Center of Excellence for Clean Energy FY25 Q4/Year End Report

Q4: April 1 – June 30, 2025

Scope of Institutional, Instructional, and Industrial Reach

Institutional Reach
 # colleges with programs that supply a skilled workforce to your sector(s).

Most colleges (32) offer programs related to this sector.
https://www.cleanenergyexcellence.org/college-programs/

College programs, which are included on our website, are organized by areas of study: Apprenticeship; Electrical; Energy Efficiency/Studies; Engineering (Advanced); Engineering Technician; Engineering Transfer; EV/Automotive; Industrial; Mechatronics; Nuclear; and Trades.

Q1 CTC Outreach, not including Energy Educators' Association, included:
Bellingham, Columbia Basin, Lake Washington, Shoreline, Spokane

Q2/Q3 CTC Outreach, not including Energy Educators' Association, included:
Bates, Bellingham, Centralia, Clark, Columbia Basin, Everett, Grays Harbor, Lake Washington, South Seattle, Shoreline, Skagit Valley, Spokane, and Walla Walla

Q4 CTC Outreach, not including Energy Educators' Association and WEC, outreach included:
Bates, Bellingham, Big Bend, Centralia, Clark, Clover Park, Columbia Basin, Everette, Grays Harbor, Green River, Lake Washington, South Seattle, Spokane, Tacoma, Walla Walla, and Yakima.

Instructional Reach
# of CTC instructional programs that supply a skilled workforce to your sector(s). This can include programs that are core to your sector(s) and those that are associated or have a nexus in some meaningful way. Example: Cybersecurity: Core example – AAS IT Forensics & Security. Associated: AAS Networking.

Engineering: 29 colleges; 1 Bachelor's degree
Automotive/Diesel: 21 colleges offer ICE; EV: 8 colleges

CIP	Name	Reach
11.1003	Cybersecurity Analyst/Cyber OT	1
14.0701	Chemical Engineering, General	17
14.1001	Electrical and Electronics Engineering	18
14.1901	Mechanical Engineering	17
15.0000	Engineering Tech, General	7
15.0201	Civil Engineering Tech	3
15.0303	Electrical Engineering Tech	7
15.0403	Electromechanical Engineering Tech	4
15.0406	Automation Engineer Tech	1
15.0612	Industrial Technology	1
15.0613	Mfg Engineering Technician	4
15.0805	Mechanical Engineering Technology	2
15.1103	Hydraulics and Fluid Power Technology	1
15.1302	CAD/CADD Design Technology	4
15.1306	CAD/CADD	3
15.1401	Nuclear Engineering Technology	1
15.1701	Energy Systems Technology/Technician	4
15.1702	Power Plant Technology/Technician	0
15.1703	Solar Energy Technology/Technician	0
15.1704	Wind Energy Tech	0
15.1705	Hydroelectric Energy Tech	0
40.0101	Physical Sciences, general (engineering)	33
41.0205	Nuclear Power Technology (other CIPs)	0
46.0301	Electrical Power Transmission Installation	2
46.0302	Electrician	8
46.0303	Lineworker	5
46.0401	Building/Property Maintenance	3
46.0403	Building/Home/Construction Inspection	5
46.0502	Pipefitting/Pipefitters	2
47.0101	Electrical Equipment Install & Repair Tech	4
47.0105	Industrial Electronics Technology HVAC	4
47.0201	HVAC Maintenance Technology	8
47.0303	Industrial Mechanics/Maintenance Tech	11
47.0604	Automotive Mechanic/Technician	20

Industrial Reach
Quantitative indicator(s) of the size, scale, or scope of your sector. Examples: Total employment, total number of businesses, list of major sectors and subsectors with employment numbers.

Based on the U.S. Energy & Employment Jobs Report(USEER), and CETI Net Zero NW: in 2022, four Northwest states employed nearly 158,000 clean energy workers across renewable electric power generation, grid and storage, energy efficiency, clean fuels, and alternative technology transportation, a 2.8% increase from the previous year. Of these, energy efficiency comprised most clean energy jobs (73%), followed by renewable electric power generation (13%). Alternative transportation and grid and storage account for another 6% of the region's clean energy workforce, with clean fuels responsible for the remaining 2%.

Washington accounted for half of all clean energy workers in 2022 in the Northwest. Jobs spread between utilities, municipalities, government, private businesses, unions, national labs, education institutions, transit.

From 2017 through 2019, clean energy employment in the region increased by 4%. In 2020, clean energy jobs suffered a 9% decline, mostly due to decreased employment in energy efficiency. While there is more employment now than before the pandemic in alternative transportation and grid and storage, employment in energy efficiency has yet to make a full recovery. The net increase in energy jobs in the Pacific NW, 2021 - 2030 are:

Electricity: 43% growth (44,000 jobs), driven by generation, such as land-based wind and solar; transmission, and distribution.

Fuels: Fossil fuel, 7,400 jobs, hydrogen 11,000 jobs and biofuels, 1,400 jobs.

	47.0605	Diesel Mechanics/Technology	11	**Buildings**: 32,500 jobs, driven by commercial HVAC, energy efficiency, building electrification and decarbonization. **Transportation**: 2,000 jobs, including decreases in fuel stations, vehicle manufacturing, maintenance and wholesale parts; plus charging stations.
	47.0701	Energy Systems Installation/Repair Tech	2	
	48.0503	Machine Shop Tech Assist	2	
	48.0510	CNC Machinist Tech/CNC Machinist	5	
	48.0801	Boilermaker	2	
	51.0916	Nuclear Tech-Rad Pro Tech	1	

Explanation: Ten years ago, energy programs within the CTC system were niched, which isn't so true anymore. Meaning, Shoreline offered solar, Centralia offered power operations, Cascadia offered sustainability; Columbia Basin, nuclear; Spokane, lineman; and Walla Walla, wind. As industry changed and the demand filled, the colleges needed to broaden their scope and offer more job opportunities within their programs. If someone were to search for CIP code specific programs, they might fall short on finding the right programs. Engineering, for example, is mostly falling under the CIP that represents "Physical Science, general." Pipefitters are included for the hydrogen subsector. Only one Cybersecurity program appears, because Everett has a Cybersecurity Operations Technology (OT) offering. The information above was provided by SBCTC tools: ctcLink full inventory list and CIP spreadsheet.

Quarter 1: According to CETI Net-zero NW Workforce Analysis released March, 2024, changes from 2021 to 2030, including direct, indirect and induced jobs:

Transportation will increase 2% (1,656 jobs) Buildings will increase 22% (16,470 jobs)
Electricity will increase 24% (13,148 jobs) Fuels will increase 5% (more than 700 jobs)

Most of the job growth will occur in construction, building electrification efforts, transmission/distribution expansion and new clean electricity capacity. Movement in this quarter included planning, siting, and permitting.

Quarter 2: During discussions with our advisory board members: Utilities are standing in the middle of an intersection with many crossroads. The Center, like industry, needs to know what initiative, funding, law, changes, etc., are on each road. What will affect industry first? What will affect industry in the years to come? How will these changes affect colleges? It's difficult to differentiate between what is a distraction and what is real. Some utilities are waiting to see what happens next. Investment utilities are unsure of which investment to make. It's a very unusual time.

Quarter 3: This quarter was filled with so much "uncertainty," which became the word that described turmoil since the change of the federal and state administrations. Partners faced early retirement and lay-offs; funding was paused or canceled; and some projects were terminated. Towards the end of this quarter, "clean" became the new dirty word; and "renewable" "equity" "DEI" and "Justice40" were alongside of "clean" as words to avoid (by some, but not all).

Quarter 4: As in Q3, this sector continued to work in a time of uncertainty due to the rounds of restructuring departments, people and policies within the U.S. Dept of Energy.
This quarter included the end of a long Washington legislative session, new bills, and a new budget; as well as discovering the list of Governor Ferguson's priorities. Fifteen of 25 climate and energy related bills that passed within this sector included nuclear power generation, solar panel installation on housing, sustainable building options, transmission and power storage ownership, clarifying wholesale power purchases, stricter transportation carbon standards, EV charging station installation requirements, microgrid projects, photovoltaic recycling program, fuels for agriculture equipment, and directing the departments of Ecology and Commerce to move towards annual emissions accounting. (details of these bills: Washington: 2025 Energy and Climate Policies Recap).

CETI, mentioned above, created SCALE 2030 and 2050 Institute projects and released two white papers that emphasized the need for "a systemic framework that will enable the rapid market transformation needed to decarbonize buildings" within 25 years.

We also experienced the re-organization of Career Connect Washington; layoffs and increased retirements throughout partners and utilities; and news of potential re-structuring of the Centers of Excellence.

FY 25 Review: The year's outlook began with a lot of promising grants, projects and potential hires. We expanded our partnership base and participated in some amazing projects that would have added electric long-haul trucks into 10 colleges, additional hydrogen training throughout the system, carbon capture/sequestration in Grays Harbor, extended partnerships in eastern Washington and Oregon, and additional congressional spending funds. We were scrambling to find office space to accommodate the work as well as seven additional staff.

Halfway through the year, with a change of government and administration, projects were canceled and paused. Key partners entered early retirement or were laid off; we (this Center and partners) lost more than $33 million in potential funds; and the U.S. government cancelled $23 billion of clean energy projects. "Clean," "green" and "renewable" - when placed with "energy" - became words that caused concerns within the U.S. Dept of Energy. Partners scrambled to re-write grants, project names, and marketing materials to avoid losing additional funding.

Our highlights included H2Skills, two Climate Corps Fellows, a successful summer Energy/STEM academy, an updated website and energy guide, a new outreach plan, and the ability to support our industry and CTC system. One sector win: Reorganization of the national Advanced CTE Career Clusters which introduced a new classification for Energy and Natural Resources. This new cluster will help increase career awareness nationally within K-12 education.

We began the year with an overwhelming amount of potential growth and ended the year in uncertainty – just like the sector that we serve. During this time of uncertainty, we continue to focus on ensuring clean energy work continues to move forward. While progress may be slower than desired, progress is still being made. How? We continue to support industry by finding ways to add value, such as collaborating with utilities to increase career awareness and outreach, using VR technology to hook students into learning more, updating the FWEE activity guide with new technologies that are emerging, and enhancing pathways to serve clean energy program faculty, directors and deans.

