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Local Governments Empowering Our Communities

Decarb's Path to the High Road:

How to Create Quality Jobs in Residential Building Decarbonization

Julia Hatton

President and CEO of Rising Sun Center for
Opportunity



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Mission

Building career pathways for economic equity and climate resilience

Vision

A just and sustainable future for all people and our planet



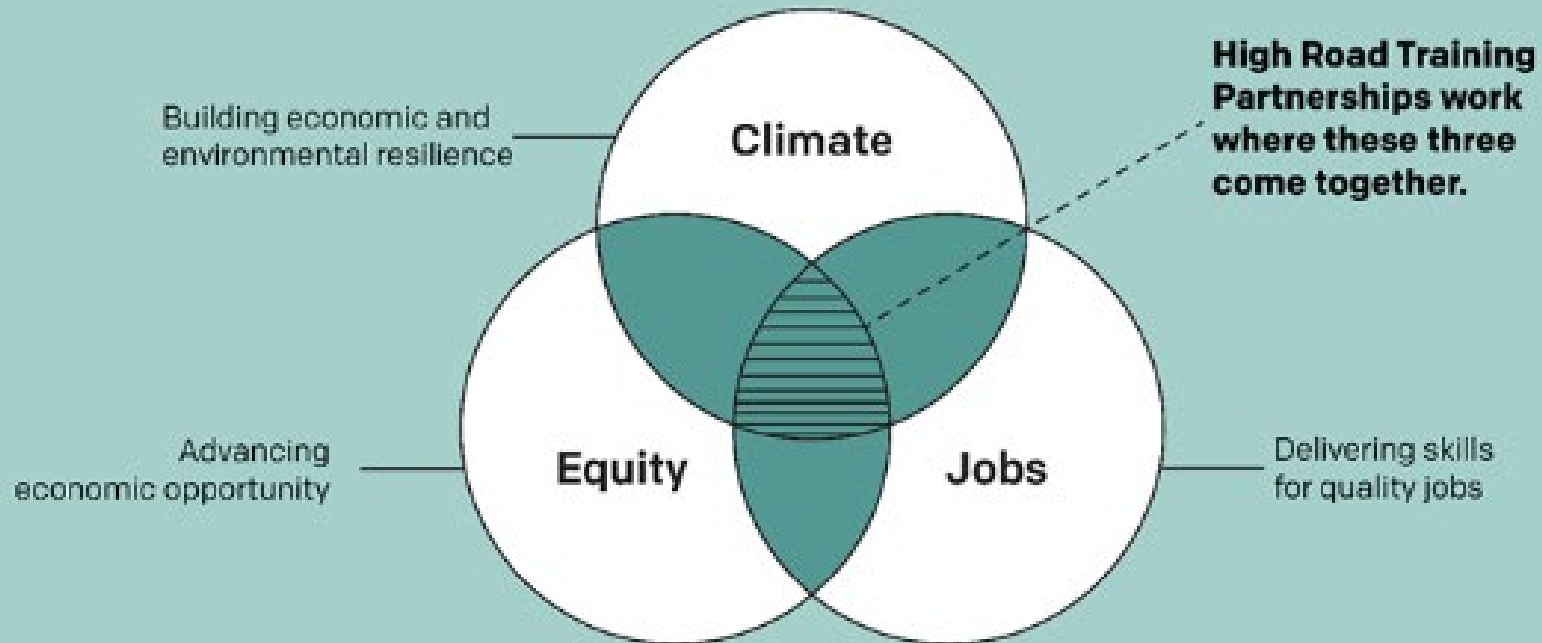
The High Road:

A Holistic Win Win Win Strategy for Equitable Building Decarb

Climate: High quality jobs to attract and retain the skilled workers needed to address the climate crisis

Equity: Targeted job training to create equitable access to economic mobility

Jobs: High quality decarb training to prepare the technical workforce needed to decarbonize every building



Official Partners

- Construction Trades Workforce Initiative (CTWI)
- BayREN
- City of Berkeley, Office of Energy & Sustainable Development
- City of San Francisco, Environment Department
- Construction Resource Center
- National Association of Minority Contractors
- Nomada Coaching & Consulting
- Revalue
- Rising Sun Center for Opportunity
- StopWaste
- Contractor Reps
 - Bear Mechanical
 - Enso Building Solutions
 - KelAire Heating & Cooling
 - West Coast Green Builders
 - LJ Kruse Company
- SMW Local 104 Worker Representative
- Workforce & Environmental Justice Alliance

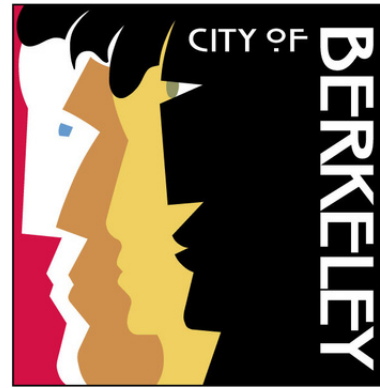


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n o m a d a
coaching & consulting



STOPWASTE
at home • at work • at school





Bay Area Residential Decarbonization High Road Training Partnership

Mission

The H RTP seeks to increase job quality and equitable access for all workers in the residential decarbonization market, starting in the 9-Bay Area County region

Vision

A residential building decarbonization industry that supports quality jobs, engages a qualified workforce, and provides stable career pathways for disadvantaged workers while simultaneously reducing GHG emissions and building more resilient communities



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HIGH ROAD TRAINING PARTNERSHIP SCOPE

- ▶ Small scale - single family + small multifamily
- ▶ Existing buildings (no new construction)
- ▶ 9 County Bay Area focus
- ▶ Electrification + Energy efficiency measures (not including energy generation ex. solar)

HOW DO WE MOVE A MARKET TO THE HIGH ROAD?

