Workshop 4: Workforce Development

Program Administrator Overview
December 15, 2020

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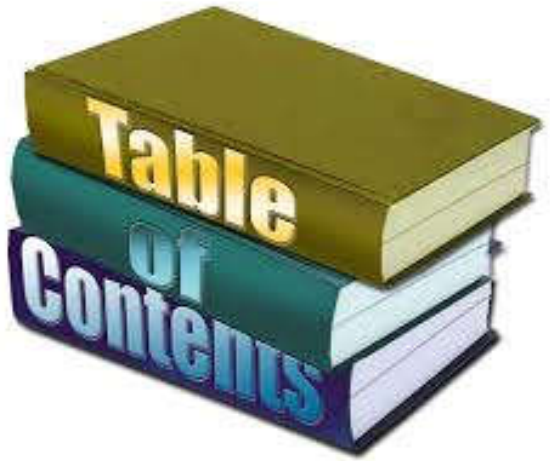


Workforce Development Defined

Language in 2019-2021 Plan

- *"The Program Administrators continue to **monitor and support trainings in order to contribute to building and maintaining a qualified workforce that will meet the demand for energy efficiency.** Trainings provided under Workforce Development provide general skills or training that could benefit the workforce across initiatives and/or sectors, including topics such as building science, energy efficient new construction, heating and cooling technologies and techniques, and sales and marketing." (p.132)*

- ***"...developing training and retention strategies to ensure a knowledgeable workforce to continue on-the-ground success" (Income Eligible programs, p.14)***

- ***"...offer subsidized trainings and certifications to develop the expertise** needed to achieve certified buildings, including Certified Passive House Consultant ("CPHC"), Certified Passive House Designer/Consultant, Certified Passive House Builder, Certified Passive House Tradesperson ("CPHT-E", "CPHT-MBS"), Rater and Verifier certifications....and provide **hands-on building science technical trainings** to installation contractors to ensure that all involved in a Passive House project have the information and skills necessary to achieve Passive House certification." (p.43)*

Key Takeaways

- Build and maintain a qualified workforce that will meet the demand for energy efficiency
- Provide training on skills that will benefit existing EE workers across initiatives and sectors
- Trainings offered are informed by LEAN, Contractor Best Practices working group, and key trade allies
- Budget excludes any direct PA staff-it is only used for external contractor staff and incumbent workers

Emerging Workforce Strategy

Start small with proven strategies → iterate, scale

- Set targets
- Measure progress
- Evaluate success

1. **Train** diverse candidates and trade allies-people of color, women, multilingual
2. **Engage** stakeholders for bigger wins-trade ally network
3. **Retain** diverse entrants
4. **Grow + Upskill** small trade allies, new entrants

Year 1 ↓ Year 2-4 ↓

= **Achieve Goal:** **Larger, more diverse, upskilled energy efficiency workforce**

2019-2021
WFD Budget

2019-2021 Statewide Budget

	2019	2020	2021
Workforce Development	$ 1,166,275	$ 1,206,887	$ 1,222,429
Residential Education	$ 2,310,162	$ 2,347,319	$ 2,389,980
Total	**$ 3,476,437**	**$ 3,554,207**	**$ 3,612,409**

- Workforce Development includes residential, income eligible residential, and C&I
- Residential education includes work with K-12 students and other creative initiatives by PAs to increase awareness and understanding of EE. It is included here because of the overlap between work with high school students and young adults.

