2018 Workforce Development Summit Report

Prepared for:
Members & Summit Attendees

Presented By: NCBPA’s Marissa Nixon and Ryan Miller
Report Date: Tuesday, November 20, 2018
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ABOUT THE SUMMIT

On September 20, 2018, NCBPA welcomed industry professionals and stakeholders to our Summit to help define and develop the workforce resources our industry needs to be successful. The morning’s opening presentations shared stories of success and need from across the state, helping attendees understand what we have, what we need and how to get there. Afterward, working groups formed from diverse backgrounds – faculty, industry pros, students and government representatives – to discuss these needs and opportunities and identify new ones.

Lunch provided “near peer” networking opportunities for attendees with peers from their own region. The Summit concluded with working group sessions focused on developing the actual resources our industry needs to be successful. These resources included:

- An outline for modernized curricula that colleges and universities can use to train our industry’s future workforce.
- A career “lattice” that illustrates to students (and their parents) the job, career and educational opportunities available in our industry.
- The requirements our industry supports for Apprenticeship programs that will help train future leaders that will work for our companies.

Following the Summit, NCBPA staff has worked to compile the findings, best practices and recommendations provided by attendees into this report. Upon completion, NCBPA will lead industry efforts to develop and manage needed resources, campaigns and programs.

BACKGROUND

In February of 2017, NCBPA’s Board of Directors determined that Workforce Development would be one of four focal points for the association’s Strategic Plan for the coming years. Since this time, NCBPA has been actively assessing member company needs, presenting to colleges and determining what workforce development resources and activities are needed to benefit NCBPA member companies, students and parents, and other stakeholders.

The 2018 Workforce Development Summit was held to bring together industry professionals and stakeholders to review NCBPA’s work thus far, discuss opportunities amongst each other and share ideas and opportunities. With a diverse group of industry professionals, faculty, students, nonprofits, local government staff and others in attendance, the Summit was a success.

The focal point of the Summit involved working group sessions on six topic areas that NCBPA member companies believed to be the most important for our industry to address. See more information on the working groups below.

Leading up to the Summit, NCBPA identified a variety of topics and issues to focus on. Provided here are some of those talking points, questions and problem statements:

Sample questions for Summit attendees to respond to:

- What’s been your experience finding and keeping a job in our industry? What struggles and opportunities have you experienced?
- What examples do you have of industry professionals that you’ve worked with – both good and bad – related to their experiences in the field, in the office, being promoted, learning new trades, making enough money to be happy, etc.
• Are there any local programs that you’ve worked with or know about that have offered support to industry companies locally?
• What steps would you recommend for a weatherization installer to take to become a crew lead, sales person, manager and eventually owner of their own company? Have you experienced someone doing something like this?

Job numbers to consider in prioritizing needs and opportunities:

• National energy workforce job reports identify 84,000+ energy efficiency jobs in North Carolina.
• State estimates have previously reported roughly 17,000 energy efficiency jobs but are being re-run using new methodologies to count the assumed larger job numbers.
• The US and NC construction market faces a significant shortage in available skilled labor. For residential construction, this issue is the second greatest concern behind lumber prices. For commercial construction, many efforts are underway to promote jobs in the trades as a viable and beneficial career opportunity for students in high school and middle school to pursue.

Sample deliverables that NCBPA members believe are important to develop and manage:

• North Carolina’s Apprenticeship NC program has grant funding available to work with our industry to establish Apprenticeship programs for needed trades. Industry needs to determine what specific trade roles need an Apprenticeship program, how many hours of on-the-job and classroom training are required, what pay ranges should be provided for the Apprenticeships, and how to oversee and manage them at the state-level.
• Similarly, North Carolina’s NC Community College System has grant funding available to work with our industry to establish Career Pathways resources for our industry. Creating resources that effectively describe to students, new professionals and experienced professionals the types of career opportunities available to them, including salary and benefit information, continuing education requirements, and more will help our industry advertise available job and career opportunities and encourage existing workers to use these resources to stay in our industry and find the right position for them.
• Faculty across the state working in the roughly one dozen industry-related programs (Sustainability Technologies, Green Building, Building Automation, etc.) at technical colleges, community colleges and universities need an opportunity to come together to share curricula, program needs, educational best practices and learn from industry leaders what they can do to better prepare and connect their students to current and future jobs in our industry.

Sample issues related to industry certifications and credentials:

• There is really only one state and nationally-recognized certification for residential home performance/energy efficiency: the Building Performance Institute’s Building Analyst (BA) certification. BPI and other organizations including RESNET, NAHB and others offer a wealth of other certifications, but the BPI BA remains the most frequently-used and frequently-incorporated into utility, nonprofit, weatherization and other program requirements. NCBPA seeks to bring together this information and make it easier for professionals and companies to effectively use the industry certifications and credentials available. NCBPA anticipates establishing licensure requirements for a variety of residential trades over the next several years.
• Commercial certifications and credentials are similarly widespread but due to the size, scope and potential liability of building performance issues and activities in larger buildings, industry companies more frequently seek out professionals with well-known certifications and credentials from ASHRAE, USGBC, AEE and others.

Workforce stories and experiences that industry professionals need to know:
• ACEEE released a series of “Energy Efficiency Worker” videos featuring NCBPA members in late 2017. Click here to view them.
• NCBPA has interviewed several members about their careers in our industry and to obtain their guidance and recommendations for students and young professionals entering our field. Click here to view them.
• NCBPA seeks to work with member professionals and partners to tell the stories of industry professionals in order to contribute to a healthy, diverse and inclusive community and roadmap for industry careers.

Resources available on NCBPA’s website:
• Workforce Development page with videos, resources, etc.
• Job Board and Job Seekers pages.

WORKING GROUPS

The focal point of the Summit involved working group sessions on six topic areas that NCBPA member companies believed to be the most important for our industry to address. Click on a link to access much more information relating to each of the following working groups:

1. Faculty Curricula
2. Apprenticeship Programs
3. Career Pathways
4. Internships and Co-ops
5. State and Local Resources
6. Diversity, Equity and Inclusion

FACILITATORS

NCBPA would like to recognize and thank these Facilitators for volunteering their time to lead the working groups:

1. Faculty Curricula: Nancy Kaplan, Manager of Workforce Development, Building Performance Institute, Inc. (BPI)
2. Apprenticeship Programs: Curt Hurd, Residential Buildings Specialist, NCBPA
3. Career Pathways: Malinda Marsh, NCWorks Career Center Coordinator, Central Carolina Community College
4. Internships and Co-ops: Abby Coulter, Commercial Buildings & Member Services Specialist, NCBPA
5. State and Local Resources: David Doctor, President & CEO, E4 Carolinas

SPONSORS

The Summit would not have been possible without the support of our Sponsors! Please visit their websites to learn about their companies.

