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WSC-SMART Comments on IRA Contractor Training Program

Additional submitted attachment is included below.



Submitted Via Electronic Docket

California Energy Commission Docket Unit, MS-4 Docket No. 23-DECARB-01 715 P Street Sacramento, California 95814

RE: Comments of the Western States Council of SMART on Contractor Training for Inflation Reduction Act Residential Energy Rebate Programs

Dear Commissioners and Staff,

On behalf of the Western States Council of the Sheet Metal, Air, Rail and Transportation Workers (SMART), we would like to highlight the pivotal role that Sheet Metal Joint Apprenticeship and Training Committees (JATCs) play in fostering a skilled, trained, and certified workforce that can carry out energy rebate programs funded by the federal Inflation Reduction Act (IRA) like the Homeowner Managing Energy Savings (HOMES), High-Efficiency Electric Home Rebate Program (HEEHRA), and other available or upcoming federal, state, and utility-backed incentives and financing options, based on existing resources.

As you deliberate on the allocation of funds and strategies for energy efficiency and sustainability in our great state, we urge you to consider a strong investment in Sheet Metal JATCs.

1. Information on Available Training Programs and Organizations in California:

The Western States Council of SMART, representing the Sheet Metal Workers' local unions across California, is a prominent player in residential energy contractor training. With a significant network comprising of over a dozen advanced training facilities managed by our JATCs, we have over 25,000 trained craftspeople in California, aligned with over 600 contractors that are trained to perform a wide range of skills, such as energy auditing and the production, fabrication, installation,



detailing, service, and testing and balancing of sheet metal products, and Heating, Ventilation, and Air Conditioning (HVAC), which includes heat pumps.

SMART and the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) jointly provide registered apprenticeship programs and journeyperson upskilling across the state through our JATCs.

Below are our JATCs and their respective facilities:

Sheet Metal Joint Apprenticeship Training Committees

- Bay Area Sheet Metal JATC
 - o Livermore Training Facility, 1401 Greenville Road, Livermore, CA
 - o San Jose Training Facility, 2350 Lundy Place, San Jose, Ca. 95131
 - Fairfield Training Facility, 4350 Central Place, Suite A, Fairfield, CA 94534
 - Castroville Training Facility, 11060 Commercial Parkway, Castroville, CA
 95012
- Southern California Sheet Metal JATC, 633 N. Baldwin Park Blvd, City of Industry, CA 91746
- Tri-Counties Sheet Metal JATC
 - o Ventura Training Facility, 1794 Goodyear Ave., Ventura, CA 93003
 - Santa Maria Training Facility, 2325 Skyway Dr. #L, Santa Maria, CA
 93455
 - o Nipomo Training Facility, 1220 Professional Pky, Nipomo, CA 93444
- San Diego Sheet Metal JATC, 4596 Mission Gorge Place, San Diego, CA 92120
- Northern California Valley Sheet Metal JATC, 3665 Bleckely Street, Mather, CA 95655
- Modesto Area Sheet Metal JATC, 841 Lone Palm Ave Suite A, Modesto, Ca 95351-1532
- Fresno and Vicinity Sheet Metal JATC, 5410 E Home Ave, Fresno, CA 93727
- Kern and Northern Los Angeles Counties Sheet Metal JATC, 620 Enterprise Way, Suite A, Bakersfield, Ca. 93307



a. Energy Auditor Availability and Readiness:

Our members, trained across the state at our JATCs, are equipped to handle both residential and commercial energy audits with certifications earned through the Sheet Metal Industry International Certification Board (ICB) and Testing, Adjusting, and Balancing Bureau (TABB).

ICB certifications, listed in the Department of Energy (DOE) Contractor Training Grant Program Administrative and Legal Requirements Document (ALRD)¹, currently being earned in California includes the Indoor Air Quality (IAQ) - Ventilation Verification (IAQ-VV) Contractor, Supervisor, and Technician certifications. These IAQ certifications encompass a comprehensive understanding of the primary indoor environmental factors that impact human health and the energy efficiency of buildings. Those certified in IAQ-VV are equipped with the knowledge and skills to assess ventilation, filtration, and thermal components of HVAC systems.. IAQ technicians are trained in whole system understanding which allows them to evaluate a system to ensure it is simultaneously achieving IAQ and energy efficiency requirements. As improper ventilation and filtration is a primary factor in improving the health of a building, a technician properly trained to evaluate HVAC system performance is a key first step in achieving California's objectives. In the context of energy auditing, an IAQ-certified professional can identify inefficiencies in the air distribution system, recommend energy-saving solutions, and ensure that IAQ improvements align with energy conservation measures.

