Building the Workforce for Energy Efficiency Programs

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Market Characterization

• The Big Question = How many jobs for how long?
  • Survey the existing market conditions
    • Market Sector: Commercial, Industrial, Residential
    • Geographic Location
    • Skill Type and Level
    • Wage Level
Market Characterization

- Forecast job growth for three years based on increased funding
  - Is this growth short term or permanent?
  - What level of demand can the existing firms meet?
  - What level of demand for what time period justifies cost for specific EE certification and training?
    - Will the program meet this threshold?
Stakeholder Engagement

• Key stakeholders in developing a well-trained workforce:
  • Workers
  • Energy Efficiency Employers/Contractors
  • Trainers and Educational Resources
Workers

- Employed
- Underemployed
- Unemployed
- New entrants to the workforce

Key levers for engagement:

- Skill Assessment
- Job Ladder Creation
- Wage Expectations
Energy Efficiency Employers/Contractors

- Firms that are trained and specialize in EE
- Contractors that are aware of EE benefits and incentives and offer them to customers on general projects
- Contractors that do not market EE improvements

Key levers for engagement:

- Scale up current operations
- Incubate new businesses
- Realistically incentivize trainings for new job creation
- Monitor job creation and preservation
Stakeholder Engagement

Trainers and Educational Resources

- Nationally Recognized Programs (BPI and RESNET)
- Local Certifications (State Specific)
- Community Colleges and Vocational Programs

Key levers for engagement:

- Require Certification
- Continuum of Services
- Internships and Apprenticeships
Types of Certification

National

- BPI
- RESNET

National Certifications accepted by the EnergyStar program and HomeStar Legislation
- Through curriculum on the building science of rating and energy efficiency
- Quality Assurance by certification authority
- Expensive and time intensive

Local / Regional

- Tailored to local labor market
- Time and Cost can be managed
- Quality Assurance is local responsibility
- Certification may not be acceptable to national programs and lenders
Types of Training:

- Audit:
  - Building Analyst
  - Envelope
- Construction
  - Air Leakage Control Installer
  - Whole House Air Leakage Control Crew Chief
  - Manufactured Housing
- Heating
- Air Conditioning and Heat Pump
- Multifamily

Costs:

- Each training is the cost of the credits at the educational facility
- $500 for audit certification
- Annual Assessment of up to $7000 based on gross revenue for continued quality assurance
Types of Training:

- Energy Audit
  - HERS training is optional as a study mechanism for HERS rater test
  - Test is 50 questions specific to energy rating

- Costs
  - $1500/year to maintain training and certification
Hudson Valley Community College

- Center for Energy Efficiency and Building Science (CEEBS)
  - Partnership with BPI and NYSERDA at 10 NY State community college campuses
  - Provides training to achieve BPI certification
  - Also provides RESNET certification
  - Additional training in general building science and specific skills (rater, HVAC, etc)
Hudson Valley Community College

- Center for Energy Efficiency and Building Science (CEEBS)
  - Spectrum of Skills
    - Labor Unions / Pre-apprenticeship Trade Training
    - Professional Certification Training (BPI)
    - Accredited College/ University Credit
    - Career Development and Professional Continuing Education
NYSERDA Incentives

- Partial tuition scholarships
- BPI certification test cost reimbursement
- Certifications required to participate in NYSERDA incentive programs
Community Work Force Agreement

- Negotiate community benefits that contractors must meet as part of projects

- Created through Stakeholder Evaluation and Implementation Committee:
  - Unions
  - Contractors
  - Local Government
  - Non-Profits
  - Community Groups
Community Work Force Agreement

- Pilot Project = 470 residential projects
- Goals for post pilot scale up:
  - Local Hire 80% of the work force
  - Include Minority, Women, and historically disadvantaged groups in the job creation and contracting
- Good Job creation:
  - Jobs are above 180% of minimum wage
  - Mitigate burdens in providing employee health insurance
  - Provide resources for continuing education
Clean Energy Works Portland

Participating Groups

- City of Portland
- Energy Trust of Oregon
- Carpenters Union Local 247
- LIUNA Laborers Local 483
- Construction Apprentice and Workforce Solutions
- Evening Trades Apprenticeship Preparation
- Green For All
- Coalition for a Livable Future
- Change to Win
- Home Energy Life Performance Group, Inc.
- Metropolitan Alliance for Common Good
- Metropolitan Contractor Improvement Partnership
- Eco Tech, LLC
Thank you!