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2018 Workforce Development Summit Report

- Ingersoll-Rand

Working Group Sponsors:

- Performance Point, LLC
- Environmental Defense Fund

Attendee Scholarship Sponsors:

- Siemens
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- ICF
- City of Raleigh Office of Economic Development + Innovation

ATTENDEES

More than 60 industry professionals and stakeholders representing a wide variety of backgrounds and roles attended the Summit. Attendee roles included:

1. Faculty from universities, community colleges and technical colleges
2. Nonprofits supporting workforce development and industry jobs
3. State and local government staff offering workforce programs and resources
4. Students seeking industry jobs and looking to contribute to the creation of new resources
5. Industry professionals involved in building performance products and services

PRESENTATIONS

Presentations from the Summit’s general sessions are available on NCBPA’s website here. They include:

1. NCBPA’s opening slides, workforce survey results and closing slides.
2. BPI’s Nancy Kaplan: The Value of Partnerships in Training and Workforce Development
3. NC Department of Commerce’s Michelle Muir: State Workforce Solutions

SURVEY RESULTS

Prior to the Summit, NCBPA completed two industry surveys that sought feedback on a wealth of workforce development topic areas. The results from the residential and commercial surveys include:

How positive do you feel about workforce development?

- Residential: Neutral 3.0/5
- Commercial: Neutral 3.1/5

What concerns you the most about the future of our industry?

- Residential: “Shortage of skilled workforce”
- Commercial: “Skilled workforce availability”

Is your company having difficulty finding and retaining workers?

- Residential: Yes 3 to 1
Do you plan on hiring new employees?

- Residential: Yes 75%
- Commercial: Yes 84%

Where does your company have the most success finding qualified employees?

- Residential:
  - Employees: 44%
  - Colls/Univs: 25%
  - High Schools: 0%
- Commercial:
  - Employees: 57%
  - Colls/Univs: 35%
  - High Schools: 1%

What are the largest barriers you face in hiring entry-level workers?

- Residential: Drug tests and background checks
- Commercial: Drug tests and background checks

What is your interest level in hiring an Apprentice for 1 – 3 year period?

- Residential: Yes 2.8/4
- Commercial: Yes 2.4/4

**LOCATION**

The Summit was held at the James B. Hunt Jr. Library on NC State University's Centennial Campus.

**PHOTOS AND VIDEOS**

Visit the Summit webpage for photos and videos from the event.
GENERAL SESSION SUMMARY

North Carolina’s building performance industry is facing many of the same workforce issues that other trades are: lack of skilled labor, lack of interest in trades positions, lack of resources for career opportunities, lack of diversity, equity and inclusion, and more. To begin formally addressing these and other needs and opportunities, NCBPA has compiled the following listing of findings, best practices and recommendations from our 2018 Workforce Development Summit.

OPENING REMARKS FROM NCBPA’S RYAN MILLER

Summary notes from NCBPA staff include:

• Workforce development topics have been in the news for many months now. We are experiencing a strong construction and clean energy industry growth period in North Carolina and have an opportunity to capitalize on it. But, our industry lacks the workforce resources needed to support new workers coming into our field and keeping our existing workers happily employed.

• One of the most trending topics we see is the need for more women in our industry. Taking this a step further, improving general workforce diversity, equity and inclusion are also becoming more important.

• North Carolina is home to many building performance jobs. NCBPA estimates roughly 50,000 in building performance/energy efficiency, while national studies estimate more than 84,000.

• NCBPA’s recent 2018 Energy Efficiency Potential Report identified an opportunity to increase building energy efficiency in the state by 16.8% and create more than 52,000 new industry jobs. Workforce solutions and resources are needed to meet this desired demand increase.

• Our industry’s needs are not unique. The ACE Mentor Program in Raleigh/Durham offers programs and resources that our industry could benefit from. Unfortunately, building performance is not a topic area included in other trade-related industry workforce initiatives.

• NCBPA has vested a great deal of time and resources into supporting our member companies and industry with workforce resources. Visit NCBPA’s website for member interviews, stories from the field, job postings, resumes for hiring candidates and more.

DEVELOPING OUR FUTURE WORKFORCE FEATURING PANELISTS

• J. Hackett: Executive Director, Green Opportunities
• Shannon Musselwhite: Adjunct Instructor, AB Tech
• Pinaki Acharya: Recent Graduate, NC State University, Mechanical Engineering
• Megan Berry: Sr. Clean Energy Training Specialist, NC Clean Energy Technology Center

Summary notes from NCBPA staff of comments made by panelists:

• There is a lack of educational and other resources for skilled labor positions needed by our industry companies. Many “unofficial learners” exist – skilled laborers who would be good fits for our industry positions but that are unaware of our industry, unaware of career opportunities or that see our trades work as uninteresting or “lower class” than other trade roles and office jobs.

• There is a need for greater collaboration between professionals and organizations to structure curriculum and broaden opportunities. More than a dozen universities, community colleges and technical colleges in North Carolina offer programs related to building performance (or sustainable technologies, building science, etc.) but the state curricula is limited and faculty have few opportunities to connect and learn from one another and lack many resources needed to provide a quality education to students about our industry’s work.
There is a significant need to develop certification and credentialing programs that address soft and hard skills needed by industry professionals in today's workplace environment.

Some industry professionals are greatly concerned about the lack of diversity, equity and inclusion in our workforce (not just our workforce, but construction and clean energy overall). In some cases, companies are being forced to diversify their workforce due simply to a lack of skilled labor. In other cases, companies are proactively broadening the diversity, equity and inclusion of their workforce through new hiring processes and target areas.

- **KEY FINDING:** NCBPA's survey results confirmed this assertion and found that the number one source of recruiting new employees is from existing employees. By reaching outside of a company's current employee demographic for new employees, a company can broaden its staff diversity.

Non-college degree program pathways are needed for young professionals interested in careers in clean energy and building performance. More post-college professional certifications are needed.

