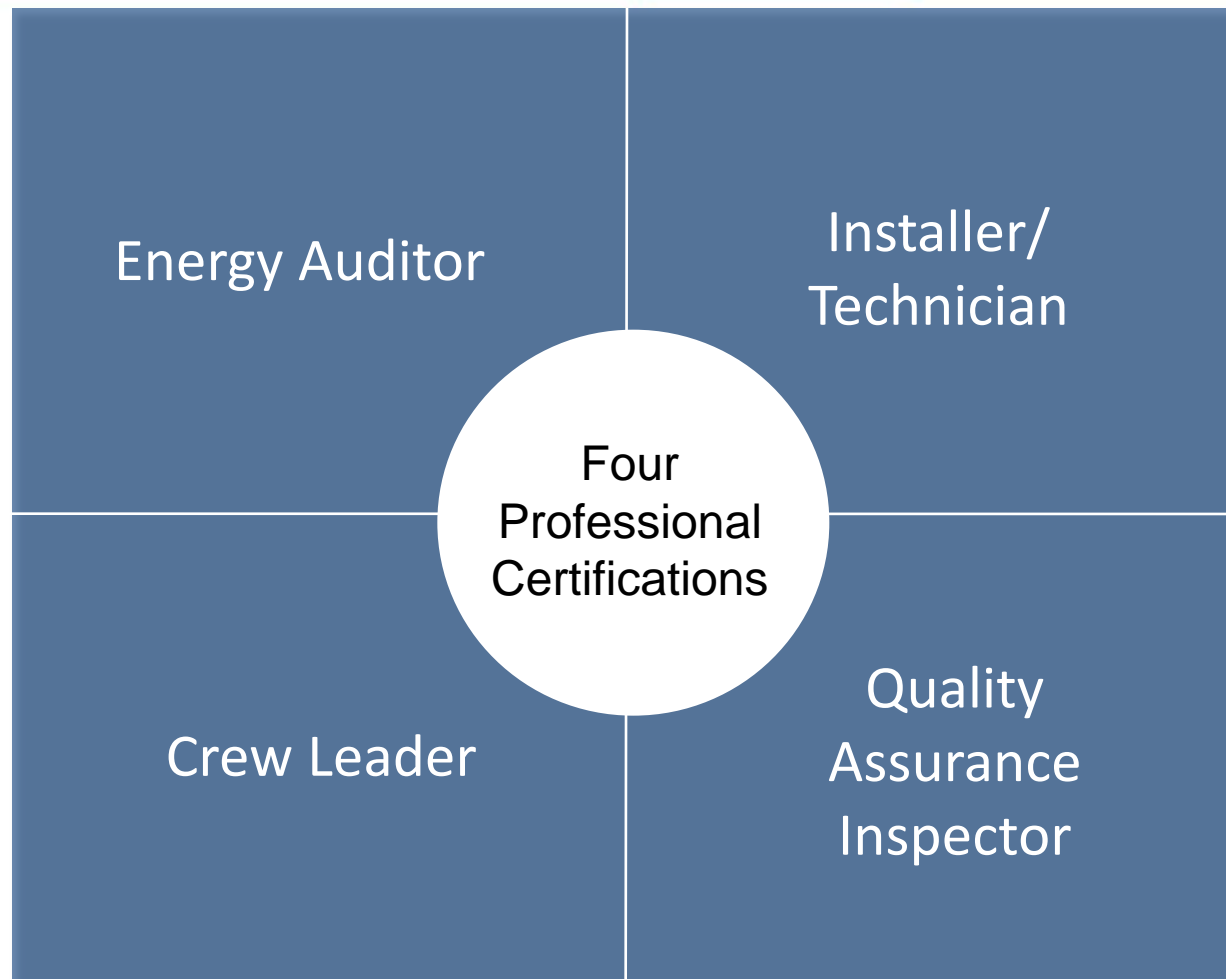
Industry credibility is enhanced through quality work that delivers durable upgrades with consistent energy savings

