Clean Technology and Energy Sector

Sector Strategy Update: June 2025

Prepared by the CleanTech Alliance, in partnership with
the Pacific NW Center of Excellence for Clean Energy and Kinetic West

Please describe the greatest workforce needs facing your sector, with a focus on needs that career connected learning strategies can help to address.
The workforce needs facing the clean technology/energy sector are varied and are compounded by the fact that technology is moving faster than training opportunities. Companies within this sector vary widely in composition (size and ownership). Some have a long history in this sector, while some are newly transitioning to a clean energy economy. Energy demand in America will triple to quadruple in the coming years (Miller, 2023), and delivering energy will depend on new forms of generation, updated grid systems, and newly installed efficiencies. None of this will be possible without a dynamic, growing, and diversified workforce. Utility and industry employees are working in a flurry. They are rapidly adjusting to finding a new equilibrium in meeting state/federal initiatives while maintaining federal compliance. They are balancing an aging infrastructure with generation loads, dramatic climate events and increasing power demand. At the same time, they are recruiting, developing, and retaining a diverse workforce. Utilities also face the need to keep electricity affordable, reliable, and sustainable; for them, these challenges are aggravated by competition for engineers, the cost of IT employees, and the need to enhance cybersecurity. All of this is complicated by attrition, primarily due to an aging workforce approaching retirement age. Similar to other sectors in Washington, utilities are facing a “silver tsunami” of their own. Washington’s Public Utility Districts (PUDs), for example, report they are experiencing some of the highest attrition rates in history and expect to lose an average of 40% of their experienced (30+ years) workers in the next two years. Clean energy employment grew 4.5 percent and added nearly 150,000 jobs across the U.S. in 2023. That was three times as fast as the growth in employment across the entire U.S. economy. Clean energy has outpaced economy-wide employment growth for the last five years (E2, 2024) at the same time population and labor-force participation is declining (SHRM, 2025) – all compounding the difficulty to meet this sector’s needs. As of September 2024, Washington state has 81,080 clean energy jobs and ranks 16th in the nation for clean energy employment. The majority focus on energy efficiency and renewable energy subsectors, such as solar, wind, low-impact hydroelectric, hydrokinetic, and geothermal energy. Washington also has a significant number of grid storage, clean vehicles, and biofuels jobs (E2, 2024). Many emerging clean technology/energy companies are still growing, with products and concepts such as carbon capture, hydrogen, fusion energy, and small modular reactors still in

development. Along with the products, many of the positions within these companies are still changing as roles and needs evolve. These companies often do not have the resources to host internships and build workforce development programs, but the need for a well-trained workforce for these sectors in the Pacific Northwest could not be clearer and more compelling.

- The **Electricity** sector supported a 43% job growth (nearly 44,400 jobs) between 2021 and 2030, driven by increases in land-based wind, transmission, distribution, and solar.
- The **Fuels** sector supports a 19% net increase (nearly 7,400 jobs) between 2021 and 2030. Hydrogen drives this growth, adding more than 11,000 jobs, while biofuels add more than 1,400.
- Between 2021 and 2030, the **buildings** sector supports a 22% employment increase (over 32,500 jobs), driven largely by Commercial HVAC and residential shell jobs. In fact, all buildings subsectors are projected to grow as energy efficiency and building electrification and decarbonization efforts ramp up. Employment supported by the Transportation sector increases by about 1% (approximately 2,000 net jobs) between 2021 and 2030, reflecting decreases in employment in conventional fueling stations and, to a lesser extent, vehicle manufacturing, along with net growth in vehicle maintenance, wholesale trade parts, and EV charging stations. (CETI).

To meet growing demand and diversify the sector, employers have identified their largest need is increasing awareness of clean energy and clean tech careers and pathways. Producing qualified workers in all aspects of the clean technology/energy sector starts with awareness and demand for programs that lead to these great careers.

- **Additional outreach must be conducted with women, minorities, rural communities, and other underrepresented groups**.
- Employers in our sector have intersecting challenges to maintain a well-trained, diverse workforce– and **accelerating more Career Explore and Prep programs** will be required to meet their long-term needs.

The entire sector faces a growing need for engineers. We recommend increasing available slots at in-state universities and preparing more in-state students for success in engineering and STEM fields. **There is a critical need for stronger preparation for chemistry**, a major barrier for underrepresented students (Harris, 2020) and more hands-on teaching of general STEM courses at the university level (Urton, 2020). Washington state continues to rank as low as 49th in the nation in the production of engineers (University of Washington, 2017), based on the size of our engineering workforce. As sectors other than ours will be competing to employ those engineers, the needs are only compounded.

Learners need career awareness; regions and educators must understand these evolving career pathways, especially for populations who have not been introduced to these careers. We have seen success by participating in rural trades fairs and hosting summer energy STEM academies, and the collaborative CCW approach can grow programs to meet the need.

Between now and June of 2025, what are your sector's 3-6 occupations that are highest priority for building supportive career connected learning pathways? Please focus on occupations that lead to economic self-sufficiency.

Currently, our priority jobs are:

- Engineer (all disciplines) (SOC 17-2000)
- Electrician (SOC 47-2110; 47-2111)
- Technicians (SOC 49-0000)
    - HVAC Technician (SOC 49-9020)
    - Electric Vehicle (EV) Technician (SOC 49-2096)
    - Solar Photovoltaic Technician/Installer (SOC 47-2231)

Many of our sector's high-priority jobs have significant overlap with other sectors. Electrician is an occupation of focus for Construction and Maritime as well. We recognize that there is an opportunity to create a cross-sector approach, while simultaneously understanding that those sectors and many of the training programs for electricians face shortages and are focused on training for their specific sectors. Location is key to solving some of these problems: an abundance of electricians in big cities, but insufficient in rural areas. This sector could benefit from incentives to aid the distribution of trained workers.

It is important to note that unions do not offer stand-alone apprenticeship training for Solar Photovoltaic Technicians, rather incorporate it into Electrician Apprenticeships. However, increased electrification and the continuing demand for rooftop and other solar installations could benefit from faster pathways to becoming a Solar Installer. Additionally, the solar industry would benefit from training that includes an emphasis on system design, electrical and building codes, and safety codes and standards.