- One example in the residential industry involves just two primary industry certifications related to residential building performance: BPI Building Analyst or RESNET HERS Rater/RFI. There are few other industry certifications offered or widely-used in North Carolina.
- On the commercial side, there are many more certifications and credentials popular amongst industry professionals. Some provide overlap in commissioning and energy auditing, while others are very specific. There is little consensus on the most popular or most needed professional certifications.

Targeting for college students: it is important to make our students aware of industry pathways and opportunities because they are not advertised.

There is a major need for curriculum, resource and messaging consistency across the industry. In most cases, industry companies are working through workforce development activities on their own.

- Faculty shared examples of how there is a large disconnect between coursework taught in today's curricula and industry work needed by NCBPA member companies, no matter which career pathway a student may be pursuing.

**INDUSTRY INSIGHTS FEATURING PANELISTS**

- Bill Stricker: VP of Operations and Workforce Development, Carolinas AGC
- Jordan Jones: Engagement & Equity Specialist, NC Sustainable Energy Association
- Tim Gasper: Energy Solutions Team Leader, Siemens
- Josh Hartness: Rating Field Inspector, Performance Point

Summary notes from NCBPA staff of comments made by panelists:

- Hiring is the number one issue facing the industry today. NCBPA's survey results showed a variety of reasons for this. For labor positions, a major issue is a failure of applicants to pass background checks. For non-labor positions, a major issue identified is a lack of awareness by target candidates about our industry. Candidates may find a mechanical engineering job by looking for that role specifically, but they are not aware of or looking for a position in building performance or any variation of the term (i.e. green building, energy efficiency services, etc.).
- Young professionals entering our industry and existing professionals more than ever need to be educated and experienced in a wider set of skills that includes a strong focus on soft skills – selling, communications, listening, etc.
- There is no central organization in our industry currently managing workforce development information, resources, candidate recruitment, etc. The information that industry companies needs has yet to be sufficiently collected, organized and share for use across our industry.
KEY FINDING: NCBPA acknowledges this opportunity in our market and is committed to addressing it on behalf of our member and industry companies.

- There are industry jobs available for interested parties with a variety of educational requirements available. In the case of Siemens, the company had more than 150 open positions available in North Carolina on the day of the Summit. Not all are in building performance-related trades or positions, but many are. Key issues with connecting available jobs to available workers involve students and parents not understanding the value, career opportunities, benefits, etc. of jobs in our “trades” industry – i.e. a vocational career. This is commonplace across the U.S., whereas the situation is very different in many European countries where vocational jobs are at the same class/level as office jobs.

KEY FINDING: There is a major need to change the perception of students and parents looking at trade jobs. This is not an industry or North Carolina specific issue, however.

THE VALUE OF PARTNERSHIPS IN TRAINING AND WORKFORCE DEVELOPMENT
FEATURING BPI’S NANCY KAPLAN

Summary notes from NCBPA staff include:

- Building Performance Institute (BPI) seeks to address gaps in the residential workforce by combining cross industry skills. BPI is currently working to build a career ladder by pooling resources across multiple residential trades and partner organizations.
- This new generation of workers wants to feel like they’re making a difference.
- The home and building performance industry workforce is aging. This is most commonly seen and discussed relative to code officials.
- Case study: Connecticut Trade high schools have a 4-year plan for incorporating green technology into high schools and to keep workers in the state.
- In addition to efforts to recruit new workers to the industry and its companies, BPI recommends focusing on developing needed skills for existing professionals, both new and experienced. One example includes teaching HVAC professionals about building performance work in the off season.

DIVERSITY, EQUITY AND INCLUSION FEATURING EDF’S MARILYNN MARSH-ROBINSON

Summary notes from NCBPA staff include:

- In China, 40% of the engineering sector is women, in Russia 50% of the engineering sector is women and the United States is quickly falling behind.
- There is a need in our industry (and many others) to include unseen diversity such as sexual orientation, veteran status, family status and geographic location in our existing workforce and recruiting practices for our future workforce. Improving diversity, equity and inclusion is an opportunity that many companies are taking on voluntarily and others are now looking at due to shortages in skilled workers and other factors.
- These issues are present in urban communities and also rural communities. In many cases, persons talking about these two different communities speak two different languages about the same issues.
- Something for business owners and hiring managers to think about regarding their practices:
  - How are you communicating your support or interest in improving these issues publicly, if you do support these issues?
  - How are you altering your recruitment practices to address these needs?
  - Are you supporting minority-owned businesses by purchasing from these vendors?
Internal support and resources for a more diverse workforce must be planned for and monitored once brought in to a business.

- If there’s not a program at your company already, or one that you are looking for, create one!

**FINAL REPORT, VIDEO HIGHLIGHTS AND ACTION ITEMS**

Coming soon in Part Three!
WG #1: FACULTY CURRICULA

Facilitator:
Nancy Kaplan, Manager of Workforce Development, Building Performance Institute, Inc. (BPI)

Problem Question:
Do our current educational curricula match our industry’s needs?

What we hope to develop today:
Identify curricula updates and faculty resources needed.

Target Participants:
Faculty, students and industry pros.

SUMMARY NOTES FROM THIS WORKING GROUP

- North Carolina’s building performance industry is struggling to fill available jobs, like many other industries.
- A major gap/opportunity identified by many participants is that younger/newer workers that aren’t familiar with, comfortable with or strong in communications, relationship management and other soft skills.
- College and university students are excited about careers but there are significant barriers:
  - Sometimes there is a lack of awareness of job and career opportunities available to them. Because NC’s building performance industry (at the industry level) lacks the same visibility or job interest as architecture, general contracting, solar energy, etc. students being trained in sustainability technologies or similar programs are unaware of job and career opportunities with industry companies.
  - Faculty struggle with paperwork and normal institutional regulatory barriers that can make it hard to apply for and obtain grants that could be used to offer new programs, curricula or resources to students.
  - Some students see barriers in colleges or universities related to minimum educational requirements and age. NC has several community and technical colleges that have been very welcoming to more experienced students working on second, third or fourth careers.
  - Lack examples of students like them completing an education (or not) and finding a good career. Industry needs to develop and promote case studies to encourage other students and young professionals to join our industry.
- High school guidance counselors are primarily focused on the college pipeline because it is the most familiar to their work and any incentives to the counselor are likely tied to sending students to colleges and universities, not into trade work. Establishing an industry presence in middle and high schools to inform students and their parents of their options for trade work is needed.
- Our industry offers a wealth of different career opportunities that are amenable to various educational backgrounds and on-the-job experiences. From high-end architecture and design to high-performance plumbing or framing, sales, marketing... our industry offers a wide variety of positions.
- There is curriculum available through NCCER.org to support educational and career opportunities for persons with disabilities entering or staying in our industry.
- Greater collaboration between organizations working in and with our industry is needed:
  - Home builders associations are primarily focused on framing, plumbing, carpentry, etc.
  - Organizations like ASHRAE and USGBC are focused on their own certifications and credentials.
Our industry needs to come together to form our internal workforce development resources and form relationships with partner/stakeholder organizations, industries, etc. to promote job and career opportunities.