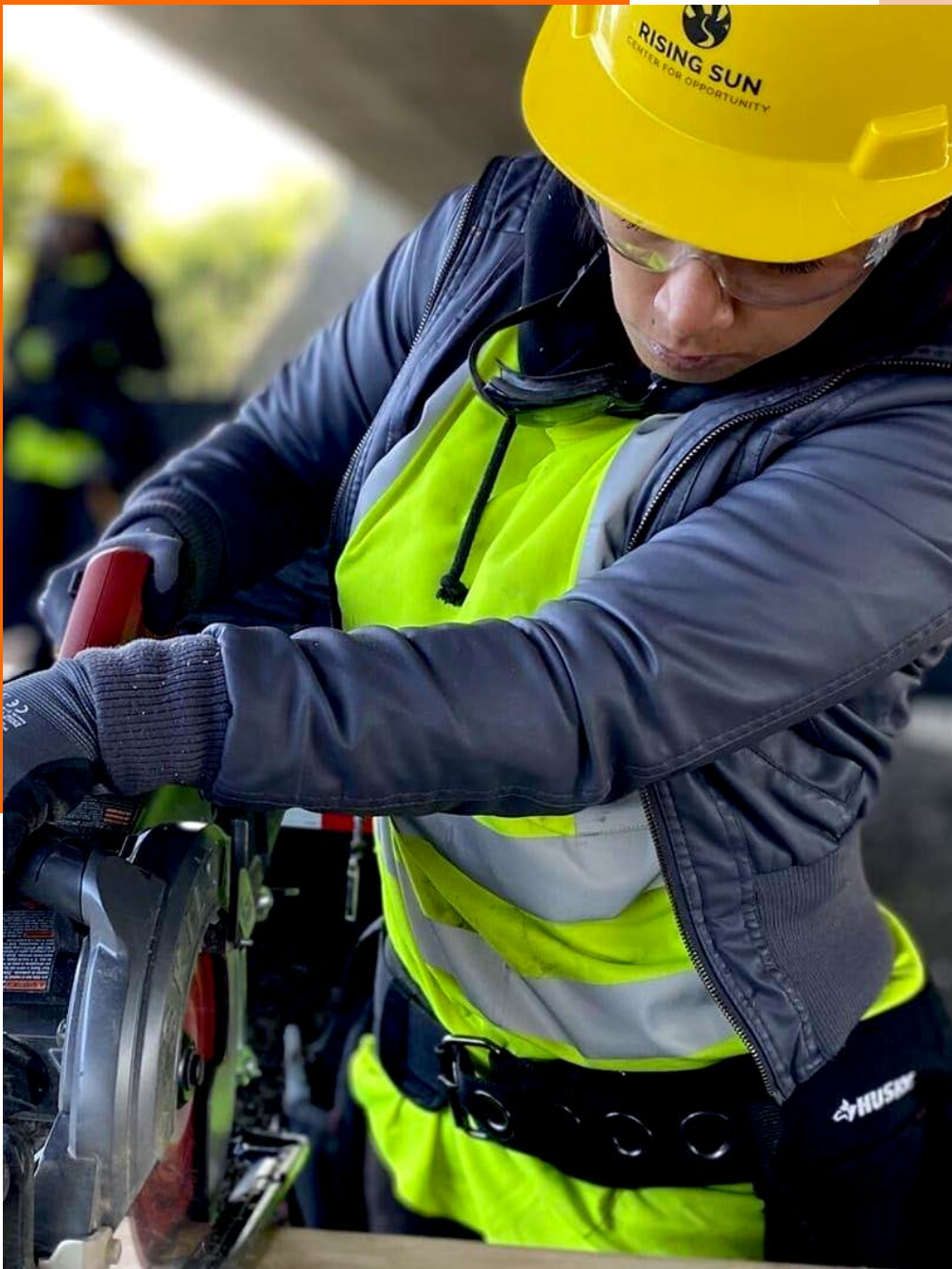
Labor Standards

Labor Standards are a *strategy* to set a baseline for job quality that we can employ to achieve our *goal* of quality jobs and equitable access to residential decarbonization jobs

How we use them

Our approach for equitable labor standard intervention is to:

- Require *minimum labor standards* to subvert the race-to-the-bottom on publicly funded projects
- *Use a phased-in approach* to allow disadvantaged contractors to join based on a commitment to meet labor standards by the start of construction
- *Support contractors* to meet these standards, and
- Offer *additional incentives* to support greater job quality.



INDUSTRY SPECIFIC LABOR STANDARDS

- Wages + Benefits
- Training & Certification
- Targeted & Regional Hire
- Uplifting Disadvantaged Contractors
- Compliance + Accountability

Partnership-Recommended Definitions:



WHAT IS A HIGH ROAD RESIDENTIAL DECARB JOB?

- Provides residential prevailing wages with overtime.
- Provides healthcare coverage that includes dependents, vision and dental.
- Offers a pension or retirement savings plan for full-time workers with an employer match.
- Provides paid time off.
- Offers opportunities for career advancement and skill development for experienced workers and entry-level workers.

A worker in a High Road residential decarb job feels welcome, safe, heard, included, and empowered, with the assurance of support from supervisors and the organization.

ECONOMIC IMPACT OF AN INDUSTRY- WIDE WAGE & BENEFITS STANDARD





**Good Wages and
Benefits are a
Win Win Win Win Win:
Good for the Climate,
Workers, Contractors,
Taxpayers & the
Economy**



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a prevailing wage standard



for Bay Area

residential decarbonization work
would result in an average increase of



\$14.50

per hour



or

\$25,951

annually

among workers who would be impacted

This represents a **71% increase** in these workers' annual earnings.

A wage standard would **increase project costs by just 3-9%**, while bringing Contractors and consumers the benefits of **better employee recruitment, retention, and work quality**

CLOSE THE RACIAL WAGE GAP

Latine residential decarbonization workers in the Bay Area, who make up a majority of workers in the industry, **earn only 65 cents for every dollar** that White non-Hispanic workers earn.



A prevailing wage standard would **eliminate most, if not all, of this racial wage gap** for workers in the bottom half of the wage distribution.