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



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

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

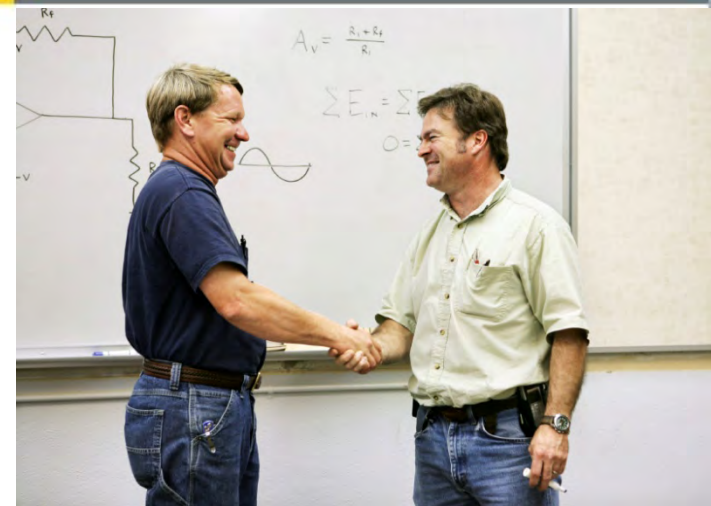
- *Is given to **individual workers***
- *Certifies that an individual has the knowledge, skills, and abilities to perform a certain job*
- *Is issued by an independent, third-party certification body*

Training Accreditation

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



Professional Certifications

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

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



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 IS PQ 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



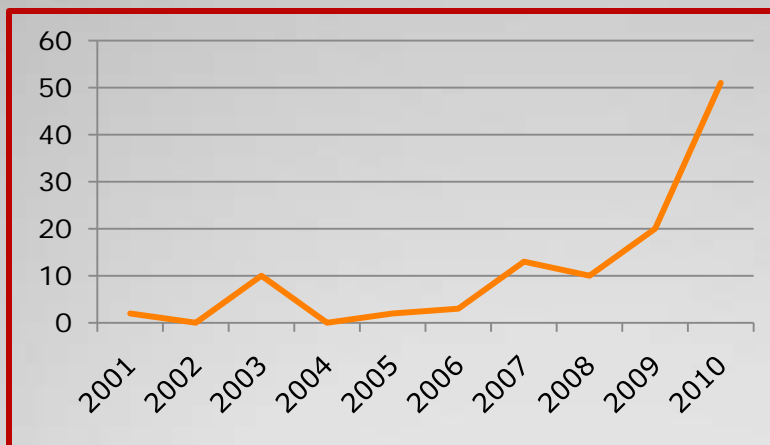
Best practices for states, municipalities, utilities

Uniform Guidelines & Standards



Interstate Renewable Energy Council





Current Awardees

- PV
- Solar Thermal
- Small Wind



Letters of Intent

- PV
- Solar Thermal
- Small Wind
- Energy Efficiency/Weatherization

IREC ISPQ Program



It's all about quality...

