File No. 251169 **Committee Item No.** 3
Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

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Committee: Budget and Finance Committee **Date** January 7, 2026
Board of Supervisors Meeting **Date** _____

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Completed by: Brent Jalipa **Date** December 31, 2025
Completed by: Brent Jalipa **Date** _____

FILE NO. 251169 RESOLUTION NO.

[Accept and Expend Grant - Retroactive - United States Department of Energy - Buildings Upgrade Challenge, Phase 2 - $400,000]

Resolution retroactively authorizing the Department of the Environment ("Environment Department") to accept and expend a prize in the amount of $400,000 which was confirmed as received by the Environment Department on March 17, 2025, from the United States Department of Energy's Office of Energy Efficiency and Renewable Energy, to implement a pilot program to upgrade 20 San Francisco homes with electric heat pump water heaters and energy efficiency measures.

WHEREAS, The City and County of San Francisco is a long-standing leader in local and regional electrification and energy efficiency program development and implementation; and

WHEREAS, On January 18, 2023, the U.S. Department of Energy (DOE) Buildings Upgrade Prize (Buildings UP) released a notice of capacity-building prizes focused on reducing greenhouse gas emissions in existing buildings through energy efficiency and efficient electrification; and

WHEREAS, Buildings UP is implemented in three phases over approximately five years: Plan, Pilot Implementation, and Full-scale Implementation; and

WHEREAS, In March 2023, air quality regulators in the San Francisco Bay Area mandated phasing out the sale of residential natural gas water heaters by 2027; and

WHEREAS, On July 18, 2023, the Environment Department submitted its concept titled, "200 x 200: Fast Upgrades, Equitable Outcomes;" and

WHEREAS, The concept aims to upgrade up to 200 single-family homes in 200 days with electric heat pump water heaters (HPWH) and energy efficiency improvements; and

WHEREAS, As the San Francisco Bay Area has mandated the phase-out on sales of residential natural gas water heaters by 2027, the concept will help ensure the electric HPWH roll-out is affordable for all communities; and

WHEREAS, On December 15, 2023, the Environment Department received the prize of $400,000 to conduct Phase 1, creating a plan to implement the concept; and

WHEREAS, On November 22, 2024, the Environment Department and its Co-Applicants successfully completed Phase 1 by submitting the plan and other required documents, as well as passing an oral interview with the DOE; and

WHEREAS, On December 5, 2024, the DOE announced another prize of $400,000 to the Environment Department to conduct Phase 2, Pilot Implementation; and

WHEREAS, The prize for Phase 2, Pilot Implementation, funds a pilot program that aims to upgrade at least 20 single-family homes; and

WHEREAS, The pilot program will provide insights and lessons-learned to effectuate the goal of upgrading 200 single-family homes in 200 days with HPWH and energy efficiency improvements during the final phase of Buildings UP; and

WHEREAS, The Environment Department intends to collaborate with the San Francisco Climate Equity Hub to promote and implement the pilot program; and

WHEREAS, If the pilot program is successful, DOE may grant the Department an additional $400,000 in Phase 3; and

WHEREAS, Phase 2 of this project began on March 17, 2025, when the Department confirmed the payment as received from the Department of Energy, and is not associated with a restricted time period; and

WHEREAS, The prize does not require an Annual Salary Ordinance (ASO) amendment and partially funds the Environment Department for existing positions; and

WHEREAS, Retroactive approval is being requested because this resolution was determined to be the best process for seeking authority to utilize a Federal prize, following discussions and clarification across multiple departments; and

WHEREAS, The final, approved Fiscal Year (FY) 2024-2025 and FY2025-2026 Annual Appropriations Ordinance included the prize revenues and expenditures associated with these prize winnings; and

WHEREAS, The Environment Department has submitted all the documents applicable to this prize that are required in an Accept and Expend package submitted to the Board of Supervisors, and those documents are on file with the Clerk of the Board of Supervisors in File No. 251169; and

WHEREAS, The prize budget reflects planned spending of indirect costs totaling $41,227; now, therefore, be it

RESOLVED, That the Director of the Environment Department is hereby retroactively authorized to accept and expend the United States Department of Energy - Buildings Upgrade Challenge - Phase 2 prize of $400,000 on behalf of the City, in accordance with the purposes and goals for the funding.