EMPLOYERS (AND THE CLIMATE) ALSO BENEFIT

RETENTION

Employers face lower worker turnover rates, **offsetting wage increases by at least 20%**

SKILL DEVELOPMENT

Workers stay in the construction industry longer, gaining valuable experience that **increases their productivity** over time

EDUCATION LEVEL

Workers have higher levels of formal education, receive more training from employers, and are more likely to participate in apprenticeship programs



TAXPAYER BENEFITS

Almost **half** of families of construction workers in California rely on one or more social safety net program - an **annual cost of \$3 billion per year**.

This is compared to a rate of **one third** of all worker families statewide.

A wage and benefits standard would **reduce** taxpayer expenditures on safety net programs by at least **\$15-\$24 million annually**, as well as generate **\$21-49 million in additional tax revenue** in the Bay Area.

A PREVAILING WAGE STANDARD WOULD:

Increase local GDP by between \$115 and \$189 million as workers would spend their additional earnings on housing, transportation, food, and other goods and services in the local economy.

NET PUBLIC BENEFIT OF A PREVAILING WAGE + BENEFITS STANDARD

**\$44-\$70
million**



SUBSIDIZING HIGH ROAD JOBS SAVES TAXPAYER DOLLARS

For each additional **\$1** of project cost created by a prevailing wage labor standard, the local economy (**GDP**) would grow by **\$1.28 to \$3.15**.



The Partnership recommends the 3-9% in increased project costs be paid for in additional public subsidies.

If taxpayers subsidize good jobs rather than low road jobs...

For each additional **\$1** in taxpayer spending on prevailing wages and benefits would result in **\$2.61 to \$2.76** in **net taxpayer savings**.

In 2022, the Partnership identified **38** res decarb programs that served the Bay Area and **NONE** had labor standards

MAKING PROGRESS

Now, the programs below have labor standards impacting over **\$1 billion** in residential decarb subsidies

- ▶▶ California Energy Commission (EBD)
- ▶▶ BayREN
- ▶▶ City of Berkeley
- ▶▶ Ava Community Energy
- ▶▶ Peninsula Clean Energy
- ▶▶ City of Hayward
- ▶▶ City of San Francisco



City of Berkeley Just Transition Pilot Program

CCEC Forum

July 10, 2025

Just Transition Pilot Program

- **\$1,500,000** funded by City Council
- **2 years** (2023-2025)
- **Partner:**

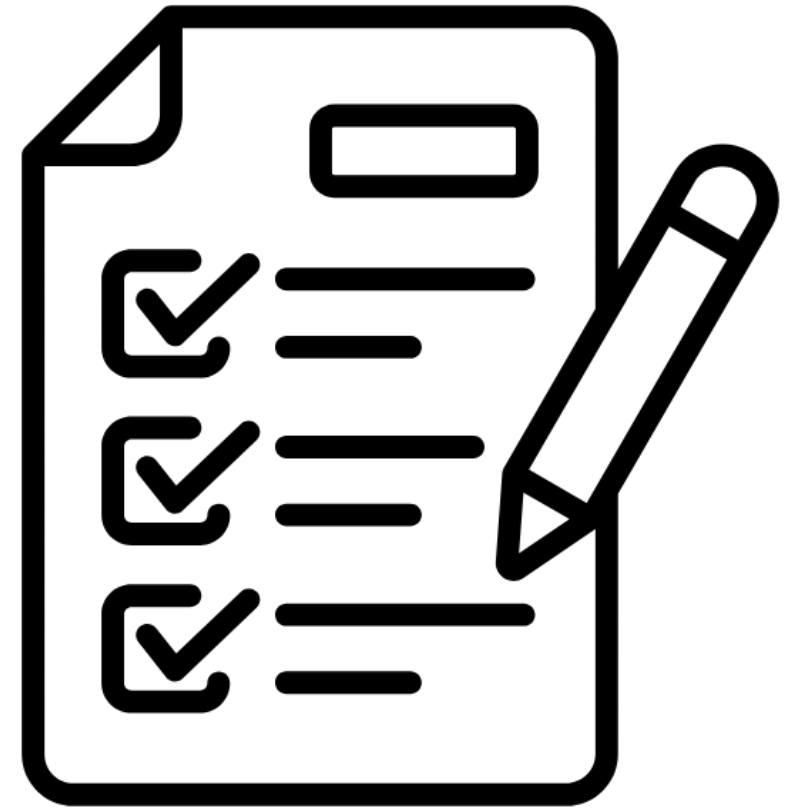


WE BUILD TOGETHER

Victoria Valdez

Just Transition Pilot Program

- **Low to Moderate Income (LMI)** households (at or below 120% AMI, with a preference for below 80%)
- Requires pre-qualified contractors who meet minimum **labor standards for high road jobs**
- **Aggregation** of residential electrification measures



Created by Funtasticon
from Noun Project

Bay Area High Road Training Partnership



Program Goals: Aggregation

Expand high-road workforce opportunities in the low-rise residential building sector by **aggregating projects and/or buildings;**



Created by Eucalyp
from Noun Project

Program Goals: Advancement

Advance economic opportunities for residential building electrification contractors and workers, particularly **Black, Indigenous, and people of color (BIPOC) and women contractors and BIPOC and women workers**, by creating high-road job labor standards, trainings, and inclusive recruitment pathways;



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Program Goals: Quality Improvements

Improve occupant health, comfort and energy affordability for LMI Berkeley residents with **high quality** installations of efficient electrification measures in homes; and



Created by Fina Arfiana
from Noun Project

Program Goals: GHG Reductions

Reduce community-wide greenhouse gas (GHG) emissions by converting residential gas systems to clean electricity.



