

Rebuilding Together East Bay Network

City of Berkeley Just Transition Residential Electrification Pilot Program

A1. Braided Funding Report

Purpose and How to Use This Report

This report documents how the pilot braids multiple funding sources so a single home receives one complete scope of work. Use it to understand the funding picture at close-out, the braiding logic, the allowable-expense matrix, and the shared-cost allocation method, and to adapt the same approach to your own jurisdiction's available sources. Read it alongside the tiered aggregation framework (A4), which turns this funding model into per-home budgets, and Appendix II.C of the Final Report, which enumerates the delivered work and its cost home by home.

Reporting basis. Figures are stated as of close-out reporting (July 30, 2026). Leveraged amounts are working estimates. Reconciliation of the braided funding is completed at the end of August 2026, the single audit runs from September through December 2026, and audited figures are restated in the December 2026 financial addendum.

1. Funding at Close-Out

No single funding program covers a full home upgrade for a low-income household. Each available source (federal, state, local, and utility) was built for a narrow purpose such as lead removal, weatherization, accessibility, or efficiency, and pays for only part of what a home actually needs. The Just Transition pilot was designed around that reality: it braids several sources together so a single home can receive one complete scope of work.

The City of Berkeley Just Transition contract is the anchor. It carries a total budget of \$1,500,000 and funds program administration and pilot delivery. At close-out, \$1,190,209.02 of the contract was spent as direct funding, including \$90,209.02 reallocated from the administrative budget to electrify more homes, and \$309,790.98 carried out by administration. Around that anchor, RTEBN layers three primary US Department of Housing and Urban Development (HUD)-derived streams plus supplemental utility and community sources:

- Community Development Block Grants (CDBG): the base layer for home modification, weatherization, and remediation.
- Healthy Homes Production (HHP): health-driven remediation (combustion safety, ventilation, moisture, radon); also funds electrification where it fixes a documented hazard.
- Older Adult Home Modification Program (OAHMP): safety, fall-prevention, and accessibility work for older adults.
- Supplemental sources: California's Low-Income Home Energy Assistance Program (LIHEAP), PG&E's CARE and FERA programs, the Community Reinvestment Act (CRA), and AmeriCorps Seniors RSVP.
- Partner-coordinated leverage: PG&E's Energy Savings Assistance (ESA) program is delivered by partner agencies, and GRID Alternatives delivers solar and battery installations. Rather than billing these through RTEBN, the program schedules its work alongside those partners so their measures complement the pilot scope.

These streams run across RTEBN's whole portfolio. As one organization-wide measure of scale, HHP disbursements to RTEBN during the pilot period totaled roughly \$186,776 across about twenty households. The braid figures in Section 5 are narrower: they state only the dollars attributed to pilot homes, which is why the pilot-attributed HHP figure is smaller than the organization-wide one. Over the two years, more than 13 pilot homes carried at least one additional direct funding braid beyond the anchor contract.

2. How the Funding Is Leveraged

The braiding strategy was chosen for three reasons. First, these were, until recently, relatively stable federal sources directed at modifications for low-income households, which gives the program a consistent base to build upon. Second, because each source is individually inadequate to complete a holistic scope, the program continually layers additional funding to reach a finished home. Third, by weaving multiple funding sources through one streamlined process and program, the model maximizes the benefits, efficiency, and resources reaching a recipient who could not otherwise achieve these home improvements without a liaison providing guidance from start to finish.

The braiding logic

CDBG lays the base layer of funding required to perform home modifications. On top of that base, the program brings in HHP and OAHMP for the health, safety, and accessibility measures those programs allow. Where PG&E's Energy Savings Assistance (ESA) program is active, RTEBN coordinates with the partner agencies that deliver it and schedules its own work alongside theirs, so efficiency and electrification measures get completed without duplicating cost. Where a home qualifies for solar and storage, GRID Alternatives delivers that scope on the same coordination model. CRA dollars, reinvested by banks into qualifying communities, provide a further layer where eligible. The result is a single coordinated scope of work in a home that no individual program could have funded alone.

The funding hierarchy in practice ran health-first: the largest share of the braided dollars came through health and home-access programs, with housing preservation funds close behind. That ordering reflects the program's resident-centric design, in which electrification work frequently doubled as hazard remediation, code-citation resolution, or fall prevention.

Controlling cost through in-house labor

Because much of the cost in weatherization and electrification work is labor rather than materials, RTEBN concentrates cost centers in its areas of in-house expertise. Performing installation and modification work directly, rather than subcontracting, gives the program more control over its largest variable cost and allows labor to be allocated cleanly across the funding sources that allow it.

Resilience through diversification

Diversifying funding also hedges against volatility. If the program secures some sources in a given year but not others, the remaining streams sustain delivery, so the program is never dependent on a single source. This resilience proved essential during the pilot: disbursement of the federal Inflation Reduction Act funds the program had watched was paused by executive order in January 2025, and much of the underlying funding was rescinded by Congress that July, while HUD Healthy Homes initiatives came under threat of reduction. The central insight of the pilot stands: no single funding source can support the layered needs of low-income electrification and health interventions, and long-term policy stability is as essential as diversification.

3. The Shared-Cost Allocation Method

The mechanism that makes braiding work in practice is a shared-cost allocation built on an allowable-expense matrix. The method proceeds in four steps:

- Step 1, Map allowable expenses. For each funding source, list what the program rules permit (for example, HHP requires each measure to tie to a documented health or safety hazard, and at least 65 percent of the award must be spent on direct identification and remediation; CDBG allows weatherization and modification; OAHMP allows accessibility and fall-prevention work).
- Step 2, Build the matrix against Just Transition (JT) allowable expenses. Place each program's allowable categories against the Just Transition contract's allowable expense categories to identify where they overlap and where each program is the eligible payer for a given measure.
- Step 3, Assign each line item to its best-fit source. For a household scope of work, allocate each measure to the funding source whose rules it satisfies, placing health-hazard measures on HHP, accessibility on OAHMP, base modification and weatherization on CDBG, and efficiency measures on the utility-coordinated work. Avoid double-counting any single cost or claiming prohibited leverage (for example, DOE Weatherization Assistance Program funds cannot be counted as leverage under the HHP NOFO).
- Step 4, Allocate genuinely shared costs proportionally. Where a cost legitimately serves more than one program's purpose (such as the comprehensive assessment, certain labor, or balanced ventilation that addresses both moisture and efficiency), split it across the contributing sources on a documented, defensible basis and record the allocation in the accrual ledger.

This matrix-driven approach lets the program document, line item by line item, how each source contributes to a complete scope of work, and it underpins the funding status summary in Section 5. The same discipline extends to costs shared across homes rather than across sources: permitting, PG&E applications, and appliance purchasing were carried as shared direct-cost lines, enumerated in Appendix II.C of the Final Report.

Funding source	Health-hazard remediation	Ventilation	Weatherization	Electrification	Accessibility	Assessment and labor
Just Transition (anchor)			✓	✓		✓
CDBG	✓	✓	✓	✓	✓	✓
Healthy Homes (HHP)	✓	✓	✓	✓		✓
OAHMP					✓	✓
LIHEAP			✓	✓		
ESA (partner-delivered)			✓	✓		
Solar and battery (GRID, partner-delivered)				✓		
CRA						✓

Figure 1. Allowable-Expense Matrix. Each mark shows where a funding source is permitted to pay for a given measure type. The Just Transition contract (top row) sets the program's allowable expenses; leveraged sources are braided in where their allowable expenses align with the work JT needs done. The marks indicate eligibility, not sufficiency: because each source provides limited dollars, measures are layered across sources to fully fund the work.

Read it this way: the Just Transition contract funds efficiency, electrification, weatherization, and shared assessment and labor. The leveraged sources fill the gaps JT does not cover: CDBG and HHP carry health-driven remediation, OAHMP covers accessibility, and LIHEAP, ESA-coordinated, and solar work reinforce efficiency and generation.

4. How Shared Costs Are Reduced in Practice

The Just Transition contract requires pre-qualified contractors paid prevailing wage, which raises the per-home cost of the work. The braiding model offsets that in two practical ways.

First, the program uses other funding sources to pay RTEBN to enter homes and standardize access and site set-up. Because that mobilization is covered by another source, the Just Transition scope does not carry the full cost of reaching the home and preparing the site.

Second, the program stacks scopes onto existing site visits. When a contractor is already in a home for an outside project, RTEBN adds the relevant Just Transition scope to that same visit. Even when the added scope costs RTEBN more in direct labor, it removes a separate site visit and a separate round of construction administration, so the all-in total comes in lower than it would if RTEBN mobilized to the home on its own.

5. Funding Status by Source at Close-Out

This table states each source's role in the braid and the amount attributed to pilot homes at close-out. It matches the funding stack in Section II.1.1 of the Final Report; the two documents state identical figures. Leveraged amounts are working estimates until the December 2026 financial addendum restates them from the audited record.

Funding source	Role in the braid	Amount at close-out
Just Transition (City of Berkeley)	Anchor funding: administration and pilot delivery	\$1,500,000 (\$1,190,209.02 direct, including \$90,209.02 reallocated from administration; \$309,790.98 administration)
Healthy Homes (HHP)	Health-driven remediation braided into pilot homes	\$36,000
OAHMP	Older-adult safety, fall prevention, accessibility	\$30,000
Rebates (California Energy Smart Homes, CESH)	Electrification incentives, recovered post-installation	\$5,800
PG&E ESA (partner-delivered)	Efficiency and electrification measures delivered by partner agencies, valued at program approved rates	\$27,675
Solar and battery (GRID Alternatives, partner-delivered)	Solar and storage at two pilot homes (Homes 01 and 03)	\$64,000
Total leveraged beyond the anchor		\$163,475

The braid in a single home

Appendix II.C of the Final Report enumerates the braid home by home; two examples show the mechanics. At Home 04, the Just Transition contract funded one dedicated circuit, roughly \$2,955 of direct funding, while the ESA program's partner agency delivered the home's HVAC, heat pump water heater, and main panel upgrade, a scope valued at \$27,675 at program approved rates. The household received a complete electrification for a fraction of the anchor contract's usual per-home cost. At the four pilot-within-a-pilot homes, \$162,582.74 of Just Transition direct funding braided with health and home-access dollars, and with \$64,000 of partner-delivered solar and battery at Homes 01 and 03; one of those homes was paid for by five separate funding sources working together.

6. Rebate Programs

Rebate programs, including the California Energy Smart Homes (CESH) program and TECH Clean California's HEEHRA layer, were part of the original braiding strategy as a layer to help offset electrification and efficiency costs. The design assumed rebates and incentives would return 6 to 8 percent of the program's direct costs.

In practice, the program was not able to fully realize this layer. Of the 5 rebates applied for across 4 homes, one was realized during the pilot period: a \$5,800 claim approved through the CESH program on the fully electrified pilot-within-a-pilot home, where complete documentation had been captured at close-out. That is a return of under half of one percent. The federal rebate programs never became available in time, and the programs that did operate carried eligibility rules, documentation requirements, and reimbursement timelines written for market-rate retrofit customers rather than for a no-cost program advancing payment to small contractors.

Lesson learned. Treat rebates as upside rather than baseline, in the same spirit as the federal layers of the braid. Assign the reservation and claims work to a named role with time budgeted for it. Capture nameplate data, invoices, and completion documentation at every close-out as a standing requirement, because some claim windows open only after a project has ended. And where a rebate program's terms conflict with serving low-income households, say so to the program's administrators; eligibility rules are policy choices, and public comment is one of the few tools an implementer has to change them.

7. Reconciliation and Next Steps

This report is submitted at close-out on the working figures stated above. Reconciliation of the braided funding completes at the end of August 2026; the single audit runs from September through December 2026; and the December 2026 financial addendum restates the funding status table from the audited record. The household-level braid promised in earlier drafts is now published as Appendix II.C of the Final Report, and the forward-looking funding strategy, including the federal conditions that reshaped the rebate and IRA layers, is treated in Sections II.1.1 and II.1.2 of the Final Report.

This report is intended to be replicable: the allowable-expense matrix and shared-cost allocation method in Section 3 are written so another public agency can adapt the same approach to braid its own available funding sources.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A2. Eligibility Criteria and Intake Screening

Purpose and How to Use This Document

This document sets the eligibility and intake screening standard that RTEBN took for the Just Transition Electrification Pilot Program. It complements A1, the Braided Funding Report, and Step 1 of the Contractor Onboarding Playbook, which asks the administrator to reconcile eligibility across every braided funding source before a household is accepted into the program.

The City of Berkeley relied on RTEBN to conduct the income verification for its Just Transition pilot program, which itself only required that a household earn 120 percent of Area Median Income (AMI) or below. But screening every applicant against that threshold alone would forfeit potential braided and leveraged funding sources. For example, leveraged sources described in A1 carry a stricter 80 percent AMI limit and a heavier documentation burden. A household that only clears the 120 percent AMI threshold cannot be paired with those sources, which narrows that household's braid down to the Just Transition contract alone.

This packet follows the path that RTEBN took in approach, and directs intake staff to screen every applicant to the strictest standard in the braid, 80 percent AMI, and to collect full income documentation for every adult household member at intake. Applicants who clear the strict standard remain eligible for every source in the braid and are of the highest priority to enroll in the program. They are followed by applicants who fall between 80 and 120 percent AMI and are eligible for Just Transition funding, but have a narrower set of funding sources to optimize.

1. The Income Standard

Income eligibility is based on gross annual household income, measured against HUD Area Median Income (AMI) limits for the county in which the home is located. Two thresholds are in play:

- Just Transition anchor threshold: 120 percent of AMI or below.
- CDBG and other HUD-derived leverage thresholds: 80 percent of AMI or below (the “low-income” limit).

The table below reproduces the 80 percent AMI figures currently used for the main program application (as of 202X), alongside an approximate 120 percent figure, calculated as 1.5 times the 80 percent limit. Confirm current-year HUD AMI figures for your county before publishing this table, since HUD updates these limits annually.

Household Size	80% AMI (CDBG)	120% AMI (Just Transition)
1	\$95,050	~\$142,575

Household Size	80% AMI (CDBG)	120% AMI (Just Transition)
2	\$108,600	~\$162,900
3	\$122,200	~\$183,300
4	\$135,750	~\$203,625
5	\$146,650	~\$219,975
6	\$157,500	~\$236,250

Screen every applicant against the 80 percent column, not the 120 percent column, regardless of which individual program will ultimately fund the work in that home.

2. Why the Program Screens to the Stricter Standard

The braiding strategy described in A1 only works if a household qualifies for more than one funding source at once. Screening to the highest available threshold (120 percent AMI through Just Transition) is the most accessible and fastest way to approve an applicant, but it also caps what the administrator can braid around that home. A household above 80 percent AMI may only receive funding through Just Transition and cannot anchor other programs.

However, screening every applicant to the 80 percent AMI standard, and collecting the full income documentation that standard requires, keeps every qualifying household eligible for the full braid. The stricter standard costs more staff time at intake. It buys back that time, and more, in the additional dollars each qualifying home can draw on.

From the field. RTEBN staffed assessments with energy specialists alongside clinicians and Certified Aging-in-Place Specialist (CAPS)-certified home repair technicians, which is what let the program favor bundles with dual health outcomes (see A1). An administrator standing up this tool should decide up front which trades and clinical disciplines need to be represented on an assessment visit, since the instrument asks a single assessor to judge electrical, structural, health, and mobility conditions in one pass.

3. Documentation Required at Intake

The administrator should collect the following at intake for every applicant household. This list is drawn from the program's Master Application and its completion checklist, and reflects the documentation burden of the 80 percent AMI standard rather than the lighter documentation a 120-percent-only screen would require.

Document	Applies To	Notes
Government-issued photo ID	Applicant and co-applicant	Driver's license or state ID.
Income verification for every household member 18+	All adult household members residing at the property	Pay stubs, Social Security/pension award letters, or full federal tax returns; a signed Affidavit of Zero Earned Income for anyone with no income.
Most recent month's bank statement(s)	All adult household members	Required in addition to whichever income document above is used.
Proof of home ownership	Applicant (and any co-owners on title)	Deed or title; administrator may verify with the County Assessor if paperwork is unavailable.
Asset documentation	All adult household members	Two most recent bank statements if combined earned interest exceeds \$5,000.
Signed Homeowner Agreement and Release from Liability	All individuals on title, plus all residents including renters	Confirms eligibility, scope-of-work process, and consent to share information with braided-funding partners.