Gaps in Availability of Instructional Programs, Emerging Skills, and Technological Disruptors

Needs/Gaps: *Is the CTC system meeting your sector(s) needs for a skilled workforce? Are there skills gaps that the colleges could help close? Are there un- or underserved occupations or fields in the industry that the CTC system could be preparing students for?*	**Emerging Skills/Technological Disruptors:** *Are there emerging skills that you recommend the colleges prepare for but are not quite ready for workforce training? Are there technological advances that are or will disrupt your sector(s) and require new curriculum or programs?*
Our industry struggles with career awareness and job readiness. In many instances, applicant pools are small - especially in rural areas. Utilities also find that their roles in training are changing. They need to build self-confidence in new employees, add training to close gaps between generations. Other specifics from industry include: • Business Communication (emails, calendaring, meeting protocol, how to edit your own work and others, how to save work etc.) • Professionalism and what it's like to work in a job. • Punctuality • EQ – social emotional learning • Math skills, such as Algebra • Tool skills- being able to demonstrate real tool use and knowledge • CDL licensing – to pass the application gateway, some utilities are only moving those who have obtained CDL licenses, forward. • Adding job shadowing into curriculum as a requirement and credit earned Industry needs to increase retention efforts for diverse communities. Note that most jobs in this sector require an understanding of English.	Understand and meet the workforce needs of emerging technologies that will supplement energy generation and the electrification of everything. Skills are evolving. We need to be able to be nimble and develop short term, dual credit, stackable credentials for the following emerging technologies: • Biofuels, fusion, hydrogen, and small modular reactors (SMR – fission) • Clean Buildings Laws (energy auditors) • Clean Transportation (technicians) • Cybersecurity Operation Technology (OT) • Microgrid power managers, designers, and technicians (utilities) • Sustainable Aviation Fuels (SAF) • TECHNICIANS – trained to fit a wide variety of technologies and fields. • Transmission – improve infrastructure to accommodate the increase demand for electricity and new technologies to support energy generation. The industry competes for all types of engineers, electricians and technicians in a world that is experiencing increased security threats (cyber and physical attacks on the grid). **Q4 Update**: Retirements and separations are increasing at an alarming rate. Our sector is facing a loss of experienced talent represented in middle- to upper- level management. For example, Pacific County PUD will lose 80% of its workforce within two years. That's 44 of 55 employees. Others are reporting losses from 20 to 40 percent by 2027.

CoE's Goals and Activities

Core expectations	**#1: Identify & Monitor Industry Workforce Gaps & Needs**

☒ Economic Development ☒ Sector Strategy ☐ Ed/Innovation/Efficiency ☒ Supply/Demand ☒ Equity & Access	**Continue to monitor emerging clean energy industry trends and state-driven initiatives to share with educators and CoE stakeholders**. The energy industry is in the midst of tremendous change and growth which are occurring at a rapid rate. The growth of this sector depends on a well-qualified workforce to design, build, operate and maintain emerging technologies, energy grids, systems and equipment. <u>Utility workforce issues:</u> • Attrition has nearly tripled as the number of qualified candidates declines. • Competition for workers increases as new technology grows. Emerging technologies need engineers and technicians too. • IT/Cyber salaries are difficult to match in the utility vs. private sector. • Budgets: Utilities with smaller budgets use funds to meet clean energy initiatives vs. training and hiring. Consumer-owned and public utilities are hesitant to try emerging technologies (resulting in different workforce needs than those with emerging technologies). • Increased workload capacity with limited hiring, due to financial constraints, leads to a higher rate of employee burn-out.	
Funding Sources %	**Purpose**	**Planned Output & Work Products**
CoE: 100%	It's imperative to continue monitoring industry's needs and gaps to build a fit-for-purpose workforce. Sharing these trends will support CTC program needs. One example: A hot topic for CTC automotive programs: Who builds, repairs, maintains equipment, such as EV charging stations? Graduates would be more valuable if they were trained in technologies outside of internal combustion engines. **Activities** • Utilize data and research from institutions such as Chmura, the WA State Dept of Commerce, Dept of Energy, and CETI/Net-Zero NW. • Attend industry conferences, workshops, and meetings to make workforce connections and gleam information. • Host, co-host or sponsor events that address clean energy workforce discussions. • Participate on panels as a presenter or moderator to share energy workforce information. • Leverage Career Connect WA/CleanTech Alliance partnership to track workforce gaps, trends, and needs. • Serve on the WTC Clean Energy Technology Workforce Advisory Council (CETWAC – HB 1176). • Serve as co-chair of CEWD West Coast Coalition and invite more utilities and educators to participate in virtual meetings. • Serve on the Board of Directors of CleanTech Alliance. • Attend the Dept of Energy's labs project webinars and meetings to learn industry forecasts and opportunities. • Attend NSF-Engines workforce board meetings led by Portland State University, called Powerize, and AVISTA, called INTENT. Both are collaborative efforts to build regional partnerships in energy. PSU focuses on battery and smart grid technologies; Avista focuses on a regional energy workforce training co-op.	✓ Meet with energy workforce development leads at WA State Dept. of Commerce, Washington Trades Council, CleanTech Alliance, called the Clean Energy Workforce Huddle; and Center for Energy Workforce Development (CEWD). Monthly/quarterly ✓ Share updates with the CTC system using Energy Educators' Association targeted emails, newsletters and the CoE website. (Q1-Q4) • Create a website tool, such as a dashboard, that reflects in-demand jobs and industry trends. (Q4) ✓ Host two CoE Advisory Board meetings that include time for in-depth workforce discussions. Allow time for industry to share successes and challenges. Record and share the highest trends and concerns. (Q2 & Q4) ✓ Update advisory board, utilities, CTC Energy Educators, and stakeholders of CoE activities and findings through targeted emails and website blogs. (Q1-Q4) ✓ Attend the Green Transportation EXPO in Tacoma to meet new EV industry contacts and learn about training opportunities (Q1) ✓ Attend WSU/PNNL Advanced Grid Institute Summit for transmission and grid updates (attended virtually) (Q1)

Report Progress Toward Output and Work Product(s)	
Q1	Monitoring Industry Landscape: Accomplished list included in Activities and those checked in the Output columns above, including attending: • **The Energy Summit**, hosted by US Senators Marie Cantwell and Ron Wyden, focused on the emergent need of improving the region's power grid; supporting new technologies as problem solvers; and supporting the state's clean energy initiatives and progress. • **Green Transportation Summit & Expo**, we learned that maintenance of EV charging stations is either conducted by the manufacturers or third-party electricians. We're gathering information on electrician businesses to track opportunities for colleges and students. • **Hydrogen in Focus: Transportation**, Monica presented CTC skilled and technical workforce information alongside of Erin Childs, ED of Renewable Hydrogen Alliance, Phil Crocker, REVIT program manager – to a group of 50 transit agency directors and union representatives. Training hydrogen/EV technicians is needed to support our transit partners. Hydrogen fueled buses are emerging first in this sector. • **CEWD West Coast Consortium** – We hosted the first virtual consortium meeting that included industry and education representatives from five states. The meeting focused on participant introductions, who then requested a follow-up meeting prior to the national meeting in November to discuss K-12 outreach. (Note: the CEWD West Coast Chair requested that the Center lead meetings while out on leave). **Industry summary for this quarter**: The **political landscape** focused heavily on positive promotion of the Climate Commitment Act (CCA) and the support of the Cap and Trades initiatives passed by legislation. CCA funds that are gathered through carbon emission fees and taxes support statewide climate improvement projects. WA State ballot initiative 2117, if passed in Q2, will appeal the CCA and eliminate revenue collected by taxes on CO2 emissions – which will affect many partners, initiatives and projects, including eliminating the CETWAC committee, projects and staff. **Electricity transmission** is not capable of adding additional energy generation resources without expansion and updates. It takes time. BPA has approximately 150 energy-intensive projects in its queue across the region – some since 2005. The PNW Utilities Conference Committee estimated that demand for electricity will increase 30 percent during this decade. **AI and data centers are increasing demand**. We learned that Moses Lake, for example, requires 120 MW of generation for businesses and community members. One data center requires 130 MW and the new battery manufacturers, who want to build the largest factories in the world, require 400 MW. New forms of generation are needed to supply the demand. We're seeing an increase in support for **Microgrids** – off-grid energy production for communities and large off-takers such as data centers. Those microgrids need renewable energy generation, such as solar farms and battery back-up systems. Fusion, once commercialized, will help support the needs of Microgrids.
Q2	**CleanCurrents Conference** Monica created and presented a poster about K-12 outreach and summer FWEE academies; presented during an educator's breakout session; and supported FWEE during presentations and an awards ceremony (Andy Dunau accepted an award for the FWEE summer academy outreach). The event offered great networking and learning opportunities for hydropower careers – such as manufacturing, welding, machining and underwater work, as well as new connections within the U.S. Army Corps of Engineers, BPA and Hydropower Foundation. The Hydropower Foundation supports workforce training and education through hiring events, the Waterpower Club, and competitions. A Wenatchee Valley College student and Waterpower Club member won the 2024 Julie Keil Scholarship Award during the event. **Fusion Week** Monica partnered with WSU and led two workforce panels as a contributor and moderator for public and Dept of Energy/Fusion focused attendees. Panelists included lead faculty and staff from Auburn University (Alabama), Colorado State University, Columbia Basin College, Oak Ridge National Lab, Snohomish STEM, and University of Washington. Key takeaways: 1. Fusion industry partners need to collaborate to share gaps and best practices; as well as common recruitments sites, education-industry partnerships, and training for educators. 2. Fusion, as with all new technologies, has phases of workforce needs: R&D and Commercialization. R&D requires engineers and physicists, while Commercialization will require more machinists, electrical technicians, and advance manufacturing technicians. 3. A national survey is needed to gather information about existing and future-needs programs that can bridge between research and coursework. 4. Training needs to be aligned with phases and industry needs. At the request of WSU, Monica wrote a five-page workforce and panel summary that will accompany a report for the U.S. Dept of Energy. The fusion leaders are requesting a formal hub process and funding, similar to the work that's being done in hydrogen.