- Faculty needs include:
  - Opportunities to collaborate more – most from across the state rarely see each other or have opportunities to collaborate with one another.
  - Share updates to curricula and add-ons, activities and opportunities that they can share with others.
  - Grant funding opportunities that they can pursue on their own or with others.
  - Obtain software and other types of training (inexpensive or free preferred) to ensure that faculty are current on the latest (and future) industry tech, operations, needs, etc.

- Legislature previously allocated money for rebranding the construction industry. We as an industry need to take advantage of that.

- Technical skills of students need to be improved in some areas to make them more viable candidates for industry positions. As the technical nature of our positions increases – via computers, connectivity, etc. – students will need these skills in order to garner jobs with industry companies.
  - Some students don’t understand the process and focus on being able to answer test questions.
  - Some college/university students don’t know practical skills like math that are basic requirements for most educational courses or jobs related to our industry.

- There is a significant need for increased attention to, support for and resources for:
  - Hands on experience for students to work in the field as part of educational courses.
  - Instructor education to ensure that faculty members are up-to-speed on industry needs, opportunities, modern technology and best practices for educating students.
  - Improving the representation of, resources for and image/reputation of trades in high schools.
    - STEM primarily leads to 4-year degrees when it doesn’t have to. Focus on cross training?
    - Incorporate our industry work into high school STEM programs.
  - Early college programs on high school campuses.

- Generally speaking, our industry struggles from the same as traditional construction – that it is “not sexy” as a job or career option.
  - Our industry needs better (any?) advertising, marketing and communications strategies to produce tangible results – students and young workers being interested in working in our industry.
  - Apprenticeships and unions are not seen favorably in the South. May be possible to benchmark what unions offer for workforce development and offer through NCBPA and other orgs.
  - Need to focus our language on comfort and health instead of energy efficiency.

- Need to focus on recruiting military and ex-military because they are good for our type of work.

### RECOMMENDED ACTION ITEMS

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<th>#</th>
<th>Item</th>
<th>Proposed Owner</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1</td>
<td>Soft skills training for new and experienced workers. May be possible to develop/purchase an existing soft skills training program for industry companies to use.</td>
<td>TBD</td>
<td>Med</td>
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<tr>
<td>2</td>
<td>NCBPA staff and members to visit each college/univ once a semester to speak with students about career opportunities and faculty about support their need.</td>
<td>NCBPA</td>
<td>High</td>
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<td></td>
<td>Establishing an industry presence in middle and high schools to inform students and their parents of their options for trade work is needed.</td>
<td>TBD</td>
<td>Low (costly)</td>
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<td>4</td>
<td>Greater collaboration between organizations working in and with our industry is needed. HBAs, plumbing, mechanical, state agencies, etc.</td>
<td>NCBPA</td>
<td>Med</td>
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</table>
| 5 | Develop, implement and manage a faculty support plan:  
- Improve collaboration and networking amongst faculty.  
- Provide discounted or free education and training for them.  
- Create resource center for curricula add-ons, activities, programs, etc. | NCBPA, TBD | High |
| 6 | Assess opportunities for updating/improving/expanding industry-related curricula in NC community college and university system. Where possible, identify an incorporate curricula add-ons that are inexpensive and able to be used by faculty – from nonprofits, private companies, etc. | NCBPA, NC CC System, TBD | High |
| 7 | Create or participate in “jobs in the trades” campaign and resources for high school, college and university students and their parents. | TBD | Low (costly) |
| 8 | Benchmark what trade unions offer for workforce development and determine how these resources could be offered for our industry in NC. | NCBPA | Low |
| 9 | Identify opportunities to recruit current and former military for positions in our industry. | NCBPA | Med |
| 10 | Industry needs to develop and promote case studies to encourage other students and young professionals to join our industry. | NCBPA | High |
**WG #2: APPRENTICESHIP PROGRAMS**

**Facilitator:**
Curt Hurd, Residential Buildings Specialist, NCBPA

**Problem Question:**
What types of apprenticeship programs are needed to support our industry companies and professionals?

**What we hope to develop today:**
Details for one, four or more desired apprenticeship roles.

**Target Participants:**
Industry pros, faculty, students and job educators.

**SUMMARY NOTES FROM THIS WORKING GROUP**

**Problem Statement:**
Infrastructure in place for apprenticeships in general, but there’s a disconnect between potential candidates and programs/employers, including communication, awareness of available opportunities, perception, parent buy-in, university/college influence on decision making process, etc.

**Barriers to Success:**
- Universities have a huge influence on high schools, counselors, students, parents, etc. in the decision making process.
- Existing programs, employers, etc. combining their efforts and resources.
- Building performance industry is not a mature industry and may not have enough demand yet to implement dedicated apprenticeship.

**Strengths:**
- Existing opportunities, infrastructure and programs are available – just not for building performance trades, specifically.
- Viable and potentially lucrative career path.
- For companies – molding employees from day one to fit your company and needs.
- The jobs are there!!!

**Opportunities:**
- Tying resources, opportunities together.
- Educating school counselors, students, parents, etc. to change the perception of both trades and building performance industry.
- Taking advantage of already existing apprenticeship paths and adding options that include building performance aspects.

**Partners Needed:**
- Employers basically develop and implement apprenticeship programs, so it starts with them; they need to realize the benefit and be willing to invest is developing a program.
• An entity that can tie together all the information and resources for apprenticeships to make it easier for candidates & parents to find opportunities and educate themselves – A one-stop-shop so to speak.