Students

Learn the right skills

Employers

Confidence in hiring

Consumer

Quality work

IREC ISPOQ - Value



NREL: Dennis Schroeder

Quality assessment of curriculum

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



Assurance of program quality and value

Six IREC ISPQ Credentials

Training
Program
Accreditation

Continuing
Education
Accreditation

Independent
Master Trainer
Certification

Affiliated
Master Trainer
Certification

Independent
Instructor
Certification

Affiliated
Instructor
Certification



IREC ISPQ International Standard 01022



Evidence of Requirements

Policies and Procedures

Linkage with Industry

Management,
financial fitness

Resources

Safe practices

Task Analysis basis for
curriculum or syllabus

Job Descriptions

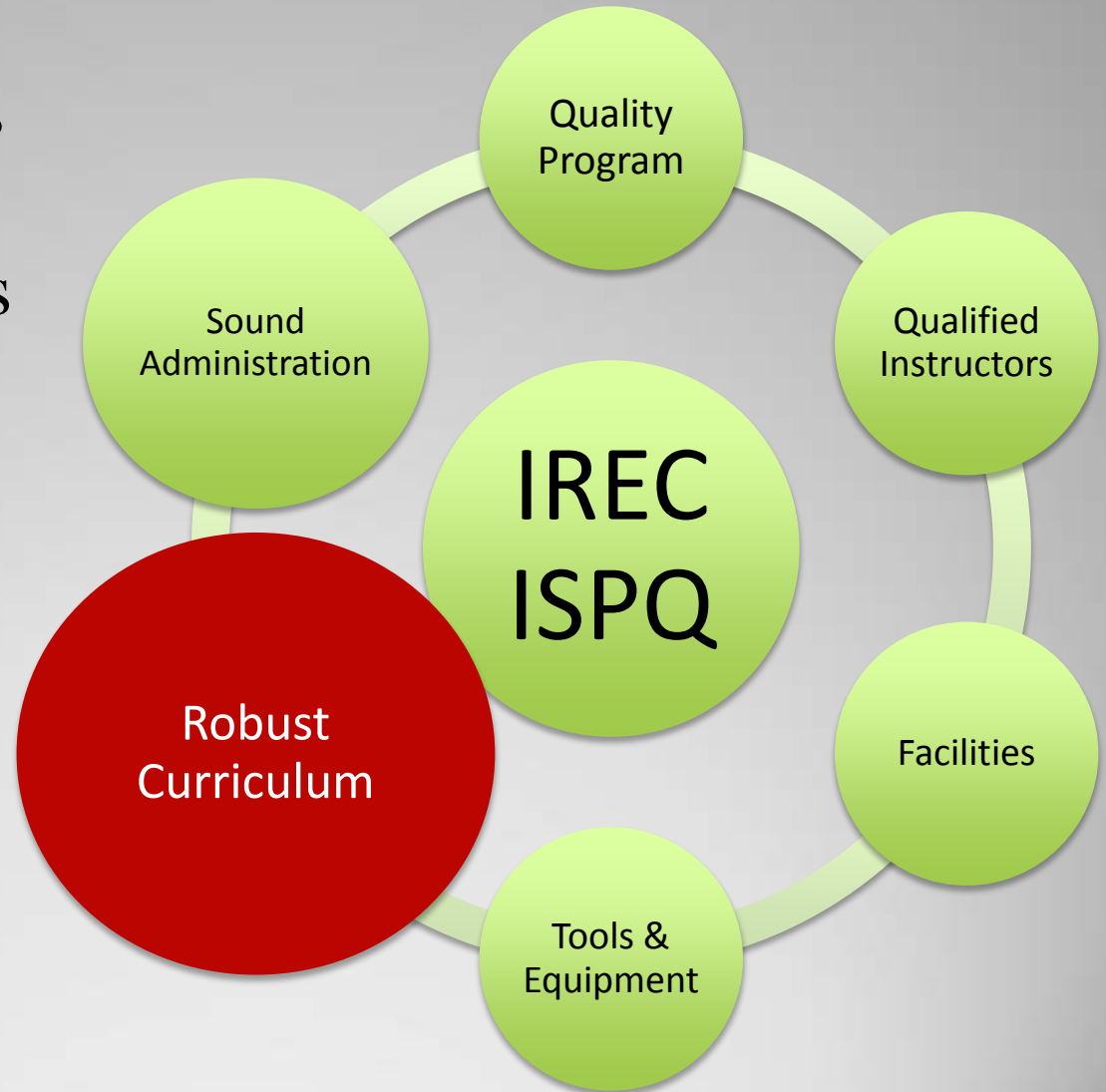
Facilities

Tools & equipment

Examinations



Curriculum aligns
with
Job Task Analysis



Approved JTA's

Energy Auditor

Installer /
Technician

Crew Leader

Quality
Control
Inspector

PV Installer

Solar Thermal
Installer

PV Technical
Sales

Small Wind
Installer

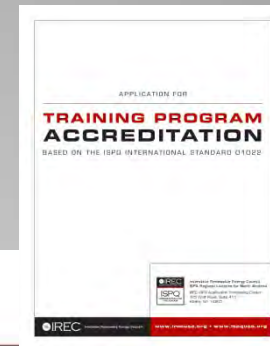
Resources



Interstate Renewable Energy Council



ISPO
CREDENTIALING
PROGRAM



IREC ISPQ AWARDEES



- Pacific Region
- Mountain Region
- Central Region
- Eastern Region
- Online Courses

www.irecusa.org



Interstate Renewable Energy Council



ASSURING QUALITY FOR RENEWABLE ENERGY & ENERGY EFFICIENCY TRAINING



www.irecusa.org

Pat Fox
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IREC ISPO
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Interstate Renewable Energy Council