	CoE Advisory Board Meeting Avista's Jeremy Gall introduced Sara Letsch who will replace Jeremy on our board. Along with an update from the Center's director, presentations included a website update and use survey; Climate Corps Fellows work; and an update on REVIT and hydrogen. **CEWD West Coast Consortium** Monica organized and led a virtual meeting which invited industry participants to share K-12 outreach. Presenters included representatives from Avista, FWEE and Tacoma Power. Avista is in its third year of a student craft program which is a part-time worked base learning project for high school seniors. Tacoma Power shared high school internships, job shadowing, shop tours and involvement in a Touch A Truck program. FWEE discussed summer academies. We had 15 industry partners on the call representing several west coast states. **Economic Alliance EXPO** Keynote Economist Bill Conerly presented that the overall workforce pool is shrinking. That between now and 2030, we will see the lowest growth of the working-age population since the Civil War. Businesses are experiencing fewer applicants and there is a knowledge gap that's growing as experienced workers retire. AI is needed and is welcomed during this time to fill some workforce gaps – which will allow workers to move into positions that require people power. **Industry updates**: **Political Landscape** (follow up to Q1): Voters accepted to keep the Climate Commitment Act (CCA), passed by WA Legislation in 2021, as well as voted to keep natural gas as a fuel source. CCA, led by the Dept of Ecology, funded 37 agencies that received appropriations of $3.2 billion ($472,488,619 were spent) July 1, 2023 – June 30, 2024). Distribution of funds from CCA accounts Fiscal Year 2024 **Transmission** The WA Dept of Commerce released an RFP to hire a research/consulting firm. They chose Kinetic West, who reached out to the CoE for help. We will make connections between the firm and utilities to provide information about Washington's aging electric infrastructure and what's needed for enhancements and workforce support. **Grays Harbor Co2 Carbon Capture/Sequestration** Projeo lead, includes Invenergy, PNNL, Visage Energy and the CoE. This group is in the negotiations phase with the Dept of Energy. CoE's role is to help coordinate community outreach in Elma as well as coordinate field trips for GH and CC classes. We will make this a separate activity once the funding is complete.
Q3	**Starting with Political Landscape: This quarter introduced "uncertainty" as the defining word.** Colleagues, work partners, funding and projects were on a never-ending roller coaster ride. Some colleagues accepted early retirement packages, some were laid off and re-hired, some simply quit and walked away from the turmoil. Within a month, we lost the Grays Harbor C02 Carbon Capture/Sequestration project that was in a negotiation phase; and to the day this report is due, hydrogen is still at risk of losing hub funding. The director consoled colleagues, re-organized workplans, and rode the coaster. **TransAlta community meeting** – TransAlta held a closed-door meeting at Centralia College to discuss next steps in closing the facility. Staff are working on a closure and clean-up plan and are examining all options. They were clearing rumors of a retrofit and if they choose a retrofit option, the plant will still be closed for 2026, and the grid will be without TransAlta's power generation. **CETWAC Report to Governor** and Legislators. Executive Director Ilene Munk included a fantastic write up on all of Washington state's Centers of Excellence and included a specific shout out to our Center as doing great work. The WTC created and disseminated a workforce survey to energy industry employers, employees, and labor. We are creating a survey for the CTC system. **Clean Energy Workforce Groups** – WA Dept of Commerce has invited those who work in climate and energy workforce to meet regularly and share resources. Included within this group: labor boards and councils, WTC, CoE, WorkSource, and other workforce councils. **Forest Day at the Capitol, April 9** – we were invited to join Centralia College staff to bring the mobile lab and VR technologies to this event for our state Legislators. This event sparked several event planning and mobile lab meetings – to find funding and additional simulators for the mobile lab. **FWEE** – We discussed updating the NW Activity Guide to include advanced nuclear, fusion, battery technology and pumped storage; continued working with industry for the summer academy; and welcomed Red Barn Consulting, the company chosen to be the lead of FWEE (Andy Dunau retired). **CTA Board of Director's Meeting** – attended virtually and learned more about the house and senate budgets from CleanTech Alliance's lobbyist. CTA is funded by memberships and grants; and are facing the same uncertainty challenges as other industry partners (especially NGOs). The CoE director spent much of her time attending industry related meetings, including AFV-TAG, Capital STEM, and hydrogen projects. She met with representatives of new businesses such as BrightNight (grid battery storage), CleanFiber (clean insulation mfg.), Renovation Innovations (bio waste to product), and

	ToyotaLift (forklift battery retrofit). She met advisory board members in one-on-one meetings, including a welcome orientation to the newest member; and she wrote support letters for Hotrocks Geothermal, PNW Battery Collaborative, and SOAR-Hy (WSU hydrogen in aviation).
Q4	Industry support included building labor partnerships; co-hosting DACUMS and roundtables; organizing tours and activities; and enhancing regional partnerships. **CETWAC** – We participated in creating and disseminating an energy workforce survey for industry, led by WA's Workforce Training & Education Coordinating Board. **CEWD** – We encouraged and supported the re-launch of the West Coast Consortium and invited industry to be actively engaged. Monica serves as vice-chair with Southern California Edison as lead. The meeting included 18 participants, representing electric and gas utilities and educators from California, Hawaii, Oregon and Washington, and gave space for industry to reconnect and share. Hot topics included wildfire mitigation, cuts in workforce, and new projects such as SMRs and hydrogen. CEWD, a national membership organization that includes 90 percent of this industry, shared news that included the release of an updated strategic plan, new career awareness information, a new scholarship program, career cluster curriculum, and industry standards for stackable credentials. **CoE Advisory Board Meeting** – The director's report included successful and lost opportunities (page 2), and CoE FY26 forecasts and workplan. We invited the members to nominate a new chair as well as assist with reviewing/developing a new strategic plan that will begin in 2026. CoE_Construction director Christina Rupp presented Tool Box Talks and invited board members to review the current inventory as well as suggest new topics. The meeting ended with the board requesting a letter of support for the Center to be delivered to Dr. Mohrbacher. **Regenerative Industries -** Biochar biofuel refinery site visit. We discussed potential internships and training opportunities for Centralia College's trades programs. **COM-IBEW 77 Transmission study** – Washington's transmission is old and full. It lacks the capacity to add electric generation projects without closing other resources. The Dept of Commerce hired Kinetic West to conduct industry interviews regarding the status of the state's transmission/grid and its workforce. Our role was to act as an advisor to Kinetic West and to make introductions and connections to industry representatives. Bonneville Power Administration (BPA), which owns 79 percent of our state's transmission, plays a central role in delivering reliable, affordable, carbon-free electricity and transmission throughout the Pacific NW. Monica met with BPA's VP of transmission who confirmed that the regional transmission company is conducting a whole-load cluster study. BPA has 23 projects worth $5 billion "in the hopper." These projects are slated for now through 2035 and focus on resources and loads that will connect eastern and western parts of our state. BPA has a generations connection reform project that will add 70 GW of electricity (equals 70,000 MW and electricity for 70,000,000 people) to the system. Employees, who are on mission-critical only work status, experienced a two-month workforce reduction. They are monitoring the closure of TransAlta, Coal Strip (in Montana), gas-generated plants, and hydropower projects; looking at resiliency due to wildfires, security and pipeline stability; and are working closely with national energy labs to model scenarios. He included that "the grid is a huge machine" and they are looking at other resources to tap into. In May, BPA approved EnergyNW's implementation of an Extended Power Uprate project – a $700 million project that will increase Columbia Generation Station's output by 162 MW by 2031. **FWEE SW WA Hydropower & STEM Career Academy –** A collaborative effort involving Centralia City Light, Centralia College, Chehalis-Centralia Airport, Chelan County PUD, Cowlitz PUD, FWEE, Lewis County PUD, Lewis County Transit, NREL, SEI, Tacoma Power, and TransAlta. Through supporting this academy, we learned that Lewis County PUD has an application process that looks for applicants with CDL licenses – especially in the fields of Lineman and Tree Trimmer that require CDL licensed drivers. Those who include their CDL license within the application process receive priority interviews. All partners volunteered employee time, space and SWAG for the academy students (see page 13 for more camp details). **Powerize**: We were asked to re-write portions of the proposal to delete the words "clean" and "equitable." The proposal moved forward, and we continued to meet as a consortium throughout this quarter. Update: Powerize did not moved into July's visitation phase. (information was released in July, FY26).
FY25 Review	Power demand across the nation will triple to quadruple in the coming years. The supply of electricity will depend on new generation, an updated grid and newly installed efficiencies. Utilities 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 power generation loads, dramatic climate events, increasing power demand, decarbonization demand, security issues, and a changing workforce. The increase in demand is driven by AI, data centers and manufacturing.

	Clean energy employment grew 4.5 percent – adding 150,000 jobs across the US in 2023. That was three times faster than the growth in employment across the entire US economy. Energy has outpaced economy-wide employment growth for the last five years – at the same time population and labor-force participation is declining. This industry needs increased career and energy awareness support, nimble training resources, and workforce pipelines. Short-term stackable credentials will help train new technologies to incumbent workers as well as those who have transferable skills. Construction apprenticeship pipelines require construction projects to open in order to grow numbers of trainees. Increased construction also relies on an expanded grid, quicker siting and permitting, and available funding.

Core expectations	**#2: Support Educators and Training Providers**
☒ Economic Development ☒ Sector Strategy ☒ Ed/Innovation/Efficiency ☒ Supply/Demand ☒ Equity & Access	• Strengthen partnerships within the CTC system – build trust and knowledge of who to call if/when industry needs workforce outreach. Meet new faculty and deans; and offer support for CTC programs. • Build relationships and trust between apprenticeship organizers, unions and the college system. • Build and develop partners with STEM and K-12 ESD's to reach students, grades 8-12, and their parents - to increase energy career awareness and training opportunities in CTC programs and apprenticeships.