Once a technician is trained and certified in IAQ-VV, the next step is certification in Testing, Adjusting, and Balancing (TAB) by the Testing, Adjusting, and Balancing Bureau (TABB). Certified TABB technicians not only evaluate the performance of HVAC systems, but can make adjustments and repairs to bring the existing HVAC system in compliance with IAQ and Energy Efficiency requirements. TABB-certified technicians can meticulously evaluate HVAC systems, pinpoint inefficiencies, and then take corrective actions. By ensuring systems are balanced and function at peak performance, energy inefficiency is minimized, leading to reduced energy costs and a lower carbon footprint for the building.

¹ Department of Energy Contractor Training Grant Program Administrative and Legal Requirements Document (ALRD) at p. 25.



It is important to note that TABB provides the only TAB certification that is accredited under ANSI National Accreditation Board (ANAB) ISO/ISE 17024. This is crucial as ISO/IEC 17024 ensures that a certification body follows strict standards for organizational structure and discloses potential conflicts of interest to ensure certificates are awarded impartially and are consistently applied around the country. This readiness ensures that we can adequately respond to the state's needs and carry out the IRA rebate programs, ensuring optimal energy efficiency and safety.²

TABB works with the following organizations to develop procedural standards, provide training, hands-on experience, administer examinations, and maintain high-quality certifications: ³

- The International Training Institute (ITI) develops classes to assist SMART and SMACNA members in learning the material required to become certified.
- JATCs offer apprentice and journeyperson programs and other educational courses.
- National Energy Management Institute (NEMI) is a not-for-profit organization jointly funded and managed by SMART and SMACNA. NEMI works with public, private, and government entities to promote certification, education and emerging market opportunities in HVAC Fire Life Safety, TAB, IAQ, energy efficiency, and more.
- The International Certification Board (ICB) administers the tests and certifications.
- SMACNA is an international trade association representing 3,500 signatory contractors with more than 100 chapters. SMACNA is well-known for its standards development work, which is designed to increase productivity and efficiency in building systems.
- SMART Local Unions 104, 105, and 206 have trained and retained highly skilled sheet metal workers for over 100 years in California. Their registered apprenticeship programs have a proven track record of providing broad-based training that educates apprentices in all aspects of building efficiency, from

² Meyers, Fredrick and Theresa Pistochini. "Testing, Adjusting and Balancing HVAC Systems: An Overview of Certification Agencies." University of California Davis Western Cooling Efficiency Center. May 12, 2020

https://wcec.ucdavis.edu/wp-content/uploads/TAB-Technical-Report-051220.pdf ³ lbid



interior mechanical systems to building enclosures. This comprehensive understanding of building systems enables graduates to readily adapt to changes in technology. Apprentices obtain free classroom training, mentorship, and on-the-job instruction from experienced journeypersons.

TABB-certified contractors are trained, equipped, and capable of carrying out a 10-point process to assure that systems in "green" buildings are performing according to design objectives and/or to provide optimum system performance for sustainability.⁴

- 1. Verify that fundamental building elements and systems are installed, calibrated, and operating as intended to deliver functional and efficient performance.
- 2. Review the building operation plan to affirm that it meets the requirements of current building usage with regard to the heating and cooling system, humidity control, and building automation controls.
- 3. Prepare a balancing plan to test the building systems for performance up to specifications or the most efficient possible performance.
- 4. Report all building systems that are not working according to specifications as stated in the building operation plan.
- 5. After refitting or repair, re-test all building components to verify operation according to specifications in the building plan, or up to the most efficient possible performance.
- 6. Provide a summary of current building operation plan, highlighting major building HVAC systems and assemblies.
- 7. Document that all actions of the HVAC specification requirements have been completed.
- 8. Provide demonstratively either (a) that the building's energy performance meets one of the following standards: Energy Star (using Energy Star Target Finder), GBI and USGBC LEED (using the alternate method as described in the "LEED for Existing Buildings Reference Guide"); or, if that rating cannot be achieved, that the building has the most efficient possible performance given its HVAC systems.