Program Scope

- **Just Transition Pilot Process Development**
 - Pre-RFP Information (released!)
 - RFP (anticipated release Summer 2025)
 - RTEBN Climate Coach Program (ongoing)
- **Home Assessments** (*in progress*)
- Initial “**Pilot within a Pilot**” Retrofits to inform aggregation (*in progress*)
- **Aggregated Pilot Retrofits** (*anticipated Q3-Q4 2025*)
- **Final report** (*anticipated Q4 2025*)



Veronika Belcheva

Pre-RFP Information Release

- Contractor Requirements & Labor Standards
 - Builds on Bay Area H RTP
- On-Ramp Technical Assistance Supports Available
- Frequently Asked Questions

<https://www.rtebn.org/just-transition>



Kim Nguyen for OBI x Fine Acts

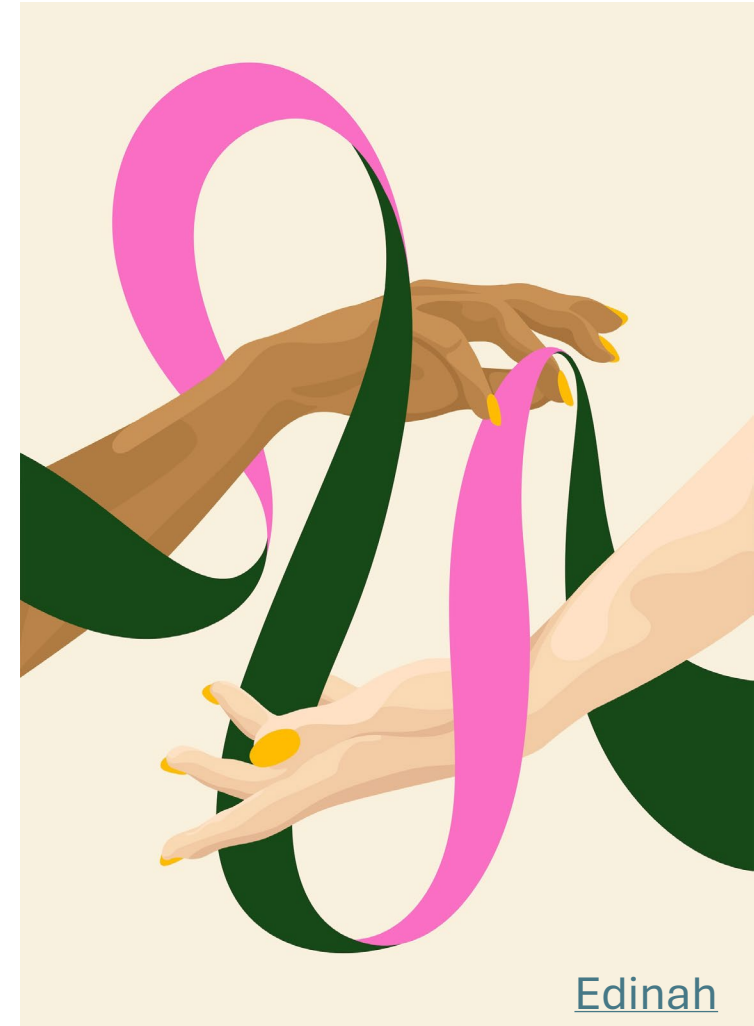
Lessons Learned To Date

- Cultivate relationships
- Clarify development roles to help keep things moving
- Helpful to have existing pipeline of homes
- Complex and multi-layered funding required
- Support dual path options (union and non-union)



Lessons Learned To Date

- Contractor readiness takes real time & support
- Small lots/denser neighborhoods can be challenging to meet space clearance requirements
- Timely payment processes are required to support small firms
- Homeowners need to feel guided the whole way





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CCEC Conference

City of Hayward

Heat Pump Water Heater Installation Program

Mireille Vargas
Sustainability Specialist

July 10, 2025



Heat Pump Water Heater Program Overview

- **\$328,000 funds available due to Calpine settlement funds**



Heat Pump Water Heater Program Overview

- \$328,000 funds available due to Calpine settlement funds
- **Low-income qualified, near RCEC, and older water heaters**

Figure 1.
Census Tract 4371.01

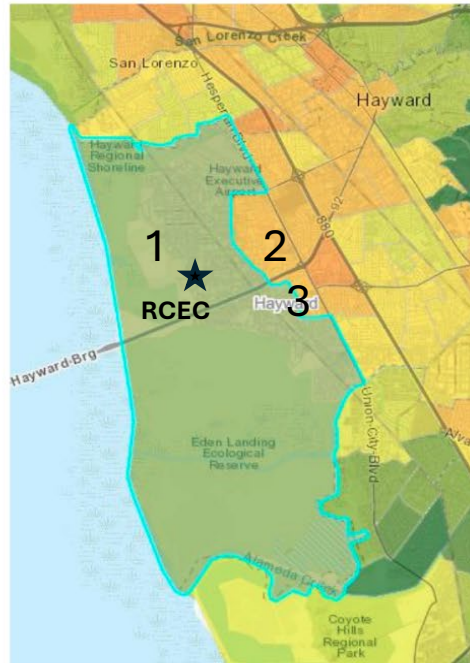


Figure 2.
Census Tract 4372.00

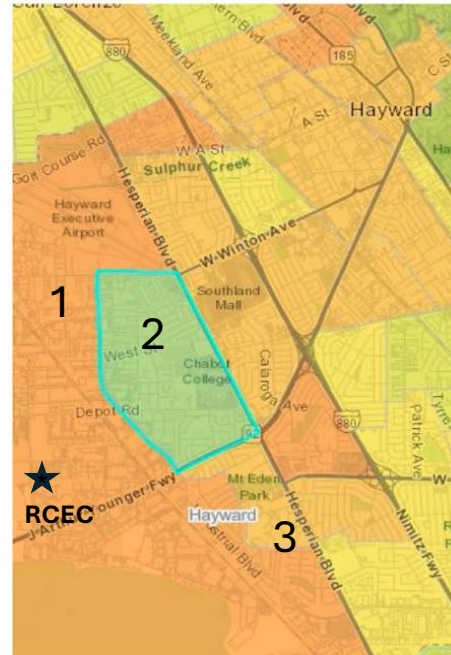
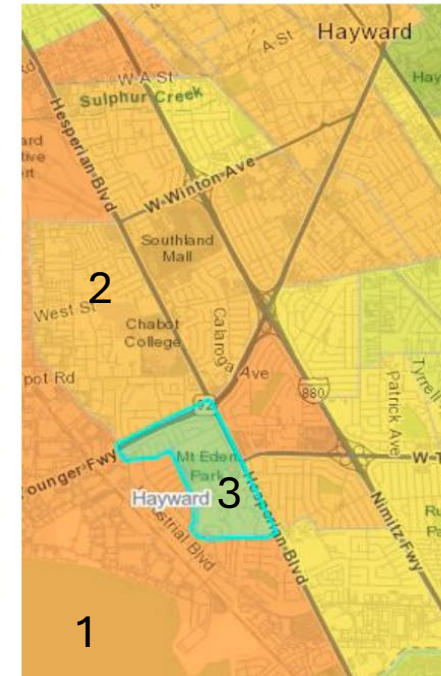