**RECOMMENDED ACTION ITEMS**

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<th>Item</th>
<th>Proposed Owner</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1</td>
<td>Survey industry employers (again) to determine if creating state-run</td>
<td>NCBPA</td>
<td>High</td>
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<td></td>
<td>(through NCBPA, state govt or nonprofit) apprenticeship programs</td>
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<td>meet their needs, and how, if at all, they are willing to support and</td>
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<td></td>
<td>or participate in these programs.</td>
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<td></td>
<td>• Signing on individual companies already offering related</td>
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<td>apprenticeship programs is also a starting point. Ingersoll-Rand,</td>
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<td></td>
<td>Siemens, Piedmont Service Group and others could be targets for this.</td>
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<td>2</td>
<td>If desired by industry employers, then complete the build-out of</td>
<td>NCBPA</td>
<td>High, after item #1</td>
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<td></td>
<td>NCBPA's four proposed Apprenticeship programs (see below) – or</td>
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<td>develop new ones – so that Apprenticeship NC can aid in building out</td>
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<td></td>
<td>and making the programs available.</td>
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<td>3</td>
<td>Develop, implement and manage programs, resources and campaigns</td>
<td>All vested parties</td>
<td>High</td>
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<tr>
<td></td>
<td>that make our industry's job and career opportunities more</td>
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<td></td>
<td>attractive to potential candidates, particularly those that are</td>
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<td>already actively engaged in, or pursuing, trade apprenticeship</td>
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<td>programs.</td>
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<td>4</td>
<td>Develop a one-stop-shop resource for apprenticeships to make</td>
<td>NCBPA and Apprenticeship NC</td>
<td>Med-High</td>
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<td>opportunities easier to find and to help educate potential</td>
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<td>candidates and parents.</td>
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<td>• Note 1: <a href="#">ApprenticeshipNC</a> provides this service already.</td>
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<td>Promoting it and ensuring that our industry apprenticeship</td>
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<td>programs, including those managed by industry groups and</td>
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<td>private companies, are included is needed.</td>
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<td>• Note 2: The problem is one that is common for all trades. The</td>
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<td>more broadly the problem can be addressed, the greater the</td>
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<td></td>
<td>benefits for our industry.</td>
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<td>5</td>
<td>Incorporate our industry trade work into existing Apprenticeship</td>
<td>NCBPA</td>
<td>Med</td>
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<td></td>
<td>programs offered across the state.</td>
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<td>6</td>
<td>Create case studies of apprentices that have successful careers to</td>
<td>NCBPA</td>
<td>Med</td>
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<td>share with prospective students, their parents and other</td>
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<td>young professionals.</td>
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<td>7</td>
<td>Create promotional collateral for job opportunities in our industry.</td>
<td>NCBPA</td>
<td>Med</td>
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<td>Leverage national and state clean energy/energy efficiency job</td>
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<td></td>
<td>reports and NCBPA’s Potential Report.</td>
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</table>
NCBPA’s Four Proposed Apprenticeship Programs

During the summer of 2018, NCBPA benchmarked Apprenticeship programs available across the country to develop the following framework for four building performance industry-specific Apprenticeship programs. If desired by industry companies, these programs could be developed, implemented and managed by Apprenticeship NC, NCBPA or another organization with a vested interest. To establish these programs, additional information is needed from industry employers including salary ranges, minimum in-field job experience requirements and more.

1. Commercial:
   a. Building Energy & Performance Contracting Technician
      i. Needed credentials: TB
      ii. Field work: energy services performance contracting, insulation, green building, automation and controls, HVAC, building envelope, water efficiency, indoor air quality, etc.
      iii. Course work: TBD
      iv. Years: 3
      v. Benchmarks: TBD
   b. High Performance Building Design Professional
      i. Needed credentials: TBD
      ii. Field work: zero energy building, green building, Passive House, automation and controls, HVAC, building envelope, water efficiency, indoor air quality, etc.
      iii. Course work: TBD
      iv. Years: 3
      v. Benchmarks: TBD

2. Residential (single and multifamily):
   a. Home Energy & Performance Contracting Technician
      i. Needed credentials: BPI Building Analyst, Crawlspace Credential (NCBPA pending), Insulation Credential (NCBPA pending).
      ii. Field work: energy audits, weatherization, insulation, air sealing, building envelope, crawlspaces, attic repair, HVAC, etc.
      iii. Course work: TBD
      iv. Years: 2
      v. Benchmarks:
         a. Alaska Building Energy Retrofit Technician
         b. Connecticut Energy Efficiency Technician
         c. DOL Energy Auditor & Analyst Apprenticeship Program
         d. National Association of Regional Councils Report
         e. Liuna Training
   b. High Performance Home Design Professional
      i. Needed credentials: BPI Building Analyst, RESNET Home Energy Rater, NAHB Certified Green Professional, USGBC LEED AP.
      ii. Field work: zero energy home, green building, Passive House, automation and controls, HVAC, building envelope, water efficiency, indoor air quality, etc.
      iii. Course work: TBD
      iv. Years: 2
      v. Benchmarks: TBD
WG #3: CAREER PATHWAYS

Facilitator:
Malinda Marsh, NCWorks Career Center Coordinator, Central Carolina Community College

Problem Question:
How can we inform students, parents, young pros and experienced pros about our industry career opportunities?

What we hope to develop today:
A “Career Lattice” from the top-down and side-to-side.

Target Participants:
Industry pros, faculty, students and job educators.

SUMMARY NOTES FROM THIS WORKING GROUP

- Perceptions about our industry’s careers:
  - The concept of sustainability is not a career. It needs to be communicated to people that sustainability can be woven into the industry but sustainability on its own is not a career path.
  - Some people and stakeholders affiliated with our industry see construction and development as bad for the environment, but that perception needs to be changed, particularly as it relates to the high performance and green construction that our industry represents.
  - Parents absolutely need to be involved in the conversation to be able to change a lot of negative perceptions.

-Titles for positions need to be updated and standardized—“Technician,” “Designer” instead of “HERS Rater”.
  - Job descriptions and titles need to focus on the term Building Performance to begin standardizing the industry and shifting perceptions about construction and development.
  - NCBPA has seen a shift in this over our five years in business. More member companies have positions for “Building Performance Technician” whether residential or commercial, and performance is being used more often than “green” or for a specific role like an insulation consultant or Home Energy Rater.

- Current industry professionals need to focus on sharpening and teaching soft skills.
  - For example, learning to identify how your target audience communicates (text vs. phone call) and being able to shift your communication style for maximum efficiency.

- There is a need to improve Curriculum consistency:
  - Sustainability as profit center for businesses.
  - Apprenticeship career path: companies combine sending trainees to one centralized training that teaches valuable core competencies related to our industry work.
  - Community colleges can adapt to what is needed in the local area, but improvements to minimum requirements and standard resources provided by the state, college or university are needed.
  - Student apprentices can serve as ambassadors for prospective students, speaking to their classes and sharing their experiences.

