Equity Centered Workforce Development: Demonstrated Success Through Partnership

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ABSTRACT

With increased funding from the IRA for workforce development and continued labor shortages, the need for training opportunities and supportive workforce development to reach historically excluded populations only continues to grow. The industry can address these real challenges while leveraging trainers, employers, and community-based partners to meet participant and industry needs. This paper outlines successful partnership strategies that support an equity-focused workforce development program in Minnesota, implemented by Center for Energy and Environment (CEE) with funding from Xcel Energy, that launched in 2022.

Over the past two years, program staff have discovered ways to effectively build partnerships to sustain a successful workforce development program past the initial launch phase. We've identified best practices for continued partnership engagement with employers and community-based organizations that lead to participant success using a holistic framework. Partner and participant stories and testimonials will be shared along with details on metrics used to track retention, certification, and employment rates and measure overall program success.

Introduction

This workforce development program funded by Xcel Energy and implemented by CEE creates numerous energy efficiency career pathways for unemployed and underemployed people living in historically underserved communities, Black, Indigenous, people of color, and women residing in Green Zones of Minneapolis and Areas of Concentrated Poverty (ACP) 50 zones of St. Paul. A Green Zone is a group of neighborhoods with high levels of environmental pollution and racial, political, and economic marginalization (Minneapolis, City of Lakes 2023). This workforce development program is provided by Xcel Energy and administered by CEE.

Since its launch in 2022, nearly 100% of graduates reported entering the program with a household income at or below 60% of the Area Median Income and 69% of internship graduates went on to employment in the energy efficiency sector, with all graduates earning an average wage of \$21 per hour following completion of the training.

Community-based partnerships and partnerships with employers have been critical to the program's success since its inception. While CEE identified several partners before the program

launched to recruit participants, we found that the most successful community-based partnerships were those that truly invested in the expansion of equitable jobs and energy efficiency careers.

Background

Through research conducted in 2018, CEE found that 85% of Minnesota's energy efficiency employers reported difficulty hiring (Foshay and Steigauf 2019). Across the country and regionally, more work is needed to meet the ambitious energy efficiency and climate goals from federal and state governments and utilities.

In 2020 and 2021, the Building Performance Association and U.S. Department of Energy conducted a workforce development needs assessment of state weatherization agencies, HVAC trade organizations, and insulation contractor companies (Building Performance Association 2021). The assessment identified areas of need including increased awareness of careers in energy efficiency as well as engagement of previously untapped communities of workers, like formerly incarcerated individuals, immigrants, women, and BIPOC. The assessment also identified time constraints around onboarding and training new employees and the need to connect new entrants to on-the-job internship opportunities.

In 2022, a report released by Clean Energy Economy Minnesota (CEEM), an industry-led nonprofit that provides the business voice for energy efficiency and clean energy in Minnesota, found that clean energy jobs grew 50% faster than the overall state job growth. Additionally, clean energy jobs employed 60,000 Minnesotans at the end of 2022, a 3.4% increase from 2021. Over 72% of the state's clean energy jobs are in energy efficiency, and 71.7% of these businesses employed fewer than 20 individuals (MN Clean Energy Jobs & Transportation are Growing 2022).

Meanwhile, Minnesota's women and communities of color continue to be underrepresented in the industry (Clean Energy Economy Minnesota 2021). Within this resilient and growing sector, people of color represented just 28% of the state's clean energy workforce (Figure 1) and women represented about 27% (Clean Energy Economy Minnesota 2021). By August 2020, Black unemployment had risen to 16.3% compared to a rate of 6.7% for white Minnesotans (Clean Energy Economy Minnesota 2021).

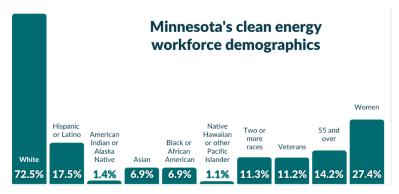


Figure 1. Clean Energy Economy MN: Clean Jobs Midwest Report 2021. Source: cleanenergyeconomymn.org.

CEE and other organizations that employ energy auditors in Minnesota have struggled to attract and retain workers, making it difficult to keep up with customer demand and goals for scaling. Likewise, contractor partners that provide insulation, air sealing, and HVAC work for Xcel Energy customers can be scheduled out sometimes as far as six months due to staffing struggles. This hiring demand continues to increase dramatically as more funding intended to advance energy efficiency and climate goals comes to the industry from federal, state, and local governments and utilities.