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⁴ Joint Committee on Energy and Environmental Policy. http://www.jceep.net/



- 9. Aid in implementing energy-efficient retrofits and energy-saving techniques to reduce energy usage to comply with ratings described in 8, or the most efficient possible performance.
- 10. Provide a third-party entity (certified and current with TABB) to test, adjust and balance all building HVAC systems.

The ICB/TABB promotes data transparency by providing an up-to-date list of certified professionals, that includes technicians, supervisors, and contractors. The aforementioned public certified professionals list provides location, contact information, and expiration date of certification to ensure consumers are connected to a skilled, trained, and certified workforce to carry out energy efficiency, electrification, and clean energy jobs.

b. Skills Assessment Reports:

Our partnership with the California Association of Sheet Metal and Air Conditioning Contractors National Association (CAL SMACNA) and our joint sponsorship of the ITI ensures that our curricula remain contemporary. The ITI is pivotal in producing state-of-the-art sheet metal curricula, conducting instructor training, and maintaining quality control, keeping our training programs up to date with the latest industry practices and technologies.

SMART and SMACNA also sponsor the National Energy Management Institute (NEMI), which works with public, private, and government organizations as well as companies nationwide to make environments safer for people in schools, hospitals, and commercial buildings nationwide. NEMI also creates training and certification opportunities, so consumers know the workers — who assure fire life safety systems are inspected, verify the IAQ in schools, and make sure the heating and air conditioning systems in office buildings are energy efficient — are at the top of their industry and experts in their field. NEMI works with state and federal officials, as subject matter experts (SME), to make sure legislation and safety align, allowing members of SMART and SMACNA to use their training and experience to ensure the safety of building occupants and first responders.

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⁵ https://www.icbcertified.org/certification/certified-professionals/



2. Alignment with the Goals of the IRA Contractor Training Program:

The foundations of the Western States Council (WSC) of SMART emphasize a commitment to energy efficiency and sustainability. Our ongoing training programs, especially those related to energy conservation, HVAC system efficiency, heat pumps for space heating and cooling, and the integration of modern techniques like Low Global Warming Potential Refrigerants. (LGWP), align perfectly with the goals set out by the IRA Contractor Training Program.

It's imperative that training for energy auditing and HVAC certifications offered by the ICB/TABB be funded through this program. In fact, the DOE grant program includes these certifications on its list of example certification programs. Applicants, like the CEC, must demonstrate that their proposed certifications for energy auditors meet specific requirements. You can view DOE's citation for our SMART Energy Auditor certifications⁶ on page 25 of the funding document.⁷

How SMART and its JATCs Can Enhance IRA Energy Rebate Programs as a Partner

1. Contributing Leveraged Resources:

SMART and its JATCs bring to the table a vast array of resources cultivated over the years that can be leveraged as part of the program. From state-of-the-art training facilities to an extensive network of industry experts and partnerships, we can provide both material and intellectual resources that will enrich the programs.

2. Recruiting Participants:

Through our established presence in the community and strong ties with industry professionals, we can efficiently recruit a diverse group of participants. Our outreach mechanisms, bolstered by community events, partnerships with pre-apprenticeship

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https://www.icbcertified.org/wp-content/uploads/2022/05/ICB-Certification-Manual-v220426_Approved.pdf https://www.energy.gov/sites/default/files/2023-07/IRA-50123-ALRD-Contractor-Training-Program.pdf



programs, career fairs, and school presentations, ensure a continuous influx of workers to deliver on California's energy efficiency efforts.

3. Utilizing a Proven and Evolving Curriculum:

While our JATCs already boast a comprehensive curriculum covering a wide range of energy auditing, HVAC, and IAQ topics, we are also equipped to develop new, specialized content tailored to the needs of this initiative. Our curriculum design experts are adept at integrating the latest industry trends, technologies, and best practices.

4. Training Participants:

Our JATCs are renowned for their rigorous training programs that combine theoretical knowledge with hands-on practice. Participants will benefit from a holistic training experience that ensures they are job-ready upon completion. Currently, Sheet Metal JATCs have about 2000 registered apprentices enrolled⁸, with hundreds of journeypersons taking classes for re-certification and upskilling yearly.

5. Offering On-the-Job Training:

Beyond classroom-based learning, SMART believes in the value of practical, real-world experience. We can facilitate on-the-job training opportunities with our partner organizations, providing participants with valuable insights and experience in live-work environments.