Every adult household member (18 or older) who resides at the property as their primary residence must provide income documentation, including household members who are not on the property title and are not the applicant. A resident with no income must sign an affidavit of zero earned income rather than being omitted from the file.

4. Other Eligibility Criteria

Income is the first screen but not the only one. Confirm each of the following before a household is accepted:

- **Ownership and occupancy:** the applicant must own and live in the home. A mortgage or reverse mortgage is acceptable. Renters are only eligible where a specific program (for example, Alameda) extends eligibility to renters; confirm this exception before screening a renter household.
- **Service area:** confirm the home sits within the jurisdictions the pilot serves, and check any city-specific exclusions (for example, the Safe at Home program's exclusion of certain Contra Costa County cities) before scheduling an assessment.

- **Program-specific criteria:** OAHMP, in particular, layers additional criteria on top of the income and ownership screen, including county of residence and, where relevant, age or disability status tied to fall-prevention and accessibility work. Confirm the applicant meets every layered program's specific criteria, not just the Just Transition baseline, before counting that source as part of the home's braid.
- **Household composition and title:** every individual legally listed on title must be identified and must sign the Homeowner Agreement and Release from Liability, even if they do not reside in the home. Every resident, including renters, must also sign.
- **Prior program history:** record whether the household has applied before and whether the home has previously received work from Rebuilding Together, Habitat for Humanity, or a related agency, since prior health and safety upgrades can make a home a stronger electrification candidate (see the From the Field note in A2's companion playbook, Step 2).

5. The Intake Screening Workflow

- **Step 1.** Take the initial application and confirm the household falls within the service area and meets the ownership/occupancy requirement.
- **Step 2.** Collect income documentation for every adult household member against the 80 percent AMI standard, plus the most recent month's bank statements and any required asset documentation.
- **Step 3.** Verify proof of ownership, or check the box authorizing RTEBN to confirm ownership with the County Assessor's office.
- **Step 4.** Determine which threshold the household actually clears: 80 percent AMI (full braid eligible) or between 80 and 120 percent AMI (Just Transition anchor and matching sources only).
- **Step 5.** Screen against any program-specific add-on criteria (OAHMP age/disability criteria, city-specific exclusions, and so on) to confirm which leveraged sources actually apply to this household.
- **Step 6.** Route eligible households to the comprehensive home assessment (A3), where the funding matrix from A1 is applied to the home's specific conditions.

Households that do not clear the 80 percent standard are not disqualified from the pilot; they remain eligible for the Just Transition anchor and any source with a matching or higher income limit. Flag these households at intake so the assessment and funding-matrix steps in A3 do not mistakenly assume access to the full braid.

Supporting Documents

- Master Application for Home Repairs (intake form and income/asset schedules).
- Homeowner Agreement (A12).
- Braided Funding Report (A1), Part 3, for the allowable-expense matrix these thresholds feed into.
- Comprehensive Assessment and Scope-of-Work Packets (A3), for the next step after an eligible household is confirmed.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A3. Comprehensive Assessment and Scope-of-Work Packets

Purpose and How to Use This Packet

This packet bundles the two instruments the program administrator and assessor carry through the life of a home's scope: a Comprehensive Home Assessment Tool that scores a home's health, safety, accessibility, affordability, and electrification readiness at intake, and a Scope of Work and Change Order template that turns those findings into a priced, trackable scope from first estimate through final invoice.

The two tools attach to different points in the playbook. The assessment tool runs once per home during the landscape scan in Section 1, Step 2 of the Contractor Onboarding Playbook, and again wherever an assessor is present at intake, building the program-wide dataset that groups homes into tiers. The scope-of-work template opens in Section 2, Step 3 of the Contractor Onboarding Playbook, when a contractor validates the pre-populated scope on site, and stays open through Steps 5 through 7 of the Contractor Onboarding Playbook, carrying the same line items from projected estimate to change order to final invoice. The point values, income bands, and line-item categories below are the pilot's own.

1. The Comprehensive Home Assessment Tool

Use this tool at intake to produce a single, comparable score for every candidate home, across four weighted domains plus a photo log and sign-off. One assessor visit generates the data the landscape scan in Section 1, Step 2 of the Contractor Onboarding Playbook needs to tier homes and prioritize the intervention sets that carry dual outcomes.

What It Captures

- Intake information: client name, property address, assessment date, assessor identity and license number, household income and size, and the income band the household falls under (a lower band typically opens more funding sources).
- Four scored domains, described below, each with its own point ceiling and priority thresholds.
- A composite summary that rolls the four domains into a single score out of 100.
- A photo and documentation log, tracked per electrification system.
- Attestations from the homeowner, contractor, and program manager confirming the record is accurate and the work meets program and code requirements.

Scoring Domains and Point Values

Domain	Max Points	What It Measures
A. Home Health	50	• Structural and safety conditions (25): foundation, roof, plumbing, electrical, and appliance condition.

Domain	Max Points	What It Measures
		- Indoor air quality and environmental health (20): ventilation, mold and moisture, combustion safety, filtration. - Health-relevant observations checklist (5): hazards flagged for follow-up.
B. Universal Mobility and Accessibility	30	- Interior mobility (15) - Exterior mobility (15): doorway access, trip hazards, lighting. - Optional resident functional assessment (5) - Note that the assessor should subtract the number of points from the total in this category. This is because the higher the max score, the less of a priority the home's health to address. The optional assessment should demonstrate that if a homeowner marks off additional medical needs, they highlight a need that should be addressed.
C. Affordability	5	Utility burden as a share of monthly income, plus enrollment in rate-assistance programs such as CARE/FERA, LIHEAP, or Medical Baseline.
D. Electrification Readiness	15	Panel capacity and upgrade needs; fuel source and siting for the water heater, HVAC, and cooking appliance; decluttering, weatherization, and load-management needs.
Composite	100	Sum of the four domains, banded into a recommended program action.

Scoring and Priority Bands

Each line item is scored 1 to 5, where 1 is the worst condition observed and 5 is the best. Domains A and B each carry their own priority threshold (for example, a Home Health score of 35 or higher is lower priority than a score under 20), so a home can surface as urgent on one domain even if its composite score looks moderate.

The composite score bands into four tiers that set the recommended next action:

Band	Range	Interpretation	Recommended Action
Excellent	85–100%	Home meets or exceeds program standards	Monitor; document as a model outcome
Good	70–84%	Minor gaps; most needs	Complete remaining items

Band	Range	Interpretation	Recommended Action
		addressed	before close
Fair	50–69%	Moderate unmet need; some risk	Prioritize in current or next cycle
Poor	<50%	Significant unmet need or safety concern	Flag high priority; escalate

Photo Log and Attestations

The tool closes with a per-system photo log, before and after, for the electrical panel, water heater, HVAC or heat pump, induction stove, range hood, weatherization measures, and electric dryer, each with a checkbox confirming submission. A final attestation block has the homeowner, contractor, and program manager sign off that the record is accurate and the completed work meets program and code requirements. Keeping this log on the same instrument that scored the home at intake is what lets close-out reconcile assessed conditions against completed work without cross-referencing a separate file.

From the field. RTEBN staffed assessments with energy specialists alongside clinicians and Certified Aging-in-Place Specialist (CAPS)-certified home repair technicians, which is what let the program favor bundles with dual health outcomes (see A1). An administrator standing up this tool should decide up front which trades and clinical disciplines need to be represented on an assessment visit, since the instrument asks a single assessor to judge electrical, structural, health, and mobility conditions in one pass.

Note on adapting this tool

The income bands, disability flag, and rate-assistance checkboxes are written to this pilot's braided funding sources. Anchor this packet to create a tool that reflects your program's eligibility criteria based on A1 and A2 . Set point weights and priority thresholds to match which domains your own contract and leveraged funds are actually equipped to remedy.

2. The Scope of Work and Change Order Template (A11)

Where the assessment tool scores a home once, the scope-of-work template is a living document. It carries a single home's priced scope from the projected estimate a contractor submits, through any change order, to the final invoice billed to the funding agency.

What It Captures

- Header fields: homeowner name and address, the agency billed (in the pilot, the City of Berkeley), invoice date, and permit number.
- Two parallel line-item tables, one for the subcontracted repair scope and one labeled HRT/TEAM for work performed in-house, each listing repair type and description, unit cost, units, and a line total that rolls up to a Budget Total.

- A change-order convention: line items on the final scope of work that differ from the initial estimate are highlighted, with the reason for the change documented in a linked Change Order record.

The two budget tables (subcontracted scope and in-house HRT/TEAM scope) are structured identically, so pricing from either side rolls up the same way into the invoice sent to the funding agency.

Fields for permitting purposes

A companion contact and photo-tracking sheet keeps the assessor and licensed-professional details (name, company, CSLB number, permit submission date, business license number) attached to the same home record, alongside per-system before, work-in-progress, and after photo checkboxes for the panel, water heater, HVAC, stove, range hood, weatherization, and dryer. Using the same system list as the assessment tool's photo log keeps the two documents aligned on what gets tracked from first visit to close-out.

Lesson learned. Keep the highlighted-row convention even when it feels redundant with a narrative change-order memo. A reviewer reconciling the final invoice against the original estimate should be able to see, at the line-item level, exactly what changed and why, without reading a separate explanation document first.

3. Combining Both Tools

The two instruments hand off to each other at each stage of delivery:

- Landscape scan (Section 1, Step 2 of the Contractor Onboarding Playbook): the assessment tool, run across the full candidate pool, builds the program-wide dataset that tiers homes and sets the aggregation framework.
- Site visit and scope validation (Section 2, Step 3 of the Contractor Onboarding Playbook): the visiting contractor turns assessment findings into the first projected scope of work.
- Aggregation and permitting (Section 2, Steps 5 and 6 of the Contractor Onboarding Playbook): the scope-of-work template's line items feed the aggregated, bid-sheet-priced work orders and their permitting map.
- Close-out (Section 2, Step 7 of the Contractor Onboarding Playbook): the photo log and attestations in both documents, together with the change-order highlighting, let the administrator reconcile completed work against the original assessment and scope before releasing retention.

This packet's point values, income bands, and line-item categories belong to this pilot. The scoring structure and the assessment-to-scope-to-invoice pipeline are written so another administrator can carry over the shape of the tool while re-keying it to local funding rules, code requirements, and trade mix.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A4. Tiered Aggregation Framework

Purpose and How to Use This Packet

The tiered aggregation framework is the tool that turns individual home assessments into a program-wide budget and delivery plan. Rather than scoping and pricing every home from scratch, the program groups homes into a small number of standard “tiers,” each built from a repeatable bundle of measures at a known cost. This lets an administrator answer two questions before a single contractor is mobilized: how many homes can the available budget realistically serve, and what mix of contractors and trades will that require.

This document reformats the program's first tiered-cost submission (July 2025) into a step-by-step guide so another jurisdiction or program administrator can build the same framework for its own budget, housing stock, and measure list. Use it alongside the landscape scan (Step 2 of the Contractor Onboarding Playbook) and the comprehensive assessment templates (A3): the scan tells you what each home needs, and the framework in this document turns that need into a costed, schedulable unit of work.

1. What the Tiered Framework Does

A tiered framework bundles scopes of work by project type, complexity, and potential energy and health impact. Each tier is a fixed combination of measures, priced as a package, so that a home assigned to a tier has a known cost and a known scope before a contractor ever sets foot on site.

This gives the program two things it needs from day one. First, it lets the administrator determine the total number of homes the project will serve, simply by dividing the available budget by each tier's cost. Second, it gives the program a baseline it can adjust: as real project costs, funding levels, or measure lists change, the tiers are recalculated rather than rebuilt, and the homes-served projection updates with them.

2. How the Tiers Were Built

Build each tier from a pool of completed home assessments. In the pilot, energy specialists worked alongside clinicians and CAPS-certified home repair technicians to assess 44 homes. The resulting tiers reflect both energy measures and the non-energy health benefits of electrification.

From that assessment pool, group homes by the combination of measures they actually need, from the lightest intervention (device-level and electrical optimization) to the deepest (panel upgrades, ducting, weatherization, and window replacement). Cost each resulting bundle using the anticipated contractor sequencing and braided funding, not just the raw price of materials and labor, since the same measure can cost the program more or less depending on which funding source pays for it and which contractor is already on site.

From the field. RTEBN set a target number of homes, weighed it against the total program funding, and turned 44 completed assessments into the three tiers below. Dividing the budget by each tier's cost gives the number of homes that tier can reach, which is what let the program commit to a homes-served projection for the City of Berkeley before contractor mobilization began.

3. Tier Structure (Preliminary Cost Ranges)

The program is piloting three draft tiers. Costs and homes-served figures below are preliminary and were current as of the first submission in July 2025; treat them as a starting structure to recast against your own funding, prevailing wage, and measure list, not as fixed figures.

Tier	Estimated Cost	Homes Served	Included Measures
Tier 1	~\$18,440	Up to 44 homes	Electrical optimization & device(s), 50-gal. HP water heater, and HP heating/cooling (DIY) - 3-ton
Tier 2	~\$23,057	Up to 35 homes	Panel upgrade & circuit install, 40-gal. HP water heater, HP heating/cooling (DIY), and Crawl space insulation
Tier 3	~\$39,028	Up to 21 homes	Panel upgrade & circuit install, 40-gal. HP water heater, HP heating/cooling (DIY) & ducting, 24-inch induction range, Range hood (30-inch), Crawl space insulation, Weatherization (doors, floors, windows), and 3 new windows

These tiers represent scalable approaches built from typical combinations of core electrification measures: heat pump HVAC, heat pump water heaters, electrical panel upgrades, and ventilation or weatherization enhancements. A given jurisdiction's tiers will differ in cost and content, but the same logic, that a small number of standard bundles can stand in for individualized scoping, holds regardless of the measures involved.

4. Scope Triggers for Tier Assignment

To keep tier assignment clear and consistent across assessors, use a defined set of “scope triggers” tied to property conditions, safety needs, and resident priorities. These triggers, drawn from the assessment, determine the most appropriate tier for a given home and give contractors a consistent basis for estimating time, labor, and material needs. They include, but are not limited to:

- Existing equipment nearing end of life
- Use of alternative, more expensive energy devices, such as space heaters or an oven used for heating
- Health and safety hazards, such as inadequate heating or mold risk
- Overloaded or outdated electrical infrastructure
- Structural readiness for deeper electrification measures
- Confirmed household interest in full electrification

Apply these triggers during the same site visit that develops the household's scope of work (Section II, Step 3 of the Contractor Onboarding Playbook), so tier assignment and scope validation happen together rather than as separate steps.

5. Using and Updating This Framework

Treat the tier structure as a living budget tool, not a one-time calculation. Revisit it whenever the underlying assumptions change:

- As field data accrues: Update each tier's cost as real contractor bids, sequencing outcomes, and material prices come in, and recalculate the homes-served projection against the current budget.
- As funding shifts: Because tier costs already reflect the braided funding mix (see the Braided Funding Report, A1), a change in any one funding source's availability should trigger a re-costing of every tier it touches, not just an adjustment to the total budget.
- As the measure list evolves: If field experience shows a tier is consistently over- or under-scoped, split, merge, or redefine it rather than forcing every home into a tier that no longer fits.

The tiered framework connects directly to two other steps in the playbook: it is the basis for the aggregation and sequencing workbook (A13), which groups tiered homes by contractor, geography, and intervention type; and it is the reference point at close-out (Section II, Step 7 of the Contractor Onboarding Playbook) for confirming that the program's actual homes-served total tracked the original tier-based projection.

Documentation. The source tier costing and the full assessment pool are documented in the tiered aggregation workbook. Supporting documents: comprehensive assessment and scope-of-work templates (A3); aggregation and sequencing workbook (A13).

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A5. Job Quality Standards and Union Signatory Onboarding Pathway with Regional Trade Contacts

Purpose and How to Use This Document

The Just Transition Electrification Pilot Program was designed not only to decarbonize and electrify homes, but also to demonstrate how public climate investments can support high-quality careers, workforce development, and contractor capacity-building. As part of that effort, the program incorporated labor standards intended to promote safe, skilled, and family-sustaining construction careers while creating opportunities for contractors to participate in high-road construction markets.

Labor standards required under the pilot such as prevailing wages align with the standards already established through collectively bargained agreements in the union Building Trades. As a result, contractors participating in the pilot may find that they are already operating in a manner similar to union signatory contractors.

This document explains the labor standards used in the pilot, outlines the pathway for contractors interested in becoming union signatory contractors, and provides contact information and resources for contractors seeking additional information about high-road participation opportunities.