- Overall, communication and collaboration needs to be improved around all workforce development resources – career opportunities, apprenticeship programs, job titles, etc.
• Supporting residential professionals moving into careers/jobs in light commercial is a big opportunity. Equipment, building science and other matters are relatively similar. With the right training, it can open doors to young and experienced professionals.

**RECOMMENDED ACTION ITEMS**

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<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Proposed Owner</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Continue the build-out of NCBPA’s current Career Lattice framework with support from Malinda at NCWorks. Obtain industry feedback along the way and communicate the final result via websites, social media, educational presentations and more.</td>
<td>NCBPA, NCWorks</td>
<td>High</td>
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<tr>
<td>2</td>
<td>Add information on professionals moving back and forth between residential and commercial trades to the Career Lattice. What skills are needed, certifications, credentials, etc.?</td>
<td>NCBPA</td>
<td>Med</td>
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<td>3</td>
<td>Incorporate standardized job titles for positions in Career Lattice.</td>
<td>NCBPA</td>
<td>Med</td>
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<td>4</td>
<td>Incorporate building performance trades work into existing high school, college and university curricula.</td>
<td>TBD</td>
<td>High</td>
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<tr>
<td>5</td>
<td>Another focal point for the Career Lattice needs to include the soft skills that are needed at the starting points on the Lattice and all the way up, with increasing importance on those soft skills that are needed the most by business managers and CEOs.</td>
<td>NCBPA</td>
<td>High</td>
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<tr>
<td>6</td>
<td>Offer employee training resources that inform new/young professionals of what career choices they have, how to move up in a company or industry, etc.</td>
<td>NCBPA</td>
<td>High</td>
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<tr>
<td>7</td>
<td>Improve and expand existing resources that connect available workers to available jobs. NCBPA job board, NCWorks job portal and other resources should be included. Indeed, Craigslist, etc. viewed as difficult and low value for many positions.</td>
<td>NCBPA</td>
<td>High</td>
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<td>8</td>
<td>Career Lattice – Develop pathways that originate from individual industry roles/positions. Consider how building types matter – residential single family, multifamily, commercial, public and industrial. Also consider how a person’s individual interest in sustainability, green building and/or high performance construction matters. Fundamentally, this is the primary driver for someone to enter into and participate in our Career Lattice.</td>
<td>NCBPA</td>
<td>High</td>
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</table>

**NCBPA’S CAREER LATTICE FRAMEWORK**

During the summer of 2018, NCBPA benchmarked career ladders/lattices from across the country and established the below framework to guide development of a Career Lattice for our industry. The below diagram includes some of the roles and opportunities available – but needs to be built-out much further.
1. Student:
   a. High school GED, 2-year or 4-year degree student learns about the industry and gains an interest.

2. Internship/Co-op:
   a. Gain basic understanding of industry opportunities and define career pathways interest for field-based or office-based work.

3. Pre-Apprenticeship:
   a. Gain soft and hard skills to prepare for Apprenticeship.

4. Apprenticeship:
   a. 2–3 years of experience with relevant course work, field work, certifications and credentials
   b. Pay and benefits ranges: TBD

5. Journeyman (Field-based interest)
   a. 2–3 years of full-time work experience as licensed/certified professional working underneath experienced professionals.
   b. Pay and benefits ranges: TBD

6. Analyst/Professional (Office-based interest)
   a. 2–3 years of full-time work experience as certified professional working underneath experienced professionals.
   b. Pay and benefits ranges: TBD

7. Foreman (Field-based interest)
   a. 3–5 years of full-time work experience leading field work, managing employees, working with customers and managing parts of a business.
   b. Pay and benefits ranges: TBD

8. Designer/Consultant (Office-based interest)
   a. 3–5 years of full-time work experience leading office work, managing employees, working with customers and managing parts of a business.
   b. Pay and benefits ranges: TBD

9. Manager/Executive (Field or Office-based interest)
   a. Manages all aspects of the business.
   b. Pay and benefits ranges: TBD

10. Owner/Operator (Field or Office-based interest)
    a. Oversees and leads all aspects of the business.
    b. Pay and benefits ranges: TBD

Positions Include:
- TBD

Positions Include:
- TBD
WG #4: INTERNSHIPS & CO-OPS

Instead of holding this working group on its own, Summit attendees voted to integrate internship and co-op needs, opportunities and discussions into other working groups. Provided below are key discussion points, needs and recommended action items from other working groups discussions.

Facilitator:
Abby Coulter, Commercial Buildings & Member Services Specialist, NCBPA

Problem Question:
Can industry-coordinated internship and co-op programs help address some of our workforce challenges?

What we hope to develop today:
A framework for programs that many companies can effectively participate in.

Target Participants:
Faculty, students and industry pros.

Summary Notes from this Working Group

- A clearinghouse of available internship and co-op programs would be helpful to industry companies and students.
- Smaller industry companies are not familiar with participation rules, policies and procedures regarding internships and co-ops.
- Larger companies have formal programs for internships and co-ops that can be benchmarked by industry stakeholders and small to mid-sized companies as needed.
- Internships and co-ops are lead-ins to Apprenticeship programs.
- Industry needs to collect data on the high schools, vocational schools, technical colleges, community colleges and universities that offer internship and co-op programs related to our industry.
- Central Piedmont Community College (CPCC) in Charlotte has a co-op program that industry companies participate in directly. Ryan Miller of NCBPA has spoken with their faculty previously about an industry role in the program. As it is already established, that role would simply be to advertise and refer companies to participate in CPCC’s existing program.

Recommended Action Items

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<th>#</th>
<th>Item</th>
<th>Proposed Owner</th>
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<tbody>
<tr>
<td>1</td>
<td>Establish an online clearinghouse of available internship and co-op programs with industry companies and educational institutions.</td>
<td>NCBPA</td>
<td>Med</td>
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<tr>
<td>2</td>
<td>Create case studies and testimonials (and consolidate existing) of successful programs and individuals to promote to students, parents and hiring companies.</td>
<td>NCBPA</td>
<td>Med</td>
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<td>3</td>
<td>Add internship and co-op opportunities to Career Pathways resources to highlight their role in pre-Apprenticeship and other opportunities.</td>
<td>NCBPA</td>
<td>High</td>
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</table>
WG #5: STATE AND LOCAL RESOURCES

Facilitator:
David Doctor, President & CEO, E4 Carolinas

Problem Question:
How can industry companies best work with resources available through state and local governments?