Funding Sources %	**Purpose**	**Planned Outputs and Work Products**
CoE: 100%	To build a strong workforce that supports the clean energy industry and Washington state's economy, we need to work together. Collaboration is needed with all educators and trainers. Awareness is needed to fill the education pipelines and career opportunities to support this sector. **Activities** • Attend WEC including new member orientation, WEC meetings and opportunities to build relationships. Increase collaboration and outreach opportunities (i.e., BTC - hydrogen; CPTC - biofuels; BBCC - battery manufacturing; CBCC - cyber; Clark/others - EV) • CTC CTE boards – continue to serve and offer support to colleges, such as Shoreline and Clark, who request CoE resources. • Find programs that could use CoE resources for training, such as EV training for auto/diesel faculty; battery manufacturing technology; and hydrogen. • Support CTC system grant writers with Chmura and other labor market resources. Write letters of support when projects meet workplan goals. • Partner with other CoE directors when sectors cross Centers – such as EV/hydrogen technology in Marine and Global Trade; electrical contractors in Construction; Cyber OT with Cybersecurity; offshore wind with Marine. • Serve as Vice Chair for the CoE directors – take minutes, assist Chair with meeting agenda, assist directors and SBCTC with Center needs. • Find ways to partner with trades/unions such as IBEW and UA290, to build relationships and trust, and pathways for students.	✓ Attend WEC events. Seek out, meet and follow-up with at least three deans (new contacts each meeting), who lead sector-related programs. (Q2 – Q4) ✓ Create EV training opportunities for automotive/diesel and energy tech faculty and include SMEs. ✓ Attend Shoreline CTE/Solar Energy Advisory Board meetings and connect to resources. (Q1-Q4) ✓ Update and publish CoE Education Program Guide. ✓ Co-host at least one combined CoE summit/workshop or event with another CoE. (planning Q1-Q3; event Q4) ✓ Serve as Vice Chair of the Centers of Excellence directors committee. (Q1-Q4) ✓ Attend one K-12 regional superintendent meeting to introduce new Climate Corps/K-12 Fellow. (Q2) ✓ Use VR energy career technologies at the SWW Fair, Expand Your Horizons and college events (Fellow, Q1 – Q4) ✓ Finish re-design of website college program resource page. (by end of Q2)

	• Manage SEI Climate Corps K-12 Education Fellow, who will strengthen K-12 outreach by offering energy competitions, coordinating faculty training opportunities, and coordinating Centralia College's mobile lab (see goal #7). • Invite CTE deans and educators to CEWD West Coast Consortium meetings that focus on workforce training.	
Report Progress Toward Output and Work Product(s)		
Q1	<u>Supporting K-12</u> • The Center is managing **Centralia College's mobile lab** through Climate Corps Fellow #2. We arranged for the lab to participate in the SWW Fair, and our K-12 Fellow promoted careers in energy through VR technology and lab simulators to 27 visitors (three days that she worked). She promoted the lab as a school/classroom tool and started building a K-12 outreach contact list. • **SWW Energy/STEM Summer Academy**, we held the first 2025 planning meetings and secured next year's industry involvement to include Centralia City Light, Chelan PUD, Cowlitz County PUD, FWEE, Lewis County PUD, Lewis County Transit, NREL, TransAlta and Upward Bound. • We are also supporting a summer academy in the Seattle-Snohomish area. <u>Supporting CTC Educators</u> • Connected with Shoreline and offered assistance in promoting/supporting Shoreline's energy program and WA Solar Summit. • Sent updates and event information to the Energy Educators' ListServe. Many educators took summer months off; however, three SPSCC faculty attended the Green Transportation Summit & Expo. • The director met with Irene Shaver to discuss fiber optics training with Lightbrigade, a company that has published fiber optic training programs; and Kenworth/PACCAR to partner on an EPA grant that would offer HD electric trucks, equipment and tools to 10 CTCs with diesel tech and CDL programs. • CoE program coordinator began updates to the Energy Program Guide, as well as updated college programs, news and blogs on the Center's webpages. • The Center met with Global Trade/Supply Chain CoE and Homeland Security Emergency Management CoE to create a summit supporting CBC's new supply chain program. The summit will focus on supply chain resiliency. Planning will continue through Q2 for an April event.	
Q2	**South Seattle SBST 10th Anniversary Hermanson Forum** Monica attended the celebration to show support for South's sustainability and energy programs. **WA Solar Summit at Shoreline** Monica attended to help bring awareness to Shoreline's energy and trades programs. She also connected with Everett CC's Resource Conservation Manager and discussed his campus work within renewable energy. We are meeting in Q3 to see how we can support his work (presentations) with resources. **CleanCurrents Teacher Workshop/National Energy Education Development (NEED)** Monica supported this workshop by sharing CoE website resources and best practices of summer STEM outreach programs. Bonneville Environment Foundation, NEED and the US Army Corps of Engineers led activities for 20 attendees. **NREL STEM Steering Committee - Hydropower Workforce Development Roadmap** Meeting goal: integrate activities across a collective portfolio of projects and understand who to best promote all of the activities and identify gaps in waterpower workforce education and programs. Monica was invited to present Center resources and activities. Met representatives from KidWind, Mystic, NEED, POET/UMERC and the HydroFoundation (those who are offering K-12 activities throughout the country). **EPA EV Truck Grant/Kenworth** Monica has met with Kenworth representatives for two years, talking about supporting the CTC system with trucks and curriculum. Kenworth/PACCAR led several meetings this quarter to write an EPA grant proposal that would put one or two new EV long-haul trucks into 10-12 colleges within the system. We invited CoE_Global Trade/Supply Chain Management to lead the coordination between colleges and connected Kenworth to Pac Mountain Workforce Council, as the team needed a non-profit organization to serve as the Lead PI. The collaboration included Pac Mtn, United Way PNW, SBCTC (Irene Shaver), CoE's GTSCM and Clean Energy, and the following colleges: Bates, Bellingham, Centralia, Clark, Columbia Basin, Grays Harbor, Lake Washington, South Seattle, Skagit Valley, Spokane and Walla Walla. The grant was submitted this quarter, and we were notified before Christmas that we weren't chosen for this round. EPA is holding the application for further consideration after the new administration is in place.	

	Fusion Week/CBC Outreach Monica invited CBC Dean Jesus Mota to attend Fusion Week, participate on a workforce panel, meet Fusion leaders and then attend a conference hosted by EnergyNW (where he met WSU leaders and EnergyNW workforce rep's). Jesus is working with WSU and Energy NW on receiving a fission simulator – that will either be placed at CBC or housed at the Institute for NW Energy Futures in Tri Cities. **PSU NSF Engines Grant: Powerize.** Monica was invited to participate in a workforce advising group and we brainstormed ideas for the next steps of submitting a grant proposal (PSU lead PI). We submitted ideas that included updating our smart grid curriculum, smart grid website pages, and 2-3 skill standards; and organizing new technology tours for faculty. **Other connections** We continued to update our Energy Program Guide, sent correspondence to our Energy Educators' Association, and met with: • Dean Orlando de Lange at Shoreline to discuss their energy program (enrollment is low and the program is at risk of closing) • Deans at WEC to discuss the EPA/Kenworth project. • Dean Priyanka Pant to discuss a possible project with Modern Hydrogen and CHARGE • K-12 Superintendent regional meeting – Monica introduced the CoE and the Climate Corps Fellows, who each had some time to introduce themselves and their programs. We have not hosted any in-person EV training and continue referring faculty/deans/directors to attend AFV-TAG webinar and events. We are partnering with WSU's Green Transportation Group and need to plan the in-person trainings.
Q3	**Winter WEC –** Monica presented the Centers update and encouraged guests to get up and stretch. **CoE SBCTC Site Review –** The CoE invited advisory board members and Centralia College administration to a virtual site review. Eight advisory board members attended, who represented utilities, labor, NGOs, WorkSource, and new technologies. The review ended positively, and suggestions will be incorporated into next year's workplan. We hope to include the official report in the next Advisory Board meeting May 16. **CTC Energy Survey** – Partnering with Irene Shaver, SBCTC, and Agnes Balssa, consulting contractor, we will create and disseminate an energy workforce survey throughout the CTC system. The survey will be launched at Spring WEC with follow up to the Center's Energy Educators' Association and SBCTC ListServes. Results will be included in CETWAC's energy industry and labor survey results – that will be shared with the governor and legislators. **King County Career and Technical Administrators (KC CTA) –** Monica and CleanTech Alliance's Mel Clark presented energy industry and Centers of Excellence information to 20 CTAs. We will organize future fusion and new tech tours to help build clean energy ambassadors in King County. **Lake WA Tech – Modern Hydrogen/CHARGE/WA Dept of Commerce** – Modern Hydrogen, a Bothell based company, had won a $150K award from the WA Dept of Commerce to build workforce training in the trades. CHARGE and the CoE met with Dean Pant to discuss how LW Tech could partner with Modern Hydrogen. Modern Hydrogen eventually backed out of the project siting they had too many projects to manage. So, we designed a plan to ask for funding to purchase lab equipment for LWTI. Commerce denied the funding as they saw equipment as a capital expense. **Shoreline Energy Program –** Due to staff changes, the newly designed energy program at Shoreline, which launched fall of 2024, closed. We served on the advisory board and met several times with new adjuncts, dean and VPI. The program needed a full-time faculty/champion. **Construction Center of Excellence: Solar Installer Toolbox Talk –** Christina Rupp invited our CoE and CleanTech Alliance to write letters of support for a grant supporting new safety videos that will be featured in the CCE's Toolbox Talks collection. The award was announced this quarter. **Centers of Excellence *Securing the Supply Chain Summit: Building Resilience within the Supply Chain*** – we secured presenters, including Benton Rural Electric Association, Dept of Commerce Resiliency team, EnergyNW and PNNL, to serve on our Energy Resilience panel at the April 24 summit at Columbia Basin College. Event sponsors include CBC and the Centers of Excellence for: Ag & Natural Resources, Clean Energy, Global Trade/Supply Chain Management, Homeland Security/Emergency Management and Semiconductors/Electronic Manufacturing. **Ilwaco Trades Fair** – one of the quarter's highlights was partnering with Pacific County Fair to increase energy career awareness at Ilwaco High School! We featured an energy display (Monica invited students to participate in a science experiment) and the VR headsets. Pacific County PUD recruited students into a job shadowing program. We won a new partner and made some new friends!