1. Why Labor Standards Were Included in the Pilot

The City of Berkeley designed the Just Transition Electrification Pilot Program to test whether residential decarbonization and electrification projects could simultaneously advance climate goals, workforce development goals, and economic opportunity goals.

Labor standards, based on the High Road Training Partnership (H RTP) Bay Area Residential Decarbonization Program, were incorporated into the program to support:

- High-quality installation work and long-term building performance
- Workforce stability and retention
- Family-sustaining careers for workers
- Fair competition among contractors
- Utilization of state-certified apprenticeship and workforce training systems
- Expansion of contractor capacity capable of delivering decarbonization and electrification work in the residential market

The program recognized that long-term decarbonization goals require both qualified contractors and a skilled workforce capable of performing increasingly complex decarbonization work.

2. Job Quality Standards Used in the Pilot

Participating contractors were required to comply with labor standards designed to support high-quality work and workforce development outcomes.

Labor Standard	Labor Standard Purpose
Prevailing Wage	Supports family-sustaining wages and fair competition
Capacity Building	Builds future workforce capacity
Employee Medical Benefits	Supports workforce retention and worker well-being
Retirement	Supports long-term economic security and workforce retention
Focused Hiring	Promotes opportunities for local and disadvantaged communities
Wage Management and Recordkeeping	Promotes accountability and transparency

For electrical work, contractors were required to maintain an active California C-10 Contractor License. For HVAC work, contractors were required to maintain an active California C-20 Contractor License.

3. Why Contractors Choose to Become Union Signatory

A signatory contractor has signed a collective bargaining agreement, often called a Master Labor Agreement, with the local union for its trade. In doing so it agrees to pay prevailing wages, contribute to the union's healthcare benefit and pension funds, and follow the trade's apprenticeship and dispatch rules. Participation in the pilot did not require contractors to become union signatory contractors. However, several contractors expressed interest in learning more about the process.

Contractors choose to become union signatory for a variety of reasons.

Access to Larger Market Opportunities

Many federal, state, and local projects require or strongly incentivize the use of contractors operating under high-road labor standards. Signatory contractors are often well positioned to compete for these opportunities due to their natural compliance with these standards.

Access to Skilled Workforce Pipelines

Signatory contractors gain access to workers trained through state-certified apprenticeship programs and union hiring halls.

Workforce Flexibility

Through their access to a union hiring hall, signatory contractors can scale workforce capacity up or down as project demands change through established dispatch systems.

Business Growth and Industry Relationships

Signatory contractors gain access to contractor associations, industry networking opportunities, workforce training resources, and joint labor-management partnerships.

4. Can Small Contractors Become Union Signatory Contractors?

Yes. Many small contractors are signatory contractors, and many large signatory contractors began as small businesses and grew over time through participation in apprenticeship systems, joint labor-management partnerships, and public-sector construction markets.

Small businesses may also benefit from project labor agreements and procurement programs that encourage participation by local, small, and disadvantaged businesses.

5. The Union Signatory Onboarding Process

The process varies slightly by trade and union, but generally follows five steps.

Step 1. Meet with the Union Representative

Review the Master Labor Agreement (MLA) and discuss expectations, obligations, and operational requirements.

Step 2. Evaluate Financial Capacity

Review wage rates, benefit contributions, trust fund requirements, and administrative obligations.

Work with your accountant or bookkeeper to understand:

- Payroll costs
- Benefit contributions
- Bonding capacity requirements
- Financial assessments

Step 3. Meet with Your Workforce

Discuss how signatory participation may affect employees.

Some unions may evaluate worker skill levels to determine journey-level or apprenticeship placement.

Step 4. Visit the Apprenticeship Training Center

Contractors are encouraged to tour the Joint Apprenticeship Training Committee (JATC) facility to better understand workforce training systems and available resources.

Step 5. Execute the Agreement

Meet with the union representative to finalize and sign the Master Labor Agreement.

Contractors are encouraged to have legal counsel review the agreement prior to execution.

6. Regional Trade Contacts

Contractors interested in exploring signatory opportunities should contact the representative associated with their primary scope of work.

Trade	Organization	Contact	Title	Email
Electrical	IBEW Local 595	Jason Gumataotao	Lead Organizer	jasong@ibew595.org
Plumbing	UA Local 342	Tim Knight	Business Representative	timk@ua342.org
HVAC / Sheet Metal	SMART Local 104	Adam Masters	Business Representative	adamm@smw104.org
Laborers	LiUNA Local 304	Rafael Gonzalez	Field Representative	rgonzalez@liuna304.org
Carpentry	Carpenters Local 713	Tony Munoz	Business Representative	amunoz@nccrc.org

Program staff and workforce partners can also assist with introductions and referrals.

From the field. Contractors rarely decide against becoming signatory because of labor standards alone. More often, they are unfamiliar with the process, unsure how workforce systems operate, or uncertain whether enough future work exists to justify the transition.

The pilot demonstrated that when contractors are provided with clear information, direct access to union representatives, and visible market opportunities, many become interested in exploring high-road participation pathways. While few businesses make a major workforce transition during a short pilot project, creating those relationships and introducing contractors to apprenticeship and workforce systems can lay the groundwork for future participation in larger-scale electrification programs.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A6. Certified Payroll Form and Review Checklist

Purpose and How to Use This Packet

This document gives Program Administrators and their contractors a single, practical reference for certified payroll compliance under high-road labor standards. It draws on the program's experience administering certified payroll for Alameda County prevailing-wage work and is written so another jurisdiction can adapt it to its own county and trades.

Sections 1 through 4 explain how to find and apply the correct wage determination. Sections 5 through 7 describe what contractors submit each week and how the Program Administrator reviews it before releasing payment. Section 8 lists the misclassification errors the pilot saw most often, and Section 9 confirms that a contractor can complete certified payroll correctly without specialized software. Blank, reproducible forms (a Statement of Compliance and a simplified WH-347 report) are included at the end of this document.

1. Why Certified Payroll Matters

Every contractor working under the Just Transition Job Quality Standards (A5) must pay prevailing wage and submit certified payroll each week, consistent with California Labor Code section 1776. Certified payroll is the record that proves a worker was paid correctly for the classification of work performed. It protects workers, and it is the Program Administrator's primary evidence of labor compliance before any payment is released. The standard itself is set out in the Job Quality Standards (A5); this document explains how a contractor meets it in practice, week to week.

2. Finding the Correct DIR Wage and Benefit Rate

The California Department of Industrial Relations (DIR) publishes the official prevailing wage rate for every county and trade, including the required base hourly rate and the required employer payments for benefits.

- Visit the DIR prevailing wage determination page and select the current determination cycle.
- Open the determination for your county (for the pilot, Alameda County, coded ALA).
- Confirm the determination's issue and expiration dates before applying it. Rates update on a regular cycle, and an expired determination should not be used for a new pay period.

3. Assigning the Correct Classification Code

Each trade classification on the DIR determination carries a code tied to a specific craft (for example, ALA-2025-1-xxx). To assign it correctly:

- Match the trade title on the determination to the work actually performed on site, not the worker's job title.

- Use the code that corresponds to the on-site task. If a worker performs more than one type of work in a day, apply the code for each type separately and report the hours under each.
- Reassign the classification whenever the nature of the task changes, even for the same worker within the same week.

4. Understanding Base Wage and Employer Payments

Each classification lists two hourly amounts that together set the compliance floor:

- **Base Rate:** the straight-time hourly wage.
- **Employer Payments:** the combined hourly fringe benefit amount, covering Health and Welfare, pension, training, vacation, and other approved benefits. DIR does not publish Health and Welfare as a stand-alone figure; it is folded into this combined Employer Payments column.

Total compensation for the hour must meet or exceed the base rate plus the full employer payment amount. If a contractor does not offer a bonafide benefit plan, the full fringe amount must be paid directly to the worker as cash wages, clearly identified on the certified payroll as cash-in-lieu.

Component	Amount
Basic Hourly Rate	\$39.13
Health & Welfare	\$15.92
Pension	\$12.59
Training	\$1.27
Other (Industry Promotion Fund)	\$0.15
Total Employer Payments	\$29.93
Total Minimum Hourly Package	\$69.06

Figure 1. Sample Hourly Wage Calculation: This is the minimum rate that must appear on certified payroll for every hour worked under this classification. The base rate is reported as taxable wages; employer payments go to the appropriate fringe benefit funds or, if the contractor does not participate in those funds, are paid as cash in lieu of benefits.

An average regional health-plan premium, such as the Covered California Silver plan rate, can help a contractor estimate its own internal benefit costs when bidding, but it is never a substitute for the official DIR Health and Welfare rate on certified payroll.

5. Apprentice Requirements

Apprentice rates may be used only for workers registered in a DIR-approved apprenticeship program.

- Verify registration through the DIR apprenticeship database before a worker's first day on the project.
- If a worker is not registered, report and pay that worker at the journeyworker rate for the classification, regardless of actual skill level.
- If the worker is registered, pay the correct apprentice step rate listed in the applicable determination, and report apprentice hours separately from journeyworker hours.
- Submit apprentice verification if requested, and keep proof of registration on file.

6. What Contractors Must Submit Each Payroll Cycle

Each weekly certified payroll submission must include:

- A certified payroll report (federal WH-347 or California A-1-131).
- A signed Statement of Compliance.
- Hours worked per day, per classification code.
- Base wages paid.
- Fringe benefits paid, or the cash-in-lieu amount.
- Any overtime, double-time, travel, or subsistence pay, and how it was calculated.

All hours submitted must reflect actual time worked on the project. No special- or second-shift rate should be reported unless the applicable trade determination specifically requires it.

7. How the Program Administrator Reviews and Verifies Payroll

Give contractors this checklist at onboarding so there are no surprises at payment. The Program Administrator runs the same review on every payroll period before releasing payment, confirming for each worker:

- Classification match: the code reported matches the work actually performed.
- Prevailing wage met: base rate, overtime rate, and fringe or cash-in-lieu meet or exceed the current DIR determination for that classification and county.
- Certified payroll form on file, with a signed Statement of Compliance.
- Payroll journal or pay stubs on file, as independent proof of what was actually paid.
- Timesheet on file, with overtime or premium pay calculated correctly.
- Site-check verification: an independent visit confirming the named workers were on site on the recorded date, reconciled against the payroll.

Supporting documents, such as timecards or pay stubs, may be requested at any point. The review is layered by design: the contractor self-certifies first, and the Program Administrator independently reconciles that certification against DIR rates, payroll records, and site verification, then logs and signs off on each period.

8. Common Misclassification Issues and How to Avoid Them

Issue	How to Avoid It
Wrong classification for the work performed	Match duties to the DIR trade description, not the job title. Reassign the code whenever tasks change.
All hours reported under a single classification	Break out hours by classification code and track daily tasks. Report installer and laborer time separately when both occur.
Apprentice rate used without registration	Verify registration in the DIR database before use. Pay the journeyworker rate if the worker is unregistered.
Fringe benefits or cash-in-lieu omitted	Confirm wages plus cash-in-lieu meet or exceed the required total hourly rate.
Travel, subsistence, holiday, or premium pay applied incorrectly	Review each classification's specific rules and document how special payments were calculated.
HVAC or mechanical work misclassified	Compare installation, sheet metal, duct fabrication, and controls work to their specific codes rather than one general HVAC code.
Skilled work reported as "Laborer"	Reserve the Laborer code for general laborer tasks only. Assign the appropriate craft classification to skilled work.
Incomplete or inaccurate documentation	Confirm every weekly report lists the correct codes, rates, fringe values, and hours before submission.

These are the errors the pilot encountered most often in contractor payroll. Reviewing them at onboarding, alongside the checklist in Section 7, heads off most compliance issues before they reach a payment cycle.

9. Completing Certified Payroll Without Third-Party Software

A contractor with only a few employees on a public-works task does not need a payroll company or specialized certified-payroll software to comply. Internal compliance requires only that the contractor:

- Pay the correct prevailing wage: the right DIR classification, the base hourly rate, and the full fringe amount, either into benefits or as cash-in-lieu.
- Track the hours of workers on the public-works project separately from any other work they perform.
- Complete the certified payroll report (A-1-131 or WH-347), by hand or by transferring figures from its normal payroll system.
- Submit the weekly Statement of Compliance, confirming prevailing wage was paid, no unlawful deductions were made, any apprentices are properly registered, and records are accurate and available.

- Keep all supporting documentation on hand for a DIR audit or program review: timesheets, pay stubs, payroll register, certified payroll report, and the signed Statement of Compliance.

There is no requirement that a contractor use a third-party payroll provider. Any system that can input the correct wage rates, track hours by classification, and produce a weekly payroll register alongside the required certified payroll form and Statement of Compliance is sufficient.

10. Supporting Forms

Blank, reproducible templates follow this section:

- Statement of Compliance (Certified Payroll Records)
- WH-347 Certified Payroll Report (simplified version)

Program Administrators in other jurisdictions may substitute their state's equivalent forms, such as California A-1-131, where applicable.

Statement of Compliance (Certified Payroll Records)

Project Name: _____

Project Address: _____

Contractor/Subcontractor: _____

Week Ending: _____

Payroll Number: _____

I, _____ (Name of signatory party)

in my position as _____ (Title)

with _____ (Company name), hereby state that:

1. The payroll for the above period is true, correct, and complete.
2. Each worker has been paid not less than the applicable prevailing wage rate for the classification of work performed, as determined by the California Department of Industrial Relations.
3. The wage rates, fringe benefits, cash payments made in lieu of fringe benefits, and overtime rates conform to the applicable prevailing wage determinations.
4. No rebates or deductions have been made either directly or indirectly from the full wages earned, except for permissible deductions as defined by law.
5. All apprentices listed on the payroll are registered in a California DIR-approved apprenticeship program, or no apprentices were employed during this payroll period.
6. All hours worked on this project have been recorded accurately for each employee.
7. The payroll records required by Labor Code section 1776 are maintained and will be made available for inspection or furnishing upon request.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on _____, at _____

Signature: _____

Printed Name: _____

Title: _____

Company: _____

Phone: _____

Email: _____

WH-347 Certified Payroll Report (Simplified)

Contractor or Subcontractor: _____

Address: _____

Payroll Number: _____ Week Ending: _____

Project Name: _____

Project or Contract Number: _____

1. Employee Information

For each employee working on the project this week, list: Name | Last 4 of SSN | Classification | DIR Code | Day-by-Day Hours | Total Hours

Employee 1: _____

Employee 2: _____

Employee 3: _____

(Add additional lines as needed)

2. Wage Information

List base rate, fringe rate or cash-in-lieu, and gross wages.

Employee 1: Base Rate: _____ Fringe or Cash-in-Lieu: _____ Gross Wages: _____

Employee 2: Base Rate: _____ Fringe or Cash-in-Lieu: _____ Gross Wages: _____

Employee 3: Base Rate: _____ Fringe or Cash-in-Lieu: _____ Gross Wages: _____

3. Deductions

List any lawful deductions taken: _____

4. Overtime and Premium Pay

Detail any overtime, double-time, travel pay, or subsistence: _____

5. Statement of Compliance (Required Weekly)

I certify that:

- The payroll for the above period is correct and complete.
- Each worker has been paid the correct prevailing wage for all hours worked.
- No rebates or unlawful deductions have been made.
- Apprentices (if any) are properly registered.
- Payroll records are available for review upon request.

Signature: _____

Name: _____

Title: _____

Date: _____

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A7. Pre-RFQ Information Packet: The RFQ and Blind Scoring Matrix Instructions

Purpose and How to Use This Packet

This appendix packages the three documents a program administrator needs to run an equitable contractor procurement: a pre-RFQ information packet released well before the formal solicitation, the Request for Qualifications (RFQ) itself, and the instructions for scoring responses blind. Each part below is adapted from the documents the pilot actually used, with program-specific names and dates replaced by placeholders so an adopting agency can fill in its own.

The three parts work as a sequence. The pre-RFQ packet opens a long runway: it tells contractors what is coming, what standards they will need to meet, and what help is available to meet them. The RFQ is the formal solicitation. The scoring instructions turn the responses into a ranked selection that favors demonstrated experience over polish.

The pre-RFP open period and one-on-one technical assistance

The pre-RFQ open period is, in our experience, the piece that makes the rest work. Small and emerging contractors rarely lose procurements on capability; they lose them on paperwork, unfamiliar labor standards, and short timelines. Publishing the program's requirements months before the RFQ, together with a self-assessment survey and an offer of one-on-one technical assistance, gives those firms time to close the gaps: registering with the state labor authority, setting up certified payroll, lining up apprentices, or documenting past work. During the open period the administrator and its workforce partners meet individually with interested firms, walk through the readiness levels, and build a support plan for each.