Recommended:	Approved: _/s/ Sophia Kittler for _____
	Daniel Lurie, Mayor
_/s/_____	Approved: __/s/ Jocelyn Quintos for___
Tyrone Jue, Director	Greg Wagner, Controller
Environment	

File Number: 251169
(Provided by Clerk of Board of Supervisors)

Grant Resolution Information Form
(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: United States Department of Energy - Buildings Upgrade Challenge, Phase 2

2. Department: San Francisco Environment Department

3. Contact Person: Alice Hur Telephone: (415) 355-3709

4. Grant Approval Status (check one):

   [X] Approved by funding agency [ ] Not yet approved

5. Amount of Grant Funding Approved or Applied for: $ 400,000

6. a. Matching Funds Required: None
   b. Source(s) of matching funds (if applicable): Not applicable

7. a. Grant Source Agency: United States Department of Energy
   b. Grant Pass-Through Agency (if applicable):

8. Proposed Grant Project Summary: The Environment Department will launch Phase 2, the Pilot Phase, of the Buildings Upgrade Prize Challenge by upgrading 20 single-family homes in the Bayview-Hunters Point neighborhood. These upgrades will include the installation of electric heat pump water heaters (HPWH) and other energy-efficient improvements. During this phase, the Environment Department will collect data, gather feedback, and document lessons learned to inform a future application for the Final Phase of the Buildings Upgrade Prize Challenge, which aims to upgrade 200 single-family homes in 200 days, in the same neighborhood.

   With the Bay Area Air District mandating the discontinuation of residential natural gas water heater sales by 2027, this initiative becomes important in ensuring an equitable and affordable rollout of HPWH. The project's overarching objective is to demonstrate an innovative way to quickly and equitably upgrade single-family homes and validate its ability to scale citywide.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

   Start-Date: March 18, 2025 End-Date: None required

10. a. Amount budgeted for contractual services: $ 60,000
    b. Will contractual services be put out to bid? Processes for acquiring contractual services will comply with all applicable City procurement requirements.
    c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Not applicable because it is Federal funding.
    d. Is this likely to be a one-time or ongoing request for contracting out? One-time

11. a. Does the budget include indirect costs?
    [X] Yes [ ] No
    b. If yes, how much? $ 41,227.00
    c. How was the amount calculated? 10% de minimis rate applied to direct labor costs
    d. If no, why are indirect costs not included?
    [ ] Not allowed by granting agency [ ] To maximize use of grant funds on direct services
    [ ] Other (please explain):
    e. If no indirect costs are included, what would have been the indirect costs?

12. Any other significant grant requirements or comments:

Federal prize awards were designed to be less administratively burdensome than federal grants. Prize funding is provided up front and does not have an expiration date. The proposed budget shows the plan for spending but is not binding. While DOE would prefer that prize winners spend funds needed to complete work that enables successful competition in subsequent phases of the competition, it is not required.

****Disability Access Checklist***(Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

[ ] Existing Site(s)	[ ] Existing Structure(s)	[ ] Existing Program(s) or Service(s)
[ ] Rehabilitated Site(s)	[ ] Rehabilitated Structure(s)	[X] New Program(s) or Service(s)
[ ] New Site(s)	[ ] New Structure(s)	

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.
4. All websites and digital content developed as part of this project will comply with the Digital Accessibility Inclusion Standard.