Current & Recent PA WFD Efforts

Highlighted Previous Efforts

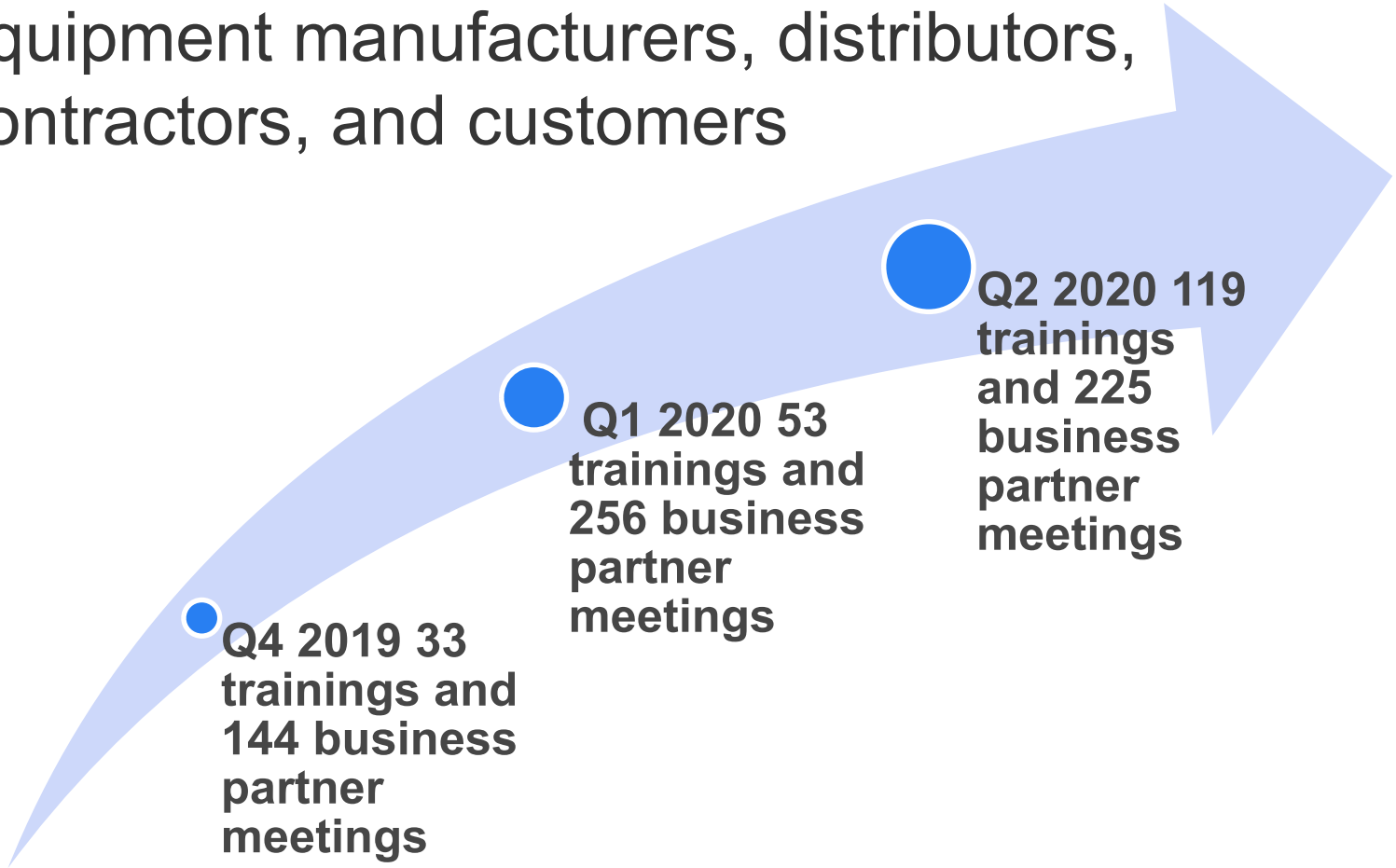
- For many years, PAs have held sales and technical trainings open to all
- Involvement with **vocational technical high schools** on C&I new construction trainig
- Renew Boston workforce development training to recruit multilingual energy specialists with **Asian American Civic Association**
- Conservation Services Group, on behalf of PAs, memorandum of understanding (MOU) with **Green Justice Coalition** to recruit more staff from environmental justice communities
- PAs supported LEAN, SMOC and other stakeholders in establishing the **Green Jobs Academy**-graduates are regularly hired to work for income eligible and market rate programs