How Berkeley did it. The pilot released its pre-RFQ information packet in April 2025 and the formal RFQ in August 2025, an open period of roughly four months. The release circulated to a distribution list of over 400 contractors through a mix of trades council partners, union business agents, jurisdiction boards, and RTEBN contractor channels and email newsletter. Interested firms completed a readiness self-assessment, and the program team and its workforce partner held one-on-one pre-RFQ meetings with four firms. The RFQ drew eight qualifying applications, from which five contractors were selected and onboarded. Three of the five selected firms were minority- or women-owned.

Part 1. Pre-RFQ Information Packet (template)

Release this packet 3 to 6 months before the RFQ. It is explicitly not a solicitation; call it out,

Notice

This is NOT a formal Request for Qualifications. The following information is released ahead of a formal RFQ by [Administrator] to give contractors who are interested in participating in [Program Name] time to prepare, and to receive technical assistance in meeting the program's contractor requirements.

1. Program overview

[Program Name] is a direct installation program for residential electrification measures in existing affordable housing and/or for low-to-moderate income households [insert income eligibility, e.g., at or

below 120% of Area Median Income with a preference for below 80% AMI]. [Administrator] has been selected by [Funder/City] to implement the program.

Electrification upgrades are completed by pre-qualified licensed contractors who meet specific qualification and labor standards, so that the construction work provides equitable opportunities to workers. The program's goals include:

- Expand high-road workforce opportunities in the low-rise residential building sector by aggregating measures and buildings with similar opportunities.
- Advance economic opportunities for electrification contractors and workers, particularly BIPOC and women contractors and workers, through high-road project opportunities, labor standards, training, and inclusive recruitment pathways.
- Improve participating residents' health, home comfort, and energy affordability.
- Reduce in-home and community greenhouse gas emissions by converting gas systems to clean electricity.

2. Timeline and funding

Contractors accepted into the technical assistance track will have approximately [30-45] days from acceptance to achieve the required standards. The formal RFQ, including typical scopes of work for aggregated projects, is planned for release in [month]. The program anticipates contract awards in the range of \$[___] to \$[___] per scope of work; total implementation funding is up to \$[___] including labor, materials, equipment, and fees.

3. Qualifications and labor standards preview

To bid, contractors will need to verify compliance with the program's qualifications and labor standards. Firms that do not yet meet every requirement but seek to become high-road employers can request targeted technical support. In summary, the standards cover:

- Prevailing wage: all workers, including subcontractors' workers, paid according to the current county prevailing wage determination.
- Apprenticeship: use of registered apprenticeship programs or graduates of accredited pre-apprenticeship (MC3) programs.
- Medical benefits: a minimum employer-paid share of health coverage for full-time employees, or payment of the equivalent fringe amounts per the applicable wage determination.
- Retirement: a retirement savings offering meeting at least the state auto-enrollment standard, or payment of the equivalent fringe amounts.
- Focused hiring: documented efforts to expand access for priority workers (defined in the RFQ).
- Record keeping: weekly certified payroll and wage oversight compliance as directed by the administrator.

4. Contractor pathways and readiness levels

The program supports both union and non-union firms, and supports firms interested in exploring the union signatory pathway through its workforce development partner [Partner]. Interested contractors complete a self-assessment survey that places them in one of three readiness levels, each with its own support and expectations:

Readiness level	What it means
Shovel-Ready	Meets all license, registration, wage, benefit, apprenticeship, and experience requirements today. Bids without additional support; first jobs inspected before further assignments.

Readiness level	What it means
Experience-Ready	Has the trade experience but commits to close specific gaps (for example DIR registration, back-office payroll setup, benefits) within roughly 30 days of bidding, with training support from the administrator.
Start Up-Ready	Newer firm committed to the standards; commits to close gaps within roughly 45 days, completes required training and a back-office readiness assessment, and passes a longer initial inspection cycle.

Program expectations scale with readiness level: all levels comply with licensing, labor standards, equipment specifications, and administrator site visits; Experience-Ready and Start Up-Ready firms additionally complete equipment, rebate, and bid-process trainings, and pass a longer cycle of first-job inspections (for example the first 5, 8, or 10 jobs by level) before receiving further assignments.

5. How to participate

Interested contractors complete the self-assessment survey at [link] and contact [name, email] for technical assistance and on-ramp opportunities.

Part 2. Request for Qualifications (template)

Adapted from the pilot's RFQ as released. Bracketed items are for the adopting program to set.

1. Overview and timeline

[Administrator] releases this formal Request for Qualifications to seek contractors interested in providing electrification installation services for [Program Name]. Firms that responded to the pre-RFQ release and remain interested must complete this RFQ to be considered.

Milestone	Date / time
Deadline for question submission	[date, time]
Written responses to questions posted	[date, time]
RFQ submission deadline	[date, time]
Submission review and scoring	[date range]
Contractor selection notification	[date range]
Performance period	[date range]

Funding: eligible contractors may bid for a range of \$[__] to \$[__]; awards may be single or multi-home (aggregated) contracts, with final amounts determined by [Administrator] based on program goals. Insurance: contractors must maintain general liability, auto, and workers compensation coverage throughout the contract; limits confirmed at award. Questions go to [name, email] by the question deadline; answers are shared with all interested parties.

2. Qualifications required

- Hold the state contractor license(s) required for the awarded scope, in good standing.
- Abide by the program's labor standard and recruitment/workforce development requirements.
- Have the financial capability to supply all labor, materials, equipment, permits, and warranties for awarded work.

- Demonstrate experience performing a minimum of [30] residential projects including heat pump HVAC, heat pump water heaters, kitchen appliances, minor repairs, and/or electrical work.
- Have the capacity to meet administrative duties: prevailing wage payroll, certified record management, client record management, and workforce development reporting.

3. Required labor standards

Participating contractors must demonstrate in their response the capacity to meet the following by the time the response is submitted: prevailing wage payment per the current county determination for all workers including subcontractors; use of registered apprenticeship programs or accredited MC3 graduates; a minimum employer-paid medical benefit (or the equivalent fringe payment per the wage determination); a retirement offering meeting at least the state standard (or the equivalent fringe payment); focused hiring toward priority workers; and weekly wage payment with record keeping and wage oversight compliance as directed by [Administrator].

4. Scope of work

Work may include one or more of the following: electrification measures (heat pump water heaters, heat pump split and mini-split systems, panel optimization and upgrades, electric and induction stoves, solar, battery storage, EV readiness); weatherization measures (insulation, windows, doors, envelope improvements); record keeping including project photos and completion documentation; review of the program-provided residential assessment and participation in a bid walk before final bid; permits and energy-code compliance documents; and quality control, with initial jobs inspected by program staff (for example the first 5 to 10, by experience level) and random inspection afterward.

5. Project aggregation

The program aggregates work so a contractor can bid on and be awarded one or more homes in a single contract. Aggregated awards may combine interventions across multiple homes and are organized in tiers by depth of scope, for example a panel optimization with heat pump HVAC and water heater at the lighter end, up to service upgrades with comprehensive weatherization at the deeper end.

6. Response contents

Responses are accepted by email only, by the submission deadline. A complete response includes:

- The response questionnaire: company profile (ownership structure, size, licenses, certifications such as MBE/WBE); project management team and qualifications; trainees employed (apprentice, certified trainee, MC3) by trade; permitting and energy-code experience; experience with low/moderate income housing projects; rebate and incentive program experience; prevailing wage and certified payroll systems; benefits and retirement offerings; apprenticeship and training practices; priority worker hiring; workload and mobilization capacity; administrative capacity; subcontractor management; equipment familiarity; quality control approach; on-time on-budget commitment and change-order handling; safety plan confirmation; and current insurance coverages.
- Three references for past projects, each identifying the client, program (if any), project type by measure, installation counts, project values, and dates of service.
- Proof of required licenses and insurance, and signed acknowledgements of compliance requirements.

7. Priority workers definition

Priority Workers are underrepresented in the residential decarbonization sector or face career-limiting circumstances, indicated by one or more of the following: people who experience disabilities; household income below 50% of AMI; a criminal record or justice system involvement; protracted unemployment

(6 months or more); current receipt of government cash or food assistance; homelessness within the last year; custodial single parents; former foster youth; veterans, National Guard members, reservists, or eligible spouses; affordable housing residents; lacking a high school diploma or GED; English language learners; and displaced fossil fuel industry workers.

How Berkeley did it. The pilot's RFQ was released August 1, 2025 with a 30-day response window and a written Q&A cycle in the middle: questions due August 12, answers posted August 15 to every firm on the distribution list, and a running FAQ published alongside. Bids ranged from \$20,000 to \$250,000 per award against up to \$830,000 in implementation funding. The pre-bid FAQ also answered process questions in plain language, which reduced one-on-one email load during the open window.

Part 3. Blind Scoring Matrix Instructions

What is masked, and why?

Scoring is blind in two senses. First, responses are scored on the documented evidence in the submission, not on reputation or relationships: reviewers are instructed to award no points for anticipated or speculative capabilities, and firm-identifying details are masked from scorers to the extent practical [confirm the pilot's masking mechanics] so that a well-known name cannot outscore a well-documented one. Second, each reviewer scores independently on an assigned copy of the matrix, without seeing other reviewers' scores; final rankings average the independent scores. The purpose of both is the same: a small, minority-owned firm with strong documented experience serving low-income households should be able to win against a larger, better-known firm, and in the pilot's scoring that is what happened.

Recruit reviewers beyond the administrator's own staff. A mixed panel reads evidence differently and adds legitimacy to the selection.

How Berkeley did it. The pilot's responses were scored blindly by program administrators, City staff, and community-based organization reviewers, each on their own assigned reviewer workbook. The matrix weighting deliberately favored emerging contractors with a history of serving low-income households. Minority-owned firms won the highest-value bids on documented merit.

The scoring matrix

Each proposer is scored on five focus items, totaling a maximum of 20 points. The weighting is a policy choice; the pilot's weights below put the most points on demonstrated installation experience and on experience serving the program's target households.

Focus item	Points	What it covers
1. Work completed with target technologies	6	Heat pump HVAC, heat pump water heaters, panel upgrades, windows/weatherization, solar and storage; higher weight on panel upgrades and heat pumps
2. Experience with target homeowners	4	Documented work with senior citizens, very low-income households, and government-subsidized projects
3. Project management and team capacity	4	Staffing, qualifications, ability to deliver on time and to quality standards

Focus item	Points	What it covers
4. Compliance and program participation	3	History of code, permit, and safety compliance; participation in related programs
5. Workforce development	3	Local hiring, workforce training, and diversity, equity, and inclusion in hiring and subcontracting

Tie-breaker: if two or more proposers have identical totals, the score on Item 1 (work completed with target technologies) breaks the tie.

Evaluation process for reviewers

1. Open the proposer tab (or scoring sheet) assigned to you.
2. Review each question and enter scores in the score column based only on the evidence provided in the submission.
3. For the target homeowners item, mark yes or leave blank for each category; points calculated automatically.
4. Enter your name and the date on the sheet for audit purposes.
5. Review your totals, then confirm the ranking sheet has picked up your inputs.
6. Do not award points for anticipated or speculative capabilities not evidenced in the submission.

Using the rankings

The ranking sheet aggregates all reviewers' scores and feeds the ranking reports used for internal decision-making and funder presentation. Select the number of top-scoring contractors needed to cover the required trade mix, not a fixed number: the goal is coverage of the scopes the program must deliver.

Lesson learned. Define the trade mix before scores come back. The pilot's target mix was two HVAC and two electrical contractors; reaching that coverage meant selecting five firms in total, including one general contractor. Deciding the mix first keeps the selection defensible when scores alone would have produced a different set.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A8. Contractor Agreement and Personal Services Contract

Purpose and How to Use This Packet

This is the program administrator's guide to A8, the Master Subcontractor Agreement that every contractor performing Just Transition work signs before any project begins. The signed agreement itself lives in the program's contract files; this guide explains what it does, when to use it, and how its pieces connect to the onboarding and delivery steps described in the Contractor Playbook.

Use it when preparing a contractor for signature, training new program staff on what the agreement requires, or checking whether an obligation such as insurance, prevailing wage, indemnification is already covered before a Work Order is drafted. Read it alongside the agreement itself rather than in place of it; where this guide simplifies a term, the signed agreement controls.

Documentation. The Master Subcontractor Agreement template, including Exhibit A (Insurance Requirements), Exhibit B (Rules for the Just Transition Pilot Program), and Attachment A (Non-Discrimination/Workforce Composition Form), is the underlying document this guide walks through. Keep a signed copy on file for every subcontractor before issuing a Work Order.

1. What This Agreement Is

The Master Subcontractor Agreement is a one-year master contract between the program administrator and a subcontractor. Signing it commits the subcontractor to no specific project; it fixes the standards, protections, and program rules that will govern every project the program administrator later assigns. Each actual job is authorized separately through a Work Order that both parties sign, setting the address, fee, scope, deliverables, and deadlines for that job alone.

Together, the Agreement, every Work Order issued under it, all attached Exhibits, and the Just Transition Program Rules make up the “Contract Documents.” If a Work Order's terms conflict with the Agreement, the Agreement controls unless the Work Order expressly says it supersedes the conflicting term.

2. How the Agreement and a Work Order Fit Together

Administrators sign the Agreement once, at onboarding, and reuse it for every subsequent project with that contractor for the year it runs. Each new project only requires a new Work Order, not a new Agreement.

Document	What It Fixes	When It's Signed
Master Subcontractor Agreement	Standing terms: standard of performance, indemnification, insurance, labor standards, compliance, and enforcement	Once, at contractor onboarding (Playbook Section1, Step 4)
Work Order	Project-specific address, fee, scope of work, deliverables, and deadlines	Before work begins on each individual project

Because the Agreement runs for one year, plan renewal ahead of the anniversary date for any contractor still active in the pilot, so there is no gap between an expiring Agreement and a new Work Order.

3. Standard of Performance and Subcontractor Status

The Agreement sets the baseline every contractor is held to and makes clear the contractor, not the program administrator, controls how the work gets done. Administrators should confirm a contractor understands both halves of that bargain before signature:

- Work is performed diligently, professionally, and to the highest applicable trade standard, in compliance with all applicable laws, codes, and regulations.
- The contractor maintains its own required permits, licenses, and certifications, and carries its own tools, equipment, and expertise.
- The contractor is an independent subcontractor, not a program administrator employee: it controls its own means and methods and is solely responsible for employment taxes, workers' compensation, and workplace safety compliance.
- Completed work is warranted against defects in materials and workmanship for at least one year, or longer if required by an applicable builders' statute.
- The site is kept free of debris during the work and cleared of tools, equipment, and surplus material at completion.

4. Insurance Requirements (Exhibit A)

No contractor may begin work until the program administrator has received and approved a Certificate of Insurance and Additional Insured Endorsement meeting Exhibit A.

Coverage	Minimum Required
Workers' Compensation	Statutory limits
Employer's Liability	\$500,000 each accident; \$500,000 by disease, per policy/employee
Commercial General Liability	\$1,000,000 each occurrence / \$2,000,000 aggregate

Coverage	Minimum Required
Business Auto Liability	\$500,000 (one vehicle) or \$1,000,000 per accident (more than one vehicle)

The program administrator must be named as Additional Insureds on all liability policies, with coverage primary and non-contributing, a waiver of subrogation in the program administrator's favor, and at least 30 days' written notice of cancellation (10 days for nonpayment). No endorsement may limit or exclude required coverage, and Contractor's Pollution and Professional Liability is required where applicable to the scope.

5. Just Transition Program Labor Standards (Exhibit B)

Every contractor working under the Program had to sign on to the labor standards in Exhibit B as a condition of participation. These are the same standards developed under the Job Quality Standards framework (see A5) and are the terms verified through the certified payroll process (see A6):

- **Prevailing wage:** pay every worker, including subcontractors, at the current Alameda County DIR prevailing wage determination for their trade and classification.
- **Capacity building:** contractors may satisfy training requirements through registered Joint-Labor Management Apprenticeship programs, DIR/DAS-registered apprenticeship programs, especially accredited MC3 graduates who are accepted into an apprenticeship program.
- **Employee medical benefits:** provide coverage at least equivalent to Covered California Silver Level Coverage, paying at least 75 percent of the premium (up to \$412.50/month) for the employee and for dependents, prorated for part-time staff; absent an established plan, pay the medical portion of the fringe benefit rate by DIR job classification in cash.
- **Retirement:** offer a plan meeting or exceeding CalSavers, such as a 401(k) or IRA; absent an established plan, pay the retirement portion of the fringe benefit rate by DIR job classification.
- **Focused hiring:** meet the jurisdiction's objective of expanding access to opportunity for priority workers in the local impact area.
- **Wage management and recordkeeping:** pay wages on the DIR-mandated weekly schedule and maintain payment records and documentation as the program administrator directs.