If such access would be technically infeasible, this is described in the comments section below:

Comments:

Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Deborah Kaplan

(Name)

Deputy Directorfor Programmatic Access

(Title)

Date Reviewed: 10/10/2025

DocuSigned by:
Deborah Kaplan
57AA35F0CBEF940A...
(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Tyrone Jue

(Name)

Director

(Title)

Date Reviewed: 10/14/2025

DocuSigned by:
Tyrone Jue
3D5889FZAE5140C...
(Signature Required)


Photo Credit: SFE Staff

U.S. DOE Buildings Upgrade Prize – Accept & Expend

Alice Hur
Senior Policy Coordinator

January 7, 2026

SAN FRANCISCO ENVIRONMENT DEPARTMENT

SF Environment's focus on climate, coordination, and equity - turning climate goals into lived reality by protecting health and communities through electrification initiatives.

$83.2M in grants won since November 2022.

2 federal prizes (total **$800,000**) awarded to SFE since November 2022.

Background: U.S. Department of Energy Buildings Upgrade Prize

- Designed to accelerate building retrofits with high-performance, energy efficient and electrification technologies **over 3 phases.**

- Benefits include cutting energy costs while improving indoor air quality, comfort.

- Has awarded over $22 million in cash prizes and project support nationwide.

SFE

Photo Credit: SFE Staff

Environment Department's Winning Concept – 200 x 200: Fast Upgrades, Equitable Outcomes

Upgrade 200 homes in 200 days using **standardized equipment and installation processes** for heat pump water heaters and energy efficiency measures - in and around state-designated Disadvantaged Communities.

SFE

 Photo Credit: SFE Staff

Summary: Buildings Upgrade Prize, Phases 1 and 2

Summary	
Purpose:	Improve energy efficiency and electrification in low-income, historically marginalized communities through the **200 x 200** concept.
Cash Prize Amount:	$ 400,000 per phase x 2 phases or **$800,000 total**
Timeframe:	**None specified**. At the discretion of the awardee, application to compete in the next phase must be submitted before the rolling application window closes or available funds are exhausted. Prizes were received in Dec 2023 and March 2025.
Description/ Deliverables:	• **Phase 1**: Develop a pilot implementation plan in collaboration with 3 partners. • **Phase 2**: Implement the pilot plan to upgrade 20 single-family home within the Disadvantaged Communities to gather feedback and data for the full-scale program in Phase 3.

SFE

- The DOE funding consists of **cash prizes** and carries no deliverable requirements or terms and conditions. As a prize, there is no grant agreement.
- Since they're prizes, SFE budgeted $800,000 in FY24-25 and $400,000 in FY 25-26 for all 3 phases.
- SFE believed that including the prizes in the budgets met requirements.
- Later, City Attorneys and Controller's Office staff determined the prizes must follow grant procedures under local rules.
- SFE, therefore, is now following standard grant procedure, including submission of the Accept and Expend resolutions.

Why retroactive authorization of A&E?

SFE

Thank you!

Alice Hur
Senior Policy Coordinator
San Francisco Environment Department
SFEnvironment.org

SAN FRANCISCO ENVIRONMENT DEPARTMENT

City and County of San Francisco, - Department of the Environment			
US DOE, Buildings Upgrade Challenge, Phase 2			
Personnel	**Classificaiton, Title, and FTE %**	**Activities Description**	**Amount**
	5644 Principal Environmental Specialist (0.25 FTE); 5642 Sr. Enviornmental Specialist (0.25 FTE)	Implement the pilot (designed in the previous phase) and prepare the application packet for the final phase and prize	$84,557
		Sub-Total Personnel	**$84,557**
Non Personnel Services	**Category**		**Amount**
	Incentives for new equipment, installation, permitting, etc.		$209,216
	Other Professional Services, Standby Consultants		$60,000
	Community Engagement Expenses		$5,000
		Sub-Total Contract/ Other	**$274,216**
Indirect			**$41,227**
		Grand Total	**$400,000**