Current Trainings Supported by All PAs

Training Topic/Course Title	Sector
Wx Crew Chief Training	All Resi
Wx Installer Training	All Resi
BPI Certification	All Resi
New technology/ heat pump training	All Resi
Passive House Certification	All Resi
Passive House Building Science Best Practices, Quality Assurance	All Resi
Project Expeditors Training	All Sectors
Building Operators Certification	C&I
Commercial Energy Auditor training	C&I
Chiller Optimization Training	C&I
Pump System Assessment	C&I
Process Heat Optimization	C&I
Steam System Awareness	C&I
Code Enforcement Training	All Sectors

C&I Trainings

- PA quarterly reports highlight training, a key component of the C&I programs for PA staff, equipment manufacturers, distributors, contractors, and customers



Additional Recent and Ongoing Efforts

- At the start of COVID-19, PAs stood up several virtual training and certification options from the Building Performance Institute to keep as many contractors on staff as possible, while also furthering their training.
- During COVID-19 the PAs procured & promoted "no cost' to student online learning modules in Safety & Health Protocols, Networked Lighting Controls, & Building Operator Certification
- Funding to vendors and contractors to train new staff
- On track to achieve or surpass goal of training 90 Passive House Consultants by 2022 as part of Passive House offer
- High Performance Homes program targeting strategic recruitment of minority and women owned contractors and builders in 2020
- Informal stakeholder outreach ongoing with LEAN and Contractor Best Practices leadership to strategize on workforce development

Near Term Efforts and Beyond

RFP: Workforce Development & Training

Goals

- Create a sustainable workforce to support the local energy efficiency and demand reduction industry.
- Attract and retain a demographically and geographically diverse workforce
- Ensure personnel are equipped with the skills necessary to deliver current and future energy efficiency and demand reduction portfolios.

Primary Elements

- Employment forecasting (EF) and opportunity tracking.
- Development Programs (DP) to train, retain, and create a pathway for prospective workers into forecasted and identified employment opportunities.
- Engagement, Recruitment, and Talent Management (ERT) to incentivize workforce development training, employment opportunities, and position talent into programs.

WFD RFP

- ✓ *Complete workforce needs assessment*
- ✓ *Receive complete Building Operator Needs Assessment from MassCEC*
- ✓ *Write scope of work based on needs assessment*
- ✓ *Launch RFP*
- ✓ *Review responses*
  - ✓ *Note: All bidders included teams of multiple partners*
- Select winning bidder
- Launch in Q4 2020
- Continue iterating and building on process

WFD RFP Continued

- PAs are working hard to finalize which bidder we will move forward in contracting with and recognize that it has taken time to finalize
- We updated the scope of work in fall of 2020 in order to clarify our requirements and priorities for the selected bidder based on the responses we received
  - This added length to our RFP process but is helping us to select the best equipped vendor and will support long term success
- PAs want to set these efforts and the vendor up for success

Near Term Commitment for 2021: Clean Energy Pathway Internship

Clean Energy Pathway internship (CEP) will help women, people of color and non-native speakers develop skills and enter the energy efficiency workforce.

Serve as a foundation for further energy efficiency workforce development strategies to train diverse candidates, engage stakeholders, retain and grow the pool of diverse participants, support small trade allies, and evaluate success over the next several years**.**

- ✓ Create a sustained increase in the supply of qualified weatherization and HVAC workers
- ✓ Increase the diversity of this workforce
- ✓ Increase energy efficiency program participation in traditionally hard to reach communities, with specific geotargeting based on Non-Participant Study

Opportunity to iterate on the success of other program models, aligning high need jobs with a 100% focus on diversity and inclusion- an area where other programs have faced challenges.

Commitment: Clean Energy Pathway Internship cont.

How?

- Partner with geotargeted community-based organizations' workforce readiness programs to identify work-ready young people from key deomgraphic groups
- Provide training for participants and place them with HVAC and weatherization trade allies
- Provide diversity, inclusion, & equity training for trade allies to strengthen candidate retention

Where, When, Who?