6. Documentation, Monitoring, and Compliance

Compliance runs on the same cadence as payment. Confirm each contractor understands, at onboarding, what will be requested and how often:

- Submit certified payroll records, fringe benefit documentation, proof of apprenticeship or MC3 participation, permits, licenses, inspection approvals, and photographs of completed work upon request.
- Cooperate with site visits, worker interviews, payroll verification requests, and audits of timecards and wage documentation.
- Respond to any written Notice of Deficiency with the required corrective action by the stated deadline.

Failure to submit documentation within the required time frame is treated as non-compliance in its own right, independent of whether the underlying wage or benefit obligation was actually met.

7. Enforcement: Breach, Remedies, and Severe Violations

A breach includes failing to meet labor standards, failing to submit documentation, failing to maintain insurance, safety violations, unauthorized subcontracting, or misclassifying workers. The program administrator can respond proportionally, and administrators should apply the lightest remedy that actually cures the problem before escalating:

- Withhold payment until compliance is achieved.
- Suspend the contractor from the Program or remove it from active project lists.
- Terminate active Work Orders or the Agreement itself.
- Seek reimbursement for costs the program administrator incurs because of the non-compliance.
- For severe or repeated violations: permanently remove the contractor from the Program, report the violation to the DIR or local jurisdiction, and pursue legal action for damages or injunctive relief where warranted.

8. Payment Schedule

Every invoice must be accompanied by certified payroll and fringe benefit documentation, plus material receipts from the first progress payment onward. Incomplete documentation delays payment until compliance is verified. Payments release in the same installments used across the pilot's bid documents:

Milestone	Payment
Acceptance of the estimate	10% deposit (up to \$1,000)
Project commencement	20% progress payment
Start of on-site work	30% progress payment
Installation completed	30% progress payment
Authority Having Jurisdiction (AHJ) approval	10% retention released

9. Termination, Indemnification, and Risk Allocation

The program administrator may terminate the Agreement or any Work Order for any reason, or no reason, on at least five days' written notice; if the termination is for the contractor's breach, it can take effect immediately as stated in the notice. On termination, the contractor stops work, leaves the site, and returns any and all property or materials. Neither party owes the other lost profits, lost fees, or consequential damages arising from the termination.

The contractor indemnifies the program administrator and the homeowner against losses arising from its breach of the Contract Documents or its negligent or wrongful performance of the work, regardless of who else may share fault. This indemnification, along with the insurance, taxes, safety, and enforcement provisions, survives even after the Agreement ends.

10. Administrator Checklist Before Work Begins

Confirm each item before a contractor's first Work Order is issued:

- Master Subcontractor Agreement signed by both parties, with license number, employee count, vehicle count, and MWBE status completed on the signature page.
- Certificate of Insurance and Additional Insured Endorsement received and approved against Exhibit A.
- Contractor briefed on the applicable Alameda County DIR prevailing wage determination for its trade.
- Capacity-building, medical benefit, and retirement approach on file, or fringe-benefit fallback confirmed.
- Non-Discrimination/Workforce Composition Form (Attachment A) collected for non-construction employees, where applicable.
- Work Order drafted and signed, specifying the address, fee, scope, deliverables, and deadlines for the specific project.

Supporting documents: Master Subcontractor Agreement template with Exhibit A (Insurance Requirements) and Exhibit B (Just Transition Program Rules and Labor Standards) (A8); Job Quality Standards and union signatory onboarding pathway (A5); certified payroll form and review checklist (A6).

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A9. CRM and standardized project management packet: the tracking structure an administrator needs, in any tool

Purpose and How to Use This Packet

This packet describes the client relationship management (CRM) and project tracking structure the program used to move nearly a hundred homeowner records from first referral through construction close-out. It is written to be implemented in any tool: the pilot used a commercial work-management platform, but the structure below works equally in a spreadsheet, a database, or another platform. What matters is the design, not the software.

The design rests on a few principles that, in our experience, carry most of the value:

- One record per home. Every home (not every task, and not every contractor) is a single record that accumulates its full history: contacts, permits, utility application, scope, dates, photos, expenses, and files.
- Pipeline stages as groups. Records live in a stage that answers, at a glance, what has to happen next. Moving a record between stages is the program's heartbeat.
- Contractors see their slice. Each contractor gets a filtered view showing only their assigned homes and only the fields they need, plus a simple form for submitting updates that write back to the record.
- Money and compliance link outward. The record carries the operational state; billing reconciliation and certified payroll live in their own ledgers and tie back by home.

✓ **Appliance Work In Progress**

☐	Homeowner	Measure Type ⓘ	Mini-Split Zon...	Files ⓘ	Photos ⓘ
☐	Home 1				
☐	+ Add homeowner				

Pipeline Stages

The pilot's platform grouped homeowner records into the stages below. An adopting program can rename them, but the job sequence reflects how this work actually flows according to the Aggregation and Sequencing Workbook (A13).

Stage	What it holds
Referrals	New leads from outreach, partners, or self-referral; awaiting eligibility screening and first contact
Non-responsive	Leads that could not be reached after the program's contact protocol
Site visits	Eligible homes in the assessment and contractor site-visit sequence; visit dates tracked per trade

Stage	What it holds
Permits	Scoped homes with permits being prepared, submitted, or awaiting approval
Utility applications	Homes whose scope requires a utility service application (for example a panel or service upgrade); tracked by application round
Install ready	All prerequisites cleared; awaiting crew scheduling
Electrical work in progress	Electrical work under way
Appliance work in progress	Appliance installation under way
Finished	Work complete and closed out (see A14); record retained as the home's archive
Cancelled	Withdrawn or ineligible homes

> Referrals 19 Homeowners	Tier
> Non-Responsive 9 Homeowners	Tier
> Site Visits No Homeowners	Tier
> Permit No Homeowners	Tier
> Utility Applications No Homeowners	Tier
> Install Ready No Homeowners	Tier
> Electrical Work In Progress No Homeowners	Tier
> Appliance Work In Progress No Homeowners	Tier
> Completed 37 Homeowners / 125 Subitems	Tier
> Cancelled 13 Homeowners	Tier

The pilot also kept two reference groups on the same board (contractor firms and program staff, so every record could link to its people) and a separate group for a special delivery track. Reference data can live anywhere; keeping it adjacent to the pipeline reduces lookup friction.

Lesson learned. The stage that most often surprised adopters was administering utility applications. Main-panel and service upgrades depend on utility approval timelines the program does not control, so those homes were batched into application rounds, with the rest of each home's work was sequenced around them rather than waiting on them.

Field Definitions

The table below defines the fields tracked on every home record. All information is manually entered by the program administrator, then can be routed for updates in a separate entry form.

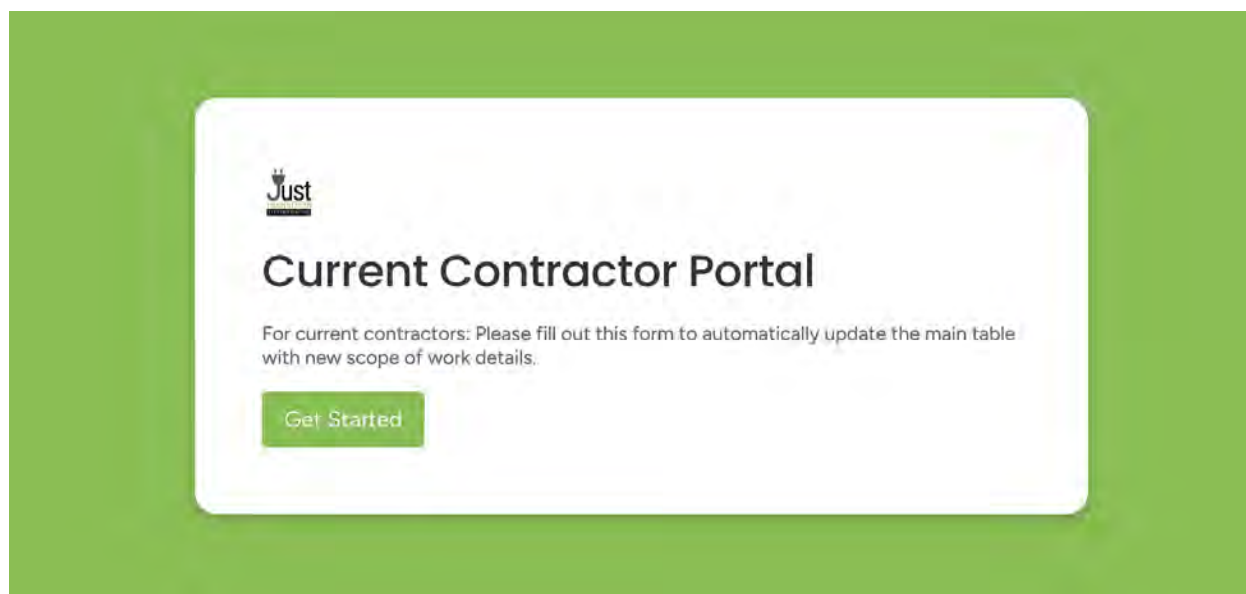
Field	Type	Definition and use
Home ID / name	Text	The record identifier. Publish-facing exports should use a neutral home ID (for example JT-01) rather than the homeowner's name
Address / location	Location	Street address, geocoded if the tool supports a map view; useful for geographic aggregation and crew routing
Phone / email	Text	Homeowner contact information
Tier	Status	Scope cost band assigned at assessment (the pilot used under \$20k, \$20-24k, \$25-30k, over \$30k); drives aggregation and budget tracking
Measure type	Multi-select	Measures in the home's scope: weatherization, heat pump water heater, HVAC, induction stove, range hood, panel upgrade, service upgrade, circuitry, washer/dryer, solar and battery
HVAC zones	Dropdown	For heat pump HVAC scopes: number of mini-split zones, or ducted, or not interested; set after site visits, then confirmed once the Homeowner Agreement is signed
Contractor	Dropdown	The firm (or internal role) assigned to the home; drives the per-contractor filtered views
Scheduling status	Status	Whether the steps needed to advance to the next stage are moving, done, or stuck; the stuck flag is the administrator's daily worklist
Permit numbers	Text	Separate fields per permit type the jurisdiction issues (the pilot tracked minor permits, building permits, and mechanical/electrical permits)
Permit status	Status	Work in progress, processing, submitted, approved, deferred, or denied
Permit document	File	The approved permit, uploaded to the record
Utility application	Status + round	Status of the utility service application plus which application round (batch) the home belongs to
Contract	Status + file	Homeowner agreement state (create, submitted, signed) with the executed document attached
Last site visit date	Date	Visit dates tracked per trade or firm, so the multi-pass site visit sequence is visible on one row

Field	Type	Definition and use
Electrical date	Date	Scheduled or actual start of enabling electrical work
Construction date	Date	Scheduled or actual start of appliance installation
Photos	Link	The home's photo album (before, during, after), organized by home not by visit
Scope of work	Link	The home's assessment-derived scope document
Cross-program referral	Status	Whether the home needs services from an adjacent program (the pilot flagged minor home repair and clean-out needs); needed, requested, or completed
Materials / expenses	Sub-items	Line items under the record: item name, status, expense amount, and date installed; totals roll up to the record

Documentation. Homeowner records contain personal information. Keep data platform access limited to program staff and each contractor's own filtered slice, and use neutral home IDs in anything published or shared beyond the program.

Contractor Views and the Update Form

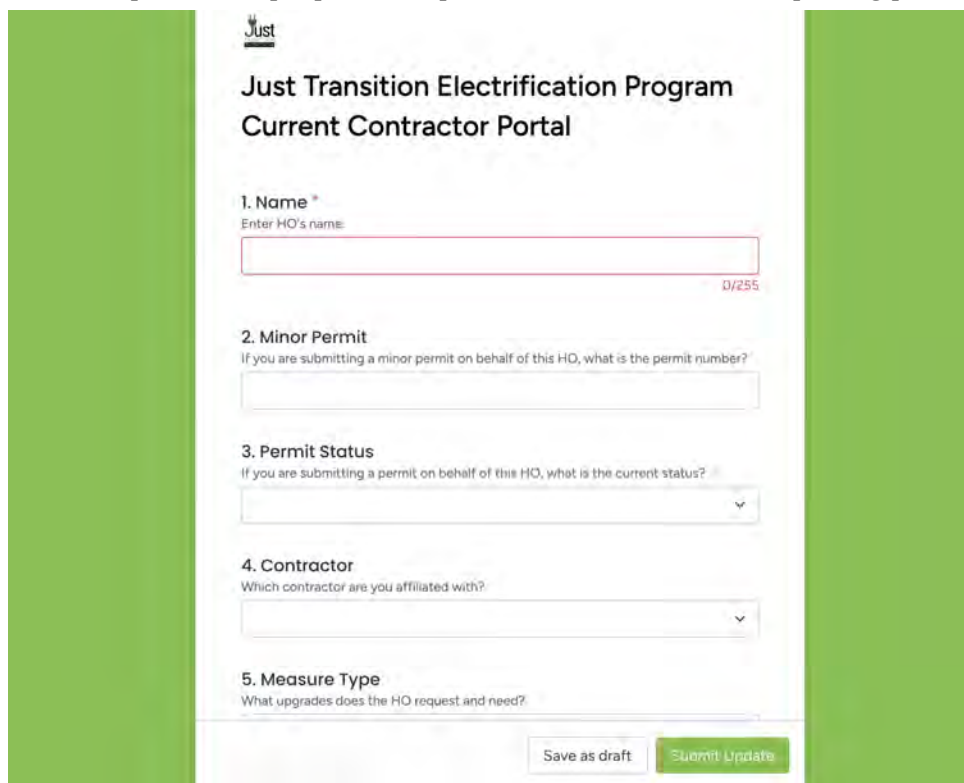
Each onboarded firm has a saved view filtered to its assigned projects, which includes columns that outline permit information, scope of work, and homeowner contact information, but nothing else. This gave the contractors a live work list without exposing other firms' assignments or pricing.



Alongside the views, a simple structured form allows the contractors to submit updates to each project without altering assigned information. The pilot's form asked for:

1. Homeowner and property information

2. Permit and utility application information and status updates
3. The firm submitting the form
4. Proposed scope of work, including change orders
5. Photo documentation
6. The date of the last site visit
7. Materials/expenses for proposed scope of work, with individual pricing per bid sheet



The screenshot shows a web form titled "Just Transition Electrification Program Current Contractor Portal". The form is set against a light gray background with green vertical bars on the left and right sides. It contains five numbered sections, each with a title and a description:

- 1. Name ***
Enter HO's name:
A text input field with a red border and a character count "0/255" in red.
- 2. Minor Permit**
If you are submitting a minor permit on behalf of this HO, what is the permit number?
A text input field.
- 3. Permit Status**
If you are submitting a permit on behalf of this HO, what is the current status?
A dropdown menu.
- 4. Contractor**
Which contractor are you affiliated with?
A dropdown menu.
- 5. Measure Type**
What upgrades does the HO request and need?
A dropdown menu.

At the bottom right of the form are two buttons: "Save as draft" and "Submit/Update".

Form submissions wrote straight onto the home's record, so administrators reviewed changes instead of transcribing them. The program's experience utilizing this one form eliminated most of the email-and-retype loop that otherwise consumes coordinator hours.

How the Platform Ties to Money and Compliance

The platform is deliberately not the financial ledger. It carries operational state; two companion documents tie to it by home:

- **Reconciliation chart.** A separate ledger lists every intervention line by home and contractor with billed amounts, payments to date, and outstanding balances against the contracted payment benchmarks [verify benchmark schedule against executed bid documents]. The platform's measure list and expense sub-items are the cross-check: an intervention should not appear on the reconciliation chart as billed unless the platform shows it installed, and vice versa.
- **Certified payroll checks.** Weekly certified payroll (see A6) is verified against the platform's electrical and construction dates: payroll weeks are matched to the homes where crews were actually scheduled, and site checks are scheduled from the same dates. A payroll for a week with no scheduled work on the platform is the flag that starts a conversation.