Buildings Upgrade Challenge, Phase 2 Prize Money

Employee Name	Job Code	FTE	Hourly Rate 2024/25	Hourly Rate 2025/26	Salary Mar-June 2025	Salary July-Dec 2025	Salary Jan-Mar 2026	Calendar Year 2025	Calendar Year 2026
Ryan Ramos	5642	0.25	82.78	86.56	10,926.49	17,137.95	11,425.30	28,064.44	11,425.30
Lowell Chu	5644	0.25	94.49	98.77	12,472.73	19,556.50	13,037.67	32,029.23	13,037.67
Total SFE Staff		0.50			23,399.22	36,694.45	24,462.96	60,093.67	24,462.96
Indirect:									
Indirect Mar-Jun 2025		0.50			32,398.67			16,199.33	
Indirect Jul-Dec 2025		0.50				50,056.00		25,028.00	
Indirect Jan-Mar 2026		0.50					25,028.00	0.00	
Total Indirect		1.50						41,227.33	

Other Expenses:	
Incentives	209,216
Other Professional Services: Standby Consultants	60,000
Community Engagement Expenses: printing and mailing surveys, payments to workshop participants for their time and feedback, space rentals for community workshops and food, coffee, and etc.	5,000
Total Other Expenses	274,216.00
Grand Total	**$400,000**

US DOE Award Name	Total	Notes
Buildings Upgrade Phase 2 Prize Money	$400,000	
Total Incoming:	**$400,000.00**	

SFE Hourly Billing Spreadsheet

Billable Hours	Days	Hours
Vacation	20	160
Sick Time	13	104
Floating Holidays	5	40
Paid Holidays	12	96
Mandatory Reqs	12	96
Sub-Total	62	496
Days in Year	260	2,080
% not billable	24%	
Billable Annually	198	1,584

