

Sectoral Partnership Meeting- Raleigh

Purpose: Bring together industry partners to identify challenges to sustaining and growing the EV charging workforce now and in 5 years, and solutions to create a thriving and growing EV workforce through partnership between education, government, and companies. The ongoing conversation and 'family' developed through the sectoral partnership will work to lift up underserved populations and continue to grow the EV industry.

NCBCE Grant

NCBCE received a grant from the Siemens Foundation (Everyone Charging Forward) to create apprenticeship and credential-based training programs for the EV installation sector. The grant prioritizes underserved and rural individuals in Justice40 communities.

Pilot program will be designed, implemented, and evaluated to address the communities' and sector's workforce needs. Grant funding will be used to provide wrap around services and improve access to the EV career pathway.

Two questions

1. What are one or two greatest challenges to sustaining and growing you workforce in EV charging space, now and over the next 5 years?
2. Consider your company's greatest challenges, how might you collaborate with education, government, and other companies in this space to solve these challenges and make the EV charging ecosystem one that is thriving and growing for all involved?

Session 1- Greatest Challenges

Challenges

- How states and cities incorporate maintenance in RFP
- Lack of nationally recognized curriculum
- Necessity to scale at speed to meet demand and growth- NEVI implementation
- Lead times and supply chain shortages causing revenue loss for small family-owned businesses
 - o Increased equipment cost from trying to source in America
- Increasing number of certified and qualified individuals to conduct installation
- Long-term employee retention for small companies
 - o Piracy of employees from larger companies
- Gutting of vocational education in high schools
 - o Hard to find high school students interested in electrical work

- Creating apprenticeship programming within companies
- Variable market and challenges with forecasting investments
- Uncertainty about where chargers are being installed and where projected growth is
- Policy lagging sector growth (regulations)
- Education for the end customer
 - o Differences between types of chargers and equipment
- Understanding differences between installation and maintenance
- Speed to scale workforce yesterday
- Lack of sufficient equipment to train on at community colleges
- Evolution of groundbreaking technology will quickly make curriculum inept
- Lack of unified industry voice to advocate for policy
- Misalignment of needs and request for charging infrastructure
- Lack of industry knowledge at local and state governments
- Training costs for current employees
 - o \$1000 per training will put small businesses under
- Niche skill shortage
 - o In high-voltage and refrigeration skills
- Project management between contracts

Themes from Challenges

1. Workforce
2. Education and Training
3. Policy
4. End-user Education

Session 2- Solutions

1. Workforce
 - o Pathways for career advancement after the initial ramp up for technicians and manufacturers
 - o Share supplies, goods, and staff resource between companies when they do not fit your company needs
2. Education and Training
 - o Programs for reskill and upskill to retrain individuals into the immobility workforce
 - Ex: Those transitioning from the fossil fuel industry
 - o Promote apprenticeships and a pathway to a livable wage

- Students will already have a baseline of knowledge that can be transferred to work-based learning
 - Develop occupational curriculum that incorporates both software and hardware
- 3. Policy
 - Leverage IJA and IRA funding to equip community college with necessary equipment to teach
 - Reestablish the NC journeyman license in North Carolina
 - Grants for businesses to pay for new hires to access training on emerging technologies
 - Develop occupational curriculum that incorporates both software and hardware
- 4. End-user Education
 - Promote and market that vocational professionals provide a good living and wage
 - Provide example applications, software packages for customers
- 5. Other
 - Develop a one-stop-shop for policies, funding opportunities, and other resources
 - Include an inventory of EV charging programs and apprenticeships opportunities
 - Assign people who are responsible and accountable for each solution
 - Establish a private-public partnership

Debrief with Community Partners

- Need to look beyond school pipeline and focus on transitioning and underserved communities
 - Ex: Justice involved individuals, limited English speakers, returning service members
- Need to build interest and knowledge of the sector
 - A 'cool' branding that makes young people and transitioning workers want to be a part of the sector
 - Start at middle school and target school counselors
- Need to build CTE programming before it can be marketed
- Concerns about ability to secure equipment to teach on
 - Recommend a loaning program with rotational equipment placements
- Desire to understand where else OEM applies
- Need the forecast numbers of the number of chargers needed in North Carolina
- Reskill vs upskill
 - Reskill: verifiable transferable skills and teach new curriculum components
 - Upskill: short-term credential programs
- NEVI programs require workforce development, but it has not been included in state's RFP
- Instructors are being poached from industry

1. Workforce

- Samantha (ChargerHelp)
- Chris Harrill (Qmerit)
- Johnny P (UPA)
- Steve Bremer (SAE International)
- Heriberto (ABB)

2. Education and Training

- Jed Routh (KEM Power)
- Peny (UPA)
- Chris Harmill (Qmerrit)
- Julia (ABB)
- Laura (Atom Power)
- Vykram Vijaysekaran (AKG America)
- Johnny P (UPA)
- Olivia Campbell(ABB)
- Mark McIntire (Duke Energy)
- Tom D. (Duke Energy)

3. Policy

4. End-user Education

- Nikki Lynberg (NCEMCS)
- Dan McLaughlin (Siemens)
- Joel B (Chatham Electric)