Lesson learned. Keep one person responsible for status updates. When everyone can drag records between stages, the platform quietly stops meaning anything. The pilot routed changes through the coordinator (with contractors submitting through the form), which is why the platform stayed trustworthy enough to schedule payroll site checks from it.

Minimum Viable Version

A program without a work-management platform can run this structure in a spreadsheet: one row per home, the fields above as columns, stages as a single status column (or as sheet tabs), and a shared folder per home for files and photos. What does not translate is the contractor form and the filtered views; in a spreadsheet, substitute a weekly structured check-in per firm and a locked master sheet only the coordinator edits. The design principles hold at any scale: one record per home, explicit stages, contractors seeing their slice, and money reconciled outside the operational tracker.

Rebuilding Together East Bay Network

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A10. Advance Site-Condition Disclosure Protocol

Purpose and How to Use This Packet

This packet governs how the program identifies, discloses, and responds to site conditions that could affect the safety or feasibility of a contractor visit. Use it alongside the comprehensive assessment templates (A3), the tracking portal (A9), and the aggregation and sequencing plan (A13). Adapt the specific staff roles and escalation contacts to your own organization.

1. Capture Conditions During Assessment

Every home assessment already gathers most of what this protocol needs, however, it is still necessary to capture specific site conditions that may create future obstacles for electrification and route solutions appropriately. During each assessment or site visit, the assessor or contractor documents:

- Domestic animal droppings or evidence of pests.
- Visible mold growth.
- Limited interior and/or exterior mobility.
- Overall poor structural or environmental condition.
- Existing panel, wiring, water heater, and HVAC conditions relevant to feasibility.

Photograph each flagged condition and log it in the tracking portal (A9) alongside the rest of the site data, so it travels with the home's record rather than living in a single person's notes.

2. Flag and Route Before Scheduling the Next Visit

Before scheduling any follow-on contractor visit to a home, review the logged conditions and route them one of two ways:

- No elevated risk: note the condition in the home's scope and prepare a standard disclosure for the contractor (Section 3 below).
- Elevated health or safety risk: route the home to the program's safety lead before scheduling anything further (Section 4 below).

This review step is what keeps a known hazard from reaching a contractor as a surprise.

3. Disclose to the Contractor in Advance

Give every contractor the same standard disclosure ahead of a visit, delivered through the shared calendar or tracking portal (A9) rather than left to a verbal handoff:

- A summary of flagged conditions at the home.
- Access instructions: which spaces need to be cleared, and where keys, crawlspace access, or panel and water heater locks will be available.
- A recommendation to wear appropriate protective gear where conditions warrant it.

Homeowners receive the matching half of this disclosure: a verbal description of who is coming, why, and what to prepare, plus a request to clear spaces and set aside keys before the visit (see A15, Section 4).

4. Escalate Health and Safety Concerns

When a condition poses a genuine risk to occupants or contractors, do not schedule around it. Route the home to a certified safety lead, such as a licensed occupational therapist or an equivalent role, who:

- Follows up directly with the homeowner.
- Conducts an in-person wellness visit to assess resident safety and well-being.
- Coordinates any remediation that falls outside the electrification scope with the appropriate outside program, since many of these conditions are addressed through other funding streams rather than the pilot itself.

Contractors are instructed to wear protective gear on any job site where a flagged condition remains active.

From the field. Across the pilot's early site visits, one contractor completed 33 site visits to report on site conditions and needed to install a heat pump water heater, heat pump mini-split, vent, and/or stove depending on the homeowner's wishlist outlined in A12. Once all site visits were complete and documented, the contractor met with RTEBN to report on structural limitations and seek guidance for navigating customer relationships for homeowners with neurological and psychological needs. RTEBN referred 5 out of 33 homes to its in-house occupational therapist to handle follow-up wellness checks.

5. Document and Route Findings After Every Visit

After each site visit, the contractor shares observations, photos, and any preliminary scope changes back to the program. Log this centrally in the tracking portal so the full team can see it, and route specific findings to the staff member who owns that issue: social-services concerns to the safety lead, rebate or scheduling implications to the program coordinator, and funding or scope questions to the program lead. Naming the right recipient for each type of finding, rather than routing everything to one inbox, is what keeps the loop fast.

No. of Homes	Condition
4	Evidence of rodents

2	Evidence of vectors
10	Presence of mold
8	Psychological condition that required special attention

Table 1: The number of homes out of 37 total homes that were noted by the program administrator or visiting contractor of having a specific condition.

From the field. With more than half of the program’s pilot cohort demonstrating at least one condition that required flexible sequencing and installation measures, there were no program administrator staff or contractors who declined serving the home. This cements the importance of onboarding and training staff to be prepared for a site visit, route observations to the appropriate program administrator staff, and practice trauma-informed care.

Documentation. Reference tools: the shared scheduling calendar and the CRM board (A9). Each entry for a visit carries instructions for photo documentation, so a condition found in the field is recorded the same way every time.

6. Why This Matters

The households in this pilot are, by design, an underrepresented group of low-income homeowners who often lack the means to address deferred maintenance on their own. Many of the conditions this protocol surfaces have already been, or are being, addressed through other RTEBN programs. Disclosing them is not a judgment on the household; it is what lets a contractor do the assigned scope safely and lets the program route the rest of the need to the right resource.

Supporting documents: Comprehensive assessment and scope-of-work templates (A3); tracking portal or CRM (A9); aggregation and sequencing plan (A13); homeowner education and communication packet (A15).

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City of Berkeley Just Transition Electrification Pilot Program

A11. Aggregated Scope-of-Work Order Template and Bid Sheet

Purpose and How to Use This Packet

This is the work order the program issues once a contractor's scope has been aggregated across homes, intervention types, or a geographic cluster, as described in Section 2, Step 6 of the Contractor Playbook. It is the instrument that authorizes work, fixes the price against the approved bid sheet, and sets the payment and retention terms the contractor is paid under.

Use one work order per aggregation, not per home. Populate Part 1 with the homes and interventions the aggregation covers, check the boxes in Part 2 that apply to this scope, and carry the line-item pricing in Section 3 directly from the approved bid sheet so the not-to-exceed amount reconciles to the same figures the contractor bid at orientation. Sections 4 through 6 do not change from order to order; they restate the production, documentation, and payment terms every contractor agreed to at onboarding, so they are included here for completeness and are not renegotiated per aggregation.

Any change to the approved scope or pricing after signature requires written approval before the change is performed, consistent with the change-control provision in the Contractor Agreement (A8).

Part 1. Work Order Identification

Complete one block per aggregation. The work order number should be unique and traceable to the aggregation and sequencing plan (A13).

Contractor Name: _____

License #: _____

Work Order #: _____

Date Issued: _____

Part 2. Aggregated Interventions Included

This work order authorizes the contractor to complete the scope items checked below across the homes listed in the attached aggregation. List each home by address or household ID, consistent with the tracking portal (A9).

Homes Included in This Aggregation: _____

Total Interventions in Aggregation: _____

Part 3. Approved Aggregated Scope

The contractor shall furnish all labor, supervision, tools, equipment, and incidentals necessary to complete the following interventions as specified per site. Check all that apply to this aggregation.

- Electrical Panel Upgrade Installation
- Electrical Circuitry Installation
- Heat Pump Water Heater Installation
- Heat Pump HVAC Installation
- Induction Range Installation
- Electric Dryer Installation
- Envelope / Weatherization Measures
- Other: _____

Part 4. Aggregated Pricing (Per Approved Bid Sheet)

Carry each line item directly from the contractor's approved bid sheet. The example rows below, drawn from the sealed bid template referenced in Part 2 of the Contractor Playbook, show the level of detail expected. Replace them with the aggregation's actual scope items.

Job Type	Materials Description	Material Cost	Labor Classification	Labor Cost	Units / Week	Service Add-On
Electrical Service Upgrade (Major)	Upgrade existing 125A electrical service to a 200A smart load-center. Recommend installing the SPAN Smart Panel (200A, 120/240 V split-phase) -SPAN Smart Panel 200A Main Load CenterSiemens QF Arc-Fault Breakers (QF120AFC) -Eaton CHSPT2ULT RA Surge Protector (or equivalent)	\$5,150	Inside Wireman (DIR ELEC-100)	\$3,250	2	Half day: \$200 Full day: \$400
Plumbing Labor	Provide plumbing modifications necessary to support the installation or relocation of a heat pump water heater. Scope includes: -Capping and removing existing gas line, rerouting 3/4" domestic hot and cold	\$450	Residential Plumber (PLUM-102)	\$778	4	Half day: \$152 Full day: \$304

	water lines using Uponor AquaPEX tubing and fittings -Installing new Watts LF25AUB-Z3 Pressure Regulator, Everbilt 2- Gallon Thermal Expansion Tank, Sioux Chief Condensate Drain Kit, and SharkBite Brass Ball Valve					
--	--	--	--	--	--	--

Figure 1. Sample bid-sheet line items at the level of detail expected in Section 4. Units per week is carried from the bid sheet for reference and is not part of the pricing total.

Total Not-to-Exceed Amount: \$ _____

Adjustments to pricing or scope require written approval prior to execution.

Part 5. Production & Documentation Requirements

By accepting this work order, the contractor agrees to:

- Schedule and complete work in coordination with RTEBN
- Pull or coordinate permits as directed
- Pass required inspections
- Submit required documentation for payment
- Comply with applicable labor and reporting requirements, including certified payroll (A6)

Part 6. Payment Terms

Payments are made against completed and inspected work per home, per the Just Transition bid sheet, in the installments set out in the contractor agreement (A8): a deposit on acceptance, and payments at commencement, at the start of on-site work, and on completion.

Retention (if applicable): _____

Retention is held until building-authority approval and released at completion and acceptance, consistent with Part 2, Step 6 of the playbook.

Part 7. Acceptance

By signing below, the contractor agrees to complete the aggregated scope listed above in accordance with the approved bid pricing and program requirements.

Contractor Authorized Representative: _____

Date: _____

Signature: _____

RTEBN Authorized Representative: _____

Date: _____

Signature: _____

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A12. Homeowner Agreement Packet

Purpose and How to Use This Packet

This packet compiles the homeowner-facing consent and agreement documents used across the Just Transition Electrification Pilot Program: the program guidelines and grant of permission, the appliance wishlist, the post-program utility notification agreement, and the consent to release information. These documents make up the homeowner grant agreement referenced throughout the playbook and are signed at the points shown in the communication schedule in A15, before any contractor mobilizes to the home.

Sections 1 through 4 below are the signed documents themselves and should be presented to the homeowner largely as written, since they carry legal and consent language. Section 5 is reference material: the frequently-asked questions homeowners raise most often. Pair this packet with the homeowner education and communication packet (A15) for the plain-language walkthrough delivered at each touchpoint. The participant waiver's program guidelines and home-access terms are carried in Section 1 of this packet.

This packet is written to be adapted: replace the bracketed placeholders with your program's administering organization, funding jurisdiction, utility, contact information, and figures before use.

1. Program Guidelines

Upon selection into the program, the homeowner signs this section to grant the program administrator permission to enter the home and perform the approved work. It covers the following:

- Permission to perform repairs: the homeowner gives the program administrator, its employees, agents, directors, donors, volunteers, and participating trade workers permission to perform repairs at the property address on file.
- No cost to the homeowner: the program administrator, as part of a [funding jurisdiction] initiative, performs the electrification work at no cost to the homeowner or anyone living on the property.
- Scope, tenant communication, and authority over the extent of repairs: the general repair plan is explained to the homeowner. If the property has tenants, the homeowner is responsible for communicating the repairs to them. The homeowner gives the program administrator, its employees, subcontractors, and volunteers the authority to determine the extent of repairs, and understands additional work may be required outside the initial scope of work.

- Cooperation with permitting and inspection: the homeowner agrees to cooperate with program staff and volunteers, program subcontractors, building-authority staff, and utility staff to pass the permit and inspection process, including coordinated site clearing, multiple rounds of scheduled inspections, and additional site visits, and to give advance notice of scheduling availability whenever possible.
- Consent to use and share assessment information: the homeowner consents to the program administrator using information gathered during the assessment process for internal purposes (program development, evaluation, and resource allocation), and to sharing it with trusted partners, contractors, or organizations bound by the same privacy protections (HIPAA) that assist in delivering services related to the program's mission. This consent may be withdrawn at any time, though withdrawal does not affect actions taken prior to it.
- Service warranty: the program administrator warrants the work to be in good working order upon completion of the Scope of Work. Problems must be reported within [confirm warranty period, e.g., 90 days] of completion; the program administrator will perform the additional work at no cost to the homeowner, and passes through any manufacturer warranties on materials it provides wherever possible.
- Contractor conduct: while the homeowner is in the program, contractors may not ask them to hire the contractor for paid work, and contractors are not responsible for the program's rules, funding limits, approved scope, or program design; those are handled by the program administrator.
- No inducements: no inducements or promises have been made to the homeowner to secure their signature on this release, other than the program administrator's intention to perform home improvements.

Homeowner Name: _____

Signature: _____

Date: _____

2. Appliance Wishlist

The homeowner approves which appliances they would like installed in the home. The program administrator makes reasonable efforts to install each selected item but may enforce change orders at will. Anything not selected below is guaranteed not to be installed.

Appliance	Selected
Electric water heater	•
HVAC mini-split system	•
Induction stove	•

Range hood	•
Electric dryer	•
Window optimization	•
Panel optimization	•

3. Post-Program Guidelines

Once a mini-split heat pump is installed, this agreement covers the homeowner's utility-notification responsibilities and the terms of any related reimbursement.

- **Utility notification:** the homeowner agrees to notify the utility immediately upon installation and operation of any HVAC mini-split heat pump installed through the program, and to update the home's heating classification from primary gas and electric to primary electric. The program administrator is not responsible for billing errors, incorrect rate classifications, or additional charges resulting from delayed or incomplete notification.
- **Limited reimbursement eligibility:** if a mini-split system was installed prior to [confirm cutoff date], the homeowner may be eligible for limited reimbursement of additional electrical charges incurred due to late utility notification. Reimbursement is not guaranteed and is subject to enrollment in [confirm applicable state or utility rebate program] and submission of the home's gas and electric bills for the confirming periods. Contact [program contact email] for more information.
- **Rebate disclosure:** upon receiving an approved rebate under the program named above, the homeowner will disclose the full amount to the program administrator to reimburse the mini-split installation, unless the homeowner is entitled to a utility electrical-bill reimbursement under the parameters above.
- **No guarantee of savings:** the program administrator does not guarantee energy savings, utility rate reductions, or bill impacts resulting from participation in the program.
- **Patching:** the program administrator covers reasonable minor and major patching directly resulting from program installations.
- **Governing law:** this agreement is governed by and construed in accordance with the laws of [confirm governing state], and constitutes the entire agreement between the parties, superseding all prior communications or understandings, whether written or oral.

Homeowner Name: _____

Signature: _____

Date: _____

4. Consent to Release Information

Signed upon approval of the homeowner's application, this consent authorizes the information sharing needed to coordinate and verify home rehabilitation services on the homeowner's behalf.

- Purpose: information shared is necessary and appropriate for coordinating and verifying home rehabilitation services, and may include demographic data, income documentation, and rehabilitation information about the property, including past rehabilitation projects completed by one or more of the agencies involved.
- Scope limitation: this consent does not automatically entitle the homeowner to any appliance installation services other than the repairs noted in the application.
- Confidentiality: information shared remains confidential and is used only for the purposes described above.
- Right to revoke: the homeowner has the right to revoke this consent in writing at any time, except for information already released.

Applicant's Name: _____

Applicant's Signature: _____

Date: _____

Witness / Agency Signature: _____

Date: _____

Mail the completed application along with copies of supporting documents to [program administrator name and mailing address], or email it to [program contact email].

5. Frequently-Asked Questions

- What is a Scope of Work?
 - The Scope of Work lists the work items the program hopes to accomplish. The homeowner signs it to confirm agreement that program staff and volunteers may make repairs on the property items listed. It is not a commitment to complete every item, but a work plan that matches the program's resources to the homeowner's needs where possible.
- Assuming I'm approved, when's the soonest work could start?
 - This depends on the homeowner's needs and the project. [Confirm typical turnaround range for your program.]
- Is there a dollar limit for repairs?
 - [Confirm your program's average or maximum per-home budget.]
- What if I have an issue with program staff or volunteers?