	Futurus High School, Centralia – Monica met with the new principal as our Fellow invited students to participate in a VR and simulator challenge. This alternative high school does not have any hands-on science labs for their students. The visit proved the need for this type of community outreach. **SEI Community of Practice Presentation –** Monica presented energy industry, programs, pathways, and careers to five CTC faculty and staff who enrolled in SEI's COP program. The six-week series introduced participants to climate, energy efficiency and building efficiency topics. Participant deliverables included curriculum and project outlines that will incorporate resources and learnings into classrooms, programs, and departments. **Hydro "Work Group 8" –** Hydropower provides about 7% of the nation's electricity and about 40% of its renewable energy. Nearly every state uses it; and our state boasts the highest amount of what's also known as the oldest form of reliable, affordable renewable energy. NREL is supporting hydro workforce development through research and collaboration. They started WG8 as a national hydro workforce group that includes museums, clubs, colleges, the CoE, and organizations that share K-14 education and training best practices.
Q4	**Securing the Supply Chain Summit**: *Building Resilience within the Supply Chain* at CBC. Partnering with four other CoE's, we hosted 40 industry/education reps and students during the pre-event reception, and 65 of the same during the day-long summit that ended with off-site tours. We heard that tariffs have not increased prices yet, but the threat is there; we rely on China for agriculture ingredients; EPA is slow and politics are complicated which affects research; students need communication and math skills for reliable shipping; and that 2,000 trucks export frozen French fries from the port to China each week. Our CoE arranged an energy resiliency panel that included Kate Pedersen, Dept of Commerce; Joshua Lozano, Benton REA; Ross Rebich, EnergyNW; and Jeffery Dagle, PNNL. The panel shared challenges of keeping power reliable and safe; and included discussions on supply chain inventory challenges, transmission support, increased power demand, preparing for wildfires, and future energy projects - within the Tri-city region. **Spring WEC:** On behalf of the CoE directors, Monica presented CoE updates and encouraged attendees to join the centers in celebrating the center's 20th anniversary. She also joined SBCTC Irene Shaver in presenting information about this sector which led to launching the Clean Energy Program Survey. **Clean Energy Program Survey -** Led by SBCTC Irene Shaver in partnership with the center, 57 deans, administrators and faculty representing 24 colleges completed an energy-related program survey. The purpose of the survey was two-fold: to scan the system's successes, needs and future of energy-related classes/programs, which resulted in a report called *Washington's Community and Technical Colleges & the CLEAN energy Sector*: *Opportunities and Needs 2025*; and to supplement CETWAC's energy workforce report, that's due to the governor and legislation in November. Two focus groups met virtually to dive deeper into the initial survey responses. For the center, this information confirmed the need for more virtual convenings, grant support collaboration, and updated equipment. Most respondents recognized that the industry is changing at a speed in which it's difficult to keep up. **Washington Council for Engineering and Related Technical Education (WCERTE)** – The center joined WCERTE, a collaborative organization that fosters communication, coordination, and cooperation among post-secondary institutions involved in engineering and technical education. WCERTE plays a key role in aligning curricula across community colleges and universities to ensure smooth transfer pathways for engineering students. It aims to improve engineering education statewide by reducing barriers and encouraging inter-institutional collaboration. Monica presented collaboration opportunities and center information, and was asked to collaborate and support a new emerging energy program at Seattle University. **Other Education Connections** • **Big Bend** asked for help creating solar electrician instruction with BBCC for Grant PUD. Monica re-connected IBEW in Central WA who has been looking for a site in Moses Lake to offer that type of training. • **Clover Park TC –**Lineman & arboriculture program. Monica met with dean Lester Burkes to discuss the program and connect PSE as an advisory board member. The program launches in fall of 2025 and we're looking forward to sharing the program and its successes. This will be the first Lineman program to emerge in the CTC system since Spokane/Avista closed in 2021. • **BEACON SEI Fellows** at other CTCs (see 21 for more information). • **EV Training at Green Transportation Summit & Expo** (GTSE). The CoE is considered an AFV-TAG stakeholder which allowed us to purchase 10 early bird tickets for the price of five and for faculty to attend GTSE in August. We were able to promote the event through WEC and the Energy Educators' Association to support 10 faculty to attend. • Monica will continue as vice-chair for the **CoE Directors**. • We continued to work with faculty from Centralia High School, San Juan College, University of Connecticut and University of Utah.

FY25 Review	**Building relationships –** We purposely reach out to college deans and faculty members as we update and support college programs. These efforts include direct emails, phone calls and outreach through WEC, WCERTE and events. We made some good progress in gaining new contacts and were thrilled to see that many of the colleges, those who completed the clean energy program survey, thought of us as a center to work with. Those who attended the focus group meetings agreed that meeting more often would be beneficial to their programs. Those convenings will be scheduled in FY26, Q1. We enrolled in WCERTE to connect with engineering and technical program faculty and will continue to attend their quarterly meetings; and we worked with the Dept of Commerce and SEI to place BEACON Climate Corps Fellows within the college system. The hydrogen hub continues to move at a slow pace – we will see more activity involving other colleges in FY26, Q1. **There's still more work to do.**

Core expectations	**#3: Expand Career Awareness, Including Career Connect WA (CCW)**
☐ Economic Development ☒ Sector Strategy ☒ Ed/Innovation/Efficiency ☐ Supply/Demand ☒ Equity & Access	Continue supporting partnership with CleanTech Alliance (CTA) as CCW Clean Technology/Clean Energy Sector co-leader. • Share emerging technologies and workforce gaps/needs with regional networks that include ESDs, STEM groups and CCW program leads. • Support industry seeking to build work-based apprenticeship programs. • Share funding opportunities to build career awareness. Serve on Capital STEM Alliance Executive and REVIT Advising committees. Sponsor and help expand Summer Energy/STEM/FWEE academies.

Funding Sources %	**Purpose**	**Planned Outputs and Work Products**
CoE: 100% - staff time for meetings, reporting, and supporting connections, and projects. CCW: 100% - projects, STEM summer academy supplies and CEWD travel. CleanTech Alliance is PI for CCW grant	CCW programs will help increase career awareness and opportunities within our industry. Collaborating with CCW program leads and program builders will increase our career awareness outreach. Students will have better knowledge of existing and future career opportunities, as well as training and education pathways. **Activities** • Share CCW funding opportunities and news through meetings, emails and newsletters. • Write letters of support for industry partners who apply for CCW funding; include those projects in our CCW sector strategy. • Share best practices and success stories of projects, such as Avista's 9-month High School Craft Program and Lewis County Transit led Renewable Energy Vehicle and Infrastructure Technician (REVIT) training program, in presentations that showcase the Center's work. • Continue to find pathways for CTC programs to partner. Such as Shoreline's solar and South Seattle's buildings programs. • Collaborate with CoEs for Marine and Agriculture, other CCW leaders, in sharing ideas and best practices. • Attend CEWD National Conference to gather other work-based learning ideas to share with industry; collaborate on workforce development projects; and learn DEI best practices to share statewide.	✓ Renew CCW/CTA MOU. (Q1) ✓ Attend CCW sector leader meetings and regional convenings. (monthly and quarterly; Q1-Q4) ✓ Lead a workforce discussion that includes CCW opportunities at an energy-related event. (any) ✓ Update/print a bi-lingual energy career awareness flier (in Spanish) to use during outreach opportunities. (Q1) ✓ Assist in writing/editing CCW quarterly reports. (Q1-Q4) ✓ Attend the CEWD national conference. (Q2) ✓ Support statewide FWEE Academies with hands-on experiments. (Q4) • - Assist SnoSTEM, Seattle City Light, SnoPUD in building a NW WA summer FWEE Academy. (Q4) – SCL opted out this year. ✓ Disseminate updated FWEE activity guides and other promotional materials. (Q1-Q4) ✓ Submit copy for a featured cover page/article to NWPPA about STEM academies. (Q1)

Report Progress Toward Output and Work Product(s)	
Q1	Aside from the checked Outputs above, • CEWD accepted our suggestion of translating career awareness materials in Spanish and made them available this quarter. The Center's program coordinator added logos and updated other CEWD materials for us to share and disseminate. • We shared information about CCW Round 13 funding with partners and are supporting two applications led by Lewis County Transit to continue building the REVIT program; and Bonneville Environment Foundation to create Clean Energy Fellows to train educators. • We shared/disseminated FWEE activity guides in several meetings including DoE HFTO, the SWW Fair and Green Transportation Summit & Expo • NWPPA published a cover story about the FWEE academies – including photos from the SWW Energy/STEM Academy.
Q2	**CCW** The CoE and CleanTech Alliance reviewed and supported seven project applications to be considered for Program 13 funding and continued to meet with industry and CCW regional representatives to support clean technology and clean energy projects. Those encouraged to move forward will give presentations in February, so we will report on those wins and our involvement in Q3. We are also waiting for the next round of Program Leader announcements (RFP will launch January 15) to develop strategies moving forward. **CEWD Workforce Development Summit** Due to the historic investments in the sector, energy employers are forecast to hire 32 million people over the next 10 years. Of those, employers will need about 17 million replacement workers and 15 million new workers. Some of the industry's most significant workforce challenges include unprecedented hiring needs, challenged by a tight labor economy; lack of awareness of breadth and depth of energy careers (and spectrum of jobs); and a shortage of knowledgeable instructors and essential training equipment within schools. Monica encouraged Ilene Munk, CETWAC, and Sarah Fussner, Energy NW, to join her at the conference; and she was invited to present new technology workforce efforts on a panel on the last day. Attendees celebrated the launch of the new Advance CTE career clusters – which, for the first time, gives energy a place of its own. Advance CTE - State Leaders Connecting Learning to Work. The site includes a breakdown of the clusters as well as tutorials/resources of how to use them. We feel this is a great asset in increasing awareness of careers in energy and are excited to see how the new clusters will be used. **FWEE STEM Academy** Planning is underway for a full week of activities and tours to support SWW summer energy/STEM Academy. We met with SnoSTEM, Seattle City Light and SnoPUD and they have postponed adding an academy until summer of 2026.
Q3	**CCW Sector Leader Convening –** We attend these 2-day convening sessions to build contacts and energy programs across the state. The meeting led to a new partnership with Puget Sound ESD and King County CTA (Career and Technical Administrators). **CCW Bidder's Conference and Sector Leader RFP –** We participated in several brainstorming and writing workshops to re-write the Clean Technology/Clean Energy Sector Leader Sector Strategies. We also met with Kinetic West staff, who will take a big role in this partnership by participating in meetings and reporting for our sector. Our role will change to an advisory position if our sector leader proposal is accepted for the 2025-27 biennium. This is all dependent on CCW funding within the state's new budget. **Renewable Energy Vehicle & Infrastructure Technician (REVIT) led by Lewis County Transit.** The REVIT exploratory class is in its second year at Centralia High School. The class is so popular that it is being offered during additional periods throughout the day. CC's Aman Gill continues to work with the project in building dual-credit courses for a hydrogen mobility technician program. Leadership of the REVIT team met with SBCTC Interim Executive Director, Chris Bailey, to inform him of the project's intent to share the curriculum statewide, with the help of the CoE. Bonneville Environment Foundation (BEF) is seeking funds to build energy ambassadors (teachers) to train the trainers.
Q4	**FWEE SW WA Hydropower & STEM Career Academy –** The summer camp extended from three to five days this year and was well attended by 24 students from Spanaway, Rochester, Centralia, Chehalis and Ilwaco. The CoE sponsored the academy and hired a Centralia High School science instructor and former SEI Fellow to run the activities. Students learned about careers as they toured TransAlta's coal-fired plant, hydro projects owned by Centralia City Light and Tacoma Power, and electrifying activity stations at Lewis County PUD. They built hydro power projects and hydrogen cars, saw electric arcs (Cowlitz PUD Safety Truck), viewed a hydrogen fuel cell car and bus, and learned about new technologies that could be developed around Lewis County.