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



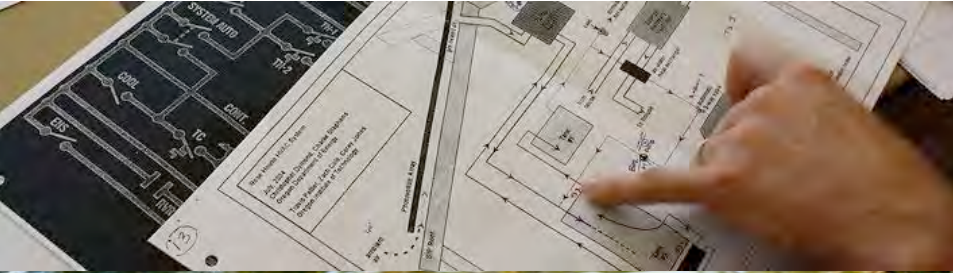
Two Separate Paths for NEEI Energy Training:



2-Year AAS Degrees
Lane Community
College



Training Opportunities
for Professionals



Two-year AAS Degrees

(Associates of Applied Science)

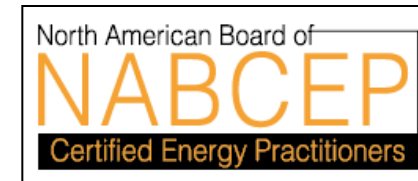
- Energy Management (since 1980)
- Renewable Energy Technology (since 2003 – ISPQ Accredited)
- Water Conservation Technician (since 2008)
- Resource Conservation Management (2009)

Program Student Population has Tripled (from 30 to 90) in the Last Four Years!!

ACCREDITATION



“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!

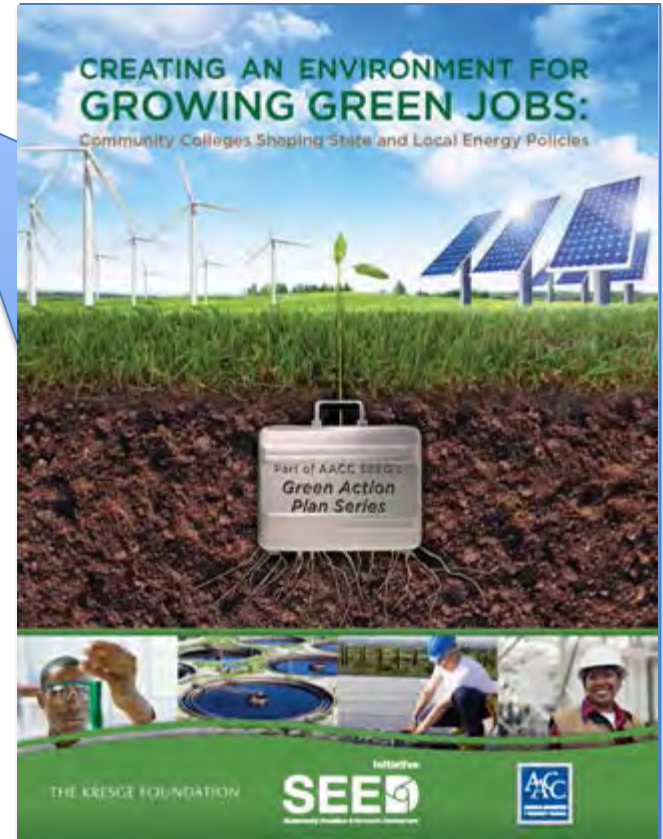
Have YOUR Program Stand Out!

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

(sign up for the newsletter)

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

<http://www.nccet.org/page/NCWENCET1>