What we hope to develop today:
Actionable steps for industry companies and stakeholders to take with state and local government resources.

Target Participants:
Industry pros and government reps.

SUMMARY NOTES FROM THIS WORKING GROUP

- The cultural, social, competency and “expectation” gap between prospective employees and employers is large and diverse.
  - Many prospective employees do not possess the “soft skills” expected by employers that include: business and sales language, behavioral management, and an understanding of the social norms unique to the business or sector.
  - Many employers have not adjusted employment standards to today’s cultural/social standards and encounter difficulties with employees passing drug tests, written tests and needing flexible work hours and remote working opportunities.
  - Many employers do not understand what “success” may mean for a prospective employee.
  - Employment pathways and results are not clear to prospective employees.
  - Employers don’t realize that “trade” or “craft” may have a stigma associated with low wages and hard work and by not “packing” their employment opportunities or the general nature of their business/industry, they are overlooked by prospective employees.

- Prospective employers often don’t know whether they are seeking “workers” or a “workforce”.
  - Employers seeking workers have many established state or local programs which source and train workers, but may be unaware of most or all.
  - Workforce development is a broad and diversely supported area which no one entity in a state or metro area “owns“, making identification and coordination of resources difficult for prospective employees and employers.
  - Because of the diversity of worker development and trainings programs and the organizations offering these on a state or local level, development of a comprehensive, ongoing program to serve a particular industry is very difficult.
  - Employers, groups of employers or industry sectors wishing to develop a workforce have few programs or financial resources available to them.

- Federal and statewide programs don’t solve or wholly-address local problems.
  - Program funding requirements often do not relate to a specific need of a locale, but must be addressed to comply with the legal requirement of accepting the funds.

HIGHLIGHTS FROM MICHELLE MUIR’S PRESENTATION

General Session: NCWorks with Michelle Muir, Department of Commerce

- The commercial building industry is having difficulty finding and retaining workers. Data shows an increase in employers having difficult increasing to 3:1 from 10:1.
NCWorks offers “Finish Line” Grants:
- This is a local board that works with community colleges and provides up to $1,000 worth of funding for completion for trade education.
- Focused on recruiting and trade pipeline development.
- This is a function of the community college system.

In some industries, only 1/10 prospective employees will pass a drug test.
- Companies should be straight forward about it if they are going to test.
- Need to eliminate blanket decisions on hiring.

Business EDGE is a program that provides grants to assist companies having financial issues.

NCWorks offers career centers that provide job fairs, interview space, soft skills training, match 50% for training, tax credits for hiring felons and more.

**Recommended Action Items**

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<tr>
<td>1</td>
<td>Identify the companies, associations, state and local government entities, and other stakeholders that will commit to addressing some, not all, of the building performance industry’s workforce needs and challenges in the coming years.</td>
<td>NCBPA</td>
<td>High</td>
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<td>2</td>
<td>Apply for grants with partners focused on workforce development at the local, state and federal levels.</td>
<td>Industry companies, NCBPA and stakeholders</td>
<td>High</td>
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<tr>
<td>3</td>
<td>Develop soft skills trainings and resources that better prepare prospective and new workers for today’s modern jobs.</td>
<td>NCBPA</td>
<td>High</td>
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<td>4</td>
<td>Coordinate free online trainings to industry company owners, hiring managers and HR managers to help them address workforce issues including soft skills training, hiring practices, retention policies and more.</td>
<td>NCBPA</td>
<td>Med</td>
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<td>5</td>
<td>Curricula for our trade work are needed in vocational and high schools. State-funded courses or certifications available? Pre-apprenticeship programs? Use Connecticut programs as examples. What about scholarship opportunities?</td>
<td>NCBPA</td>
<td>High</td>
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WG #6: DIVERSITY, EQUITY & INCLUSION

Facilitator:
Marilynn Marsh-Robinson, US Climate and Energy Partnerships and Alliances Manager, EDF

Problem Question:
How can our industry address challenges facing our companies and workers related to diversity and inclusion?

What we hope to develop today:
Recommendations for programs and resources that educate, inform and inspire action amongst industry pros.

Target Participants:
All!

* NCBPA Comment: In the first two breakout sessions for the working groups, only women attended this working group.

SUMMARY NOTES FROM THIS WORKING GROUP

- Recognizing the difference between diversity, equity and inclusion is an important first step in understanding the inherent issues and needs.
  - Diversity is more about the numbers (a noun).
  - Inclusion is the act of including others (the verb).
  - Equity is promoting fairness recognizing that people are starting at different places.
- **KEY FINDING:** Very important observation that the first session had 6 women and no men participating. This is part of the problem. We need more diverse voices and decision-makers at the table.
  - Why are diverse voices overlooked?
- Often with ED&I there’s a constant refrain that we don’t want to talk about the problems anymore. Let’s fix it, let’s solve the problem.
  - Problem with this is if you don’t understand the true problem how can you understand and develop a solution?
- Course correcting and information sharing are key for organizations/companies who want to do ED&I.
- Must also make deposits into a community, as opposed to just withdrawing help/money/support.
- How are we thinking about workforce development?
  - Are people seeing a workforce that looks like them? Less diversity as you move up the ladder and in business ownership.
    - More diversity in the installer/entry level jobs.
    - Diversity should be shown throughout the different management levels and in ownership models.
  - Part of the problem is cultural competency and making sure people in positions of power understand socio-economic and gender dynamics.
- One of the biggest barriers is that if there’s an agreement that we need to have a diverse workforce then there is an inherent understanding that the industry needs to change and change is scary.
  - Organizational structures need to change.
  - Personal and cultural systems need to change.
- What do we need?
  - Networking.
  - Diversity training.
  - Racial equity training.
o Support system to retain diverse employees (mentoring programs, opportunities to network in/outside the company).
o Apprenticeships: more than just bringing someone on, but does the company feel like it’s a value for their company?
  ▪ It’s a good business decision for folks and they need to understand that diversity is a good decision.
  ▪ Continuing support and training once an apprentice or intern or staff has made an entry into an industry.
o Diverse class backgrounds and implications for folks from lower income backgrounds.
o Structural and geographical barriers: Is there a lack of interest, lack of opportunity, lack of financing, lack of jobs, etc.: how do we tell that story?
  ▪ Example: bringing in outside workforce to work on a project in a particular community.
    • Peer to peer connection is important for trust and accountability.
o Information about hiring those with criminal records and how you can become one of those companies.
  ▪ Check a box on tax forms: look into this?
o Brand and market the industry as a leader in this exciting, emerging, issue area.
  • The ready workers and ready employers are speaking different “languages” even though they’re talking about the same things.
  • Many employers haven’t adjusted their employment standards to reflect some of the ways that our social norms have evolved.
  • Stigma and perception play a major role in whether individuals are interested in a particular role.
  • Difference between looking for a workforce vs. workers.
  • Communication is key, particularly amongst business and employee job seekers.
    ▪ Important to consider that if you’re only looking at candidates for jobs through your current employees then that’s very likely not going to increase the diversity of your company.
    ▪ Go to some more untraditional places to look for candidates: Community centers, churches, barber shops, grocery stores, etc.
• Need to pay people more.
  o NC has the second highest level of working poor.
    ▪ i.e. individuals working more than one job but still very poor.
• Cultural competency is not just about the potential employees ability to meet a certain cultural environment, but about the employers ability to work with people from different cultures.
• Create a space for employees to go where they can learn about opportunities for advancement within the industry.
• Create some sort of ED&I certification or recognition for the industry to encourage or incentivize participation in ED&I programs?