	REVIT was awarded funds by Career Connect WA to help fund additional dual-credit programming (college-high school). We attended a meeting at Centralia High School to learn more about REVIT's project-based learning, which is the foundation of REVIT. The committee built small cars using commonly found items to protect raw eggs from many different types of crashes. **Career Connect Washington (CCW**) – Clean Technology/Clean Energy Sector Leaders: Mel Clark, CEO/President of CleanTech Alliance, and Monica • This quarter focused on supporting CCW program #13 applicants as well as continuing our role as sector leaders. • Mel and Monica presented information about our sectors to King County CTE directors and CCW Regional and Sector Leaders. • We partnered with Kinetic West to update our Clean Technology/Clean Energy Sector Strategy. • Monica chose to change her role to sector lead advisor vs co-sector leader during June's RFP process. The RFP was submitted by CleanTech Alliance and Kinetic West in June.
FY25 Review	**CCW** hired a contract employee who was an amazing coordinator. She convened regions with leaders and thought of ways to convene sector leaders to coordinate joining efforts and programs. Clean energy is a sector that many participants don't fully understand – including regional coordinators who didn't recognize that clean energy employs a workforce in every county of the state. We joined CCW as a partnership with CleanTech Alliance and applied as co-sector leaders of Clean Technology/Clean Energy (it's a large sector). We split the work. The CoE focused on utilities and the CTC system, while CleanTech Alliance worked with clean tech companies, universities and K-12. Through this partnership, we were able to cover CCW meetings and attend/host industry convenings. Through funds, we were able to re-design our website and train an in-house program coordinator, Emily Girt, to manage it. She added pages for K-12 activities, apprenticeships, internships, scholarships and CCW. The additional funds paid for Emily's time, a website designer, training, updates to FWEE activity guides, and some supplies for all summer academies. Our sector leader role ended June 30, 2025, as funding for CCW was drastically cut. Roles of the sector leaders changed to being industry conveners only – which is work that we already do (the new role deleted student engagement, which we were doing through FWEE summer activities). The CoE opted to become an advisor vs. a co-leader and did not request additional funding. This strategy will reduce hours of meetings each month/quarter that were required of CCW. CleanTech Alliance partnered with Kinetic West and they submitted a sector leader RFP in June. **REVIT** was awarded CCW funds in program 13 and we will continue to support that program through promoting free high school dual credit curriculum throughout the state. This program will build on-ramps to our CTC system and will be distributed throughout the state in FY26 and beyond. **FWEE** summer academies will continue. Our partnership with SEI has funded at least two more years of camps. We have also held discussions with Clark College, Snohomish PUD, and Jefferson County PUD to start academies next year.

Core expectations	**#4: Support Hydrogen Workforce Training & $PnwH_2$**
☒ Economic Development ☒ Sector Strategy ☒ Ed/Innovation/Efficiency ☒ Supply/Demand ☒ Equity & Access	The Pacific Northwest Hydrogen Hub ($PnwH_2$) Association will wrap up negotiations with the Dept. of Energy at the end of FY 2024. If awarded, $PnwH_2$ will be one of seven hubs to win a $1 billion, 8-year grant. The CoE quickly led H_2 workforce education discussions, which added Centralia College as a crucial partner within the hub (CC was the only college recipient by the Dept of Energy). The focus of the hub: to grow a hydrogen (H_2) economy in Washington, Oregon, and Montana to include producers, users, and educators. The Dept of Energy will release funds for the first year during this period. Highlights include: • The CoE, Centralia College and WSU will lead the workforce development and curriculum building teams. • The CoE will assist WSU with workforce development. • The CoE will continue to support local, regional, national, and global workforce efforts to gather the best practices of this sub-sector's workforce needs. *__If not awarded__, then a significantly smaller amount of work will be needed to support the H_2 industry as a subsector. Our plan will be updated regardless of what happens.

Funding Sources %	**Purpose**	**Planned Outputs and Work Products**

100% CoE until the new h2 hub plan is approved and subrecipient agreement is signed.	Our state's leadership has passed strong initiatives, such as the Clean Energy Transformation Act (CETA), that will shutter energy resources starting in 2025. We need new clean energy generation resources to comply with the state's movement of cleaning the grid, transportation, and environment. A trained and well-equipped workforce is needed to support the growing hydrogen economy, which has already started in Lewis and Douglas counties.
	
	The CoE requested funds to develop a hydrogen training center at Centralia College. Staff will research, develop, and teach hydrogen curriculum and activities to support a highly skilled H_2 workforce.
	
	Activities
	
	• Attend weekly hub meetings.
	• Work with Centralia College Admin to submit agreements and finalize a first-year plan.
	• Partner with PNNL to build hydrogen safety modules through a VR format (national scope/Centralia Faculty lead) funding by Dept of Energy (see goal 5).
	• Continue convening global educators to learn about curriculum and training resources by co-chairing a global H_2 workforce taskforce supported by the Center of H_2 Safety.
	• Where needed, CoE will introduce producers and users to CTC deans/VP/faculty – focusing on colleges where H_2 will be used and produced (introduction to BTC occurred in 2024).
	• Partner with Centralia College to search for and hire a program manager, consultants, and a fiscal agent.
	  ○ The Center will manage the H_2 program manager.
	  ○ Expand office space to accommodate project manager.
	• The H2 program manager will work with manufacturers, hydrogen producers, and users to learn skills and abilities that are needed at every level; and assist with writing curriculum.
	• CoE will contact and gather hydrogen producers, users, and CTC educators to build and manage a regional hydrogen workforce taskforce/network.
	• The H2 program manager will attend conferences, workshops, and meetings to learn more about the advancements in hydrogen equipment and safety.
	• Purchase H_2 lab equipment by Festo (compatible with existing clean energy lab equipment). Centralia faculty will integrate hydrogen and hydrogen safety activities into existing programs, such as Diesel Tech, ERA, Industrial Trades and Welding.
	• Partner locally and regionally to assist hub participants with workforce questions.
	• Project Advisory Committee member (PAC), meets twice monthly to discuss topics among project managers.
		✓ Assist with promoting H_2 award and hub workforce activities with a *possible* kick-off event at CC. Website blog post and email news. (Q1)
		✓ Continue co-chairing Global Hydrogen Workforce Taskforce meetings, every 6 weeks. (Q1-Q4)
		• Meet with Centralia Admin to finalize first year plan. (~~Q1~~) (FY26)
		• Hire a hydrogen program manager to manage project. (~~Q1~~) (FY26)
		  ○ CoE to manage H_2 program manager and consultants; Centralia College to manage ~~faculty and~~ fiscal agent. (FY26)
		✓ Order hydrogen lab equipment for Centralia. (~~Q1~~) (Q3)
		• Assemble a regional H_2 workforce taskforce and host meetings. (~~Q1~~ Q4) (FY26)
		✓ Attend conferences and workshops; visit producers and users. (manager and consultant) (~~Q1~~ Q4)
		✓ Assist WSU with statewide Community Benefits Plan (CBP) and activities. (Q1 & Q4)
		✓ Submit monthly/quarterly reports to $PnwH_2$. (FY26)
		✓ New: Serve as Co-chair of Renewable Hydrogen Alliance's Workforce Committee (~~Q1~~ Q4)
		✓ New: Submit a new workplan to support additional training centers throughout the hydrogen hub region. (~~Q1~~)(FY26)

Report Progress Toward Output and Work Product(s)	
Q1	This quarter brought changes. Good news, $PnwH_2$ was awarded first year Dept of Energy funds; however, other issues occurred that caused us to submit a new hydrogen plan. • Fortescue, which was set up to be our area's largest hydrogen producer, withdrew from the project and from our area which affected off-takers and Centralia College's efforts to be a (large) hydrogen training center. At the same time, Lewis County Transit purchased three hydrogen fuel-cell buses and indicated a need for training. • First Mode, one of our partners and hydrogen off-takers, submitted a Congressional District Ask of Senator Patty Murray's office naming Centralia College as a clean energy training facility and main recipient. Senator Murray called to congratulate us as a $1 million recipient. The ask needs to be passed as a bill in November and negotiations with NSF will begin next year. The future of First Mode remains unclear; however, we are still able to fulfill the needs of the proposal with support from transit agencies. • Fortescue donated funds for Centralia College to purchase hydrogen lab equipment that will complement existing renewable energy equipment purchased in FY 2022-23. The Center hosted a $PnwH_2$ Board of Directors meeting at Centralia College and submitted a new workplan to the board. The new plan includes: • Developing five training centers which will be located at Bellingham TC, Centralia, and Columbia Basin colleges as well as one college in Montana and one in Oregon. • Purchasing lab equipment and hydrogen related supplies to support other training centers (not Centralia). • Creating a hydrogen education taskforce that includes reps from manufacturers, hydrogen producers/users, unions, tribal nations, and educators. • Hiring support staff and consultants to research/build education training programs to fill gaps. **Also, during this quarter, the Center:** • Met with BTC and CBC deans, who agreed to participate if the Center's new plan is approved. • Attended/participated in in-person Community Benefits Plan meetings, as well as weekly project management meetings. • Strengthened partnership ties with UA 26, WA plumbers/pipefitters union. • Agreed to co-chair RHA's workforce committee which will focus on developments in five states. **Hydrogen workforce committees that we're involved with include:** • $PnwH_2$ hub-wide/regional – our lead, to be developed. • RHA Workforce Committee – union/labor taking the lead with our Center co-chairing. Regional outreach for RHA members. • PNNL Hydrogen Workforce Accelerated Program – National workforce committee that includes all awarded Dept of Energy hydrogen hubs. We will be involved (level unsure). • Center for Hydrogen Safety Global Hydrogen Workforce Development Taskforce – global outreach for CHS members; Center co-chairs with San Juan College/School of Energy in New Mexico.
Q2	The CoE continues to support this work through committees and meetings, listed in Q1. **How the CoE will be positioned within the hydrogen hub**: PnwH2, Atkins and WSU are in the process of shifting our work to fall under WSU as a sub-awardee. This will occur in Q3. No match required. We are budgeting for a total of $3,719,153 for seven to eight years. **Patty Murray/Congressional Directed Spending Funds** We're waiting on news to see if the $1 million award will be funded.
Q3	**Patty Murray/Congressional Directed Spending Funds** – all 2025 fund requests, even though "awarded" were canceled and moved into the 2026 pool. We had the opportunity to revise the project, but didn't have adequate time to organize partners for a better proposal. Submission was dropped as original plan was submitted by First Mode, who was purchased by Cummins (no contacts yet).