Early in the program design, CEE heeded the advice of community-based organizations on how to support program participants who were likely facing multiple barriers to employment including issues related to transportation, workplace readiness, and housing. CEE sought to train participants in the communities where they reside. For this reason, CEE's workforce training is held in Green Zone areas of Minneapolis and ACP 50 zones of St. Paul that are highly accessible by public transportation and central to the communities.

Despite the accessibility of the training locations, transportation to and from jobsites can be a hurdle to employment for many people. For residential energy efficiency jobs, it is essential for workers to have access to reliable transportation, particularly their own vehicle and driver's license. Many residential insulation contractors' headquarters are in the outer metro region, making it difficult for those without a reliable form of transportation to get to and from daily. A lack of reliable transportation, access to a driver's license, or ability to pay fines to have a license reinstated are all reasons trainees may face challenges getting to and from a jobsite (Espinoza and Kane 2024). It became clear to CEE that effective partnerships with both community-based organizations and employers were critical to the program's success. Additionally, program staff realized a learn-and-earn training model would be most effective to ensure financial stability and program completion. This training model is used to meaningfully address inequitable training access by simultaneously paying workers to upskill (Ecker 2021).

Program Design and Considerations

This holistic, learn-and-earn career training model was designed in tandem with community-based partners, employers, and other training providers to provide participants with in-depth technical training on residential decarbonization. The first stage of this training model begins with community-based recruitment. This involves close collaboration with community-based organizations and trusted community groups in the neighborhood where the training will take place. Once individuals complete an online registration form, they have a brief phone call with CEE staff designed to screen potential candidates. CEE asks questions related to past work and training history, ability to commit to the training period, any obstacles they may face in completing the course, and their career goals.

If a candidate is screened and found to be a good fit, CEE enrolls them in the training. The first day of training includes an orientation, and the first week heavily focuses on career exploration and identifying their unique skill set as it relates to energy efficiency careers. Handson training is provided throughout the four-week training related to careers in insulation and

home energy auditing. As seen in Figure 2, participants practice air sealing and insulation techniques using props.





Figure 2. Photo taken from Xcel Energy-funded Home Energy Career training cohort 1, 2022.

Employers connect with students throughout the process and provide on-the-job training for participants seeking to gain hands-on experience. Community-based organization partners provide much-needed wraparound and recruitment support services for participants throughout the program. In addition to the weekly \$550 stipend, participants receive bus or gas cards weekly to offset transportation costs. Program details are included in Figure 3.



Figure 3. Xcel Energy-funded Home Energy Career Training model 2023. Designed by CEE staff.

Early in the program design, CEE identified three key areas as critical to participant success in any workforce program: paid, high-quality training, wraparound support services, and career navigation. Through conversations with numerous community-based organizations, CEE identified stipends as critical to completion and retention efforts for a successful workforce program model. Providing paid stipends is key because it allows participants to engage in the training more fully. It also provides a supplemental income, especially if training coincides with the hours a participant would typically be working. For participants who are enrolled in programs like Temporary Assistance for Needy Families (TANF), known as the Minnesota Family Investment program (MFIP) in Minnesota, stipends count as excluded income, allowing participants to maintain more benefits than they would otherwise if working directly in unsubsidized employment.

Career navigation was also identified as key to a successful workforce program. Career navigators, sometimes called career or employment coaches, wear many hats in their role. Ultimately, their role is to support the individual in the training program as they strive to reach their goals related to education and employment — they work alongside the person to address obstacles to their career development and long-term employment. Typically, the career navigators that CEE partners with provide weekly check-ins with participants in the training and work with them outside the training on their personal education and career goals. Often this includes refining their resumes, preparing them for the expectations of the internship, or connecting them with financial coaching.

Funding for wraparound services is mostly provided by the partner organizations, with a small portion available from the main Xcel Energy funding stream. This allows the program to heavily leverage existing workforce system resources to provide services while ensuring flexibility for additional needs not covered by existing funding. During both the four-week training and the internship, workforce partners provide participants with case management services to ensure they have what they need to participate each day: transportation, technology, adequate childcare, etc. They also provide training in career readiness to help participants present themselves to future employers and prepare for their next job.

