



Preparing the Green Jobs Workforce: Lessons from the U.S.

Jennifer M. Cleary, M.P.A.P.,
Senior Project Manager
The John J. Heldrich Center for
Workforce Development,
Edward J. Bloustein School for
Planning and Public Policy

The Heldrich Center for Workforce Development at Rutgers University

Founded in 1997, the Heldrich Center is a leading university-based research center focused on workforce development issues.

- Expertise includes:
 - Connecting workforce education and economic development
 - Regional workforce and economic analysis
 - Real world solutions
- Over 300+ interviews with employers, dozens of focus groups, surveys

How are Green Jobs Defined in the U.S.?

- U.S. Bureau of Labor Statistics and states developing national standard definition
- Most not new jobs, but traditional jobs with a “green” focus
- Challenge is to identify which traditional jobs are green for data collection.

A Better Question: Which Green Jobs Are Likely to Have Job Openings?

- **Energy** sectors have high growth potential due to state and federal investment in the U.S.

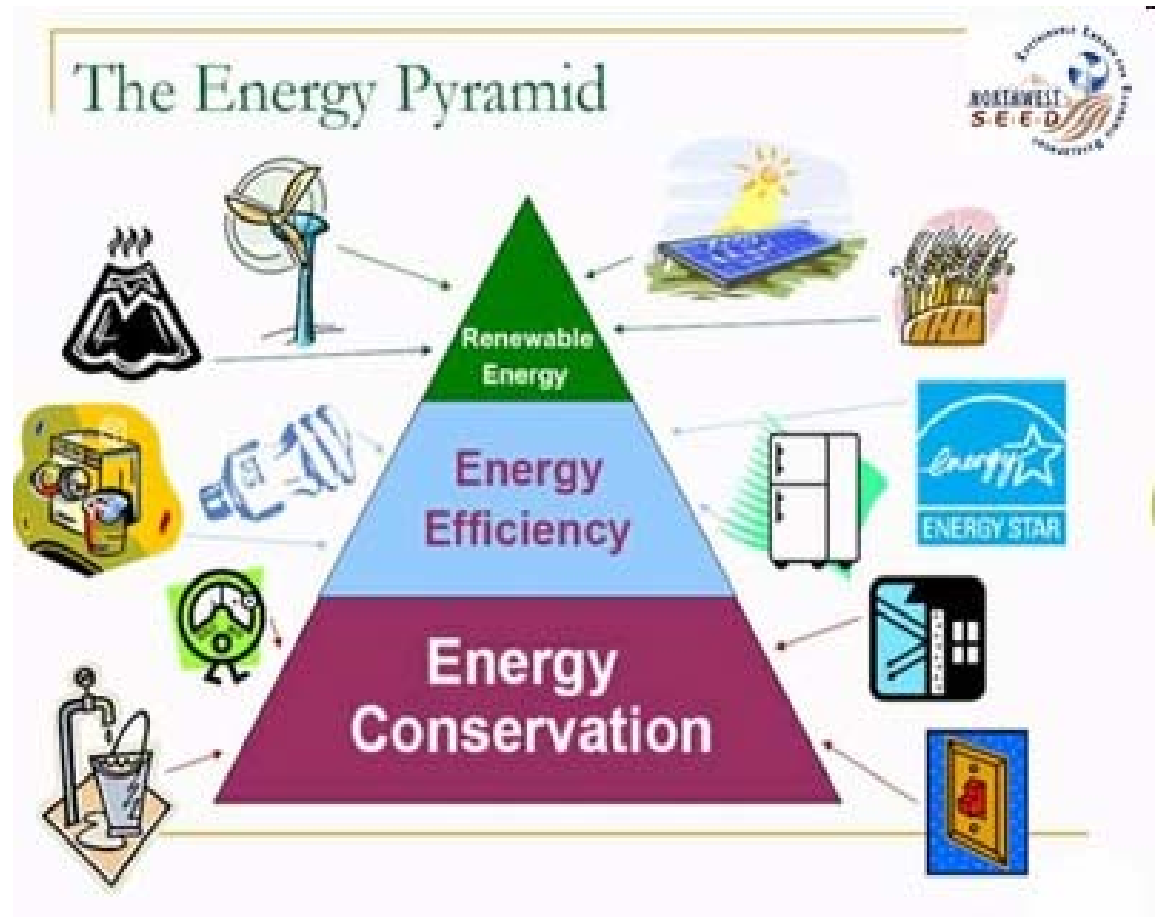
Defining the RE/EE Sectors

Energy Efficiency/ Conservation

- Residential Weatherization
- Commercial and Industrial Retrofits

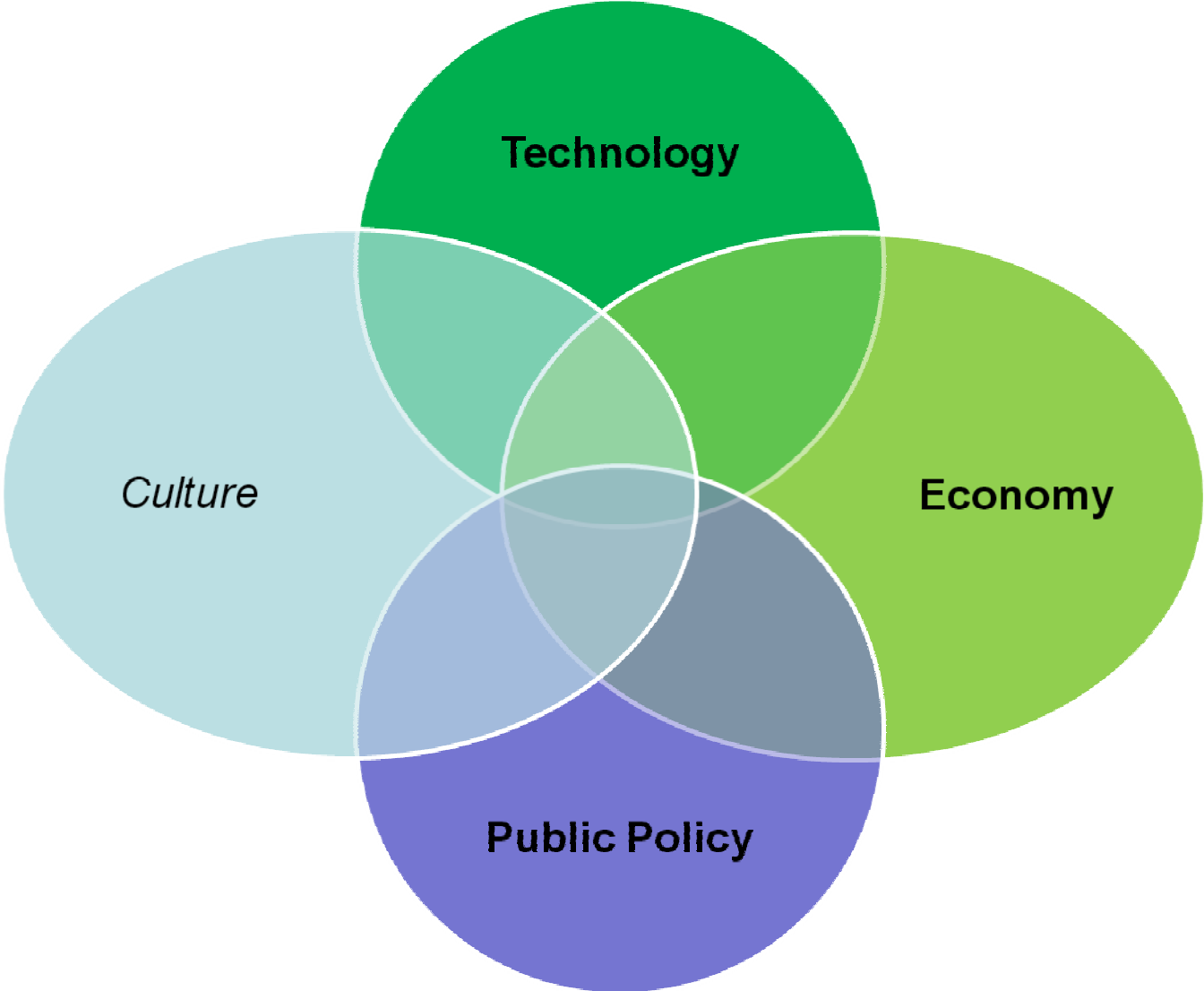
Renewable/Sustainable Energy

- Renewable: Solar, Wind, Biomass, Biofuel, Geothermal
- Sustainable: Hydrogen, Nuclear, Co-Generation