Technicians will be needed to build, construct, deploy, maintain, and operate many new clean energy and clean technology systems, critical to meeting our state climate goals. As the timing of project readiness, as well as the complexity of project siting, are difficult to predict – we recommend building a general technician program that emphasizes an overview of a myriad of energy industries and creates a strong set of transferable skills – aid our workforce to adapt to emerging sectors.

Similarly, while there is no need to create a 'clean energy engineer' degree program – we recognize that engineers are in demand by multiple sectors and industries and emphasize the need to continue to create more in-state degree opportunities. For instance, the emerging fusion industry will employ more engineers, across a myriad of disciplines, than plasma physicists as it prepares for commercialization (and then the need for technicians and advanced manufacturing workers will increase as this sub-sector moves into deployment).

Today, our utility and clean energy partners continue to emphasize the need for workers to

come job-ready with durable skills such as confidence, communications, collaboration, and troubleshooting. Whether in utilities, the broader clean technology and clean energy sector, or any other sector across our state, durable skills are the most frequently cited limiting factor for employers to hire needed talent. Additional upskilling for our sector for computer, programming, and artificial intelligence will continue to be a growing need.

For each of the occupations identified above, please provide the information below to help inform pathway development efforts and investments.

Occupation: Engineer (all specialties)	**Sub-sector: All**
Average wage: $ 103,940 – 131,840 (range across five specialties, O*NET)	
Which skills/competencies do employers use as a benchmark to hire someone in this occupation? ● Understanding of physics, mathematics, and the practical application of engineering science and technology ● Analysis, design, and construction of electrical power and communication systems ● Experience with structural analysis software such as STAAD, SAP2000, SAFE, STRUDL, or ANSYS	**Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?** ● Bachelor's degree or higher ● Professional Engineer License ● MCSE Certification ● EI (Engineering Intern) or EIT (Engineer in Training) achieved by passing the FE (Fundamentals of Engineering) exam
Please describe possible career progression opportunities for this occupation: Career progression opportunities in engineering can vary based on specialty and the field/industry of occupation. Many students participate in internships while in school and enter employment as entry-level or junior engineers before working up to more advanced positions. Based on specialty, advancement opportunities include chief engineer, senior operations manager, professor, research engineer, or nuclear reactor engineer.	
Please describe the top barriers employers have identified to hiring for this occupation: Employers have identified barriers to hiring engineers, including a lack of candidates with the right technical skills and experience. At the same time, a small pool of candidates creates great demand and makes the competition to hire them difficult for small and medium-sized companies. Employers also mentioned that hiring candidates who align with the company's culture and values is difficult. Similarly, hiring a diverse workforce can be a challenge. Utilities have had difficulty hiring engineers with hands-on experience at a pay rate that competes with private companies.	

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation: Employers seeking to fill engineering positions often find success through internship programs. These programs are an excellent way for students to get experience in the field and understand the company's work culture and the position's practical challenges. This approach is a great opportunity for employers to learn if the intern has the right skills, attitudes, and disposition to work as a full-time employee in the company. Each employer has a different approach to offering their internship program. Tacoma Power has partnered with MESA (Math Engineering Science Achievement) at PLU on a three-week summer high school internship program. Students received direct on-the-job experience, learned power systems and the utility environment, and had exposure to several key positions and careers at the utility. They also found that hosting engineering meet-and-greet events, where college engineering students met TPU engineers, helped increase applicants of their internship pool. Other examples include • Energy Northwest's Public Power Internship Program designed to encourage, attract, and increase the number of students and professionals interested in the Pacific Northwest public power industry. The program's intent is to build connections with students through on-campus activities such as mentoring and support • Lewis County PUD offers six different internship programs (one being engineering); • McKinstry offers the Build, Learn, Understand, and Enrich (BLUE) internship program centered on giving participants resources, mentorship, and exposure to career opportunities in their field.
Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation: Industry feedback tells us that utilities have had problems recruiting in the engineering fields and need transmission and distribution planners/engineers. There is expected to be a high retirement rate for engineers in the coming years and industry will need replacements. The Washington Dept of Commerce is leading a study now on electrical transmission which we anticipate incorporating into future updates of this sector strategy.

Occupation: Electrician	**Sub-sector: All**
Average wage: $82,120 (O*NET) *wages can be higher depending on level (01 being highest) and employer	

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?	Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?
• Install, maintain, and repair electrical systems in accordance with the National Electrical Code (NEC) • Diagnose and troubleshoot electrical malfunctions • Fabricate and install various electrical systems/components	• High school diploma • Journey-level certification or Electrical License • First-Aid/CPR • OSHA 10 and or 30

Please describe possible career progression opportunities for this occupation:
Possible career progression opportunities for this occupation often start with a high school diploma or GED, required by most employers and apprenticeship programs, as well as a year of high school algebra with a grade of C or better. After successful completion of an apprenticeship, the apprentice becomes a journey-level worker. There are several specialties for journey electricians and if desired, a journey electrician can advance to master electrician and/or supervisory role.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:

- Solar Electricity will continue to grow in the next 20 years. Jobs will be added to the market in all areas of the solar industry (Construction, Professional Services, and manufacturing), with the highest growth in the construction and professional services areas (CETI, 2024).
- This occupation was also identified as a high priority based on Chmura labor market reports and feedback from industry.
- As of June 1, 2024, there are more than 1,000 active job openings for electricians in Washington state, of those, 93 are in the Seattle area. (Chmura/Jobs EQ, 2024)

Please describe the top barriers employers have identified to hiring for this occupation:
The top barriers employers have identified to hiring for this occupation include a limit to how many apprentices can be trained at any one time. Since this training takes place over years (8,000 hours) this can be a very slow process. Union representatives have stated that there are more than 1,000 electricians in the Seattle area looking for work; yet rural areas report a shortage of trained electricians.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation:
Employers often use apprenticeships for training and hiring practices, with unions and JATCs organizing the applicants and training. There are also existing pre-apprenticeship programs that help prepare future applicants for the apprenticeship.

Occupation: HVAC Technician

Sub-sector: Clean Buildings

Average wage: $64,830 (O*NET)

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?

- Diagnose residential or commercial furnaces, heat pumps, and AC problems
- Comply with applicable standards, policies, or procedures (such as safety and maintenance)
- Recommend and perform preventative maintenance on HVAC systems

Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?