Initial Partnership Development

Community-Based Organization Partners

Partnerships are critical to the overall success of any program, especially in workforce development. CEE realized early on that partnerships with community-based organizations would be vital to provide wraparound support services and career navigation services. According to Forbes, identifying shared interests, prioritizing client services, and highlighting win-win opportunities, are all areas to examine when considering a partnership (Forbes Nonprofit 2019). Throughout discussions with community-based organizations, CEE identified organizations with a strong interest and commitment to expanding energy efficiency jobs and a successful history of providing social services and career navigation, with expertise in culturally specific services. In the past two years, CAPI (previously known as the Center for Asian and Pacific Islanders) and Ujamaa Place have emerged as CEE's anchor community-based partners, with newer partnerships being established with Sabathani Community Center and the City of Minneapolis.

Initially, CEE sought partnership with CAPI due to their specific expertise in culturally specific workforce development, social services, and recruitment of BIPOC communities. With historical ties firmly rooted in immigrant and refugee communities, CAPI has extensive experience serving Minneapolis residents with limited English skills or math proficiency, educational attainment, and other barriers resulting from poverty, unstable housing, and structural racism. When a funding opportunity arose from the City of Minneapolis Employment & Training for Green Industry Pathways, CAPI enlisted CEE as the training provider. CAPI was awarded this funding in 2022 and 2023, and it has allowed CAPI and CEE to serve over 24 participants.

Ujamaa Place has also been a critical partner for CEE since the launch of the workforce program in 2022. Before CEE began offering the Xcel Energy-funded, four-week paid Home Energy Career Training, a short one-week training was offered to six Ujamaa participants to increase their understanding of building science and energy efficient building technologies. This initial training was funded by the City of Saint Paul, and spurred discussion with CEE and Ujamaa Place about providing recruitment and wraparound services for the Xcel Energy-funded workforce training. Since 2010, Ujamaa Place has provided holistic transformation for young African American men experiencing inequity at the intersection of race and poverty, helping them achieve brotherhood, stability, and personal success. They have worked with over 5,000 men and maintain a 4% recidivism rate.

In 2023, CEE held all the Xcel Energy-funded Home Energy Career training cohorts at Sabathani Community Center. Sabathani is one of Minnesota's oldest African American founded nonprofits, providing a wide range of community orientated, culturally tailored services in the heart of South Minneapolis. CEE began work in 2020 with Sabathani to review and assess their plans for a senior housing new construction project. Through CEE's recommendations, all apartment units met the Energy Star Certification. In addition, Sabathani is a resilience hub for Xcel Energy and has made a significant commitment to updating HVAC systems and lighting.

The City of Minneapolis Health Department has also played a key role in furthering CEE's career training goals. While they are not a community-based organization, their breadth of partnerships with organizations in the Green Zones of Minneapolis is notable. One of the initiatives the Health Department provides is a green career exploration program for BIPOC young adults based out of Sabathani Community Center. When the City wasn't utilizing this space, they subleased the room to CEE for our career trainings. They have also served as a critical thought partner in mapping out strategies to bring in a more diverse pool of contractors.

Employer Partnerships

In addition to community-based organizations, several contractors emerged as strong employer partners early on in discussions. The residential insulation sector in Minnesota largely comprises small, family-run businesses of less than 10 employees. Furthermore, all residential insulation contractor companies in Minnesota are non-union. CEE began by identifying contractors in their preferred contractor network, but quickly learned which contractors had the interest and time to provide high-quality training on the jobsite to a new entrant to the sector. Also, some contractors were eliminated due to their work in western Wisconsin or areas of the Twin Cities' exurbs over an hour outside the metro area that were difficult or nearly impossible to access by public transit.

Through these conversations and criteria, CEE identified contractors that would best qualify as internship hosts. Element Insulation was identified as a key insulation contractor partner due to their readiness and interest in hosting and the location of their jobs mainly in Minneapolis, making them easily accessible by public transportation. For those jobs in the exurbs, CEE partnered with Uber to provide rides as needed for trainees without reliable transportation.

Community Action Partnership of Ramsey and Washington Counties (CAPRW) and Sustainable Resources Center (SRC) were also identified early on as key employers in weatherization. Due to their highly accessible locations along the route of a light rail in St. Paul and near the University of Minnesota in Minneapolis, these organizations were a natural fit as employer partners. Both CAPRW and SRC are weatherization assistance providers (WAP) and 100% of their audits are provided to income-qualified customers. While CAPRW and SRC are the two main WAP providers in the Twin Cities metro, both organizations operate quite differently. CEE recognized these differences as a strength in creating a well-rounded learning experience for trainees during the paid internship's on-the-job training.