	PnwH2 Hub – While in the process of shifting our work to a subrecipient of WSU, the U.S. Dept of Energy cut the Community Benefits Projects (CBP), a pillar within each hub. Workforce was part of the CBP and work was stopped. WSU began to rebuild the pillar late in the quarter with workforce, tribal relations and business data as subsets. The CoE re-wrote the workforce budget and plan twice during this quarter. Word came late in March that all hubs may be cut; and that the Dept of Energy was faced with reorganization. Our hub's U.S. Dept of Energy project manager accepted a buy-out. **Hydrogen Lab Equipment** for Centralia College was ordered in March. Before Fortescue left the hub and Washington state, they donated funds to CC's Foundation to purchase equipment. **Global H2 Workforce Development Group** (Center for H2 Safety): Met twice this quarter. We heard from Anil Bika, University of Delaware's Center for Clean Hydrogen, who presented his training program; and we held in-depth discussions about the status of the industry. Both meetings were lightly attended. **NEPA Virtual Community Meeting**. Before any shovels can turn any soil, an environmental survey process needs to be completed. NEPA held a virtual community meeting, which we attended. All other in-person meetings were canceled. It looks as though the NEPA process might be cancelled or will at least end in quarter 4. **CC Diesel Tech Students H2 project**. A group of seniors at Centralia College are building a hydrogen fueled cell vehicle (from a retired EV small truck that was about to be scrapped). They salvaged the truck and made a presentation to the CoE. They need to raise $84K to build a fueling station and to finish their vehicle.
Q4 & FY25 Review	**PNWH2** - As the U.S. Dept of Energy and OCED continued to restructure, workforce projects were placed on hold. The hub submitted an application for Phase 2 and we're waiting for word of acceptance. We continued being a presence in meetings as we waited for details and decisions. Phase One for WSU was extended through Dec. 31, 2025. Funding for the Center, as a sub awardee of WSU, will begin in Phase Two, which is projected to begin FY26 Q2. Since workforce efforts were placed on hold, other hubs across the nation experienced a slowing in workforce development which led to the pausing of the **global hydrogen workforce taskforce** with the Center for Hydrogen Safety. Attendance started dropping this quarter as there weren't any new developments to share. In June, Monica reached out to a small hydrogen producer in Kalama, WA, and organized a small group tour that occurred in July. The tour will be included in the next quarterly report. **The final analysis** – the hub continues to work with senators and representatives, as well as the U.S. Dept of Energy, to save federal funding for the hubs. We received good news about the 45V tax credits that will benefit hydrogen production.
Core expectations	**#5: Create H_2 Workforce Acceleration with PNNL/Dept of Energy (H2Skills)**
☒ Economic Development ☒ Sector Strategy ☒ Ed/Innovation/Efficiency ☐ Supply/Demand ☒ Equity & Access	The Center serves as a Point of Contact for a Dept of Energy funded project led by the Pacific NW National Labs (PNNL) called H2Skills. This is a nationwide project with a Washington focused component. The Dept of Energy's Hydrogen Fuel-Cell Technologies Office (DoE-HFTO) and PNNL are leading an effort to accelerate the development of a middle-skilled workforce prepared to deliver a hydrogen economy – with a focus of hydrogen safety in a VR format. The scope includes assisting PNNL and DoE-HFTO with developing a rigorous micro-credential, that's stackable, jointly deployable nationally and accessible to stakeholders including disadvantaged communities. The delivered content shall be a complete package that any educator could deploy at any equivalent institution. This effort will advance the following objectives: • Assess the regional middle-skilled workforce needs of the emerging H_2 economy – including transitioning workers, disadvantaged regions and specific training needs for traditional and non-traditional students at both junior college levels and the equivalent trades. • Develop a network of national credentialing opportunities for the H_2 workforce of the future, vetted by industry and deployable nationwide. • Develop hands-on training in H_2 and H_2 safety that will include augmented reality/virtual reality (AR/VR) and be translated into one or more languages to increase accessibility.

Funding Sources %	Purpose	Planned Outputs and Work Products
DoE-HFTO grant to PNNL; Centralia College is a subrecipient to pay for faculty engagement.	To develop hydrogen and H_2safety training for the workforce that will support Washington's Hydrogen economy. **Activities** • Partner with PNNL and attend meetings that include educators in WA, Utah and Connecticut; as well as the Center for Hydrogen Safety and Accenture, to assess community perspectives and develop an understanding of needs and perspectives of local stakeholders. • Propose and develop one H_2 workforce micro-credential and associated training modules/courses. • Support CC faculty, who will lead Washington's education involvement in this project (Aman Gill).	✓ Host a convening of partners including the DoE-HFTO at Centralia College. (Q1) ✓ Assist with Go/No Go Credential Concept Proposal (Q1) ✓ Assist with Credential Course Structure Proposal (~~Q1~~) ✓ Assist with Completed Credential Course Modules for review and approval by an Accreditation Panel (~~Q3~~) (FY26) ✓ Assist with Accessibility Improvements pending Go/No Go (~~Q4~~) (FY26)

Report Progress Toward Output and Work Product(s)	
Q1	This quarter's highlights included: • The Center hosted a meeting with staff from the Dept of Energy's HFTO, PNNL, University of Connecticut and Utah University who all presented information about PNNL's Hydrogen Workforce Accelerated Program project and introduced partners. Dr. Mohrbacher welcomed our guests. We provided CoE and Centralia College information and introduced Aman Gill. • Participants were treated to ride in a hydrogen fuel cell bus – by Lewis County Transit. • The first year of funding was awarded so that the project could hire Accenture to conduct a focused workforce needs assessment. • DoE's HFTO expressed concern about training duplication and asked follow-up questions. They also encouraged the group to support workforce groups of other DoE OCED awarded hydrogen hubs.
Q2	Several meetings involving national union representatives (electricians and pipefitters/plumbers), PNNL, Commerce, the Center for Hydrogen Safety and the CoE occurred this quarter to build relationships and trust. We're learning what is taught in the trades and how we can support training with hydrogen safety lessons and tools. **The Dept of Energy/HFTO** office invited Monica and Rebecca Kreuzer (PNNL) to serve on a Hydrogen & Fuel Cell Seminar Workforce and Upskill Development panel proceeding a conference in Long Beach, CA, January 14; and the **Green Hydrogen Summit West Coast** organizers invited Monica to serve on a workforce panel February 25.
Q3	The project changed its name to H2Skills, and members met with national and state union members to seek input. The national groups agreed to review curriculum and serve as advisors – with hopes that they will incorporate the hydrogen education and safety training into their programs. Centralia College became a sub-recipient to pay for faculty time and travel, and fiscal analyst time. **World Hydrogen North America** – Monica assisted with setting up H2Skills booth and agreed to help lead a workforce breakfast and participate on a workforce panel (April 3)

Q4	**World Hydrogen North America, Houston**- continued from last quarter. We interviewed industry reps and made new partnerships at the conference. We learned that our region is ahead of the rest of the country in workforce and community outreach initiatives. Outside of additional labor contacts, we met a company that has designed new pipe materials for hydrogen. When asked what pipefitters need to know, the owner replied that they need to forget everything that they were taught. His pipes need a special bonding technique that doesn't require welding. **Workforce Workshop with Labor** – Partnering with Renewable Hydrogen Alliance (RHA), H2Skills and RHA held a workshop at IBEW 48 in Portland, Ore., to discuss hydrogen workforce needs within iron workers, pipefitters and electricians. Work is needed for all training to include hydrogen safety and NFPA2 codes and standards. The workshop concluded with H2Skills buy-in from labor and new knowledge of what each union brings to hydrogen. **Hydrogen technician DACUMs** – We introduced the DACUM concept, as well as Jason Petrait, and helped recruit SMEs to dive into the intricate work of hydrogen technicians – including skills, knowledge and abilities of hydrogen instrumentation technicians and hydrogen mechanical technicians. Although the titles of those two positions don't sound much different, in the world of hydrogen, there are two completely different technical positions that are needed. Four DACUMS and follow-up meetings occurred in June. Faculty submitted a course outline by the end of the month. **H2 Skills** – The Dept of Energy HFTO office continues to support this project and are excited about the direction it is going. Centralia College will pilot the first technician modules during fall quarter. Dept of Commerce is also suggesting that governance be added to H2Skills as the next step.
FY25 Review	Recruiting/convening partners and understanding roles within hydrogen workforce occupied much of the year's work. It is important to understand all the intricacies of players needed to sustain a fairly new technology (green hydrogen being the new technology). Hydrogen is not new. NASA has been using it to fuel rockets into space; however, bringing hydrogen into the commercial market is new and it takes time to build policies, tax incentives and funding streams – as well as building trust. Being involved with H2Skills allowed us to build trust among labor partners, which is important for the rest of our work. We're hopeful that this project will continue to produce more curriculum and training opportunities for CTCs nationwide.

Core expectations	**#6: Create Community Awareness, including Assistance/Pilot of Climate Corps Fellows**
☒ Economic Development ☒ Sector Strategy ☒ Ed/Innovation/Efficiency ☒ Supply/Demand ☒ Equity & Access	After a year of planning with SEI and partners, the CoE has acquired two Climate Corps Fellows. In partnership with SEI, Smart Buildings, WA Dept of Commerce and TransAlta, we hired the full-time, benefited, one-year Fellows to assist with Washington's Clean Buildings Act and K-12 outreach. SEI secured the funding and assumed the role of project coordinator for the Fellows' Scope of Work: • Fellow #1: Focusing on the WA Clean Buildings Act, this fellow will work with Centralia College's FOM department to assist with bringing CC's buildings in compliance with the Clean Buildings Act and applicable laws. The Fellow will also assist local utilities and commercial building owners in bringing Tier 1 buildings within Lewis County into compliance. • Fellow #2: Focusing on building energy career awareness to K-12 within CC's district boundaries. This Fellow will lead K-12 energy activities in STEM opportunities, such as a summer academy, *Expand Your Horizons*, school competitions and mobile lab community visits; as well as coordinate energy related training for K-14 faculty. Both Fellows are involved with pilot projects that could lead to statewide initiatives that will support CTCs and industry.