- High school diploma
- HVAC Technician certification/license
- EPA License
- 06a or 06b (restricted) Electrical License

Please describe possible career progression opportunities for this occupation:
Career progression for HVAC technicians has multiple starting points: apprenticeship or traditional education through a college program. An apprentice will become a journey-level worker while students will earn a certificate or associate degree. Whether certified or journey-level, technicians can advance into opportunities such as project manager, stationary engineer, or energy analyst.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:

- Chmura labor market reports and industry feedback have identified residential and nonresidential HVAC technicians as among the highest demand occupations in the clean energy industry in the next two years (Chmura, 2024).
- In addition, the CETI Net-Zero Workforce Report for buildings, with modeling assuming all buildings by 2035 will be highly efficient, indicates growth of approximately 3,676 jobs by 2025 and 20,000 net growth jobs by 2035 for residential and commercial HVAC (CETI, 2024).

Please describe the top barriers employers have identified to hiring for this occupation: Currently, large barriers have not been identified for this occupation but with only a few CTC programs and apprenticeships being offered in the state and the amount of growth expected in the next few years, it is anticipated that this will change.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation: Depending on the training method, employers either hire from CTC programs or students who are part of an apprenticeship program. We will see growth in this area when hydrogen projects, involving transportation and storage, build across the state.

Occupation: Electric Vehicle Technician (Automotive Technician)

Sub-sector: Transportation/EV

Average wage: $57,550 (O*NET)

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?

- Test drive vehicles; use diagnostics tests on components and systems using appropriate equipment
- Conduct repairs aiming for maximum reliability
- Perform thorough maintenance including replenishing fluids on cars and trucks

Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?

- ASE Certification
- High school diploma
- Commercial Driver's License (depending on the job)

Please describe possible career progression opportunities for this occupation:
Career progression for automotive/EV technicians can vary but begins with education, through either a certification or associate program. These programs often include on-the-job experience with dealerships or automotive repair shops and ASE certification. ASE offers multiple levels of certification and test series for specialization including entry-level certification, professional technician, master technician, alternative fuels, hybrid/electric vehicle specialist, and new EV safety certifications. Further advancement opportunities can lead to positions such as shop foreman, field service technician, or shop owner.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:
Industry feedback, new legislation, and increased funding has informed us that there are many changes coming to transportation and, in turn, to automotive workers. With the State Legislature appropriating nearly $1 billion of funding for investments in cleaner transportation options, including the first hybrid-electric ferry and incentives to purchase clean fuel vehicles, there will be an increased need for automotive mechanics with the appropriate training to service hybrid and electric vehicles. As more fleets/consumers make the change to zero-emission vehicles, there will be a higher demand for qualified technicians, though we recognize this demand rises faster in more urban areas.

Similar to many industries across the US and Washington, there is significant uncertainty affecting the sector, and EV car adoption in particular, in the wake of recent Federal administrative and Congressional actions. These include international tariffs that raise the cost of EVs – both components and the assembled vehicle, revoking funds for domestic EV production, and federal pushback against more stringent state vehicle emissions standards, such as Washington's commitment to 100% new zero emission vehicle sales by 2035.

While the short-term future is more unclear given Federal actions, the long-term outlook remains strong for the sector. Many market and state and local policy signals indicate there will not be a slowdown here due to many public-facing commitments for net Zero energy (e.g., Microsoft and others).
Please describe the top barriers employers have identified to hiring for this occupation: The top barrier for this occupation is the relatively new technology and the slow process of training implementation statewide. ● Faculty of rural automotive training programs may appear to resist the transition to add EV and zero emissions training to their programs due to lack of technology, equipment, and expertise in their area. Added to that, EV adoption may be too slow in their community for students to benefit. ● When a fleet transitions from fossil fuels to zero emissions, there may not be enough newly trained workers to support a rapid change. Training programs are gradually shifting and are still training technicians for today's internal combustion vehicles. Many fleet managers are relying on manufacturers to reskill and retrain incumbent workers, which is typically done in house. ● The state should consider funding existing automotive training programs to support attracting new EV faculty, supporting faculty retraining and upskilling for EVs, and subsidizing the tools and equipment programs needed to train emerging technologies. Employers may be willing to fund some training equipment for an individual college (as Toyota's T-TEN program has provided to some schools), but scaling training across multiple colleges will likely require additional public or philanthropic funds.
Please describe the type of programs or approaches employers have found helpful in hiring for this occupation: Some employers are working directly with colleges to build and implement programs: ● Clark College's Dealer Ready Automotive Technology programs, including the Toyota Technician & Education Network (T-TEN) program. Similar programs are available at Spokane and Shoreline community colleges. ● Rivian has funded a program at Renton Technical College. ● King County Metro has created their own internal training program to upskill their existing staff mechanics.

Occupation: Solar Photovoltaic Technician/Installer	**Sub-sector: Solar**
Average wage: $ 48,800 (O*NET)	

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?	**Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?**
• Ability to lift 50 lbs. regularly throughout the day • Ability to use a ladder and tools • Follow layout plans and perform the structural mounting of racking, modules, and electrical equipment	• Driver's License • CPR/First Aid • OSHA 10 • Electrical Trainee certificate/Electrical Apprentice

Please describe possible career progression opportunities for this occupation:
Career progression in the solar industry can start in solar assembly or solar installation with some on-the-job training, and those with experience in construction or roofing need little to no training for solar installation. Many companies are also hiring solar installers as electrical trainees or apprentices- enabling them to become journey-level electricians (01 or 02). Other progression opportunities include maintenance specialist, fleet manager, system inspector, solar site assessor, and solar designer.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:
Residential and commercial solar (PV) energy is a crucial technology for the transition to clean energy, but this reality is still evolving in the state.

- According to the CETI Net-Zero report, the solar sector will grow by a net 9,818 jobs by 2030 and includes jobs in site assessment, management, administration, engineering, and installation (CETI, 2024).
- The 2023 USEER show the two largest employment sectors of electric power generation technologies in the nation were wind and solar, and saw increased employment from 2021 to 2022, following increases from 2020 to 2021. Solar had the largest number of jobs gained, adding 12,256 workers (+3.7%) (USEER, 2023).
- Chmura's Real Time Intelligence report shows 3,000 current job openings that include "solar" in Washington state (Chmura, 2024)

Please describe the top barriers employers have identified to hiring for this occupation:
Barriers identified by employers for this occupation include finding qualified and willing individuals, ensuring candidates from lower income backgrounds are equipped with the proper safety equipment or provided with wraparound supports such as gas or transit cards, and managing the seasonal nature of the work. Many people do not realize that solar installation can lead to an electrical apprenticeship or other solar careers with advancing incomes.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation:
Employers in need of electricians are exploring partnerships with existing apprenticeship

programs as well as exploring partnerships with workforce development organizations and 2-year colleges to create curriculum, train workers from distressed economic backgrounds, and partnering with NGOs to provide wraparound supports.