Figure 3.
Census Tract 4371.02



Heat Pump Water Heater Program Overview

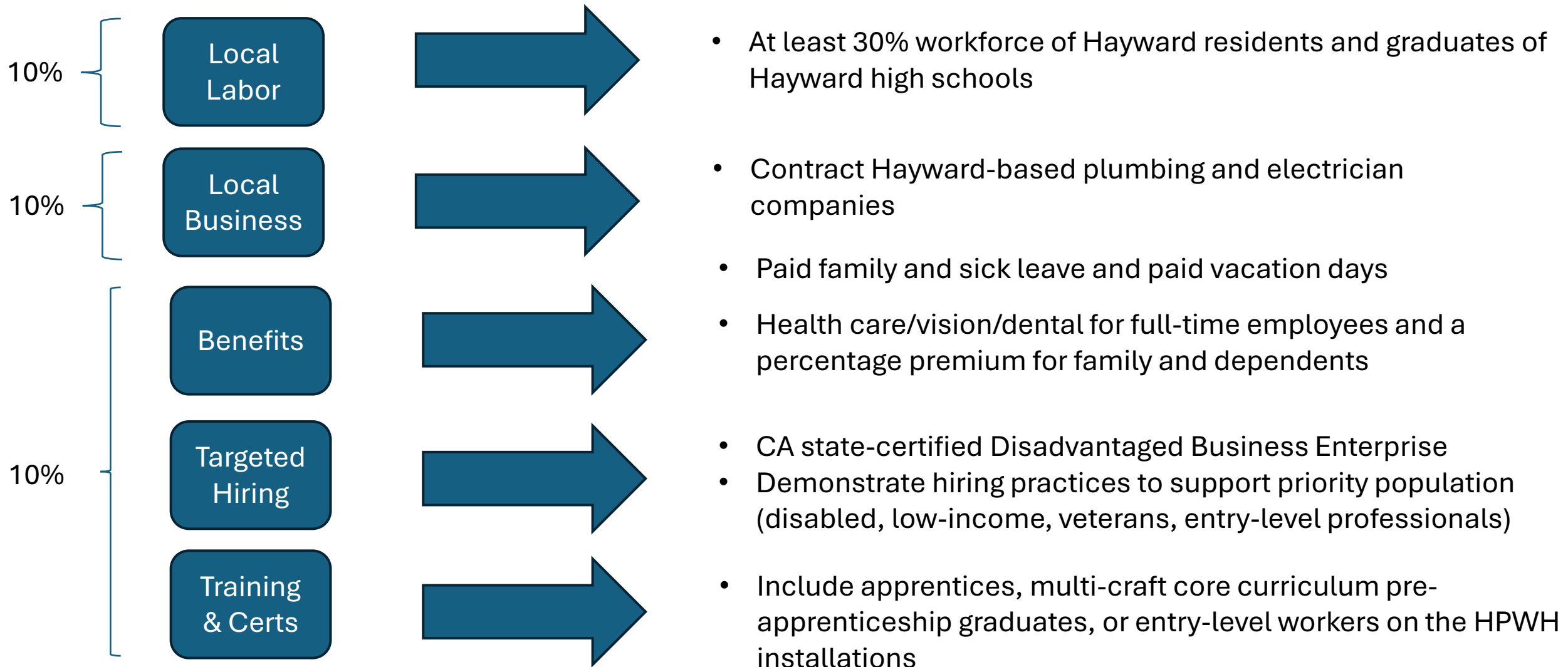
- \$328,000 funds available through settlement funds
- Low-income qualified, near RCEC, and older water heaters
- **Council and public requests:**
 - **Local labor**
 - **Equitable labor standards**



The screenshot shows the City of San Francisco's website. At the top, there is a navigation bar with the city logo and several menu items: City Services, Community & Recreation, Safety & Health, Construction & Development, Doing Business, and Your Government. Below the navigation bar, there is a breadcrumb trail: Home > Doing Business > Working With The City > Bid & Proposal Opportunities > Just Transition Residential Electrification Pilot Program. To the right of the breadcrumb trail are links for Share and Print. The main heading is "Just Transition Residential Electrification Pilot Program". Below the heading, it says "Due Date: Tuesday, March 14, 2023 - 2:00 pm" with a link for "PREVIOUS DUE DATES". Below this is a table with the following columns: SPEC #, TYPE, POST DATE, and DOCUMENTS. The table has one row with the following data: SPEC # 23-11586-C, TYPE Professional Services, POST DATE 01/31/2023, and DOCUMENTS with two buttons: DOWNLOAD RFP and ADDITIONAL FILES.