SRC provides lead hazard remediation in addition to energy conservation services across all of Hennepin County. Energy auditors at SRC noted the ability to work independently and the variety in HVAC inspections as aspects of their work they enjoyed the most. Because of this independence, most energy auditors at SRC preferred to meet trainees at the jobsite and were less flexible to trainees riding along if they lacked a reliable vehicle.

In contrast, CAPRW auditors almost always meet at the office before going to jobsites. CEE noticed there was a much more collaborative approach, and inspections were done entirely by one staff member who was QA certified. Additionally, CAPRW has an in-house insulation crew comprising union members with the Carpenter's Union. Within their hiring model they've built specific career pathways, allowing for on-the-job training (e.g., Energy Auditor I < Energy Auditor II < Energy Auditor III; Apprentice Carpenters to Journeymen Carpenters). This approach allows more people to start at an entry-level role and work their way up to advanced positions.

Assessing Effective Partnerships

Community-Based Partnerships

Partnerships are not built overnight. Time, commitment, and a common understanding are necessary to make a partnership effective for both parties. Over the past year and half, CEE has strengthened our approach to partnership building as an ongoing, cyclical process rather than a linear one. Through established partnerships with CAPI and Ujamaa Place, CEE assessed the effectiveness of the partnerships. For newer partnerships, such as Sabathani Community Center and City of Minneapolis, CEE sought to define desired outcomes, roles, and responsibilities.

The Education Development Center, Inc. designed a partnership effectiveness continuum tool that can be used to "guide the self-assessment of an existing partnership or to support the development of a new partnership" (King 2014). As defined by this tool, there are six main criteria that define where a partnership falls on the continuum: partnership vision; institutional leadership; joint ownership and accountability for results; communication and collaboration; system alignment, integration, and sustainability; and response to local context.

Over the past two years, CEE has worked closely with CAPI. Through funding CAPI received from the City of Minneapolis Employment & Training for Green Energy, CAPI has a Green Energy Navigator dedicated to supporting participants through CEE's training. CAPI also has dedicated support service dollars of up to \$800 per participant for addressing barriers to

employment such as transportation, housing, or childcare. Through discussion in meetings, CEE and CAPI discovered the partnership was effective in the vision, institutional leadership, and response to local context. The effectiveness of the response to local context is demonstrated by the clear recruitment and referral process that CAPI and CEE have co-created, as well as CAPI's commitment to prioritize green job training by securing funding dedicated to green job expansion from the City of Minneapolis not once but twice.

However, CEE and CAPI recognized the need to be more effective in specific areas of the partnership, including joint ownership and accountability for results, communication, and collaboration. Meetings are held bi-monthly between the two organizations, but often these meetings solely focused on recruitment to the training and not on retention or career navigation after training completion. Partnership goals and progress toward those collective goals was not being regularly discussed in meetings, and at times communication was not clear about the responsibilities of CAPI's navigator and CEE's staff in retention and career outcomes after completion of the training.

As a result of this assessment, CAPI and CEE created a clear action plan to track their progress toward more effective collaboration specifically on goals related to employer engagement, better defining staff responsibilities between the two organizations, and increasing communication with graduates to ensure long-term employment in the sector.

For newer partners such as the City of Minneapolis, defining outcomes and roles became a clear priority. The City of Minneapolis sought to bring more training specifically related to energy efficiency and cold climate air source heat pumps to add to their clean energy training offerings like solar installation training. CEE had concerns about the duration of each session and proposed integrating them into existing training.

Together, CEE and the City of Minneapolis recognized the shared desire to increase awareness of entry-level careers in residential energy efficiency and expand access specifically for historically disinvested neighborhoods in North Minneapolis. CEE and the City discussed a week-long introductory training to air source heat pumps and explored what this could look like embedded in an existing HVAC technician training occurring at the Regional Apprenticeship Training Center in North Minneapolis. The City of Minneapolis recognized CEE's concerns about staff capacity and funding and offered to offset the cost by investing some of the City's climate legacy funds toward this air source heat pump training. Discussions like these have allowed CEE to integrate new training opportunities into existing programs.