Problem Statement:
• To effectively address equity, diversity and inclusiveness in the industry and sufficiently address workforce demand, there are a broad range of considerations including;
  o Defining, understanding and educating industry professionals and stakeholders on the difference between diversity, equity and inclusion.
  o How do you create ownership?
    ▪ For example, we noticed there were no men who came to the first two ED&I sessions.
      • Also, when ED&I is taken on in a company it’s often that one of two people of color who are tasked with tackling it—that’s a huge burden and it’s not fair.
  o Understanding the problem before creating solutions.
    ▪ Tendency in this space to just want to fix it; important to think about the problems so that the solutions developed are appropriate and helpful.
  o Address diversity among leadership and decision makers.
Focusing on diversity among entry level or mid-level staff is important but there also needs to be diversity in the board room and at the C-suite.

- Truly changing the structural barriers to diversity and inclusiveness requires change of both organizational structure and sometimes personal and cultural structures.

- This is scary and requires some self-reflection and critical thinking.

- How are we measuring diversity? Measuring numbers alone can be misleading. If the growth in staff is not where the decisions are being made, then are you making progress?

Barriers to Success:
- Some people think that it is an HR issue though it is an organizational commitment.
- Lack of communication and unwillingness to be “uncomfortable”.
- Lack of training.

Strengths:
- Strong Leadership and accountability.

Opportunities (could also be recommended action items):
- Try to recruit from different sources to increase your chance of incorporating diverse candidates.
- Attend job fairs or conferences that are well attended by diverse candidates.
- Broaden your organization’s networking base by attending/sponsoring community events.
- Send job/internships descriptions to historically black colleges and universities (HBCUs) or minority serving institutions (MSIs) of interest, if they are not already part of your outreach.
- Go to high schools (with special focus on solar or environment) or community colleges and discuss employment opportunities, making efforts to be inclusive and reaching out to veterans, women and people of color.
- Women-only construction and education courses can be offered. CCCC does this (Jeff Gannon) and other faculty members expressed interest. Consider expanding from women as focal point to same courses for Latin American/Hispanic and other demographic target participants. Consider costs of these programs – to develop, host and attend.

Partners Needed:
- Organization’s HR, Leadership Team and Board
- Society for Human Resources Management (SHRM) – Diversity
- American Association for Blacks in Energy
- Hispanics in Energy

Key Data Points:
- Spencer Stuart: Why is Diversity Critical for the Energy Industry?
- 5 Numbers that Explain Why STEM Matters to All of Us

Additional Resources:
- NCSEA’s Women in Clean Energy initiative with networking events and resources.
- NC Clean Energy Technology Center’s Clean Energy Opportunity Diversity Scholarship Training program for EE and Solar Implementation.

### RECOMMENDED ACTION ITEMS

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<th>Item</th>
<th>Proposed Owner</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1</td>
<td>Industry needs to develop language, educational materials and</td>
<td>TBD</td>
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<tr>
<td>2</td>
<td>Highlights of diverse workers in management and leadership positions at industry firms will help encourage younger diverse workers to grow in their positions and support non-diverse workers changing some perceptions about diverse workers in leadership positions.</td>
<td>TBD</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Networking opportunities, mentoring programs and opportunities to work or network with diverse and non-diverse employees inside and outside of the company will help create a support system to retain and encourage new diverse employees.</td>
<td>TBD</td>
<td>High</td>
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<td>4</td>
<td>Research and promote resources for companies interested in or willing to hire workers with criminal records.</td>
<td>TBD</td>
<td>Med</td>
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<tr>
<td>5</td>
<td>Create industry resources and spaces (online forums) for employees to go where they can learn about opportunities for advancement within the industry. Create ED&amp;I certification or recognition for the industry to encourage or incentivize participation in ED&amp;I programs.</td>
<td>TBD</td>
<td>Med</td>
</tr>
<tr>
<td>6</td>
<td>How does, and can, our industry measure diversity within its ranks? Need to start there to gauge improvement over time.</td>
<td>TBD</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Support companies recruiting diverse workers outside of their normal ranks. Recruiting through current workers perpetuates the same level of diversity in more cases – reaching out through career fairs, local programs and other sources will help provide a diverse hiring pool.</td>
<td>TBD</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>Send job/internships descriptions to historically black colleges and universities (HBCUs) or minority serving institutions (MSIs) of interest, if they are not already part of your outreach. Go to high schools (with special focus on solar or environment) or community colleges and discuss employment opportunities, making efforts to be inclusive and reaching out to veterans, women and people of color.</td>
<td>Industry companies</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Connect employers to women-only construction and clean energy courses to participate and offer time for their staff to attend.</td>
<td>TBD</td>
<td>High</td>
</tr>
<tr>
<td>10</td>
<td>Offer an initial 30-minute DEI training course/webinar to industry companies to introduce the topic with low commitment (time invested, cost, etc.) for companies to participate. Include surveys (anonymous, worker and company-focused) to collect data on employee and employer sentiment, needs, etc.</td>
<td>TBD</td>
<td>High</td>
</tr>
</tbody>
</table>