Launch Time	Career Path(s)	Target Participants	Target Geographies	Segment(s)
Q1 2021	Weatherization entry level	women, people of color, native speakers of Spanish, Portuguese, Mandarin	Fall River, Lawrence, Springfield, Boston (Mattapan, Roxbury, Dorchester), Barnstable	Residential
Q1 2021	HVAC entry level			C&I
Q3 2021	Weatherization Crew Chief			Residential
Q3 2021	Building Operator			C&I

Measuring Success

Increase percentage of Black/African American, Latinx, Asian American/Pacific Islanders in EE workforce	Race and ethnicity of CEP participants
Increase percentage of women and gender nonbinary members of EE workforce	Gender of CEP participants
Increase percentage of multilingual workers in EE workforce	Languages spoken fluently by CEP participants
Increase residential participation in areas of MA with low historic participation	Town/zip code of residence of CEP participants

Procurement

The Lead Vendor Model

What is the "lead vendor" model?

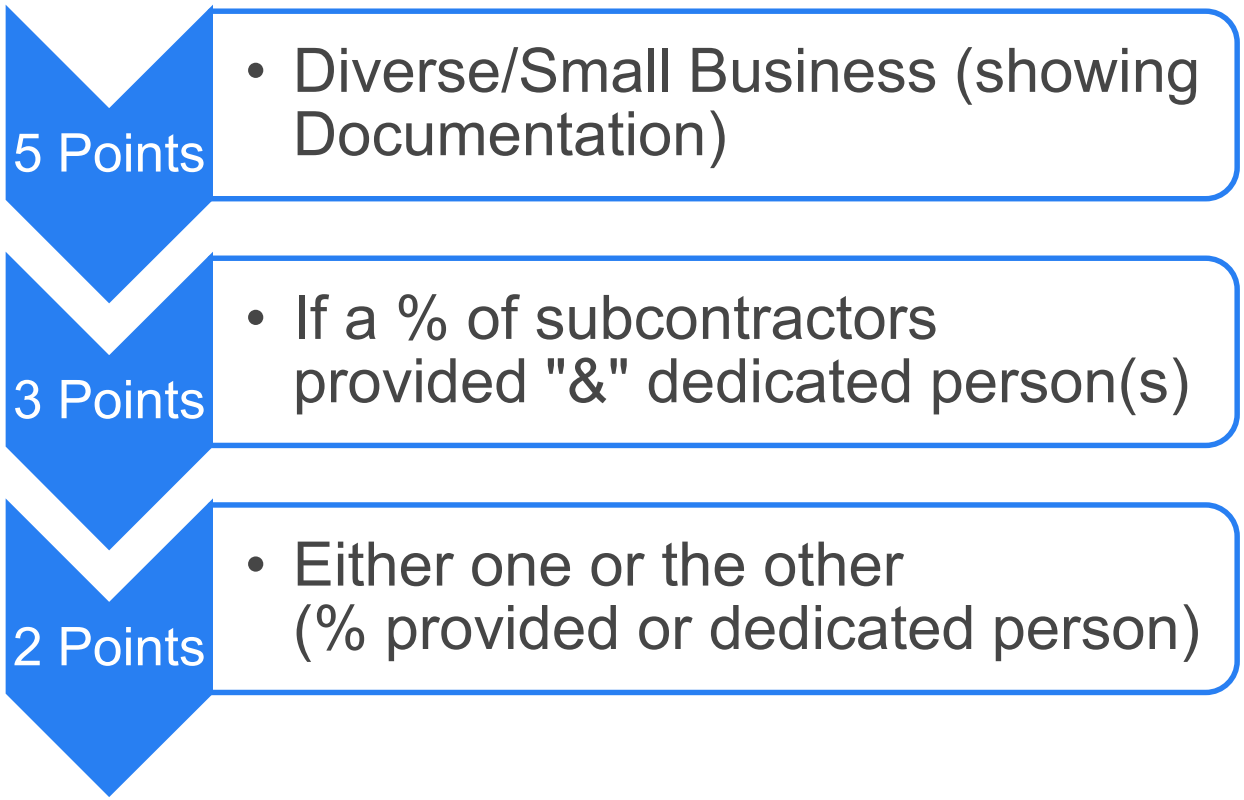
- Hiring one single vendor or vendor team to administer a program on behalf of all PAs and oversee subcontracting with additional agencies to support the success of that program.
- We have found this to be a successful model to achieve our goals and bring in smaller businesses to the programs

Why do we use this model for many programs?