For each region below, which workforce education & training programs are *effectively* meeting employer needs, or could effectively meet their needs with adjustment or expanded capacity? Where relevant, please color code responses to reflect their relevance to specific occupations.	
Please provide your color-coding key below: **Engineer (all disciplines)** **Electrician** **HVAC Technician** **Electric Vehicle (EV) Technician** **Solar Photovoltaic Technician/Installer (Solar Design and Sales)**	
Capital	**HVAC Technician** ● **Capital STEM Alliance - Renewable Energy Vehicle & Infrastructure Technician (REVIT) Training:** (diesel-to-hydrogen mechanics), commercial/multi-unit residence heat & water systems **Electric Vehicle (EV) Technician** ● **Renewable Energy Vehicle & Infrastructure Technician (REVIT) Training:** diesel-to-hydrogen mechanics, commercial/multi-unit residence heat & water systems, EV mechanics, HS class with credit in physics and CTE ● **Grays Harbor, Olympic, Lower Columbia and South Puget Sound colleges** (automotive with EV potential) ● **Centralia College/Center of Excellence for Clean Energy** (w/REVIT)
East	**Engineer (all disciplines)** ● **Avista High School Craft Program** (students are exposed to a broad range of disciplines and trades) ● **Gonzaga University, Washington State University, Eastern Washington University** **HVAC Technician** ● **Spokane Community College** **Electric Vehicle (EV) Technician** ● **Spokane Community College** ● **ESD 101** (ASE training for CTC faculty)
King & Pierce	**Engineer (all disciplines)** ● **Tacoma Power (Mix & Mingle), internships and MESA programs**

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2-year colleges: all offer pre-engineering programs
University of Washington/Tacoma is working on a new program with Tacoma Power

Electrician

JumpStart – King county-focused but as the recipient of recent Program Builder Round 13 funding and EPA funding, is developing partnerships with Pierce, Snohomish, and Kitsap counties to expand their program model, including the development of an aligned playbook.

HVAC Technician

Bates and Clover Park Technical Colleges

Electric Vehicle (EV) Technician

Bates Technical, Clover Park Technical, Lake Washington Institute of Technology, Renton Technical, Shoreline, and South Seattle Colleges; and UEI College of Tacoma (bold have EV programs; non-bold are potential auto programs)
JumpStart

Solar design, sales, and installation

Clover Park (roofing); and NW Indian College
JumpStart

Washington Alliance for Better Schools (WABS): Worksite tours and classroom visits- new to this sector and still identifying careers
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<tr><td>Mid-Columbia</td><td>
Engineer (all disciplines)

Mid-Columbia STEM Nexus initiative
WSU-Tri Cities
Columbia Basin and Walla Walla colleges

Electrician

Columbia Basin College

HVAC Technician

Walla Walla College

Electric Vehicle (EV) Technician

Columbia Basin and Walla Walla colleges

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<tr><td>North Central</td><td>
Engineer (all disciplines)

Wenatchee Valley College (BAS Engineering Technology)

Electrician

Wenatchee Valley College (apprenticeship w/ DC PUD)

HVAC Technician

Wenatchee Valley College

Electric Vehicle (EV) Technician

(Wenatchee Valley College automotive with potential EV)

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<tr><td>Northwest</td><td>Engineer (all disciplines)</td></tr>
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	• **Bellingham Technical College** • **Western Washington University** **Electrician** • **Bellingham Technical and Skagit Valley colleges** **HVAC Technician** • **Bellingham Technical College** **Electric Vehicle (EV) Technician** • **Bellingham Technical and Skagit Valley colleges** **SnoSTEM** (FWEE Summer Academy 2026)
South Central	**Engineer (all disciplines)** • **Big Bend Community College** • **Central Washington University** **Electrician** • **Big Bend Community College** (battery manufacturing) • **Perry Technical Institute** **HVAC Technician** • **Perry Technical Institute** **Electric Vehicle (EV) Technician** • (Big Bend Community College automotive with EV potential) • Perry Technical Institute
Southwest	**Engineer (all disciplines)** • **Rural CTE Cooperative - nPower Girls** **Electric Vehicle (EV) Technician** • **Clark College** (potentially Lower Columbia College)
West Sound	**Engineer (all disciplines)** • **Olympic College** **HVAC Technician** • **Peninsula College** **Electric Vehicle (EV) Technician** • (Peninsula College automotive with EV potential)
Statewide	**Labor/unions including IBEW 77, JATC**

Between now and June of 2025, where is there regional momentum to support pathway development in this occupation?
For each region listed, please describe:

- Key momentum factors (e.g., interested employers, high-priority for Regional Network, opportunity to improve equitable access, opportunity to scale existing programs, portions of CCW pathway already built)
- High-potential opportunities to support pathway development

- Is supporting those high-potential opportunities a shared priority across SL and RN?

There is a vast myriad of key momentum factors in our sector. With the need to transition to a clean energy future, supported by clean technology solutions and manufacturing now the law of the land, momentum to create this transition is emerging everywhere.

There is a key need to do career explore work to connect communities to the key employer and post-secondary institutions that are going to usher in a new clean energy economy. There is a strong need to strengthen and fund internships and re-skilling programs to map workers to rapidly developing technology.

Capital

- Key Momentum Factors: Lewis County Transit led REVIT program is in the Career Prep phase (high school dual credit in physics and CTE credits) and will lead to Career Launch with internship opportunities at Lewis County Transit.
- High Potential Opportunities: Centralia College/Center of Excellence for Clean Energy K-12 Energy Outreach and summer energy/STEM program.
    - Key partners:
        - Industry: Centralia City Light, Chelan PUD, Cowlitz County PUD, Lewis County PUD, Lewis County Transit, Microsoft, NREL, SEI, Tacoma Power, TransAlta
        - Education: Centralia College, ESD 113, local school districts
- Shared: REVIT – dual credit curriculum building will be added to the renewable energy exploratory class (launching pilot in fall 2025). Centralia High School is building an Energy Academy. We will see a growth in need of hydrogen technicians.