Employer Partnerships

CEE identified the need to better internally assess where employers were in meeting CEE's expectations for high-quality employer partners. As a result, CEE staff created a rubric (Figure 4) to assess different categories including crew culture, openness to training, recruitment/DEI/systems of support, motivation, location, and communication. This has allowed CEE to more objectively assess an employer's ability to host a trainee and determine when not to pursue a partnership if it is not in the best interest of the employer or the trainee.

	Warrants Caution	Meets Expectations	Exceeds Expectations
Insulation Partner: Crew culture	Cliquey, not diverse, 1 main crew, crew lead/contact not often on site	Several smaller crews, welcoming, lead/contact on site	Diverse crew, multiple smaller crews, crew lead on site, crew lead communicative
HVAC Partner: Crew Culture	Cliquey, not diverse, many solo crews and partner crews that only work together	Many partner crews, partners switch often, crews encouraged to stop at shop at the end of the day	Diverse crew, partners that switch often, supervisors in contact with crew, culture of meeting back at shop
Insulation Partner: Open to training	Small and busy crew, could train, but not motivated to	Crew is open to training, has a crew for training	Crew has designated trainer and a training plan
HVAC Partner: Open to training	Small shop, very busy, much of training will be shadowing	Crew is open to training, has a person/partner crew that trains most staff	Has several partner crews that train, have training plan and work with trainee to accomplish goals
Recruitment / DEI / Systems of Support	Does not express interest in working with diverse organizations or workforce training programs to recruit new hires. Shows lack of interest or concerns for creating more inclusive hiring practices. Does not express interest in creating DEI goals or opportunities for their company to grow in this area. Accepts the status quo (i.e. white, male dominant workplace) and doesn't see the need to change.	Currently hiring, job posting includes wage Has expressed interest in working with diverse organizations and workforce training programs (i.e. CEE) to recruit new hires. Expresses a desire to create more inclusive practices around hiring candidates from various backgrounds. May be actively working on creating DEI goals for the first time and/or expresses interest in opportunities for their company to learn and grow in this area. May be beginning to challenge the status quo and/or see benefit in bringing in more diverse crew members.	Currently hiring and looking for diverse candidates, job posting includes wage, benefits Partners with diverse organizations to recruit new hires and/or takes intentional action in removing barriers in hiring candidates from a variety of backgrounds Has clear DEI goals and actively seeking opportunities for their company to learn and grow in this area. Challenges the status quo and demonstrates their commitment to bringing in diverse crew members.
Motivations to be involved in workforce training	Motivated by training stipend	Motivated by opportunities for new employees	Motivated by opportunities for new, diverse, well-trained staff
Location	Far outside of metro, 50% or less of work inside metro	Outside metro, but does 80% of work inside metro	Inside metro, 100% of work inside metro and provides accommodations for trainees without reliable transit to meet at office and ride along
Communication	Challenging to get a hold of, can usually get in touch with after a few phone calls, but does not follow up	Easy to get in touch with, usually answers calls or texts within a day, sometimes	Easy to contact via phone or email and responds within 24 hours or less on most occasions,

Figure 4. Employer Partner Rubric 2024 created by CEE staff.

Additionally, it was clear to CEE that there was still work to be done in partnership with the employers that were meeting expectations to provide adequate support during on-the-job training. The National Fund for Workforce Solutions created a framework in which four different pillars are identified that outline the elements of becoming an employer of choice (Dawson 2024). As seen in Figure 5, these four pillars include core, support, opportunity, and voice. Program staff used these four pillars to guide our discussions with employers and discuss improving training efforts for new staff, anti-discrimination and anti-profiling policies, and ongoing training and development for current staff.

One area CEE explored was the concept of developing a community of practice for employer partners. As defined by the University of Wisconsin-Madison, communities of practice are "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (Wenger 2024). Through an insulation contractor community of practice, program staff invited contractors to participate. Some contractors were already employer hosts, while others were interested in learning more about our workforce program. All contractors in the group expressed a need to retain crew members and for ongoing development and cross-training among installers and spray foam crews.