6. Providing Credentialing:

Upon training at our JATCs and successful completion of exams, participants will be awarded credentials that are recognized and respected in the industry. These credentials not only validate their skills but also enhance their employability and career prospects.

7. Offering Wrap-Around Services:

Understanding the diverse needs of our participants, we also offer wrap-around services like career counseling, mentorship programs, substance abuse treatment and

⁸ California Division of Apprenticeship Standards Registration Dasboard. https://public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_163010558512 60/RegistrationDashboard



education, travel reimbursements, and child care reimbursements. These services are designed to ensure that participants are not just trained for the job but are also equipped with the personal development tools and supportive services necessary for long-term success.

3. Gaps Addressed by the IRA Contractor Training Program:

The Imperative for a Skilled, Trained, and Certified Workforce in CA

With HVAC systems becoming more complex, we have learned that our energy efficiency and IAQ goals will only be achieved if a skilled, trained, and certified workforce is performing the installation, adjustment, and continued maintenance. Numerous studies have documented that poor quality installation, maintenance, and workmanship is pervasive in the HVAC industry and lead to reduced energy efficiency for buildings and systems and increased safety hazards for building occupants. A study found that over 50% of new HVAC systems and 85% of replacement HVAC systems that they evaluated were not performing correctly due to poor quality installation. Poor quality installation of HVAC systems results in a 20% to 30% increase in energy use. It is estimated that increasing HVAC permit and Title 24 compliance could reduce peak energy demand by up to 400 megawatts.

While our JATCs have been proactive in training and skill development, the introduction of the IRA Contractor Training Program funds can help bridge gaps in the skilled-and-trained workforce needed to deliver energy efficiency, electrification, and clean energy improvements. A skilled-and-trained workforce can help save energy, lower energy bills, improve IAQ, and help reduce harmful greenhouse gasses through proper training and the use of new LGWP. Our JATCs address the root cause of the

(https://docplayer.net/6285926-Staff-report-strategic-plan-to-reduce-the-energy-impact-of-air-conditioners-ca lifornia-energy-commission-june-2008-cec-400-2008-010.html)

^{9 [i]} California Energy Commission, Strategic Plan to Reduce the Energy Impact of Air Conditioners (June 2008), CEC-400-2008-010, at p. (v) (https://docplayer.net/6285926-Staff-report-strategic-plan-to-reduce-the-energy-impact-of-air-conditioners-ca

[[]iii] Zabin, et. al, Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities, Don Vial Center for Employment in the Green Economy (2014), at pp. 32-34 and Appendix 2B (http://laborcenter.berkeley.edu/workforce-issues-and-energy-efficiency-programs-a-plan-for-californias-utilitie s/).

¹⁰ See California Energy Commission, Request for Proposals: HVAC Equipment Installation Compliance Tracking System Business Needs and Functional Requirements, RFP-16-403 (Feb. 2017) at p. 10.



identified problems with HVAC units not achieving the energy efficiency and IAQ they were designed to provide. Utility-funded studies have found the vast majority of HVAC installers don't have the technical training, knowledge, skills, or abilities to properly install systems, resulting in high failure rates for job performance on even routine tasks¹¹.

Our JATC's will use any additional funding to continue to provide and expand a sustainable solution by building skilled, trained, and IAQ-VV and Energy Audit certified technicians within California communities. When an HVAC system is operating at its peak, it gets the best results. Making sure HVAC systems are installed and maintained by professionals—those that are skilled, trained, and certified, is the best way to save money, extend the life of the system, reduce energy use, and improve IAQ. Skilled-and-trained technicians are vital to an HVAC system achieving design intent. The days of simply "dropping" in an HVAC unit and then ramping up the fan to account for improper installations are over. California communities will only achieve net-zero while maintaining adequate IAQ if HVAC units are installed and maintained by a skilled, trained, and certified workforce.