792

		FY 2017-2018										FY 2018-2019										FY 2019-2020										FY 2020-2021				
Class	Job Title	FY 17/18 Salary	Benefits	Combined	Overhead FY 17/18	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total				FY 18/19 Salary	Projected Benefits	Combined	Projected Overhead FY 18/19	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total				FY 19/20 Salary	Projected Benefits	Combined	Projected Overhead FY 19/20	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total				FY 20/21 Salary	Projected Benefits	Combined	Projected Overhead FY 20/21	Sub-Total
0962_C	Department Head II	$ 200,308	$ 69,089	$ 269,397	$ 63,200	$ 332,597	$ 159.90	$ 209.97	186842	61649		$ 213,907	$ 72,363	$ 286,270	$ 71,135	$ 357,405	$ 171.83	$ 225.63				$ 221,394	$ 75,990	$ 297,384	$ 79,032	$ 376,416	$ 180.97	$ 237.64				$ 224,715	$ 78,460	$ 303,174	$ 84,664	$ 387,838
0952_S	Deputy Director II	$ 160,030	$ 58,673	$ 218,703	$ 63,200	$ 281,903	$ 135.53	$ 177.97	140533	53098		$ 168,769	$ 61,509	$ 230,278	$ 71,135	$ 301,413	$ 144.91	$ 190.29				$ 174,676	$ 64,509	$ 239,185	$ 79,032	$ 318,217	$ 152.99	$ 200.89				$ 177,296	$ 66,606	$ 243,902	$ 84,664	$ 328,566
0922_C	Manager II	$ 138,788	$ 56,391	$ 195,179	$ 63,200	$ 258,379	$ 124.22	$ 163.12	130291	50481		$ 142,761	$ 57,740	$ 200,501	$ 71,135	$ 271,636	$ 130.59	$ 171.49				$ 147,758	$ 61,996	$ 209,754	$ 79,032	$ 288,786	$ 138.84	$ 182.31				$ 149,974	$ 64,011	$ 213,985	$ 84,664	$ 298,649
1825_C	Principal Administrative Analyst II																																		$ 84,664	
1824_C	Principal Administrative Analyst	$ 128,974	$ 49,977	$ 178,951	$ 63,200	$ 242,151	$ 116.42	$ 152.87	121039	44750		$ 133,166	$ 50,736	$ 183,902	$ 71,135	$ 255,037	$ 122.61	$ 161.01				$ 137,826	$ 54,930	$ 192,756	$ 79,032	$ 271,788	$ 130.67	$ 171.58				$ 139,894	$ 56,715	$ 196,609	$ 84,664	$ 281,273
5644_C	Principal Environmental Specialist	$ 127,795	$ 49,715	$ 177,510	$ 63,200	$ 240,710	$ 115.73	$ 151.96	119886	44448		$ 131,460	$ 50,477	$ 181,937	$ 71,135	$ 253,072	$ 121.67	$ 159.77				$ 136,061	$ 54,573	$ 190,634	$ 79,032	$ 269,666	$ 129.65	$ 170.24				$ 142,295	$ 56,347	$ 198,642	$ 84,664	$ 283,306
5642_C	Senior Environmental Specialist	$ 111,974	$ 45,895	$ 157,869	$ 63,200	$ 221,069	$ 106.28	$ 139.56	105138	41076		$ 115,181	$ 46,621	$ 161,802	$ 71,135	$ 232,937	$ 111.99	$ 147.06				$ 119,212	$ 50,377	$ 169,589	$ 79,032	$ 248,621	$ 119.53	$ 156.96				$ 121,001	$ 52,014	$ 173,015	$ 84,664	$ 257,679
5640_C	Environmental Specialist	$ 96,235	$ 41,482	$ 137,717	$ 63,200	$ 200,917	$ 96.59	$ 126.84	90338	37112		$ 99,007	$ 42,219	$ 141,226	$ 71,135	$ 212,361	$ 102.10	$ 134.07				$ 102,472	$ 45,546	$ 148,018	$ 79,032	$ 227,050	$ 109.16	$ 143.34				$ 104,009	$ 47,026	$ 151,036	$ 84,664	$ 235,700
5638_C	Environmental Assistant	$ 79,181	$ 36,699	$ 115,880	$ 63,200	$ 179,080	$ 86.10	$ 113.06	74329	32824		$ 81,469	$ 37,388	$ 118,857	$ 71,135	$ 189,992	$ 91.34	$ 119.94				$ 84,320	$ 40,310	$ 124,630	$ 79,032	$ 203,662	$ 97.91	$ 128.57				$ 85,585	$ 41,620	$ 127,205	$ 84,664	$ 211,869
1094_C	IT Operations Support Administrator IV	$ 118,732	$ 47,218	$ 165,950	$ 63,200	$ 229,150	$ 110.17	$ 144.67	109268	41655		$ 119,787	$ 47,306	$ 167,093	$ 71,135	$ 238,228	$ 114.53	$ 150.40				$ 123,980	$ 51,838	$ 175,818	$ 79,032	$ 254,850	$ 122.52	$ 160.89				$ 125,839	$ 53,523	$ 179,362	$ 84,664	$ 264,026