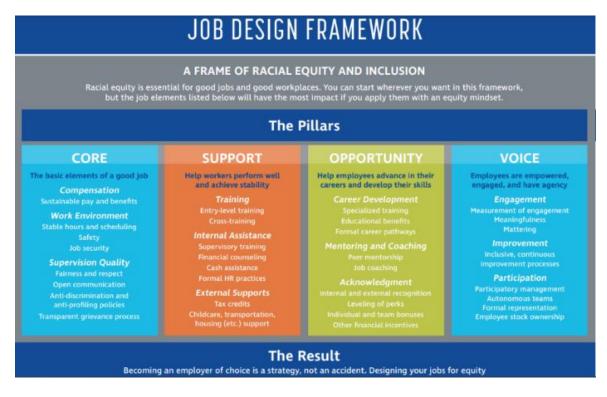


Figure 5. Job Design Framework, The National Fund for Workforce Solutions.

Through conversations with contractors, CEE found that meeting at noon over Zoom would be the most effective and practical way to meet while contractors are on jobsites. The purpose of this community of practice was trifold: hear from contractors regarding challenges and successes with hiring, give feedback to CEE on the training and skills contractors would like to see in potential candidates, and share ideas for how to address recruiting, training, and retaining crew members. These goals were shared in the first meeting, which was attended by seven contractors. After introductions, CEE and community-based partner CAPI facilitated a conversation regarding training and hiring pain points for contractors. Overall, CEE learned that incentivizing crew members with pay increases and bonuses boosts retention, and demonstrating a willingness to learn and be trained allows lead crew members and owners to promote new staff faster.

From this initial conversation, the contractors identified a topic to discuss and learn more about for the next community of practice meeting. This led to conversations around fair chance hiring and best practices in hiring those that are justice-impacted or formerly incarcerated. This was facilitated by a local workforce consultant with personal experience as a justice-impacted individual. Ultimately, these conversations led to more discussion around the challenges faced by transportation barriers and prompted CEE to seek innovative solutions to address the challenges participants faced that greatly impacted employer partners' ability to hire and retain staff from the training.

Expanding Partnerships

Since the initial partnership development phase, several partnerships have grown and strengthened. Element Insulation, which started their residential insulation business in 2020, has rapidly expanded due to their partnership with CEE. Element was one of the initial contractors that agreed to host a trainee for the 16-week internship. Although CEE provided compensation for their time hosting and training and covered the trainee's wages and liability insurance, Element still took a risk in providing on-the-job training for this new program. CEE had discussions with Element about their desire to expand from one crew to two crews. In the program launch, CEE had purchased a box truck with plans to run an insulation crew in-house, but quickly discovered how difficult it was to find an experienced, qualified crew lead with the cultural competency skills to train a diverse crew of trainees. Due to their close partnership, CEE sold their box truck to Element Insulation for less than market value, allowing Element to expand their insulation business and CEE to establish a continued employer partner for the on-the-job training in the Xcel Energy-funded internship.

Franek Construction also saw success this past year. While they were not an initial employer partner of CEE as their headquarters was over an hour from the metro area, word spread about their reputation providing high-quality training to their crew. Franek was willing to host a trainee at the jobsite, primarily in the metro area and thus more accessible to trainees in the program. A trainee that was sent to Franek for the internship wasn't sure what career path was the right fit for them after completing the four-week paid training. Through the paid internship, they realized that residential insulation could be a great career for their skillset and interests. They were working on obtaining a driver's license and had challenges scheduling the road test. With the funds from Xcel Energy and foundation funds, they were able to use Uber to get to and from jobsites while waiting to schedule a date for the driving test. Throughout the internship they were committed to being on time and earning the Air Leakage Control Installer (ALCI) certification. This graduate was able to focus on their training, earned the ALCI BPI certification, and has been employed at \$25/hour since graduating from the internship in November 2023.

Franek Construction illustrates the benefit of a program like this, stating, "We currently just hired a new full-time employee that worked with us through the workforce program, and we would have never had this great opportunity and working relationship with our new employee without this program."

In addition to Element Insulation's expansion to two crews and Franek Construction's new hire, CAPRW offered employment to three trainees directly out of the paid internship as energy auditors and as a carpenter apprentice working in income-qualified households. CAPRW helped train and develop eight individuals that are now prepared to start their careers in energy efficiency and weatherization. Since the program's launch, CAPRW has provided CEE with letters of support to secure additional funding with Ramsey County and their partnership was highlighted through a press release as CEE was awarded MEEA's Midwest Inspiring Efficiency Award in Education this year.