SPEC #	TYPE	POST DATE	DOCUMENTS
23-11586-C	Professional Services	01/31/2023	DOWNLOAD RFP ADDITIONAL FILES

Finalized Labor Standards for RFP



Prevailing wage required – Considered one PW project over \$25,000 than individual HPWH installation projects

Finalized Labor Standards – Local Labor Thresholds

Demonstrate hiring a workforce of
Hayward residents or graduates of Hayward high schools

Thresholds

10 pts

At least 30% of
workforce from
Hayward

8 pts

25 - 30% of
workforce from
Hayward

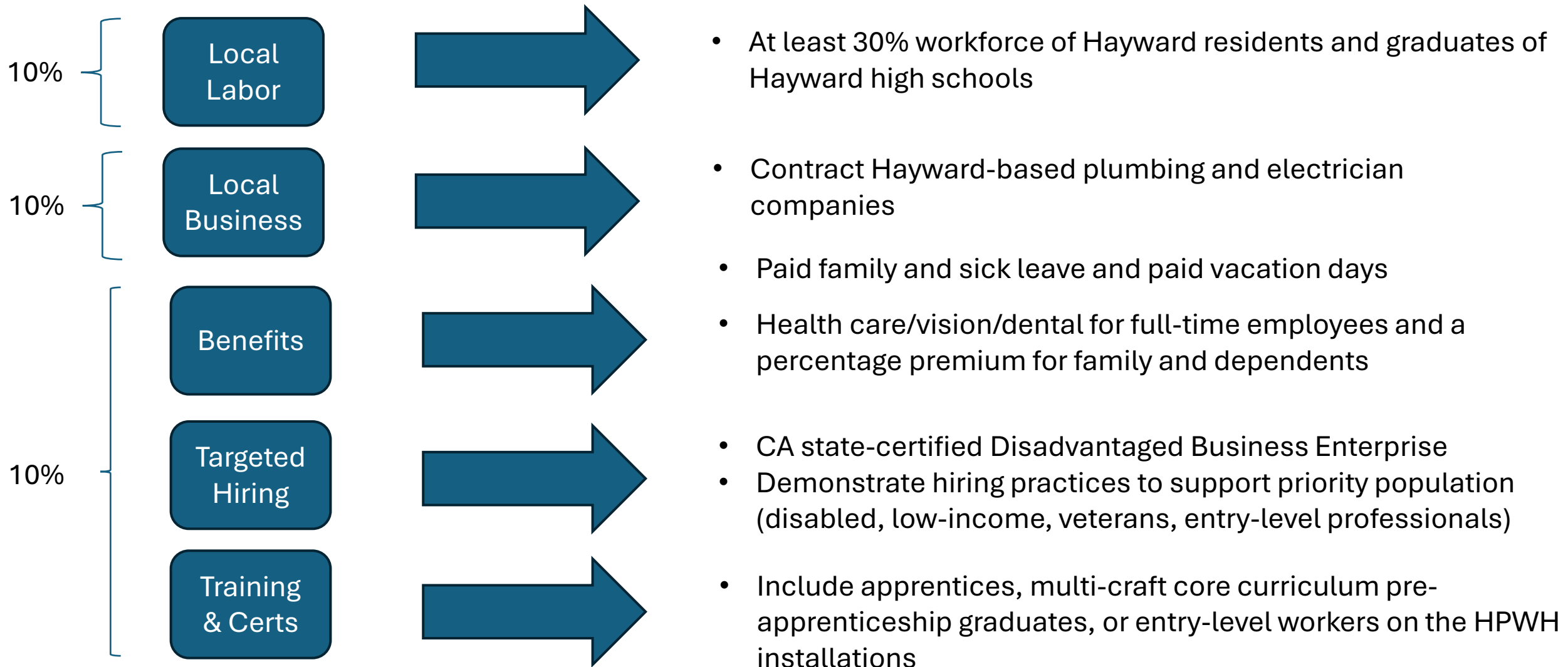
6 pts

20 - 25% of
workforce from
Hayward

4 pts

10 - 20% of
workforce from
Hayward

Finalized Labor Standards for RFP



Prevailing wage required – Considered one PW project over \$25,000 than individual HPWH installation projects

RFP Process and Results

- RFP distributed to local businesses, signatory/non-signatory contractors, etc.
- 3 proposals received

Proposal 1

Paid sick leave
Healthcare
Paid vacation
Vision/Dental
DVBE
Interns from Rising Sun

Proposal 2

Prevailing wages
Paid vacation
Hiring practices
Local labor -
Signatory
contractor

Proposal 3

Prevailing wages
Local labor
Track labor data
(demographics,
job quality,
compliance)

- 1 local contractor not submitted – concerned with co-pay

Selected Contractor

- Chosen contractor asked to commit to
 - Sourcing at least 25% local labor for installation services
 - Signatory Contractor with UA Local Union 342
 - Pay prevailing wages

Evaluating Success

- Handling prevailing wage through CA Department of Industrial Relations
- Local labor – keeping track of contractors involved in each installation
- Have a post-program survey

Thank you!

Mireille Vargas
Mireille.vargas@hayward-ca.gov



SF Climate Equity Hub

Workforce Development

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CAP Workforce Pillars

Green workforce pathways at all level
trained, reskilled, and and/or certified

Engage small, minority, women-owned
contractors in green transition

Provide a pipeline of work for hands-
on workforce training





Climate Equity Hub



Educate and engage underserved communities on the benefits of electrification



Provide residents with financial and technical support to pursue electrification



Support continued and equitable growth of the electrification industry and workforce