Source: Northwest Community
Energy

RE/EE Green Job Growth Drivers



What Skills and Credentials are Important for Green Jobs

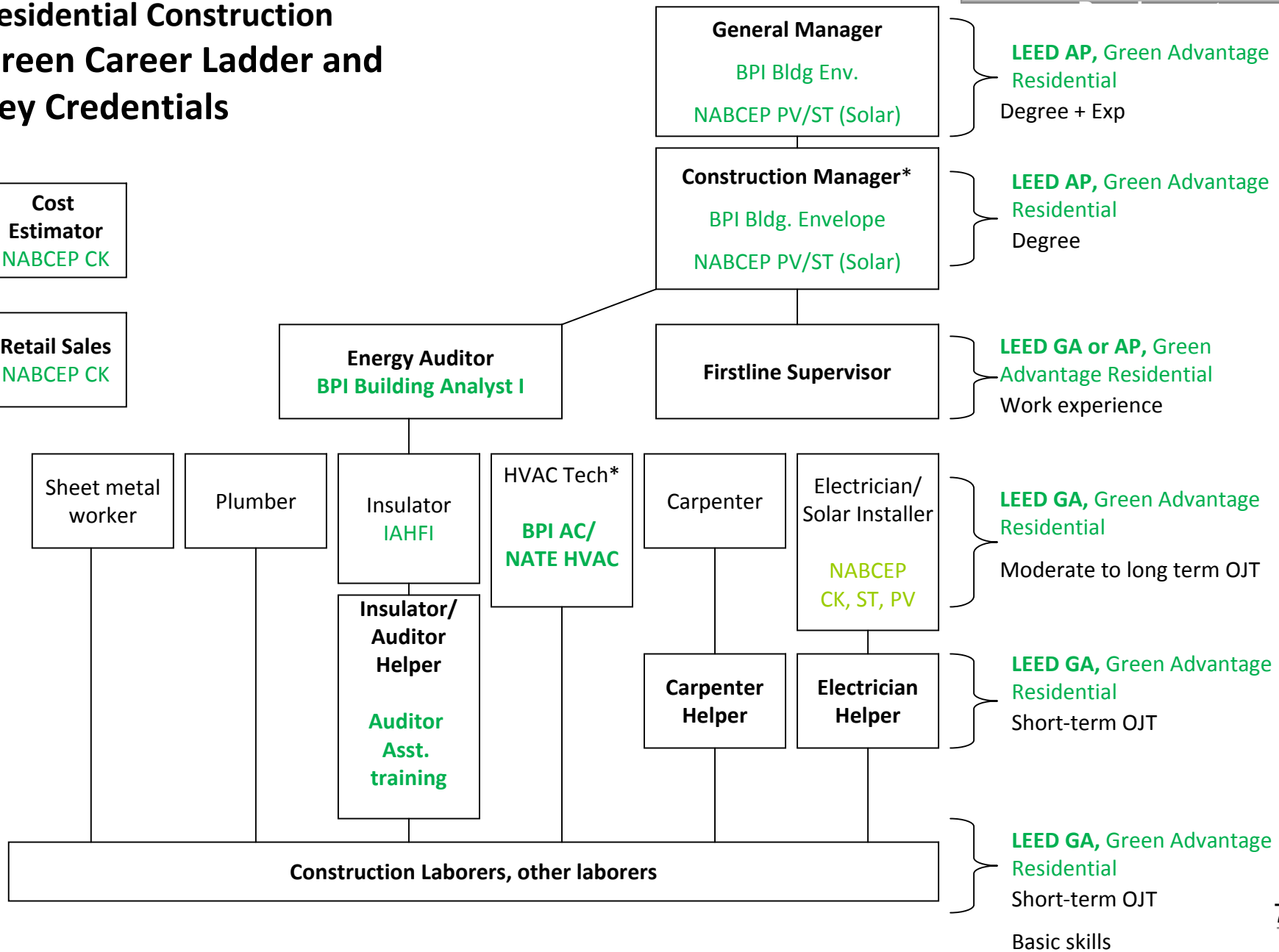
- Employers care first about traditional job skills (electrician, insulator, carpenter, engineer)
- A green credential is sometimes, but not always, required
- Multiple competing green credentials exist – reflects the state of standards-setting in EE and RE industries.
- Employers and, increasingly, government agencies, set standards for credentials, which can vary from region to region.