- Reduces administrative burden for smaller businesses, who can contract with a single vendor rather than each PA separately
- One vendor can meet all legal terms and conditions of all the PAs, similar to the Commonwealth's requirements that often can't be met by a single small business.
- It allows the PAs to work with new players that may offer a niche product, who can subcontract with the Lead
- LVs help develop partnerships and looking for subs that have in-the-field knowledge and expertise.
  - This has lent itself to a lot of new faces and entities working with the PAs

Diversity in Procurement

The procurement process the PAs utilize incorporates and places value on bidder diversity as part of the commercial review of all bids for all contracts. Five % of any bidder's commercial score is related to diversity, using the following breakout.



Questions Asked During Procurement Process

1. Does your company qualify as a Diverse Business?
   The following categories may be counted towards this question:
   a. Minority Business Enterprise (MBE)
   b. Woman Owned Business Enterprise (WBE)
   c. Disadvantaged Business Enterprise (DBE)
   d. Small Disadvantaged
2. If not Diverse as answered above, please advise, what is the best "Percentage of Total Contract Value" your company can commit to subcontracting from Diverse Vendors and reporting on a monthly or quarterly basis?
3. Are you compliant with the Diversity & Inclusion language in the Supplier Code of Business Conduct 2017 (pg. 5) as shown below. If yes, please provide how your business actively works to develop & retain a diverse workforce.

Current & Recent PA WFD Efforts

CEERE and C&I Programs

CEERE

Center for Energy Efficiency & Renewable Energy

Massachusetts Energy Efficiency Partnership

nationalgrid EVERSOURCE

With support from PAs and other funders, the Massachusetts Energy Efficiency Partnership (MAEEP) supports deployment of energy efficient technology and tools to the industrial, commercial, and institutional sectors. The MAEEP Program delivers its value through a combination of stakeholder input, technology transfer, education and outreach, and research.

Several C&I trainings are offered in partnership with MAEEP.

Green Jobs Academy

PAs sponsor trainings through GJA at 100% reimbursement:

- Weatherization installer
- Weatherization crew chief
- Duct sealing

GJA graduates are hired directly by income eligible and/or market rate contractors participating in PA programs

Demographics of 2019 GJA graduates of feeder trainings for Income Eligible EE programs:

- 27 of 34 graduates have been hired (79%)
- 24 of them (89%) 6 (25%) African-American, 14 Hispanic (52%), 2 Brazilian (7%), 2 Middle Eastern (7%); and
- 16 of the 27 hired (59%) are bilingual in both Spanish-English

REALIZE Contractor Aacademy

Emerald Cities
COLLABORATIVE

- Eversource participating in advisory board since 2019; National Grid joined advisory board in 2020
- Aimed at minority and women-owned contracting small businesses
- PAs have emailed all contractors in our network with information about the 2020 cohort

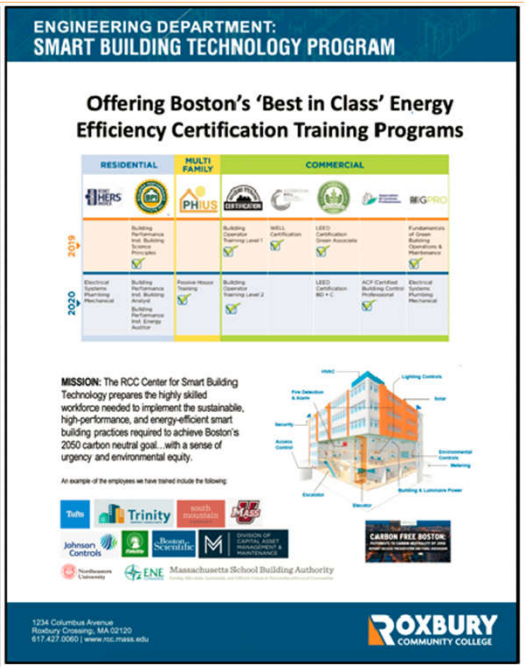
MassCEC

PAs communicate regularly with MassCEC on workforce development and worked with them to design and commission the needs assessment and building operator research simultaneously

