Virginia is in the Top 10

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>TOTAL</th>
<th>ENERGY STAR &amp; EFFICIENT LIGHTING</th>
<th>HVAC, RENEWABLE HEATING &amp; COOLING</th>
<th>ADVANCED BUILDING MATERIALS/INSULATION</th>
<th>OTHER*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>318,542</td>
<td>71,893</td>
<td>187,297</td>
<td>20,074</td>
<td>39,278</td>
</tr>
<tr>
<td>2</td>
<td>Texas</td>
<td>162,816</td>
<td>59,650</td>
<td>67,346</td>
<td>21,096</td>
<td>14,724</td>
</tr>
<tr>
<td>3</td>
<td>New York</td>
<td>123,292</td>
<td>36,848</td>
<td>69,412</td>
<td>8,244</td>
<td>8,788</td>
</tr>
<tr>
<td>4</td>
<td>Florida</td>
<td>118,412</td>
<td>32,499</td>
<td>41,381</td>
<td>31,455</td>
<td>13,077</td>
</tr>
<tr>
<td>5</td>
<td>Illinois</td>
<td>89,469</td>
<td>13,311</td>
<td>59,722</td>
<td>7,834</td>
<td>8,601</td>
</tr>
<tr>
<td>6</td>
<td>North Carolina</td>
<td>86,559</td>
<td>42,893</td>
<td>32,358</td>
<td>6,222</td>
<td>5,086</td>
</tr>
<tr>
<td>7</td>
<td>Massachusetts</td>
<td>86,473</td>
<td>14,494</td>
<td>42,558</td>
<td>11,032</td>
<td>18,388</td>
</tr>
<tr>
<td>8</td>
<td>Michigan</td>
<td>85,061</td>
<td>14,775</td>
<td>9,197</td>
<td>47,613</td>
<td>13,476</td>
</tr>
<tr>
<td>9</td>
<td>Ohio</td>
<td>81,676</td>
<td>16,290</td>
<td>35,515</td>
<td>19,650</td>
<td>10,221</td>
</tr>
<tr>
<td>10</td>
<td>Virginia</td>
<td>78,670</td>
<td>20,733</td>
<td>31,522</td>
<td>10,764</td>
<td>15,652</td>
</tr>
</tbody>
</table>
The majority of these jobs are focused on HVAC.
Which aligns with our energy needs
THE DCSEU IS ADDRESSING THIS NEED THROUGH WORKFORCE DEVELOPMENT
Connect District residents who are new to the workforce, between jobs, or looking for a career change with local contractors in the green economy.

Provide training and certification opportunities aimed at helping workers to obtain green careers.

Enhance economic stability by focusing on a worker’s marketable skills.

Reduce unemployment in the District.

Shape the local clean-energy labor market through programs that enhance green jobs’ effects on the city’s economy.
Workforce Development
- Training Energy Efficiency Workers Across the Globe -
CHP Energy Solutions Research & Training Center

- Trained more than 40,000 students since 1999
- Students from U.S., Canada, Asia, and South America
- Interstate Renewable Energy Council (IREC) Accredited

- 4 Classrooms
- Distance Learning Center
- Media Technology Solutions
- Sound Studio
- House of Pressure® Lab
- HVAC Lab
- Air Sealing Lab
- Diagnostic Labs
- Pressure House
- Mobile Home
- Grandma’s House
Workforce Development Courses

- IREC-Accredited BPI Home Energy Professional courses:
  - Quality Control Inspector
  - Energy Auditor
  - Crew Leader
  - Retrofit Installer Technician

Additional Courses:
- Envelope and Duct Leakage Testing
- Prep courses for all BPI Exams
- ASHRAE 62.2
- EPA Certified Renovator
- OSHA 10 & OSHA 30
- Customized Training

Plus over 120 more Instructor-led and Online courses & Hands On Field Mentoring
A Look Inside......
Classroom Learning
**Hands On Props**

- **Dense Packing Prop**
  Used to demonstrate and apply appropriate sidewall insulation techniques.

- **Large Air Sealing Prop**
  Used to simulate a sample attic and crawlspace to practice air sealing methods and shielding prior to insulation.

- **Gas Furnace and Domestic Water Heater**
  Used to demonstrate worst-case combustion appliance zone testing, CO testing, draft, and other appliance efficiency and health and safety issues.

- **Pressure House**
  Life-size iPad-controlled diagnostic house used to demonstrate house-as-a-system concepts, especially combustion appliance zone testing.
The Goal: Train & Credential

Train and Mentor
Core Competencies

- Knowledge
- Skills
- Abilities
The Standard Work Specifications (SWS) define the minimum acceptable outcomes for any weatherization or home performance task to be effective, durable, and safe.
Job Task Analysis (JTA’s)

Validate the Training

-The JTAs for the four major energy upgrade job classifications define what a worker needs to know and do.

The four job classifications are:

-Retrofit Installer Technician
- Crew Leader
- Energy Auditor
- Quality Control Inspector
Certify the Worker

-The Certification Blueprints synthesize the content of the SWS and the JTAs to lay out a road map for robust worker certifications.

-Nationally Recognized Industry Credentials that are Portable and Transferable Between the Public and Private Sectors.
## Virginia: A Path to Career Growth

### Training / Certification / License Outline for Virginia Weatherization Workers

<table>
<thead>
<tr>
<th>Required By DOE</th>
<th>Crew Worker (Retrofit Installer Technician-RIT)</th>
<th>Crew Leader (CL)</th>
<th>Energy Auditor (EA)</th>
<th>Quality Control Inspector (QCI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA 10 certification or equivalent</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>OSHA 30 certification or equivalent</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Quality Control Inspector Micro-Credential*</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required by EPA</th>
<th>Renovate-Repair-Paint certification (RRP)</th>
<th>Only one person needed per jobsite (accessible to the job)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Required By VA-DHCD</th>
<th>Crew Worker (Retrofit Installer Technician-RIT)</th>
<th>Crew Leader (CL)</th>
<th>Energy Auditor (EA)</th>
<th>Quality Control Inspector (QCI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be completed within date of hire or in position</td>
<td>6 Mo.</td>
<td>9 Mo.</td>
<td>12 Mo.</td>
<td></td>
</tr>
<tr>
<td>Lead Safe Weatherization course (LSW)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Retrofit Installer Technician course (RIT)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>HVAC Fundamentals course</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ASHRAE 62.2 course</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>HEATsoftware course</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Duct Sizing/Manual J course</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Energy Auditor course (EA)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Quality Control Inspector course (QCI)</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Crew Leader course (CL)</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
Home Energy Professional Career Ladder

Retrofit Installer Tech -> Crew Leader -> Energy Auditor -> Quality Control Inspector →
Robust Quality Workforce Training!

- Build and Renovate healthier, safer, more durable and energy efficient homes with a greater return on our investment.

- Drive consistency in benefits for clients, consumers and funders Nationally

- Prescribe a national standard of quality for the home performance and retrofit workforce.
Tank wrap is unprofessionally installed.
Virginia Prescriptive Path to Grow

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CHP Energy Solutions
Community Housing Partners
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Phone: 540-260-9091  Fax: 540-260-9084
www.CHPTrainingCenter.org
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Sponsored by VEIC