Funding Sources %	**Purpose**	**Planned Outputs and Work Products**
CoE: 100% for supervision, mentoring, evaluation, networking and program building, and promoting. SEI: Secured 100% to fund the Fellow's salaries and benefits;	The purpose is two-fold: To give college graduates job experience and to offer free community service for non-profits and schools. Fellow #1 assists commercial building owners and utilities with compliance of the state's Clean Building laws. The WA Dept of Commerce is hoping to secure funding to expand the Fellow #1 project statewide. If awarded, we will connect SEI to CTCs and utilities across the state; and will share best practices. This program will also address the state's anticipated needs for energy auditors.	✓ Introduce Fellows to community groups and members, such as utilities, school district admin, city/county planners. (Q1-Q2) ✓ Fellow #1: assist utilities with assessments of up to 12 tier one commercial buildings starting with those owned by non-profits, school districts and colleges. (Q1-Q4)

including career training, laptops, energy auditing tools, and travel expenses. <u>Fellow funding sources</u>: Fellow #1: WA Dept of Commerce Fellow #2: TransAlta	Fellow #2 helps build energy career awareness, and a pipeline of students into energy programs and into the energy workforce. Industry has asked for help with career awareness. **Activities** • CoE and Centralia College (CC) will provide office space. • CC and CoE will co-supervise Fellow #1, who will learn: the state's clean building laws and how to help building owners come into compliance; Energy Star program; how to read building blueprints and compile and analyze energy data. Then assist building auditors and utilities. Learn customer service skills and gain experience. • The CoE will supervise Fellow #2, who will: enroll in CEWD's free Energy Fundamentals 2.0; research existing K-12 activities; coordinate K-12 teacher training provided by SEI; coordinate and lead energy activities and competitions between schools; coordinate CC's CTE mobile lab visits; and lead SWW Energy/STEM Summer Academy by FWEE. • CoE purchased two VR simulators that offer up to 20 energy career experiences ranging from EV to broadband technician; electrician to Lineworker – that will be used by Fellow #2 for career awareness within the mobile lab and other career awareness opportunities. • CoE to assist in building schedules for both Fellows and signing timesheets. • CoE will attend regular meetings with the Fellows, their mentors and SEI staff.	✓ Fellow #2: coordinate energy activities in CC's mobile lab (VR equipment); develop energy activities for *Expand Your Horizon* workshops; participate in energy activities at Centralia College's booth (mobile lab) at the SWW Fair; coordinate teacher training for up to 6 K-14 teachers within CC's district; research activities and coordinate at least one school to school energy competition; build opportunities with Timberland Regional Libraries to support *Careers in Energy Week*; assist utilities with Utility in a Box; and coordinate and lead the *2025 SWW Energy/STEM Summer Academy.* (Q1-Q4) ✓ CoE to attend meetings, oversee both programs, and prepare and submit quarterly reports to SEI. (Q1-Q4) ✓ CoE to include K-12 outreach within CCW quarterly reports and promote success through the Center's website and newsletters. (Q1-Q4)
Report Progress Toward Output and Work Product(s)		

Q1	Quarter highlights:
	• Both Fellows completed training that included CEWD's Energy Fundamentals 2.0 and EnergyStar; and met with SEI mentors and staff.
	• Fellow #1 benchmarked Centralia College's energy use and began mapping energy equipment; met with Lewis County PUD staff who sent letters promoting the program to building owners; and began outreach to Tier 1 buildings owned by non-profit organizations.
	• Fellow #2: We held a planning/brainstorming session to outline deliverables for the quarter. She met with Centralia City Light, the REVIT committee, Capital STEM and school district staff. She promoted energy careers at the SWW Fair and developed a plan to participate in Expand Your Horizons.
	• CoE program coordinator designed and produced marketing material, such as business cards, one-page fliers and a newsletter to assist Fellow #2 with programs and K-12 recruitment.
	• The WA Dept of Commerce announced a $7.7 million award to expand Clean Building Fellows.
	  ○ Centralia's role: pilot and lead the program.
	  ○ CoE will help with logistics to place Fellows throughout the CTC system.
	  ○ CoE promoted Fellow opportunities to its Advisory Board, as well as to Columbia Basin, South Seattle, and Everett colleges.
	• The CoE program coordinator redesigned, wrote, and disseminated two quarterly CoE newsletters that promoted CoE projects and upcoming events; and updated several webpages. She reorganized historical pages and deleted old data.	

Q2	Fellow #1 expanded his work to include benchmarking 10 buildings within Lewis County Fellow #2 led two energy career exploratory classes using VR technology during Expand Your Horizons. Outreach = 25 9th grade students Fellow #2 accepted the challenge of coordinating Centralia College's Mobile Lab. • The lab hosted 500 students at Napavine School District – an outreach effort that included five school districts and one career day. • The lab moved to Centralia Middle School – which will host over 250 students in January. • She did an exceptional job coordinating maintenance, drivers, and faculty training to keep the project moving. Fellow #2 and Monica recruited five CTC faculty/staff to register for SEI's Community of Practice which includes six 90-minute webinars that will begin in January. Monica is recruiting SMEs to serve on a panel for the last session. Participants include faculty/staff of Centralia, Lower Columbia, and South Puget Sound colleges. Fellow #2 is leading the SWW Energy/STEM Summer Academy planning team and is organizing tours and activities that will occur in June.
Q3	**Clean Energy Clips.** The CoE's Emily Girt created/disseminated two newsletters this quarter which featured National Hydropower Association Outstanding Stewards of America's Waters Awards presented to FWEE, PNNL, Benton Conservation District and Wenatchee Valley College student, Advanced CTE's new Career Cluster program, CCW programs and industry scholarship news. We also worked on a new social media plan to increase awareness (and website traffic) of our work. **Fellow #1:** contacted all building owners within Lewis County to offer benchmarking services; completed benchmarking 10 buildings. Mike will return a second year as an SEI Buildings Fellow Lead to assist other fellows in the CTC system. The WA Dept. of Commerce had won a $7.7 million grant award from the US Dept of Energy to fund 60 Fellows for three years. Later this quarter, we learned funding was cut to one year only. Fellows will be placed into several colleges to continue this great work (report coming Q4). **Fellow #2**: continued to coordinate mobile lab school visits, troubleshooted driver issues and repairs; participated in Community of Practice sessions; coordinated summer Energy/STEM academy meetings and finalized the academy's schedule. She visited high schools with VR headsets, shared energy career information – AND was hired by Centralia College's TRiO. We will give a final report in Q4 of all outreach successes. **Funding for continuation**. Both Fellow positions will continue to support CoE work another year. SEI will continue as the lead employer. CoE will be lead supervisor of Fellow #2 and support lead for Fellow #1 (led by CC's FOM dept). Funding provided by TransAlta and the WA Dept of Commerce.
Q4	The SEI Fellows earned additional roles – Fellow #2 was hired by TRIO and Fellow #1 will be a lead Fellow of a larger project called BEACON. **Fellow #1: Building Efficiency & Clean Operations Network (BEACON)** – WA Dept of Commerce funded 10 SEI Fellows who will offer free services to commercial building owners within seven Washington counties – in benchmarking energy use and in how to become compliant with the state's clean building laws. The SEI Fellow at Centralia College/CoE, who piloted the initial program, will continue as a Lead Fellow as he finishes additional projects at Centralia College. This program, which runs June 2, 2025 – March 30, 2026, is offered at no cost to our utility partners, other than supporting the fellows through work with energy auditors and energy savings programs. The additional Fellows were placed within WA counties (in bold) and will work with the following partners: **Whatcom**: PSE and City of Bellingham **Snohomish**: SnoPUD and Everett CC **King:** Seattle City Light/PSE and South Seattle College (2) **Pierce**: Tacoma Power and Pierce College **Chelan**: Chelan PUD and Wenatchee Valley College **Spokane**: Avista and Spokane CC (2 Fellows) **Lewis**: Lewis County PUD and Centralia College (LEAD Fellow) **Fellow #2:** Was hired by Centralia College's TRIO and returned the week of the **FWEE SW WA Hydropower & STEM Career Academy**. She organized and ran a terrific camp; and enjoyed working with the students. **2025 SEI Champion Award –**The SEI Champion Award recognizes outstanding individuals who have been instrumental in SEI's mission of building leaders to accelerate climate solutions for a more equitable and resilient world. "Monica and the CoE have been an incredible partner to SEI in supporting the pilot and launch of our regional work supporting Building Performance Standards. Your clean energy advocacy and help in SEI securing funding through Transalta has allowed for the development of a milestone pathway in energy studies — connecting SEI's K-12, higher ed, and Climate Corps programs through instruction, internships, course development and fellowships." The CoE will be included in SEI's annual impact report as well as their website.

FY25 Review	**Hosting two SEI Climate Corp Fellows proved to be a fantastic investment of time for our CoE.** **Fellow #1**: In partnership with Lewis County PUD, Mike contacted owners of more than 100 buildings. He assisted 26 building owners with Energy Star Portfolio Manager and energy benchmarking, assisted 15 building owners with exemption applications, performed 5 site visits (3 school districts), and finished the first phase of benchmarking Centralia College. He also assisted with writing and submitting a $60K Clean Building Performance Grant for Centralia College, which was awarded; completed EV charger and future solar research, learned about Capital Projects planning and participated in the Clean Buildings Stock Assessment at CC. **Fellow #2:** Emily K coordinated Centralia College's Mobile Lab visits as well as classroom visits using our energy career VR headsets. Overall, the activities within the lab introduced careers in the trades to 1080 students within nine Lewis County school districts. She led energy activities during Expand Your Horizons, trades fairs and classrooms that reached an additional 490 students. Why is this important? Our industry partners have expressed the need for outreach to students as early as sixth grade to introduce them to energizing careers within this sector. VR technologies were a great tool to reach the students - they climbed virtual power poles, restored electricity to neighborhoods and cities, and connected pieces of electric transmission lines by guiding helicopters and wires. One student from Ilwaco even attended our summer academy because he met Emily at a high school trades fair. The pilot projects were successful and have been funded to continue. Thanks to Dept of Commerce BEACON project to continue Fellow #1 and additional funding from TransAlta to continue Fellow #2, who will start in September and end in August 2026.

BOARDS & COMMITTEES:

Capital STEM Alliance – Executive Committee member
Career Connect Washington Clean Energy/Clean Technology – Sector co-leader, with CleanTech Alliance as lead fiscal agent.
Center for Energy Workforce Development (CEWD) – Vice chair of West Coast CEWD Coalition. New participant in Energy Education Community Group; Workforce Development Workgroup
Center of Excellence for Clean Energy //Energy Educators' Association – Coordinator
Center for Hydrogen Safety/Global Hydrogen Workforce Development Group (international, led by Center for Hydrogen Safety) **–** Co-chair with San Juan College School of Energy
CleanTech Alliance – Board of Directors; and member
CETWAC – advising board member
Foundation for Water and Energy Education (FWEE) – committee member
Kinetic West/Dept of Commerce Transmission Project – advising role
Lewis County Renewable Taskforce (biofuels)– committee member
NREL Hydropower Workforce Group - member
Pacific Northwest Hydrogen Association (PnwH2) – CTC regional workforce partner
Portland State University NSF-RIE/Powerize – Advising Committee member
Renewable Hydrogen Alliance – Workforce Committee Chair and member
WA State Centers of Excellence Directors – Vice chair