East

- Key Momentum Factors:
    - NSF Funded Intent program – focused on grid modernization and collaboration between industry, education, and sector organizations
    - Avista – a dynamic, innovative utility that is creating pathways for high school students to earn and learn (best practices will be shared across the state)
    - Key partners: Avista, Inland Power, Spokane Workforce Council, ESD 101, Community Colleges of Spokane
- High Potential & Shared Opportunities: ESD 101 – ASE Training for CTC faculty

King & Pierce

- Key Momentum Factors: JumpStart; Tacoma Power is partnering with UW/Tacoma to build a new pathway for engineering students that will be launched in 2025-26.
- Key Partners: PSE, Tacoma Power; and South Seattle colleges; and UW/Tacoma
- Shared: We will see a growth in technicians within the fusion and hydrogen sub-sectors.

Mid-Columbia

- Key Momentum Factors: Energy NW and WA Vertical (a WA ICAP Cluster) – nuclear energy; WSU's Advanced Grid Institute, and the newly funded Institute for Northwest Energy Futures; Columbia Basin College, Douglas County PUD
- High Potential Opportunities: Conduct outreach jointly with WSU to connect learners to their emerging research and engineering degree programs.
- Shared Priority: Career awareness at community gatherings such as RiverFest. Technologies in smart grid and small modular reactors may expand in this region.

North Central

- Key Momentum Factors: Douglas County PUD and Wenatchee Valley College – electrician apprenticeship program – could it expand to include hydrogen?
- High Potential Opportunities: Hydrogen is building momentum in this region, which will increase the need of HVAC/electrician technicians and transportation.
- Shared Priority: CoE is working in the hydrogen sub-sector. Once funded, a workforce taskforce will include this region.

Northwest

- Key Momentum Factors: Alta Gas, Bellingham Technical College (technicians), Western WA University
- High Potential Opportunities: SnoSTEM is a strong CCW partner in this area for future growth of energy career awareness.
- Shared Priority: SnoSTEM, SnoPUD in Career Prep – summer academy and K-12 learning opportunities. Hydrogen may expand in this region.

South Central

- Key Momentum Factors: Group14, Sila Nanotechnologies, Big Bend Community College – battery manufacturing technicians; Perry Technical College; Grant PUD (outreach)
- High Potential Opportunities: Recruiting for the emerging battery materials sector and developing technician training at Big Bend
- Shared Priority: Strong CCW presence to help build career awareness; hydrogen in aerospace technologies may expand in this region.

Southwest

- Key Momentum Factors: Clark College Energy electives will be added to Mechatronics which will support EV technicians; partner with PGE and TriMet for jobs
- High Potential Opportunities: There is a future potential to bring hydrogen into the Toyota T-Ten EV lab.
- Shared Priority: Hydrogen may expand in this region (shared with CoE)

West Sound

- Key Momentum Factors: West Sound STEM; PSE

- Shared Priority: Hydrogen in transportation may be expanded in this region.

Please describe the types of employers in your sector who are most eager to participate in career connected learning to meet their workforce needs. Why are these types of employers interested in participating in career connected learning, and what type of career connected learning programs are most valuable to them?

Utility agencies

- As cited throughout this strategy, utilities are facing a rapidly retiring workforce while undergoing a significant transformation to decarbonize. This requires new and growing talent to backfill existing and enter new jobs
- In particular, investor-owned utilities (e.g., AVISTA, Puget Sound Energy), who often have greater flexibility to try new workforce training models than customer-owned utilities, are looking for innovative and cost-effective ways to build awareness of utility jobs and hire entry-level workers

Transit agencies

- Local and County transit agencies are fast converting their fleets to ZEVs (zero emission vehicles), hydrogen fuel cell, and battery-powered vehicles and need more trained workers to support the EV maintenance infrastructure
- In rural areas, given greater distance for transit authorities to cover, hydrogen fleets are more common. In urban areas, given shorter distances and city driving are more commonly converting fleets to EV. Both rural and urban transit agencies will require additional trained workers to support this field
- Career exploration, prep, and launch are all needed in this space. The REVit program, cited elsewhere in this strategy, provides a great example

Clean technology entrepreneurs and employers:

- Whereas clean energy occupations in utilities and EVs are more established and firmly in a growth period, clean technologies like fusion energy generation, new electrical grid technologies, and other emerging tech are more often in early development stages relying mostly on highly skilled scientific and engineering workers. Employers in these earlier stage subsectors frequently cite the need for more Career Exploration to inspire the next generation of physicists and engineers to scale and iterate on these technologies
- As these technologies mature there will be a greater need for more entry- and middle-skill technician roles that may lend themselves better to Career Prep and Launch

What is needed to increase participation of BIPOC students in your sector's high priority occupations? To increase participation of students from rural areas? Which programs are doing this well?
To increase the participation of BIPOC students in occupations of high priority in our sector, there needs to be a multifaceted and cross-sectoral partnership where academia (K-12, two-year community and technical colleges) partner with industry to increase awareness and create curricula and internship opportunities that provide students with both the necessary experience and the skills to fill and perform in these occupations. JumpStart in King County is a stand-out example of focusing on historically underserved and BIPOC young adults to train in several clean technology and energy professions including HVAC installation, solar panels, and more. This program has focused on building strong partnerships with community-based organizations that serve BIPOC youth and partnering with pre-apprenticeship organizations who already operate in the sector (select partners include Seattle Central PACT, Emerald Cities Collaborative, YouthBuild, ANEW, Seattle Public Schools, Skyway Silent Taskforce, and more). Additionally, JumpStart has designed their program to intentionally reduce as many barriers to BIPOC youth and young adult access as is possible. By designing their program around student needs they have been able to attract, retain, and support completion for participants. Education institutions play a pivotal role in this partnership. They are uniquely positioned to provide programs and training opportunities specifically designed to meet the skills required for these high-priority jobs. Their contribution is instrumental in preparing BIPOC students for successful careers in our sector. Industry should work together to formalize the skills they need in these occupations and work with academia and K-12 institutions to train students. There should be a mentorship component, someone who can help guide decision making and motivate students. At the same time, students should meet different professionals to learn from their experiences and career journeys. This also speaks to the need for equipping community-based organizations, counselors, faculty, and other trusted adults with training on career connected learning opportunities who can speak to students about family sustaining wage career pathways, as well as hiring diverse faculty members and staff. As evidenced from the JumpStart program, having a trusted adult in the community who can speak to various career options, and the steps a student can take to pursue them, is vital to increasing participation of BIPOC youth. Additional practices and strategies for CCL program builders and leaders can be found in this report from the National Alliance for Partnerships in Equity. Washington state is home to 34 two-year community and technical colleges (CTC), which offer a terrific opportunity for students to continue their education. Students can develop both the physical and cognitive skills needed to perform those jobs, with smaller class size and