Not only employers but also the City of Minneapolis has solidified themselves as a true partner for this program. Apart from subleasing their Green Careers Exploration classroom at Sabathani to CEE for cohorts at no cost, their partnership has allowed us to focus our resources on support services and training equipment purchases. Additionally, with the City's Climate Legacy Initiative and involvement at the Regional Apprenticeship Training Center (RATC) in North Minneapolis, they have brought CEE into conversations with numerous other potential training partners. Near the end of 2023, plans evolved to strengthen the emerging partnership by offering introductory building science/energy efficiency condensed one- to two-day training sessions at the RATC to serve as recruitment for CEE's workforce program.

Sabathani Community Center has also strengthened their partnership with CEE. They received funding from Hennepin County to address violence prevention and employment for young adults through career training in energy efficiency and green careers called the Environmental Sustainability Academy. Sabathani quickly recognized that they did not have the expertise in-house to instruct toward the BPI Building Science Principles credential. As a result, they contacted CEE about the potential for classroom instruction. CEE proposed the idea of holding ten spots for participants in their Xcel Energy-funded training for Sabathani Environmental Sustainability Academy participants. Sabathani would utilize their program coordinator staff to recruit participants for the training and would bring their own support service dollars from their Hennepin County funding for those participants. This collaboration will provide CEE with more participants who reside in the community and increase the visibility of the program within Sabathani's networks.

Addressing Barriers through Effective Partnerships

Working side by side with community-based partners, like CAPI and Ujamaa Place, CEE has been able to address some obstacles participants face, such as not owning a reliable vehicle or being able to pay off back fines on a driver's license, through financial coaching and transportation assistance. One participant regularly faced difficulties in attending the four-week Home Energy Career training due to the loss of a vehicle, and their commute to and from the training was over one and a half hours via the Twin Cities' public transportation system. In working with CAPI, CEE provided this participant with additional funds to cover a diagnostic assessment for their car and access to Uber while their vehicle was repaired. As a result, their attendance increased, and this trainee completed the four-week training and successfully moved on to the energy auditor internship pathway.

CEE pursued and received additional funding from the Minneapolis Foundation to address high transportation needs not fully anticipated in the original program design. This allowed CEE to retain trainees at a higher rate in the internship program, thus making them more employable. CEE provided funds for one graduate to purchase a vehicle hired by an employer partner in residential insulation and two car repairs that allowed two trainees to remain employed and complete the internship. These conversations would have never started if a strong partnership with this employer had not already been formed. Additionally, CEE secured a reliable form of transportation for those without vehicles through a partnership with Uber to

provide 174 rides, totaling nearly 3,000 miles, that resulted in a higher retention rate throughout the paid internship in residential insulation.

Results

Due to these partnerships, in addition to providing quality wraparound support services, community-based partners showed their ability to recruit Black, Indigenous, or people of color (BIPOC) participants from frontline communities. Since 2022, 104 participants have completed the career training. Most participants resided in the targeted locations and 92% identified as BIPOC. Participants were also asked to self-report income levels before starting the program because the program goals were to enroll participants that would typically qualify for Xcel Energy's low-income programs (Figure 6). The ability to prioritize BIPOC individuals and low-income communities through this program has grown a much more diverse workforce that represents the communities Xcel Energy serves.

Participant Annual Household Income

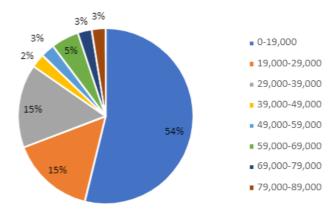


Figure 6. "What is your annual household income?" responses from 2023 graduates of Home Energy Career Training.

Program goals related to gender diversity have also been on track. Women have historically been underrepresented in the trades, specifically the energy efficiency sector, and continue to be grossly outnumbered by their male counterparts. As a result of this workforce development program, 30% of participants who have completed the program identify as women. Among the women who have completed the internship, those who are employed in the sector make an average hourly wage of \$26 and all have earned BPI credentials, creating greater opportunity for promotions and pay increases.

One graduate who was hired by CEE out of the paid internship as an energy auditor and promoted less than a year after she began now trains those who are new to the sector. When

asked about her experience, she shared, "I was able to complete my certificates, and I'm now a CEE senior energy auditor trainer. I'm now training people to do the position I was trained to do. So, you kind of escalate within this business, which I think is huge" (Haeg Nguyen 2024).