1093_C	IT Operations Support Administrator III																																			
1052_C	IS Business Analyst																																			
1204_C	Senior Personnel Clerk																																			
1823_C	Senior Administrative Analyst	$ 111,411	$ 45,737	$ 157,148	$ 63,200	$ 220,348	$ 105.94	$ 139.11	104549	40917		$ 114,618	$ 46,469	$ 161,087	$ 71,135	$ 232,222	$ 111.65	$ 146.60				$ 118,630	$ 50,206	$ 168,836	$ 79,032	$ 247,868	$ 119.17	$ 156.48				$ 120,409	$ 51,838	$ 172,247	$ 84,664	$ 256,911
1543_C	Secretary, Commission on the Environment	$ 111,411	$ 45,046	$ 156,457	$ 63,200	$ 219,657	$ 105.60	$ 138.67	104549	39916		$ 114,618	$ 45,727	$ 160,345	$ 71,135	$ 231,480	$ 111.29	$ 146.14				$ 118,630	$ 49,442	$ 168,072	$ 79,032	$ 247,104	$ 118.80	$ 156.00				$ 120,409	$ 51,049	$ 171,458	$ 84,664	$ 256,122
1844_C	Senior Management Assistant	$ 100,820	$ 42,301	$ 143,121	$ 63,200	$ 206,321	$ 99.19	$ 130.25	94574	38248		$ 103,719	$ 43,010	$ 146,729	$ 71,135	$ 217,864	$ 104.74	$ 137.54				$ 107,349	$ 46,439	$ 153,788	$ 79,032	$ 232,820	$ 111.93	$ 146.98				$ 108,959	$ 47,948	$ 156,908	$ 84,664	$ 241,572
1822_C	Administrative Analyst	$ 95,618	$ 40,840	$ 136,458	$ 63,200	$ 199,658	$ 95.99	$ 126.05	89721	36946		$ 98,363	$ 41,538	$ 139,901	$ 71,135	$ 211,036	$ 101.46	$ 133.23				$ 101,806	$ 44,839	$ 146,645	$ 79,032	$ 225,677	$ 108.50	$ 142.47				$ 103,333	$ 46,296	$ 149,629	$ 84,664	$ 234,293
1424_C	Clerk Typist	$ 61,457	$ 31,246	$ 92,703	$ 63,200	$ 155,903	$ 74.95	$ 98.42	57677	28352		$ 63,454	$ 32,863	$ 96,317	$ 71,135	$ 167,452	$ 80.51	$ 105.71				$ 65,675	$ 34,338	$ 100,013	$ 79,032	$ 179,045	$ 86.08	$ 113.03				$ 66,660	$ 35,454	$ 102,114	$ 84,664	$ 186,778
1222_C	Senior Payroll And Personnel Clerk	$ 82,935	$ 37,279	$ 120,214	$ 63,200	$ 183,414	$ 88.18	$ 115.79	77815	33752		$ 85,321	$ 37,966	$ 123,287	$ 71,135	$ 194,422	$ 93.47	$ 122.74				$ 88,307	$ 40,940	$ 129,247	$ 79,032	$ 208,279	$ 100.13	$ 131.49				$ 89,632	$ 42,271	$ 131,902	$ 84,664	$ 216,566
1632_C	Senior Account Clerk	$ 73,389	$ 34,598	$ 107,987	$ 63,200	$ 171,187	$ 82.30	$ 108.07	68940	31373		$ 75,493	$ 35,272	$ 110,765	$ 71,135	$ 181,900	$ 87.45	$ 114.84				$ 78,135	$ 38,005	$ 116,140	$ 79,032	$ 195,172	$ 93.83	$ 123.21				$ 79,307	$ 39,240	$ 118,547	$ 84,664	$ 203,211
1310_C	Public Relations Assistant	$ 66,579	$ 32,685	$ 99,264	$ 63,200	$ 162,464	$ 78.11	$ 102.57	62530	29653		$ 68,477	$ 33,348	$ 101,825	$ 71,135	$ 172,960	$ 83.15	$ 109.19				$ 70,874	$ 35,912	$ 106,786	$ 79,032	$ 185,818	$ 89.34	$ 117.31				$ 71,937	$ 37,079	$ 109,016	$ 84,664	$ 193,680
9922_C	Public Service Aide - Associate To Profe	$ 45,154	$ 28,194	$ 73,348	$ 63,200	$ 136,548	$ 65.65	$ 86.20	42366	25674		$ 46,463	$ 28,888	$ 75,351	$ 71,135	$ 146,486	$ 70.43	$ 92.48				$ 48,089	$ 30,960	$ 79,049	$ 79,032	$ 158,081	$ 76.00	$ 99.80				$ 48,811	$ 31,966	$ 80,777	$ 84,664	$ 165,441
9920_C	Public Service Aide - Assistant To Profe	$ 41,266	$ 26,969	$ 68,235	$ 63,200	$ 131,435	$ 63.19	$ 82.98	38720	24573		$ 42,607	$ 28,408	$ 71,015	$ 71,135	$ 142,150	$ 68.34	$ 89.74				$ 44,098	$ 29,625	$ 73,723	$ 79,032	$ 152,755	$ 73.44	$ 96.44				$ 44,760	$ 30,588	$ 75,348	$ 84,664	$ 160,012