- The program administrator should take homeowner feedback seriously and offer a clear path to raise concerns, for example:
- Formal complaint form: less time-consuming than the grievance procedure, used for less serious scenarios, and still reviewed at the highest levels. [Confirm phone number] to have either set of forms sent.
- Grievance policy with a grievance form: reviewed by the administering organization's board, management, and staff in a multi-level process working with the homeowner and a liaison.

6. Notes for Program Administrator

This packet functions as the homeowner grant agreement referenced throughout the playbook: no work is scheduled until the program guidelines and grant of permission (Section 1 above) and the consent to release information (Section 4 above) are signed. The appliance wishlist (Section 2 above) is finalized at the scope meeting alongside the homeowner's budget and priorities, and the post-program agreement (Section 3 above) is executed once a mini-split system is installed. Deliver Section 5 as reference material rather than a signature page; it supports the conversation but does not require a signature.

From the field. This packet is intended to be adapted, not adopted verbatim: the administering organization's name, funding jurisdiction, utility, contact information, dates, rebate program names, and dollar figures are placeholders and should be confirmed against your program's own terms before use.

Rebuilding Together East Bay Network

Just Transition Residential Electrification Pilot

A13. Aggregation and Sequencing Workbook

Purpose and How to Use This Packet

This plan covers the core of program delivery, namely, how the scope of work tiers develop from assessments, how the administrator aggregates the work at fixed per-intervention rates, how contractors are selected and work orders awarded, and how construction is sequenced. These are connected phases of one process rather than four plans made once. The motion underneath all four is grouping and sifting. The program draws a group out of a general pool of assessed homes and sends it through direct work; that work breaks the group into smaller, more detailed groups, and each round of work either finishes a home's jobs or delivers the home into the next group.

Each step pairs the method with worked figures from the pilot. Contractor names are replaced with role names to be more easily adapted in different contexts.

Scope of Work: The two parallel frames. Every scope of work in this plan belongs to one of two frames, the program portfolio or the individual home. The program scope of work describes the intervention types, home counts, and tiers of the portfolio. Site-specific scopes of work describe what is actually built at each address. Tiers, rates, and aggregation tables in this plan are program-level; anything that happens address by address belongs to the site-specific scope(s).

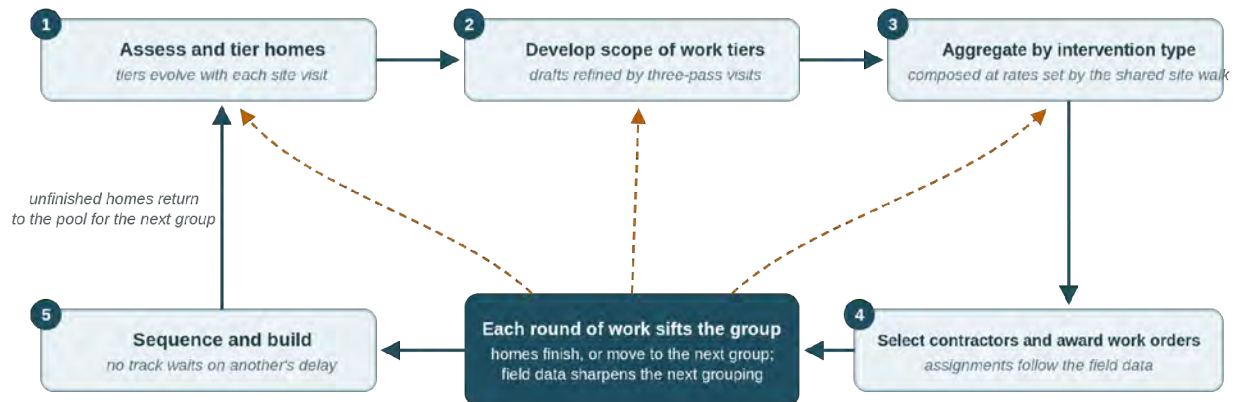


Figure A13-1. Assessment, scoping, aggregation, selection, and sequencing run as rounds of grouping and sifting; each round finishes some homes, delivers the rest into the next group, and returns field data (dashed) that sharpens the grouping.

Step 1. Assess homes and develop scope of work tiers

Outreach and comprehensive home assessments produce the program's landscape scan. Together they narrow the general goal of electrification to a jurisdiction, a set of intervention types, the funding each measure can leverage, and the contractor specialties the work will require. From that scan, each assessed home receives a program-level scope tier, a classification by intervention mix and cost band. The tiers size the qualified contractor pool by type and quantity (the pilot selected two HVAC contractors and two electricians as its specialists), the procurement, and the first estimate of how much work the program will aggregate.

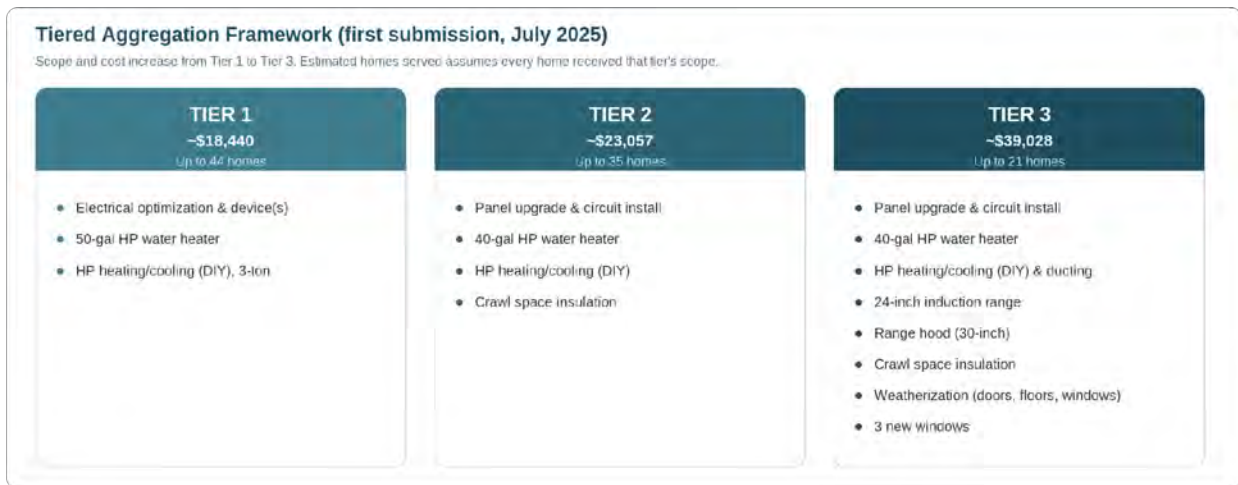


Figure A13-2. The tiered aggregation framework: escalating project tiers from the first aggregation submission.

The tiers are the first program-level scope of work. Before any aggregation is created or a contractor goes into the field, every selected contractor walks a single shared home and bids the interventions there by intervention type. Collectively, at least one firm bids every possible intervention, and most interventions are bid by more than one firm; the redundancy between specialties is deliberate, calibrating prices across firms and keeping every intervention covered. This shared site walk sets the approved rates (Step 2) and produces the first estimate of how many homes and which intervention types the program will deliver.

Each home's site-specific scope is then developed and validated in the field, beginning with the site visits of the first aggregated scope. How that first scope is chosen and sized is itself a design decision:

- The first aggregation is a count of heat pump water heaters, awarded at roughly 60 to 70 percent of the number the program anticipates. The intervention is chosen because it demands as much available electrical capacity, cost, and complexity as any other (a 30A circuit, space considerations in the home, and rebate requirements), so it installs test each home's capacity.
- The installer holding that scope visits more homes than the award covers and keeps the jobs most advantageous by cost, schedule, and geographic throw. Each visit opens that home's site-specific scope of work and records the home's electrical system, structural demands, and rebate eligibility.
- That field information, paired with the assessment and homeowner information, provides the first round of aggregated scopes, grouped by home by general electrical need. It also gives the administrator the second house-specific scope for the first HVAC contractor (mini-splits) and the first aggregated scope for the second HVAC contractor (mini-splits).

Step 2. Aggregate by Intervention Type

By the time aggregation begins, the shared site walk (Step 1) has already set the per-intervention prices and the first estimate of the work. The first aggregated scope, the heat pump water heater award described in Step 1, is created from that estimate. The site it visits returns the field data that composes every later aggregation, and each round of direct work either finishes a home's jobs or delivers the home into the next group of work.

Sequencing Site Visits to Develop and Validate Scope

The landscape scan gives only general conditions. Sequenced site visits develop the real scope, validate the costly work, and sort every home.

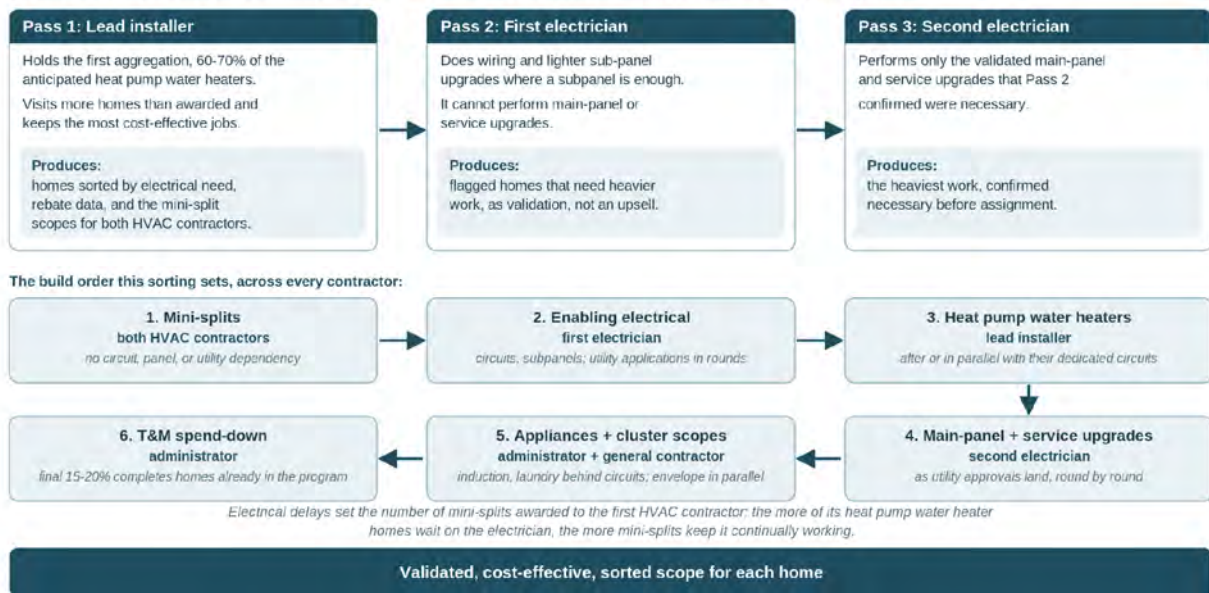


Figure A13-3. Three passes of site visits develop, validate, and sort the site-specific scope for each home, and set the build order that runs across every contractor.

The second and third passes belong to this step. As the aggregations by type are composed, a first electrical contractor scopes wiring and lighter subpanel work; because it does not perform main-panel or service upgrades, its referral of heavier work reads as validation rather than an upsell. A second electrical contractor takes only the main-panel and service upgrades that have been confirmed as necessary.

Aggregation itself is an administrative act. Contractors did not bid on packages; their bidding ended at the shared site walk, where the fixed per-intervention prices were set. Working from the sorted homes and their developing site-specific scopes, the administrator composes the work into aggregated packages, prices each package at the approved rates, and awards it as a single contract (Step 3) that the firm mobilizes once. The primary style of aggregation is by intervention type, meaning one trade working across many homes. Two other styles can layer alongside it. Aggregation by home gives one firm a whole deep scope, and geographic aggregation gives one firm a cluster of nearby homes in a single mobilization. The pilot ran all three styles at once.

The passes leave behind the dataset aggregation runs on, with every home sorted by how much electrical work it needs. In the pilot's portfolio, the City permit records sort the 37 direct-install homes as follows:

Description	Homes Served	Share
Homes without electrical work	6	16.2%
Homes with electrical circuitry	30	81.1%
Homes with smart-panel upgrade	4	10.8%
Homes with main meter panel upgrade (utility application required)	13	35.1%

Source: City permit tracking. Four deep-scope homes whose permits were filed by partner organizations are sorted from program records.

Fixed unit rates keep aggregation inexpensive to administer and straightforward to evolve. When a package re-forms around new field data, its price moves arithmetically rather than by renegotiation. The pilot's approved rates, set at the shared site walk:

Intervention	Approved rate	Note
Heat pump water heater	\$6,655	Only one firm met the production rate
Heat pump HVAC, 1 / 2 / 3 / Zones	Contractor 1: - \$7,900 - \$14,620 - \$16,885 Contractor 2: - \$9,000 - \$12,500 - \$17,500 - \$25,000	
Circuit package (per home)	\$1,700 - \$3,000	Half or full package; new circuits, outlets, protection, and fixture work, including knob-and-tube replacement
Smart panel upgrade	Contractor 1 ~\$6,280 Contractor 2 ~\$12,232	Standalone replacement of a legacy 100A panel with a 200A main load center where the service is adequate; subpanels used in lieu where load allowed

Intervention	Approved rate	Note
Main panel upgrade	Contractor 1 ~\$6,400 Contractor 2 ~\$12,270	100A overhead service to 200A; the sum of the panel upgrade (\$8,520) and the service work (\$3,120), incl. meter-main and utility coordination; labor at \$1,640 half day / \$3,280 full day where scoped; PG&E application costs additional (below)
Utility application coordination	\$2,500 or \$3,500	PG&E issued engineering advances
Induction stove Cookware	\$6,299 \$219.99	RTEBN formed a manufacturer partnership and received a 10% discount for bundled pricing
Range hood	\$930	

Lesson learned. Expect the aggregations to re-form. Clusters, pricing, and contractor assignments tighten over the program as more homes are scoped and sequenced; treating the first aggregation submission as a working draft rather than a contract inventory gives the cycle room to improve it.

Step 3. Select Contractors and Award Work Orders

Select for coverage of the trade mix the aggregations require, not for a fixed number of firms. Then award the work as aggregated scope-of-work orders (A11): each order carries a not-to-exceed total, is paid as a construction advance and installments set out in the bid documents, holds retention (for example 10 percent) to approval and acceptance, and requires written approval before any change. The pilot's portfolio settled into eight orders, and their composition shows the output of the full cycle:

Order	Aggregated work	Contractor (role)	Value (approved rates)
1	Heat pump water heaters, program-wide	Lead Installer	\$106,480
2	HVAC mini-splits by zone count	HVAC Contractor	\$155,500
3	Deeper HVAC zones and range hoods	Lead Installer	\$137,245
4	Enabling electrical + utility applications	Electrical Contractor 1	\$34,400
5	Main panel and service upgrades	Electrical Contractor 2	\$18,700
6	Geographic cluster, mixed scopes	General Contractor	\$10,985

Order	Aggregated work	Contractor (role)	Value (approved rates)
7	Direct-install appliances (induction, laundry)	Program Administrator	\$65,240
8	Time-and-materials infill, deepest scopes	Administrator (T&M)	\$142,219

Values are directly attributable costs on the approved-rate basis; program-level billing additionally carries unallocated labor and overhead. The table also records how the process evolved in practice. The same intervention type can be split across two firms (orders 1 to 3), the electrical work is deliberately split between a validator and a performer (orders 4 and 5), and the final order is priced by a different method entirely.

Step 4. Sequence and Build

Sequencing follows from the sorting and the aggregations. The governing rule is that no track waits on another track's delay; the work moves in parallel tracks, and each round of building either finishes a home or delivers it to the group that will. The build order in Figure A13-3 plays out across the contractors as follows:

- Mini-splits go first, for both HVAC contractors, because they carry no circuit, panel, or utility dependency.
- Enabling electrical runs as its own track. The first electrician's circuits and subpanels create the capacity the dependent work needs, home by home, and the utility applications are submitted early, in batched rounds, because their timelines sit outside the program's control.
- Heat pump water heaters, though awarded first, complete after or in parallel with their dedicated circuits, so the first aggregation closes as the electrical track catches up with it.
- Main-panel and service upgrades are executed by the second electrician as utility approvals land, round by round.
- Dependent appliances and the cluster scopes follow their enabling work rather than the whole program. Induction and laundry land behind their circuits, while windows and weatherization run in parallel on their own track.
- Once the aggregated, bid-sheet scopes are substantially complete, stop adding homes and contractors and direct the remaining funds, roughly the final 15 to 20 percent of project spend [confirm share], to time-and-materials work that spends down the budget in homes already in the program, completing each home's site-specific scope of work exactly.