Since 2022, 22 trainees have completed the internship with 14 participants hired in the sector upon completion. All 14 remained in the sector for at least six months, with 12 out of the 14 continuing to advance in the sector. Four of these graduates received promotions in less than one year, moving up from an auditor to an auditor trainer. This success speaks to the need to continually invest in programs like this to engage and retain all workers to meet market demands.

Participant feedback and testimonials were gathered to also have qualitative information about program success. Some responses about the program from graduates include:

- "I don't look at houses the same."
- "I can do much of what I learned in my own home."
- "I learned the proper way to reduce energy loss by properly conducting an audit and proper air sealing and insulation."
- "I learned about networking and being able to apply myself in the community."
- "I know how to save my family money and which companies to go to get insulation."

This increase in knowledge about energy-saving measures, how to use networks, and how to access quality insulation and weatherization services demonstrates that the program is accomplishing what it set out to do in addition to training workers. The program is successfully empowering communities that have been historically underrepresented and underserved in partnership with employers and community-based organizations. Overall in 2023, this program increased the types of roles program participants were hired to within the energy efficiency sector thanks to strengthened partnerships.

Conclusion

Across the country and regionally, more work is needed to meet the ambitious energy efficiency and climate goals from federal and state governments and utilities. It is also evident that partnerships are critical to expand any equitable workforce development in this sector. Partnerships like these can be replicated across regions, and with concentrated effort can bring about effective, lasting change to the clean energy workforce.

As CEE and Xcel Energy continue to grow their workforce development efforts, it will be essential that established partnerships are continuously reevaluated for effectiveness, and new partnerships are forged with clear outcomes defined. Building and sustaining partnerships will be essential to meet federal demands with IRA, ambitious state goals, and labor workforce demands. All the while, equity will need to remain at the core of workforce development program design and any partnerships seeking to expand energy efficiency careers to all communities.

References

- Minneapolis, City of Lakes. 2023. Green Zones.
 - https://www2.minneapolismn.gov/government/departments/health/sustainability-homes-environment/sustainability/green-zones/
- Foshay, E. and Steigauf, B. 2019. *Minnesota Energy Efficiency Workforce Gap Analysis*. Minneapolis, MN: Center for Energy and Environment (CEE). www.mncee.org/minnesota-energy-efficiency-workforce-gap-analysis
- Building Performance Association (BPA). 2021. Summary of Workforce Development Needs Assessments Findings and Next Steps. Pittsburgh, PA: BPA. Summary of Workforce Development Needs Assessment Findings and Next Steps | Resources | Building Performance Association
- Clean Energy Economy Minnesota (CEEM). 2022. MN Clean Energy Jobs & Transportation are Growing. Minneapolis, MN: CEEM. https://www.cleanenergyeconomymn.org/clean-jobs-midwest
- Clean Energy Economy Minnesota (CEEM). 2021. Clean Energy Jobs Midwest Report. Minneapolis, MN: CEEM. <u>Clean Jobs Midwest 2021</u> (cleanenergyeconomymn.org)
- Espinoza, R. and Kane, J.W. March 20, 2024. Building a stronger infrastructure workforce requires more than money. https://www.brookings.edu/articles/building-a-stronger-infrastructure-workforce-requires-more-than-money/
- Ecker, M. May 27, 2021. The Benefits of the Learn and Earn Model for Skilled Trades Students. https://partners.pennfoster.edu/blog/2021/may/the-benefits-of-the-learn-and-earn-model-for-skilled-trades-students
- Forbes Nonprofit. 2019. *Eight Ways to Find and Land Valuable Partnerships for Your Nonprofit*. https://www.forbes.com/sites/forbesnonprofitcouncil/2019/03/07/eight-ways-to-find-and-land-valuable-partnerships-for-your-nonprofit/?sh=1f67c40b46b4
- King, C. 2014. *Partnership Effectiveness Continuum*. wallacefoundation.org/sites/default/files/2023-09/Quality-Measures-Partnership-Effectiveness-Continuum.pdf

Dawson, S. 2024. Job Design Framework. https://nationalfund.org/job-design-framework/

Wenger, E. Communities of Practice, a brief introduction. Accessed Feb 28, 2024.

https://www.ohr.wisc.edu/cop/articles/communities-practice_intro-wenger.pdf Haeg

Nguyen, E. April 2024. Minneapolis Lakota woman uses green career to support

community. https://www.cleanenergyresourceteams.org/story/minneapolis-lakota-woman-uses-green-career-support-community