climateequitysf.org

SFE

No-Cost Water Heater Replacement Program

Income-qualified residents

Replace old, gas water heater with HPWH

Open call for electrification advisors

Connection to trusted equity contractors



Program Requirements

>50% of Projects to MWDBE from SF
REQUIRED

Prevailing wage with minimal reporting
EXPECTED

First-source hiring or PLA
UPON SCALING



Workforce Engagement

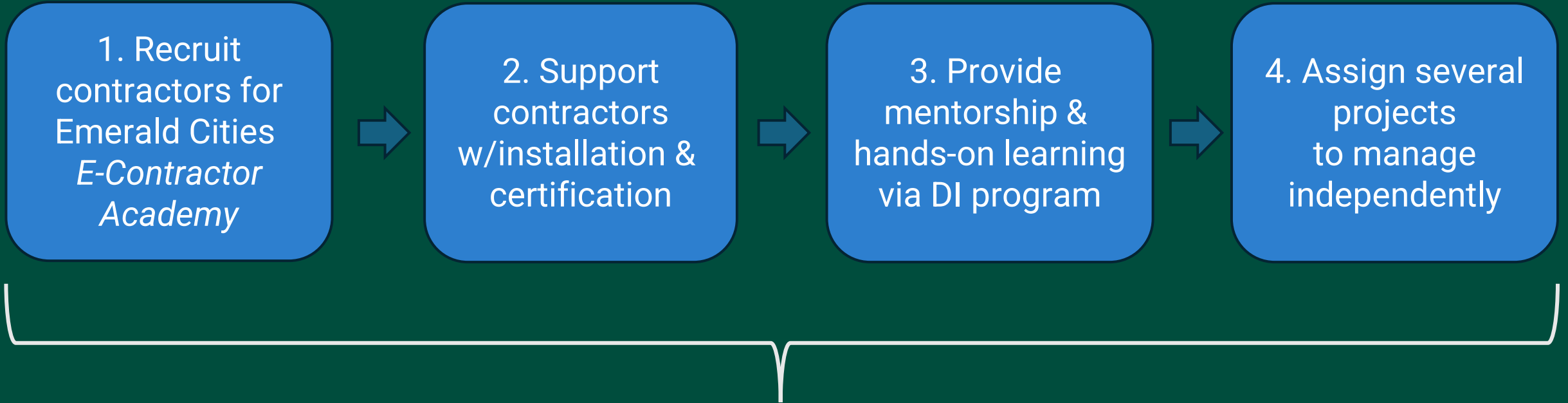
Targeted Contractor Pathway

Support MWDBE contractors to participate in green transition through hands-on training, assistance & mentorship

General Contractor Engagement

Educate SF plumbers about zero emissions regs, share benefits of electric equipment, and provide manufacturer installation training

Targeted Contractor Pathway



Equip contractors with the certifications, experience and confidence to pursue HPWH installations on their own

General Contractor Engagement

Vision:

Equip local contractors with the knowledge and skills to re-orient their businesses around heat pumps and promote electrification to customers

Strategy:

Ongoing quarterly workshops developed with contractor input & local partners:

- Local (invite C20/C36's)
- In-language
- In-person (after work hours)
- Stipended (soon!)



Workshop #1

Topics Covered

Electrification 101 & Benefits
Zero Emission Appliance Regs
Rebates & Incentives
Contractor Best Practices
Permitting Barriers

Next Step

Manufacturer Training





Accomplishments

22 installations completed
20 in the pipeline
5 pilot HVAC projects

Next Steps

50-80 projects funded
2-5 whole-home retrofits
- Pediatric Asthma Clinic
- ESA Program



Thank you!

Nik Kaestner

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Leveraging the H RTP Partnership to Support BayREN's EASE Home Program