- Many EE companies participate in the MassCEC internship program- PAs are looking to grow that number, although efforts to do this in 2020 were postponed due to COVID

Roxbury Community College

- Center for Smart Building Technology
- Eversource and National Grid partner and participate in advisory board
- Goal of attracting diverse pools of talent to the efficient building sector



Research

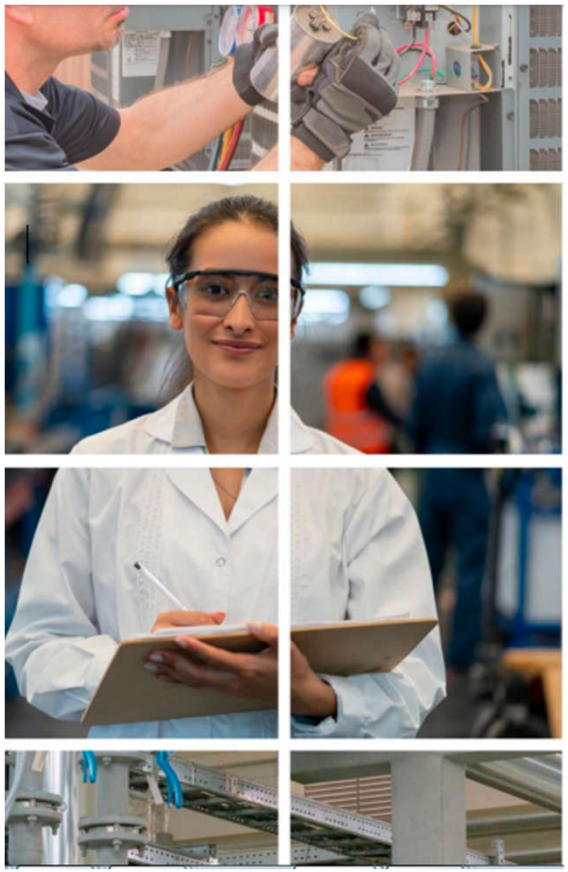
Needs Assessment

Some recommendations include:

- Support hands on training for vocational technical trades
- Create training and career pipelines in under resourced communities
- Promote mentorship programs with energy efficiency employers
- Raise awareness among young people about career opportunities in EE

PAs also see the need to focus on diversifying our workforce to better reflect the communities we serve, both through procurement and training.

Needs Assessment cont.



Read more here: http://ma-eeac.org/wordpress/wp-content/uploads/Massachusetts-Energy-Efficiency-Workforce-Development-FINAL-REPORT-CAREER-PROFILES.pdf

Contractor Survey

RISE Engineering conducted survey of contractors working in PA-sponsored EE programs

- Difficulty finding weatherization installers and weatherization crew chiefs, both before and after COVID
- Challenges for contractors
  - Candidate childcare responsibilities
  - Candidate basic computer literacy and internet access
  - Qualifications: BPI certification, Crew Chief training

MassCEC Building Operator Research

Key recommendations made to MassCEC

1. The workforce is aging. Outreach to K-12 students about opportunities in building operator professions
2. Mainstream job websites and word of mouth hiring are contributing to a diversity gap in hiring. Create a "go-to" building operator page on the job board to connect employers with qualified candidates-and advertise it to candidates
3. Difficulty for employers to locate candidates with relevant experience. Leverage vocational internship to create more opportunities.
4. No one size fits all career pathway for building operators. Focus on subsidizing certification for job seekers in these paths: boiler and utility operators and control valve mechanics.

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