more focus on hands-on experiential learning. These post-secondary institutions are a great place to do so because of their affordability and the time needed to get a diploma/certificate. Also, these institutions have a wider presence in urban and rural areas and usually have staff that represent the cultural diversity of those they serve. We strongly encourage greater industry and 4-year university partnerships with CTCs across the state on grant programs and articulation agreements to support student training to complete high value, 4-year STEM degrees.

What overarching strategies do you recommend to support pathway development for the highest-priority occupations in your sector?

#1 Grow employer participation in CCL
As is the case across all sectors and every part of the state and country, employers are the greatest limiting factor for scaling career connected learning. This is not necessarily for a lack of demand, but due to lack of alignment between education systems and employer recruitment and training infrastructure.

In our role as sector leader, we function as a collective voice for employers to amplify their needs, provide guidance and technical assistance to refine their practices to identify and recruit entry-level talent, and translate employer needs to the education system and regional partners.

Growing employer participation requires education institutions and employers to both change their daily behaviors and systems and requires government entities to build systems and incentives that create the least amount of friction possible to make this happen.

#2 Scale promising programs
There are several strong and emerging clean energy and clean technology programs around the state that should be scaled and championed. These include:

- **Jumpstart King County** merges Seattle Central College's Pre-apprenticeship Construction Training (PACT) program, Seattle City Light's Basic Electrical Applied Mathematics (BEAM) program, King County's Energize and YouthSource programs to provide pre-apprenticeship training for solar and heat pump installation careers.
- **Climate Corps/Energy K-12 Outreach Fellow**: Sponsored by TransAlta, SEI and the Center of Excellence, this fellow will be dedicated to increasing outreach throughout Lewis and south Thurston counties. The fellow will organize school to school competitions, faculty training opportunities, VR energy career pathways, and other outreach opportunities. The fellow will start in September 2025 and continue through Spring 2026.
- **Climate Corps/Clean Buildings Fellow:** Sponsored by Washington State Department of Commerce, SEI and the Center of Excellence, this fellow will assist energy auditors and commercial building owners in meeting new laws within the Clean

Buildings Act. Best practices of this program will be shared through an expanded statewide program in 2025-26. The WA Department of Commerce has funded 10 fellow positions from June 2025 – March 2026 to assist building owners with benchmarking energy use to support compliance efforts. Fellows will be located in Chelan, King, Lewis, Pierce, Snohomish, and Whatcom Counties.

- **Renewable Energy Vehicle & Infrastructure Technician (REVIT) training program:** Led by Lewis County Transit, this program brings Capital STEM Alliance, ESD 113, Centralia College, and administrators from local school districts together to develop high school and college dual credit curriculum. The first high school renewable energy exploration class was launched in fall 2023 at Centralia High School. Twenty-four students earned physics and CTE credit. The group held a DACUM for 22 SMEs to design dual credit (high school and college) that will continue the renewable energy pathway in EV and hydrogen fuel cell technologies (called hydrogen mobility technician). Once completed and tested, REVIT will be shared with other districts as a pathway to increase awareness of renewable energies, which will lead to increased workforce education and training opportunities. This program is a career prep program, and we will continue to support it to become a career launch program. Since founding, the program has expanded to 3 class periods (from 1 initially). Additionally, the program will host teachers at Centralia College in August to help share and train teachers on the curriculum to scale to other parts of the state.
- **The Foundation for Water and Energy Education's (FWEE) summer academies** gives students the opportunity to spend a week learning about the power industry, participating in hands-on activities, exploring dams, power houses, substations, and fish hatcheries, and designing a career map with SMEs. The academy originated in Wenatchee and expanded to the Tri-Cities (summer 2023) and SW Washington/Centralia (summer 2024), with plans expanding to the Snohomish area (summer 2026). The program has had significant interest and is currently oversubscribed in Ilwaco, Rochester, Chehalis, and Spanaway. Continued need to scale program capacity to meet student interest. Further expansion areas: Spokane, Jefferson, and Pacific Counties.
- **Tacoma Power** – three programs:
    - MESA Summer Program – 10 high school and community college students. The program partners with the Tacoma Community College and Tacoma/South Puget Sound MESA branches
    - TPU Academy – teaches 60 fourth-fifth graders about STEM. The program partners with the Boys and Girls Club and Girls Scouts of America
    - TPU/UW-Tacoma Summer Internship – 25 college interns for the summer, offering weekly professional development workshops, a 12-week speaker series to meet our industry professionals and site tours to our hydro projects, substations, etc.

- **BEF** – Bonneville Environmental Foundation's train the trainer in education program will aid us in creating advocates for our sector and should be launched and scaled rapidly for maximum impact.

#3 Center student learners
As described above, there is a significant need to increase participation of BIPOC and underrepresented communities within the clean energy and technology sector. This requires systemic and continued improvement to support students from underrepresented backgrounds to build awareness of and skills within the clean energy and technology sector. See detailed recommendations below.

#4 Grow career exploration
The state needs 'green collar' jobs awareness as cited throughout this report. Unlike welders, firefighters, nurses, and others, no specific image comes to mind when talking about energy careers.

- Enhance awareness and recruitment campaigns for clean technology/energy careers at all ages in the K-12 system.
- Highlight the breadth of clean energy and clean tech careers to grow and diversify the workforce
- Tell the stories of clean energy workers: Rather than using generic images or stock photos, feature actual clean energy workers and their stories in recruitment campaigns. Highlight their backgrounds, motivations for pursuing clean energy, and their impact in their roles.
- Showcase the diversity of clean energy careers: clean energy is a rapidly growing field with a wide range of career paths available. Highlight the diversity of roles within clean energy, from technicians and engineers to project managers and salespeople.
- Emphasize the potential for career growth and advancement: clean energy is a dynamic and evolving industry, and there are many opportunities for career growth and advancement. Highlight the potential for career progression and the skills and experience that can be gained by working in the field.
- Promote the positive impact of clean energy work: clean energy workers are not just helping to protect the environment; they are also helping to build a more sustainable and equitable future. Highlight the positive impact that clean energy work can have on communities, economies, and future generations.
- The November 2024 CEWD conference included information on a national push to add Energy as a stand-alone Career Cluster, a huge step to getting more visibility for this sector. Our state should adopt the career cluster as well.