California Public Contract Code Section 2600, et seq., sets out the state's Skilled and Trained Workforce Requirements. To meet said requirements, a journeyperson must be a graduate of a Division of Apprenticeship Standards (DAS) approved apprenticeship program. From 2000 to 2022, 6,065 journeypersons have graduated from DAS-approved Sheet Metal apprenticeship programs. During that time frame, 5,211 (85.9%) of those apprentices matriculated from union-affiliated JATCs whereas just 854 (14.1%) matriculated through unilateral (i.e., management-only sponsored) programs.¹²

Contractors not utilizing a skilled-and-trained workforce are currently not meeting the moment. An example of this can be found in a review of permits pulled for

¹¹ SCE Energy Efficiency Business Plan 2018-2025 at p. 63; SDG&E Energy Efficiency Business Plan 2018-2025 at p. 216; PG&E Energy Efficiency Business Plan (2018-2025), Residential Appendix at p. 30; see also C. Zabin, et. al, Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities, Don Vial Center for Employment in the Green Economy (2014), at p. 34

⁽http://laborcenter.berkeley.edu/workforce-issues-and-energy-efficiency-programs-a-plan-for-californias-utilitie s/).

¹² See "Division of Apprenticeship Standards' Completion Dashboard." 22 Aug. 2023, public.tableau.com/app/profile/california.apprenticeship/viz/CompletionDashboard_16301020658110/CompletionDashboard. Accessed 23 Aug. 2023.



residential HVAC replacements, currently a predominantly nonunion market. Permits help ensure that HVAC units operate as designed and will achieve the minimum energy efficiency and IAQ requirements. A 2008 Energy Commission report found that permits are obtained for residential HVAC replacements as little as 10 percent of the time, and that Title 24 quality installation requirements are complied with by contractors as little as 15 percent of the time. A decade later, the California Public Utilities Commission (CPUC) estimates that permits were obtained for less than 8 percent of residential HVAC replacements. The CPUC also found that the number of replacement projects is now about 1 million per year, which is nearly triple what the 2008 report estimated. Additionally, compliance rates for meeting existing Title 24 Mechanical Acceptance forms requirements are low. Mechanical Acceptance forms require a certified technician to verify that HVAC units function as designed and achieve minimum code requirements prior to occupancy.

With our partners' experience comes the perspective that energy efficiency standards must not be looked at in a vacuum. Our partners work with members of the local communities to build the skilled, trained, and certified workforce of the future. Technicians are not simply taught specific tasks; they walk away from the 5-year training program with a whole system understanding of HVAC units and their associated components. Whole system understanding allows technicians to continue working on HVAC even as technology changes because they understand how the system needs to operate regardless of the component. Additionally, technicians can continue to attend courses long after their apprenticeship to make sure they are up to date.

Strengthening Our Proven Successes in California

It is crucial to emphasize the successes our JATCs have already marked in California. Our established footprint in the region has demonstrated a consistent and positive impact on workforce training and HVAC system installations. With the IRA Contractor

¹³ California Energy Commission, Strategic Plan to Reduce the Energy Impact of Air Conditioners (June 2008), CEC-400-2008-010 at p. 17, 31.

¹⁴ California Energy Commission, *Strategic Plan to Reduce the Energy Impact of Air Conditioners* (June 2008), CEC-400-2008-010, at p. (v)

⁽https://docplayer.net/6285926-Staff-report-strategic-plan-to-reduce-the-energy-impact-of-air-conditioners-california-energy-commission-june-2008-cec-400-2008-010.html);

Zabin, et. al, Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities, Don Vial Center for Employment in the Green Economy (2014), at pp. 32-34 and Appendix 2B



Training Program funds, we envision a substantial enhancement in these accomplishments.

Our program's proven success in the state underlines the fact that we have already laid a robust foundation for training and skill development in the energy auditing and HVAC field. With the influx of additional support from this funding, we are primed to scale our initiatives even further. We can intensify our outreach, bringing more workers and contractors under the umbrella of our training programs, and also enable our existing workforce to acquire more crucial certifications. This augmentation not only fortifies our training capacities but also aligns seamlessly with the objectives of the rebate programs in California. It ensures we have a workforce that is not only skilled and trained but also attuned to the latest in energy efficiency standards and practices, ready to elevate the state's HVAC and heat pump installations to their utmost potential.

4. Certifications for Good-Quality Jobs:

We strongly recommend that the California Energy Commission prioritize Inflation Reduction Act Contractor Training Program funding for Sheet Metal Joint Apprenticeship Training Committees to help contractors and their workers pursue ICB/TABB certifications. The ICB/TABB certifications, as highlighted in the DOE funding document, are essential benchmarks for ensuring professionals are well-equipped with the knowledge and skills to implement energy-efficient solutions in HVAC testing, adjusting, and balancing, as well as IAQ. These certifications are not merely symbolic but play a crucial role in meeting California's rigorous energy efficiency standards. By subsidizing available training, testing, and certifications through our JATCs to earn these certifications, the CEC would be investing in a trained workforce that can effectively contribute to California's ambitious sustainability goals, while also promoting good-quality jobs that adhere to the DOE's guidelines on wage, benefits, safety, and DEIA values.