Energy Efficiency – Building & Installation & Residential Construction Green Career Ladder and Key Credentials

Potential Training

Cost Estimator
NABCEP CK

Retail Sales
NABCEP CK



What Are the Markers of a High Quality Green Job Training Program?



Challenges to Preparing a Qualified Green Workforce

Creating Programs Responsive to Labor Demand – Not Just Supply

- Ensuring credentials are valued by employers in the region and comply with existing and planned government requirements
 - Programs need to use data and experts to understand job market as it evolves.
- Non-duplicative of similar programs
- Where possible, credentials are standardized and portable
- Strong partnerships with hiring employers*
 - *Due to competition from experienced industry professionals, THIS IS VITAL for programs training workers with limited skills/No experience.

Challenges to Preparing a Qualified Green Workforce

Focusing on The Basics

- **Provide core job skill training to jobseekers with little or no construction or mfg. experience or training**
- **Make pre-requisites for “green layer” credential training clear**
- **Testing or other means used to verify pre-requisite skills**
- **Next steps for more advanced training are clear**

Creating Career Pathway Training

- **Program articulates to higher level training tied to higher-wage jobs in a career path**
- **Delivery of training is coordinated with other programs in the region**
- **Partnerships with support services and higher-level training help ensure successful completion and advancement**

What Does the Current Landscape of Green Training Look Like?



The Wild, Wild West.....

- Largely unregulated
- Competing & confusing credentials
- Amateur and experienced providers entering the training “Gold Rush”
- Large differences in training quality
- On-line training is the new frontier



A Note About Green Credentials

In EE and RE, standards for the level of efficiency or workmanship on projects are still being developed and debated. So, too, are standards and credentials for training.

This can be confusing for workforce professionals and jobseekers:

- **College credits** are generally valued by employers
- **Certifications** can apply to individuals, businesses, and/or EE/RE projects. (E.g. LEED certified project vs. LEED certified profesional)
- **Certificates** are often less valuable and portable in the labor market
 - **Different credentials are valued in different labor markets**
 - **Green credentials are not enough by themselves**

Key “Green” Credentials for Jobseekers

- LEED
- BPI
- NABCEP
- RESNET
- AEE
- Green Advantage

The Green Training Landscape

Four Key Trends

Especially among newly created training programs fueled by growing jobseeker interest and government funding, these trends are emerging:

Trend #1: “Crowding at the Bottom “

Trend #2: Widely Varied Connections to the Job Market & Related Training

Trend #3: Lack of Career Ladder Transparency

Trend #4: Sometimes Aggressive Recruiting for On-line, Entrepreneurial and Other Green Training



How Can The Workforce System Ensure Jobseekers Find High Quality Training For Green Jobs?: Conclusions and Recommendations



Key Conclusions

- Green Jobs are **traditional Jobs** with a green focus – sometimes, but not always, they require a **green layer** of knowledge and skill
- For the near to mid-term future, much **green job creation will be tied to public spending and will be focused in RE and EE sectors.**
- New interest in and funding for green training has caused a boom in training development
- **Lack of regulation is leading to wide variation** in program and provider quality
- Job counselors and job seekers **need better information on the connections between training and job availability to make informed choices.**

Recommendations for Workforce Professionals

- ✓ Consider stricter standards for funding training providers
- ✓ Require better inventories of existing training programs to address gaps
- ✓ Look for high quality partnerships with employers that include hiring agreements and access to career ladders/lattices.
- ✓ Build tools that provide program funders, counselors, and jobseekers with better information on **demand as it evolves (continuous feedback)**

Presenter Contact Information

Jennifer Lenahan-Cleary

jcleary@rutgers.edu

www.heldrich.rutgers.edu