As described in the following section, we recommend a joint strategy with OSPI and our fellow Sector Leaders that incorporates multi-industry and career awareness in early grades (i.e., 4th through 8th grade). Currently students receive very fragmented career exploration programming, often based on individual program availability, teacher and / or school relationships with employers, or motivated parents working in a given sector. Students in many instances are not accessing broad-based training that covers the 10 key sectors in Washington State. We recommend partnering with OSPI to develop a program that provides developmentally appropriate exposure for students to careers across multiple sectors. This program should enable students to make clear choices about where to build skills through Career Prep opportunities in high school grades.

#5 Support technician program development
We recommend funding programs that help existing technician training get access to modern equipment for training, so students are learning on current technologies. This should be an ongoing effort, as technology continues to develop, and a one-time replacement will not suffice.

Integrating clean technology/energy into existing education programs and developing pathways can be done in programs such as Automotive Technology at the CTC level with instructor training and integration of EV/hybrid and hydrogen fuel cell technology curriculum into existing classes or as classes within the program. The PNW Center of Excellence for Clean Energy is doing this already today – in August 2025, the CoE is sending 10 CTC faculty members from eight colleges across the state to the Green Transportation Summit and Expo for Electric Vehicle experiences and training.

Curriculum integration can also be achieved in the K-12 system with course modules such as Build Your Own Hydropower and the Center for Energy Workforce Development (CEWD) Energy Fundamentals 2.0, available teacher training, and programs such as Lewis County Transit led REVIT training program. With additional funds, we highly recommend additional state funding be deployed for teachers and faculty to be exposed and learn about the latest industry trends to bring back to their classrooms.

We recommend continued exploration of developing a 2-year general technician training program to grow the supply of workers who can deploy clean energy technology. The training program should cover a wide range of topics, including basic physics principles, engineering design, instrumentation, and operations. We anticipate graduates from this program could support hydrogen, fusion, waste heat, battery materials, and other emerging clean energy generation programs. It should consider linkages and crossover with the advanced manufacturing and construction sectors. There are several grant programs the exist within the CTC system to support upgrading curriculum and equipment as necessary to support new and adapted technician programs.

#6 Continue cross-agency and cross-stakeholder alignment
Like other states, Washington's workforce and education training system is incredibly fragmented with several agencies, organizations, and funding streams. It is vital that our state continue to support and fund connective tissue building like CCW and the Workforce Board's Clean Energy Technology Workforce Advisory Committee (CETWAC) initiative to bring folks together to share information and align work. Additionally, it is vital that the state continuously

identify and implement solutions to reduce friction across state agencies, educational institutions, and related funding streams to make it easier for students and employers to create and participate in CCL programs. This will require concerted action from the legislature to align and strengthen existing regulations and funding, as well as remove or combine duplicative regulations that make it difficult for organizations to build and scale programs.

#7 Explore opportunities to meet rural clean technology and energy needs
Often training programs in urban areas report being 'oversubscribed' while in rural areas there remains high demand.

Employers can help incentivize relocation. Potential strategies include exploring individual and / or employer tax incentives for building trade crews that must frequently relocate to different towns. Rural municipalities can support by (1) creating adequate space and infrastructure for RV and van hookups for crews that live in their work vehicles, and (2) providing temporary workforce housing for those without their own RVs and vans.

Please describe the types of activities and tactics you believe are needed to make progress against each recommendation between now and June of 2026, including:

1. **Key activities and tactics you would like to prioritize as a fully-funded Sector Leader**
2. **Key activities other partners should consider advancing**

Disclaimer: the recommendations and prioritized activities below are subject to adequate funding availability to support the work

#1A Grow employer workforce committee

- Sector Leader role
    - Over the next year, we intend to increase employer participation in our clean technology and energy (CTCE) workforce committee, leveraging practices for sectoral strategies to conduct the following activities:
        - Develop and deploy a routine survey tool to understand and regularly update industry workforce needs and emerging trends to support and inform state investment strategies, employer training priorities, and program builder priorities. Potential to leverage the Workforce Training Board's CETWAC employer survey to provide initial insights.
        - Identify and develop subsector and cross-sector approaches to build new and grow / improve existing CCL training programs
        - Recruit CCL employer champions and grow employer participation in CCL programs
        - Share promising practices of existing CTCE CCL programs to connect additional employers and identify opportunities to expand existing programs to new regions
    - Leverage current participation in existing advisory boards (e.g., Fusion and

WECAN clusters, hydrogen hub, etc.) to augment the Workforce Committee's identified workforce needs

- Other partner roles
    - Employers:
        - Join the CTCE workforce committee and recruit others to participate
    - State agencies, CTCs, K-12 districts, and regional networks
        - Encourage employers participating in various state and education advisory committees to participate in CTCE workforce committee
        - Share recommendations and program needs voiced by employers with CTCE sector leader

#1B Identify deeper subsector approaches for workforce needs

- Sector leader roles
    - Develop specific sub-sector approaches to support unique employer needs, especially within utilities, electric vehicles, and emerging clean energy technologies like fusion energy generation

#2 Amplify / support scaling of promising practices

- Sector leader roles
    - Strengthen partnership with existing programs to provide support via relationship building and connections, sharing of funding opportunities, and providing best practices and learnings from other programs and sectors
    - Create and amplify case studies / narratives of promising practices of programs like those listed above for broader state awareness (e.g., legislators, educators, CBOs, etc.)