These certifications act as a beacon, highlighting the importance of creating job opportunities that are more than just employment. They represent careers that provide family-sustaining wages, safe working conditions, opportunities for growth, and pathways for continued learning and development. Moreover, they signify a



dedication to fostering workplaces that are rooted in principles of fairness, equal opportunity, and respect.

Our comprehensive training programs emphasize a holistic approach to HVAC education, covering both residential and commercial sectors. This holistic methodology encompasses everything from the intricacies of heat pump installation to the details of energy audits, ensuring that our trainees are equipped with a wide spectrum of skills necessary to excel in the field.

Beyond the immediate technical skills, our programs underscore the importance of continuous learning. In a rapidly evolving industry landscape, the need for upskilling is paramount, and our programs provide opportunities for advanced learning and skill refinement. This commitment to ongoing education ensures that our graduates remain at the forefront of industry developments, prepared to address new challenges and technological advancements.

Additionally, our comprehensive training model extends beyond mere skills. We place a strong emphasis on ensuring that our graduates are not just equipped for the job, but also for a life of stability and security. The compensation package for our graduates, encompassing competitive wages, robust health insurance, and pension benefits, reflects our commitment to their long-term well-being. This well-rounded approach ensures that those completing our sheet metal JATCs are not only industry-ready but also positioned to lead a comfortable, middle-class life, both during their active working years and into retirement. Our vision is not just to create skilled workers, but to foster professionals who are equipped for lifelong success, stability, and growth.

In upholding Diversity, Equity, Inclusion, and Accessibility (DEIA) values, these certifications emphasize the importance of creating a workforce that is representative of the diverse population it serves. They advocate for the inclusion of individuals from varied backgrounds, ensuring that all voices are heard, respected, and valued. By emphasizing equity, they ensure that opportunities are not just widespread but also accessible, eliminating barriers that might prevent any individual, regardless of their background, from accessing these opportunities.



Furthermore, these certifications place a premium on inclusivity, ensuring that everyone, irrespective of their gender, race, religion, or any other defining characteristic, is not just included but is also provided with the tools and resources they need to succeed in the industry.

5. Data Availability:

Data Transparency

The expansive network of our JATCs, combined with our association with the ITI and ICB/TABB, ensures a regular influx of data on skills and training needs, workforce demands, and the overall impact of our programs. ICB and TABB contribute to enhanced data transparency through their comprehensive directory of certified experts, encompassing technicians, supervisors, and contractors. This publicly available roster offers pertinent details such as geographical location, contact information, and certification expiry dates. This resource facilitates seamless connections between consumers and proficient, certified professionals, guaranteeing a qualified workforce for executing energy auditing tasks.

The ICB's commitment to transparency and public trust is evidenced by its decision to make the Certification Manual accessible to the general public.¹⁷ This act not only demonstrates ICB's confidence in its certification process but also provides stakeholders, including potential trainees, employers, and consumers, with clear insights into the standards and expectations of a certified professional. It ensures that everyone understands the depth and breadth of knowledge that a certified professional possesses, aligning directly with the complex energy needs of California.

Furthermore, TABB stands out as the only certification that is accredited under ANSI National Accreditation Board (ANAB) ISO/ISE 17024 y, signifying its adherence to the highest national standards for certification bodies. Both the TABB and IAQ-Ventilation Verification certifications follow ISO/IEC 17024. This ANAB accreditation ensures that the TABB and IAQ certifications are consistent, comparable, and reliable,

¹⁵ https://www.icbcertified.org/certification/certified-professionals/

¹⁶ https://www.icbcertified.org/certification/certified-professionals/

¹⁷ Sheet Metal Industry International Certification Board Certification Manual. https://www.icbcertified.org/wp-content/uploads/2022/05/ICB-Certification-Manual-v220426_Approved.pdf



thus aligning directly with California's need for a dependable and consistent energy workforce.