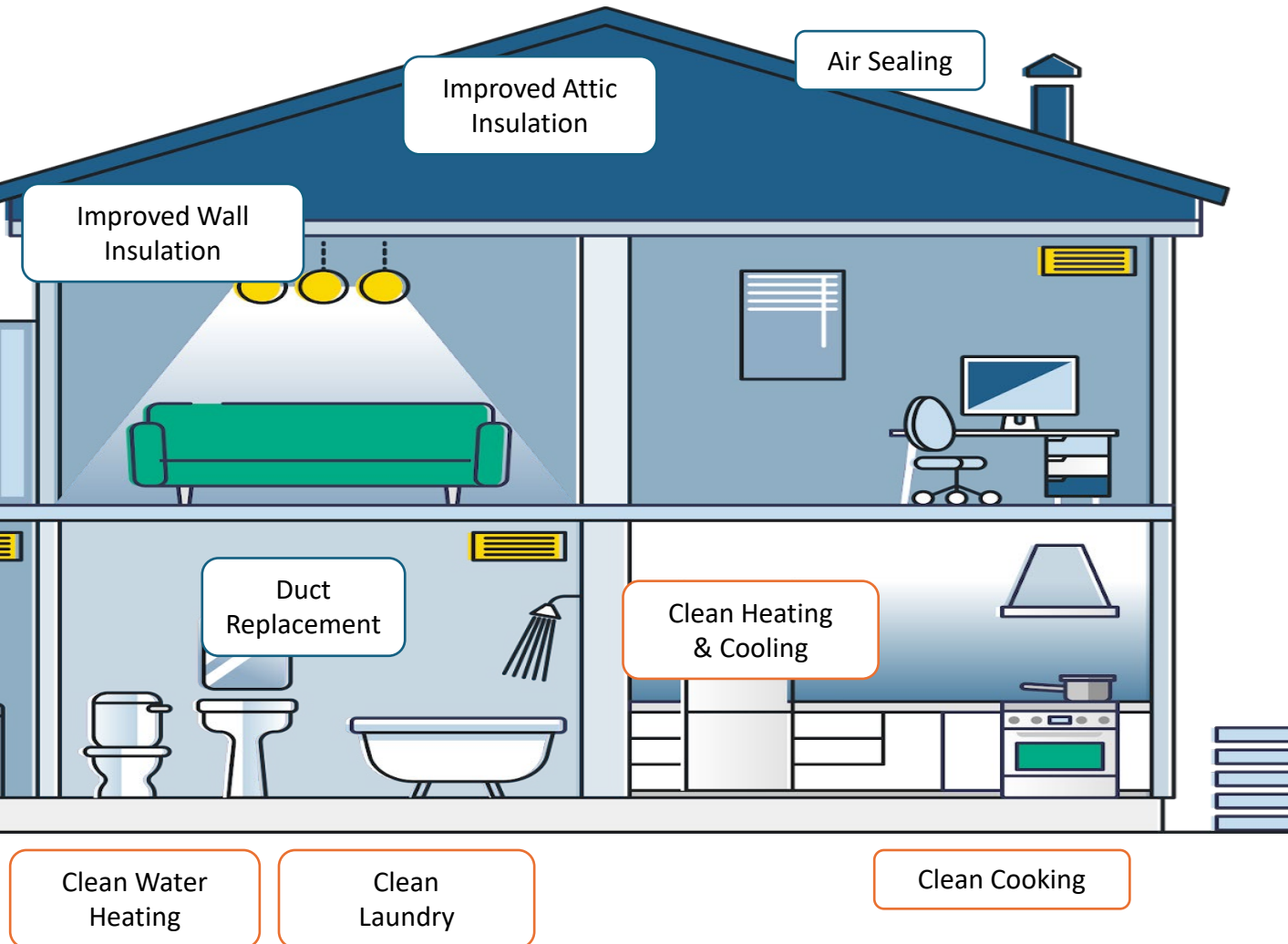
July 2025

BayREN and H RTP



- BayREN is an official partner of the Bay Area Residential Building Decarbonization H RTP since 2021
- Represented by BayREN coalition agencies: ABAG/MTC, StopWaste, County of Marin
- Main involvement has been for BayREN's Single Family Program EASE Home Program

EASE Home Measure Offerings



Core Measures

Customer co-pay: 20% of costs, no more than \$1,000.

- Attic Insulation*
- Wall Insulation*
- Duct Sealing or Replacement*
- Air Sealing
- Weatherstripping
- Smart Thermostat
- Health and Safety Upgrades
- Minor Home Repairs

✓ **80% Costs Covered** ✓ **Comprehensive Support**

* at least one starred measure is required

Additional Measures

Customer co-pay: Full cost minus 3rd-party rebates

- Heat Pump Heating and Cooling
- Heat Pump Water Heater
- Induction Cooking
- Heat Pump Dryer
- Electrical Infrastructure Upgrades

✓ **Finding and applying for third-party rebates**
✓ **Comprehensive support**

From Rebate to Direct Install

- In 2023-24, BayREN's single family program switched from a rebate program to a direct install program.
- Moving to a direct install model made it more possible to integrate H RTP standards.

	Home+ Rebate Program	EASE Home Direct Install Program
Design	<ul style="list-style-type: none"> • Rebates for single measures. • Covers a small fraction of the cost. • Homeowner chooses their own Participating Contractor. • Contractor and homeowner handles paperwork. 	<ul style="list-style-type: none"> • Multiple measures for weatherization and energy efficiency. Electrification optional. • 80% cost coverage. • Resident (homeowner or tenant) uses the program's contractors and fixed pricing. • Program handles all paperwork.
Budget	~\$7 million per year	~\$7 million per year
Beneficiaries	~90% high-income / market-rate customers	Moderate-income customers, some low-income. Income qualifications required.
Contractors	Over 150 enrolled contractors, but ~15 active firms responsible for most of the project volume.	A small pool of subcontractors; currently starting with 3.
Prevailing Wage	No, difficult to require and assess.	Yes, can require and assess.
Assurance of "good job" qualities	Unknown, difficult to assess.	Can provide preference for "good job" qualities during competitive bidding processes.

Enrolling Installing Contractors into EASE Home

Required:

- Paying wages at or above **prevailing wage**
- Located in the community or region where the work will occur
- Agreeing to standard terms and conditions
- Accepting measure installation fee schedules


Strong Preference:

- Certifications and accreditations in advanced home performance
- Building electrification skills and experience
- Certification as small business or women, minority, disabled veteran, or LGBT business enterprise
- Targeted hiring strategies to attract residents of under-resourced, tribal, or low-income communities, and barriers to employment
- Part of a multi-craft community workforce and training agreement
- Participation in relevant state-approved apprenticeship programs



Strategies to ensure job quality at the program management level

- **In the program's RFP**, we included these workforce requirements and preferences. They were considered when scoring and evaluating.
 - Same as the CEC's Equitable Building Decarbonization RFP.
- **In the scope of work**, we included a requirement for an annually updated **Workforce Plan**.
 - Annual report to be provided on how requirements and preferences are being met and incentivized.
- Our expectation was for prevailing wage verification, along with other compliances, **be part of the implementation budget**.



Strategies to ensure job quality at the program implementer level

- **EASE Home's implementer, Franklin Energy,** is responsible for soliciting and subcontracting with installing contractors.
- **Their prevailing wage verification process balances admin burden and accuracy:**
 - Follow DIR prevailing wage minimums as best as possible.
 - Wage expectations set at on-boarding, checked at the first project, then twice annually as DIR updates rates.
- **Annual reviews** of SBE/DBE certifications.
- **Limitations in offering specific support** to firms that do not have existing high-road strategies.

Real-World Lessons



“Meeting all the goals of high roads jobs development is very difficult. Programs are more complex than ever which places a strain on program administration.

In a competitive solicitation process, this leaves little to no budget for workforce development unless it’s explicitly required in the RFP.

When it works, it is often when like-minded DBE business are willing to invest in their employees.”

- EASE Home implementer representative



Lessons Moving Forward

- **The admin burden of prevailing wage verification works best if budgeted in by the public program and managed by the program implementer.**
 - Less successful if managed by the installing contractor or homeowner.
- **Aggregating demand through a direct install program has several win-wins:**
 - Minimized paperwork, fixed pricing and pay transparency for the customer
 - Guaranteed project demand and access to family-supporting jobs for partner contractors
 - However, it utilizes a smaller pool of contractors.
- **A residential decarbonization program can integrate high-roads standards, but it is challenging to build in support for firms where processes do not already exist.**
 - A workforce development program dedicated to supporting contractors to get to high-road standards would be needed.



Thank You!

Jillian Du

Single Family Program Manager,
BayREN

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RESOURCES FOR YOU

Review Resources - www.risingsunopp.org/policy/

- **Public Programs Best Practices Guide**
 - **Industry Analysis Paper Series**
 - **Job Quality & Labor Standards Toolkit**
-

Need technical assistance or are interested in next steps?
Let's connect!

CONTACT INFO - LET'S CONNECT!

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