#3 Center student learners

- Sector leader role
    - CCW serves two end-users: youth / young adults and employers. The purpose of CCW is to build the connective tissue (e.g., infrastructure, funding, guardrails, relationships, and technical assistance) to create new and expand existing programs for youth / young adults that meet employer entry-level talent needs. While the Sector Leader role is not responsible for directly interacting with students (neither in a classroom nor on the job), we are responsible for setting the conditions and building the infrastructure for youth / young adults to learn about, develop skills for, and build experience in the CTCE sector.
    - In our role as Sector Leader, we see several opportunities to build the conditions and infrastructure to center students furthest from opportunity. These include:
        - **Centering student voice:** Sharing best practices with program builders, employers, and other partners around incorporating student voice in program design and improvement opportunities (e.g., via

surveys and focus groups, during / post program feedback, etc.).
   - **Driving equitable access in rural areas:** Collaborating closely with regional networks and educational institutions to grow CCL programs in rural areas, beginning with Career Explore opportunities that intersect with existing sectors within regions.
   - **Durable skill development:** Collaborating with peer sector leaders to advance durable skill development across CCL programs. We will leverage the America Succeeds "Durable Skill" framework as a best practice example for the types of skills employers are looking for in employees, with an emphasis on entry-level skills. In every industry, employers cite durable skills as the biggest gap among entry-level applicants. As sector leaders we can continue to amplify the need for durable skill development in CCL programs with program builders and education partners, as well as provide support for employers on how to support and mentor students to grow in these capacities (which are a core part of on-the-job learning).
   - **Emphasis on pathway development:** Building on successful frameworks built by peer sector leaders, we plan to partner with employers (esp. in the workforce committee) to focus on the steps and connections across the CCL continuum so that students can progress from Career Explore to Prep to Launch.

- Other partner roles
  - CCW system
    - Continuing to share and elevate promising practices from across the education and workforce system to inform sector leader implementation
    - Develop tools that can be used across programs like a common student feedback survey that can be readily deployed across CCL programs and allows for comprehensive data collection and comparison across programs
  - OSPI, SBCTC, School Districts, Colleges, and Instructors
    - Incorporate durable skills into all coursework. Durable skills are best learned in context of projects rather than as stand-alone trainings and courses. Include mentoring, coaching, and evaluation of skills like verbal and written communication, problem solving, teamwork, self-advocacy, de-escalation, and similar within core and CTE courses

#4 Grow Career Exploration across sectors

- Sector leader role
  - Partner with fellow sector leaders and OSPI to develop an aligned approach for multi-sector career awareness and exploration across multiple sectors at once for students in early grades (e.g., 4th through 8th grade)

- Other partner roles
    - Sector leaders:
        - Partner on developing an aligned approach for career exploration programming that fits the developmental age of students
    - OSPI:
        - Partner with sector leaders to identify opportunities to pilot a cross-sector career exploration approach within schools
        - Require multi-sector career exploration each year from grades 4 through 8 and track participation at the individual student level to ensure all students can benefit from career awareness at the appropriate age to make decisions about future training in high school
    - Regional networks:
        - Help identify and recruit pilot schools to trial program
    - State of Washington:
        - Evaluate adoption of “energy” as a standalone sector to amplify the unique workforce and industry needs across the state

#5 Support technician program development

- Sector leader role
    - Partner with CTCs to develop a framework for technician training programs. Programs should cover a wide range of topics, including basic physics principles, engineering design, instrumentation, and operations. We anticipate graduates from this program could support hydrogen, fusion, waste heat, battery materials, and other emerging clean energy generation programs. It should consider linkages and crossover with the advanced manufacturing and construction sectors
    - Continue to collect employer feedback regarding core curriculum needs and develop a picture that can then be mapped against existing 2-year programs. We will also work with the Fusion Industry Association, the NSF, and other global partners to study emerging global best practices to train the future fusion energy workforce and add that to this map.
    - Explore opportunities to leverage in-development and emerging programs supported by our fellow sector leaders to fill technician roles in emerging technologies like fusion, hydrogen, and carbon capture. In particular, we want to build on the work from our peer sector leader in Life Sciences who has been advancing a similar technician-level program. We intend to explore a partnership and joint learning opportunity with Life Science Washington to adapt this concept for the CTCE sector.

#6 Continue cross-agency and cross-stakeholder alignment

- Sector leader role:
    - We will continue engaging with workforce providers, training organizations and

employers to refine our understanding of their evolving needs, challenges, and preferred solutions. We will continue to dialogue and build relationships with CCW regional partners to connect our sector's needs with their capacity and current programming, as well as educate them about emerging new clean energy and clean technology in their regions and existing solutions that can be implemented. We will continue to develop a 'roadmap' of the existing training landscape and emerging needs
    - Strengthen partnership within the apprenticeship system and organized labor to build clean energy manufacturing plants, facilities, power plants, and other related infrastructure emerging in our sector

- Other partner roles
    - State of Washington / CCW:
        - Continue to fund and support cross-sector learning and connective tissue building
        - Examine opportunities to mandate closer partnering across agencies and state funded entities to focus on CCL program creation, student enrollment and completion, and sustained employer participation

#7 Explore opportunities to meet rural clean technology and energy needs

- Sector leader role:
    - As described in recommendation #3, drive equitable career awareness programming in rural areas
    - Amplify challenges experienced by employers and workers within clean energy and technology subsectors (e.g., energy efficiency construction) to help CCW and state leaders identify opportunities to reduce burdens on those traveling and living at multiple job sites

- Other partner roles:
    - State agencies:
        - Explore opportunities to defray costs for employers and workers living on job sites, explore incentives to support rural relocation
    - Employers:
        - Provide incentives to support rural relocation
    - Cities and municipalities:
        - Create temporary worker workforce housing, ensure adequate RV and mobile van parking and infrastructure (electricity, water, sewage) for workers that travel to different job sites around the state

Conclusion

It is clear that rapid technological evolution will maintain challenging conditions to prepare a new or re-skilled workforce at exactly the right time. This requires the industry and the workforce system to develop structure to nimbly respond to changing employer demands and ensure current and future students have the adaptive skills needed to evolve with the technology.

Additionally, the sector has clear needs to diversify its workforce, both demographically and geographically. We remain keenly aware that Federal administrative actions compound the fragility of the clean tech/energy sector. The stability and growth of the preferred energy solutions are subject to policy change, and this can impact the number of jobs and fields workers should be preparing for in the future. The sector's vulnerability to changes underscores that we must maintain commitment to existing sustainable energy policies. Government investment, alongside private and corporate capital must also be maintained, so investment in industry and emerging solutions does not falter. It is critical that we keep a focus on momentum already built, can continue to grow projected climate sector jobs needed in our state, and prepare our workforce to deliver these solutions to communities state-wide.