From the field. Where a home needs no panel or service upgrade, its heat pump water heater can be scheduled and completed in parallel with the initial mini-splits. The mini-split award also keeps the first HVAC contractor working through electrical delays. The more of its heat pump water heater homes wait on the electrician, the more mini-splits the contractor is given until those homes are completed.

Adapting This Plan

This plan adapts the same way it runs. An adopting program scans its own landscape first, makes its program-level choices deliberately, and lets a small first group of homes teach before the portfolio commits. What transfers is the process rather than the numbers; the rates, the trade mix, and the tiers are all replaced with your own, set by your own scan and your own shared site walk.

Read your conditions first

Adaptation starts the way the program starts, with a landscape scan, this time of the adopting program's own conditions. The pilot's records reduce that reading to six:

Condition	What the pilot's experience says
Funding mix	Braided funding rewards stacking scopes onto visits another source already pays for, with other programs covering mobilization and site set-up. A single-source program simplifies aggregation but narrows who and what it can fund; the pilot's own replication planning is swapped in different sources for a neighboring county.
Contractor landscape	Where the local trade base is thin, run the pre-procurement readiness on-ramp (A7) before the shared site walk. The landscape scan sizes how many firms of each specialty the plan needs.
Utility relationship	Multi-party meter coordination proved the hardest sequencing challenge of the program. Submit applications early and in rounds, and route all utility contact through one dedicated administrator; homeowners cannot navigate the utility alone.
Occupant profile	Older adult and disabled households constrain crew and inspection scheduling. The homeowner track (A12, A15) has to be ready before any contractor mobilizes, because homeowner readiness failures look like contractor delays and cost fixed-price crews real hours.
Season	HVAC crews carry peak seasons. Schedule the mini-split track with them in mind, since that track is also the program's schedule buffer.
Payment terms	Small firms carry aggregated scopes only as well as the program pays. Construction advances and on-time installment payments are part of the sequencing design rather than an accounting detail, and retention is the lever that gets close-out documentation finished (A14).

Choose your delivery mix

Aggregation by intervention type is this plan's primary engine, and it is what produces the program's price discipline, its independent validation of costly work, and its specialist trade development. It was not the pilot's only path. Aggregation by home ran alongside it, in the pilot-within-a-pilot and through a fifth selected contractor, a general contractor who ran per-home installations during the implementation phase. The intervention-type aggregations proved by far the quicker and more cost-effective path.

The two styles play different roles. Per-home aggregation is not the more cost-effective path; its value is what it makes possible in the homes that need the most. Of the six projects eventually awarded to a single contractor, one home drew on the work of the program administrator, partner organizations, and subcontractors together, paid for by five separate funding sources. That kind of braided, multi-party scope is what per-home aggregation exists to carry. A per-home award is still safe to make only once prices are calibrated and site conditions are disclosed, and both come out of the sorting process this plan describes.

Fit the mandate

Programs that can sift, completing some interventions in a home and deferring others as timing and funding allow, get the full benefit of the sorting process. Whole-home and zonal mandates cannot sift. Every intervention in a mandated home must be completed, and full electrification carries additional code compliance and structural work to accommodate it. The sequencing in Step 4 still holds, and still provides

the most cost-effective ordering with continuous field work, because no home's completion waits on work that could run elsewhere.

Zonal programs apply those whole-home demands to every home in a zone, and meet two conditions of their own. Fewer homes will lack the electrical capacity that requires an upgraded service panel than a low-income-targeted portfolio shows; but local transformers support a limited number of service upgrades before the utility must upgrade the transformer itself, an added delay class, so batch the utility track by transformer service area and engage the utility early. And some homes in the zone will be resistant to having the work performed, which is work for the outreach and homeowner education track (A15) rather than for the construction schedule.

Prove it on a sample

However a program weighs these choices, decide how to run the full process on a representative sample of homes before committing to the complete portfolio. Draw the first group to reflect the housing stock, occupant profiles, and electrical conditions the program expects. Working that group end to end checks the assumptions behind the tiers and rates. It also proves the administrative framework, from the portal to the payment mechanics to the utility track, while the cost of being wrong is still small.

Companion tools: the tiered aggregation framework (A4), the scope-of-work order and bid sheet (A11), the tracking portal (A9), and the close-out packet (A14) that ends each home's trip through the loop.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A14. Close-Out Packet

Purpose and How to Use This Packet

This packet closes out a single home within an aggregated scope of work. Close-out is where the program's promises become records: the work is verified complete and inspected, labor compliance is finalized, the homeowner formally accepts the work and receives warranties and manuals, the contractor's retention is released, and the documentation that later funding claims depend on is captured while it is still easy to capture.

Complete one packet per home, in the order of the forms below. A contractor's retention for an aggregation is released only when every home in that aggregation has a completed packet on file.

1. Form 1: final inspection checklist
2. Form 2: final certified payroll verification
3. Form 3: documentation capture (nameplate data, invoices, completion records)
4. Form 4: warranty and manual handover
5. Form 5: homeowner sign-off
6. Form 6: retention release

Documentation. File the completed packet in the tracking portal (A9) under the home's record, together with the final certified payroll (A6). This packet is the audit trail for the funder, and the documentation captured in Form 3 is what makes later rebate and incentive claims possible.

How Berkeley did it. The pilot's one successful rebate claim, \$5,800 on its fully electrified whole-home project, was possible because equipment nameplate data, invoices, and completion documentation had been captured at close-out. The pilot's experience led the program to treat close-out documentation capture as a standing requirement rather than an optional extra: rebate programs commonly ask for exactly these records months after crews have left.

Project Identification (all forms)

Home / site ID	
Homeowner name	
Property address	
Contractor (firm and license no.)	
Aggregated scope order no. (A11)	
Aggregation tier	
Notice to proceed date	

Substantial completion date	
-----------------------------	--

Form 1. Final Inspection Checklist

Item	Complete	Date	Initials	Notes
All line items on the approved bid sheet (A11) are installed and operational				
All change orders were approved in writing before the work and are attached				
Punch list items are resolved and verified on site				
All permits are finalized by the authority having jurisdiction; final inspection cards attached				
Administrator (or designated inspector) final inspection sign-off completed				
Site conditions disclosed during work (A10) are resolved or documented with a plan				
Homeowner walk-through completed; operation of each new system demonstrated				

Form 2. Final Certified Payroll Verification

Item	Complete	Date	Initials	Notes
Final certified payroll (federal WH-347 or equivalent, A6) submitted for all weeks worked				
Statements of compliance signed for every payroll week				
Payroll review checklist (A6) completed; discrepancies resolved in writing				
Wages reconciled against the Job Quality Standards and the applicable funding-source wage rules				
Payroll weeks reconciled against scheduled work dates in the tracking portal (A9)				
Subcontractor payrolls, if any, submitted and reviewed				

Form 3. Documentation Capture

Capture these records at the final site visit, while equipment is accessible and the contractor is still engaged. They serve rebate and incentive claims, warranty service, and program reporting.

Record	Captured (date / initials / location filed)
Equipment nameplate data: make, model, serial, and capacity for every installed unit (photograph each nameplate)	
Contractor final invoice(s), itemized by measure	
Completion documentation: signed completion certificate or equivalent per measure	
Final permit cards / final inspection records	
Before and after photos for each scope item, filed to the home's album	
Energy-code (Title 24 or equivalent) compliance and acceptance documents, where required	
Rebate or incentive application records, if a claim is being made [verify against current program rebate status]	
Decommissioned gas equipment: disposal or recycling record	

Form 4. Warranty and Manual Handover

Equipment	Make / model / serial	Warranty registered	Manual delivered	Operation shown

Register manufacturer warranties before close-out; equipment is covered by the manufacturer's warranty, not by a separate program guarantee. Give the homeowner the warranty contact for after-service questions and record it on the sign-off form below.

Form 5. Homeowner Sign-Off

Item	Complete	Date	Initials	Notes
Homeowner education materials (A15) delivered and reviewed with the homeowner				
Homeowner has contact information for warranty issues and after-service questions				
Open homeowner concerns, if any, documented below with a resolution plan				
Follow-up check-in scheduled [confirm program follow-up timing]				

Homeowner acceptance: I confirm that the work described in my signed scope of work is complete, that the operation of the new equipment has been demonstrated to me, and that I have received the warranty and manual materials listed in Form 4. Any outstanding concerns are noted below.

Outstanding concerns and resolution plan (or 'none')	
Homeowner name and signature	
Date	

Form 6. Retention Release

Release retention only when all of the following conditions are met for every home in the aggregation:

Item	Complete	Date	Initials	Notes
Forms 1 through 5 of this packet completed for every home in the aggregation				
Final invoice reconciled against the approved bid sheet and approved change orders				
Costs allocated to funding sources per the braided funding model (A1)				
All prior progress payments confirmed paid				
No unresolved homeowner concerns or open warranty claims attributable to installation				
Retention release authorized by the program administrator				

Sign-Off

Role	Name and signature	Date
Contractor representative		
Program administrator		
Homeowner		

Lesson learned. Do not treat retention release as automatic at final inspection. Holding it until certified payroll and documentation capture are complete is the only leverage the administrator has left at the end of a project, and it is the point where missing paperwork actually gets finished.

Rebuilding Together East Bay Network

City of Berkeley Just Transition Electrification Pilot Program

A15. Homeowner Education and Communication

Purpose and How to Use This Packet

This packet is the homeowner-side mirror of the Contractor Playbook materials. The Contractor Playbook's two readiness tracks converge at the home: contractors arrive trained, contracted, and scheduled, and the homeowner needs to arrive equally ready, informed about the technology, the process, and the people who will be in their house. This packet carries the inform-and-educate track that runs alongside the contractor work.

Sections 1 through 7 below are written to the homeowner and can be adapted directly into a digital or paper packet. Deliver it in stages at the touchpoints in the communication schedule, not as a single stack of paper at intake. Translate into the household's primary language and keep reading level plain [confirm translation languages for your service area].

1. Welcome and What This Program Does

Your home has been selected for the Just Transition Electrification Pilot program. The program replaces older gas-burning or failing equipment in your home with modern, efficient electric equipment. The work in your signed scope is provided at no cost to you: there is no fee, no bill from the contractors, no lien on your home, and nothing to repay. The work is funded through a grant agreement you sign (A12).

What we cannot promise: the program cannot guarantee that every need identified in your home will be addressed, or that any particular equipment, brand, repair, or timeline will be provided. What the program will do for your home is determined by the assessment, program criteria, and available funding, and is only confirmed once it appears in your signed scope of work. If a planned item later cannot be completed, we will tell you why and put any change in writing.

- Who we are: The program administrator is your single point of contact from start to finish.
- Who does the work: Licensed, background-checked contractors selected and supervised by the program.
- What you sign: A homeowner grant agreement packet (A12), which includes the participant waiver. The grant agreement sets out the work, your eligibility, and both parties' obligations. The waiver is a condition of participation written in plain language: it covers the program guidelines, including providing home access to program staff and contractors and the work performed, including what it does and does not cover. No work is scheduled until both documents are signed.

2. The Technology Going Into Your Home

Your scope of work lists exactly which of these apply to your home. In plain terms:

- Heat pump heating and cooling: one system that both heats and cools your home efficiently. It runs on electricity and replaces a gas furnace or wall heater. Many homes get cooling for the first time.
- Heat pump water heater: an efficient electric water heater. It can look larger than your old one and makes a soft humming sound while it runs.
- Induction cooking: an electric cooktop that heats pans directly. It boils water faster than gas and the surface stays cooler to the touch. Your existing cookware may need replacement. Stainless steel and magnetic cookware works.
- Electric dryer: an efficient electric dryer that replaces a gas dryer. It runs on a dedicated circuit installed as part of the work.
- Electrical panel and wiring upgrades: some homes need a larger electrical panel or new circuits before the equipment above can be installed. This is normal in older homes and is part of the program's work to prepare your home for electrification.

3. The Step-by-Step Process

Stage	What happens	Who you will see
Assessment	We walk your whole home, note its condition, and identify what should be replaced or repaired	Program assessor
Scope of Work	We review the planned work with you and you sign the grant agreement	Program administrator
Site Visits	Contractors visit up to three times to plan the work: an installer first, then an electrician, and for some homes a second electrician for panel work	Installer, electrician(s)
Installation	Crews complete the work, usually over several scheduled days	Contractor crew
Inspection	The city inspects the work; we walk the home with you and show you how everything operates	Inspector, administrator
Close-out	You sign off that the work is complete, and receive warranties and manuals	Administrator

4. What to Expect While Crews Are Working

- Work hours: crews work on weekdays between early mornings to early evenings and confirm each visit with you in advance.
- Access: crews need clear access to work areas, including the attic, crawlspace, electrical panel, and equipment locations. We will tell you which areas ahead of each visit.
- Utilities: power, gas, or water may be off for short periods during the work. Crews tell you before shutting anything off and restore service before leaving each day.
- Your belongings: crews protect floors and furniture in work areas. Please move fragile or personal items out of work areas before the crew arrives; ask us if you need help moving anything.
- Staying home: an adult (18 or older) named on the agreement needs to be home to let crews in, unless we arrange otherwise with you in writing.
- Questions or concerns during work: raise anything with the crew lead or call the program contact below. You will never be penalized for asking questions or reporting a concern.

5. Operating Your New Equipment

- Heat pump: set the thermostat to a comfortable temperature and leave it. Heat pumps work best held steady, not turned up and down like a furnace.
- Water heater: it is set to a safe, efficient mode at installation. If you run short of hot water, call us before changing settings.
- Filters and maintenance: we show you the air filter at walk-through and how often to check it. Manufacturer warranty registration is done for you before close-out; equipment is covered by the manufacturer's warranty, not by a separate program guarantee.
- Induction cooktop: use flat-bottomed magnetic cookware. If a pan does not heat, it is the pan, not the cooktop; a magnet will stick to a compatible pan.

6. Who to Call

Question about	Point of contact
Program details and scheduling	Program administrator
Work in progress	Crew lead on site, followed by the program administrator
Equipment problems after close-out	Warranty contact provided at walk-through
Urgent safety issue (gas smell, sparking)	Call 911 or your utility emergency line first, followed by the program administrator

7. Frequently-Asked Questions

- Does this cost me anything? The work in your signed scope costs you nothing: no fee, no bill, no lien, no repayment. The program does not pay for work outside your signed scope, and anything outside it is discussed and agreed with you in writing first.

- Is everything my home needs guaranteed to be done? No. The assessment may identify more needs than the program can fund. Only the items in your signed scope of work are committed, and even those can change if conditions found during work require it; any change is explained and put in writing.
- Why do I have to sign a waiver? The waiver, part of your agreement packet (A12), is a standard condition of participating in a program that sends crews into your home at no cost to you. We walk through it with you before signing and you keep a copy.
- Will my utility bill go up? Your gas use goes down or ends, and your electric use goes up. Most households see similar or lower total bills; we review what to expect for your home during the scope meeting [verify against program bill-impact guidance].
- Do I keep my old equipment or can it get donated? No. Removal and disposal of replaced equipment is part of the work.
- What if something is damaged during work? Tell the crew lead or the administrator right away. Contractors carry insurance and the program follows up until it is resolved.
- Can I opt out after signing? The grant agreement (A12) explains your rights and any conditions. Talk to the administrator before work begins if your situation changes.

Communication Schedule for Program Administrators

Deliver the sections above at these touchpoints rather than all at once.

Milestone	What the homeowner gets	Channel	Owner
Intake accepted	Sections 1 and 2	Print + call	Administrator
Scope meeting	Section 3 (process) with their scope; agreements reviewed	In person	Administrator
Before each site visit	Visit purpose, who is coming, areas needing access	Call / text	Administrator
Before installation	Section 4 (what to expect), confirmed schedule	Print + call	Administrator
At walk-through	Sections 5 and 6 (operation, contacts manuals and warranties)	In person	Contractor + Administrator
After close-out	Follow-up check-in on equipment and bills [confirm timing]	Call	Administrator

From the field. Homeowner readiness failures look like contractor delays. A locked crawlspace, a large curio cabinet, or a homeowner surprised by a day without hot water all cost crew time that was priced into a fixed bid. Every item in Section 4 exists because it costs a crew hours somewhere.