The combination of ICB's open Certification Manual and TABB's ANAB accreditation guarantees that workers trained under these certifications are equipped with the latest skills tailored to California's energy landscape. They are prepared to address the state's burgeoning demands for energy efficiency, electrification, and clean energy enhancements, ensuring the state remains at the forefront of sustainable initiatives.

6. Performance Metrics and Targets:

Metrics like the number of certified contractors, certified professionals, energy savings realized, homes and commercial spaces retrofitted, and reductions in CO2 emissions can be useful in gauging the program's impact. Furthermore, tracking job growth in the energy efficiency sector and evaluating the outreach and efficacy of training programs are also crucial. According to the 2023 U.S. Energy & Employment Jobs Report (USEER), data on the size and scope of energy efficiency employment are limited, so direct reporting from contractors is required. SMART and its partners are ready and willing to provide such data to the CEC.

The Western States Council (WSC) supports and works with the UC Davis Western Cooling Efficiency Center (WCEC). We would encourage that the CEC work with the WCEC to provide independent analysis of the results of contractor training for the IRA residential energy rebate programs.

7. Ensuring Community and Jobs Benefits:

By investing in training at Sheet Metal JATCs, within the framework of the Community Benefits Plan, offers a multitude of advantages:

Deepening Skill Sets: By investing in training for SMART union members and signatory contractors, we ensure that the workforce is equipped with the most up-to-date skills and knowledge. This not only helps meet the immediate demands of

¹⁸ USEER 2023 National Report. P. 145.



the industry but also ensures that workers can handle future technological and methodological advancements.

Boosting Employment Opportunities: Specialized training can open doors to newer, more advanced job roles, leading to increased employment opportunities for union members and jobs for signatory contractors. This can pave the way for career advancements and job security, ultimately strengthening the California workforce.

Economic Advancement: A better-trained workforce contributes significantly to the economy. By ensuring that union members receive top-tier training, we are facilitating the creation of a pool of professionals ready to lead in their respective fields, thereby driving economic growth.

Enhanced Community Engagement: The Western States Council of SMART with its expansive network and the Sheet Metal JATCs with their deep local ties can play a crucial role in community outreach. The goal of our JATCs has been to center our efforts around populations that haven't previously had easy access to apprenticeship programs in the building trades. They partner with several apprenticeship readiness programs across the state that aim to work with young people of color; people from disadvantaged areas; justice-involved individuals; members of the LGBTQIA+ community; women; foster youth; veterans, and people with disabilities. By extending training initiatives to local communities, especially those underrepresented or underserved, the JATCs can foster inclusivity and provide valuable skills to those who might otherwise have limited access. Additionally, these community ties place us in a unique position to educate consumers on the available rebate programs.

Below are some of the pre-apprenticeship and trade preparation programs we currently partner with:

- Women In Non Traditional Employment Roles (WINTER)
- Anti Recidivism Coalition
- Maxine Waters Employment Preparation Center
- Helmets to Hardhats
- Flintridge Center Apprenticeship Preparation Program
- Slawson Southeast Occupational Center
- Miguel Contreras Foundation Labor One-Stop Center



- Tradeswomen Inc
- · Cypress Mandela
- Rising Sun Center for Opportunity
- PeopleWorkingTogether
- Pittsburg Works
- Richmond Build
- San Francisco CityBuild
- San Mateo Trades Introduction Program (TIP)
- ValleyBuild

Promoting DEIA Values: Diversity, Equity, Inclusion, and Accessibility (DEIA) are more than mere buzzwords; they are the foundation of a just and progressive society. By ensuring that training programs are accessible to all, regardless of their background, we are actively promoting a culture of inclusivity. This not only brings in diverse perspectives but also enriches the overall quality of work.

Benefitting Disadvantaged Communities: Aligned with President Biden's Justice40 Initiative, the expanded training can be especially beneficial for disadvantaged communities by giving communities the tools to uplift themselves economically and socially. It's not just about providing jobs; it's about equipping communities with the knowledge to innovate and lead in the sector. Additionally, by investing in contractor training, we can further prepare a growing workforce to perform energy upgrades and retrofits in disadvantaged communities.

The Western States Council of SMART remains dedicated to promoting energy efficiency within California. Our extensive infrastructure, partnerships, and dedication to training make us an invaluable asset in this endeavor. We are excited about the potential collaborations and opportunities that lie ahead and look forward to contributing constructively.

Sincerely,

Dion Abril

Executive Administrator

Western States Council of SMART

Dion Abril