Class	Job Title
0962_C	Department Head II
0952_S	Deputy Director II
0922_C	Manager II
1825_C	Principal Administrative Analyst II
1824_C	Principal Administrative Analyst
5644_C	Principal Environmental Specialist
5642_C	Senior Environmental Specialist
5640_C	Environmental Specialist
5638_C	Environmental Assistant
1094_C	IT Operations Support Administrator IV
1093_C	IT Operations Support Administrator III
1052_C	IS Business Analyst
1204_C	Senior Personnel Clerk
1823_C	Senior Administrative Analyst
1543_C	Secretary, Commission on the Environment
1840_C	Junior Management Assistant
1844_C	Senior Management Assistant
1822_C	Administrative Analyst
1424_C	Clerk Typist
1222_C	Senior Payroll And Personnel Clerk
1632_C	Senior Account Clerk
1310_C	Public Relations Assistant
9922_C	Public Service Aide - Associate To Profe
9920_C	Public Service Aide - Assistant To Profe

SFE Hourly Billing Spreadsheet

FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$ 186.46	$ 244.85
$ 157.96	$ 207.43
$ 143.58	$ 188.54
$ 135.23	$ 177.57
$ 136.20	$ 178.85
$ 123.88	$ 162.68
$ 113.32	$ 148.80
$ 101.86	$ 133.76
$ 126.94	$ 166.68
$ 123.51	$ 162.19
$ 123.14	$ 161.69
$ 116.14	$ 152.51
$ 112.64	$ 147.91
$ 89.80	$ 117.92
$ 104.12	$ 136.72
$ 97.70	$ 128.29
$ 93.12	$ 122.27
$ 79.54	$ 104.44
$ 76.93	$ 101.02

FY 2021-2022

FY 21/22 Salary	Projected Benefits	Combined	Projected Overhead FY 21/22	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$ 229,696	$ 80,813	$ 310,509	$ 87,204	$ 397,713	$ 191.21	$ 251.08
$ 181,226	$ 68,604	$ 249,830	$ 87,204	$ 337,034	$ 162.04	$ 212.77
$ 153,299	$ 65,931	$ 219,230	$ 87,204	$ 306,434	$ 147.32	$ 193.46
$ 160,412			$ 87,204			
$ 147,888	$ 58,417	$ 206,305	$ 87,204	$ 293,509	$ 141.11	$ 185.30
$ 157,820	$ 58,037	$ 215,857	$ 87,204	$ 303,061	$ 145.70	$ 191.33
$ 128,414	$ 53,575	$ 181,989	$ 87,204	$ 269,193	$ 129.42	$ 169.94
$ 110,344	$ 48,437	$ 158,781	$ 87,204	$ 245,985	$ 118.26	$ 155.29
$ 90,555	$ 42,869	$ 133,424	$ 87,204	$ 220,628	$ 106.07	$ 139.29
$ 136,162	$ 55,128	$ 191,290	$ 87,204	$ 278,494	$ 133.89	$ 175.82
$ 127,738	$ 53,393	$ 181,131	$ 87,204	$ 268,335	$ 129.01	$ 169.40
$ 127,738	$ 52,580	$ 180,318	$ 87,204	$ 267,522	$ 128.62	$ 168.89
$ 115,622	$ 49,387	$ 165,009	$ 87,204	$ 252,213	$ 121.26	$ 159.23
$ 109,616	$ 47,685	$ 157,301	$ 87,204	$ 244,505	$ 117.55	$ 154.36
$ 85,228	$ 36,518	$ 121,746	$ 87,204	$ 208,950	$ 100.46	$ 131.91
$ 95,108	$ 43,539	$ 138,647	$ 87,204	$ 225,851	$ 108.58	$ 142.58
$ 84,162	$ 40,417	$ 124,579	$ 87,204	$ 211,783	$ 101.82	$ 133.70
$ 76,336	$ 38,192	$ 114,528	$ 87,204	$ 201,731	$ 96.99	$ 127.36
$ 51,792	$ 32,925	$ 84,717	$ 87,204	$ 171,921	$ 82.65	$ 108.54
$ 47,346	$ 31,505	$ 78,851	$ 87,204	$ 166,055	$ 79.83	$ 104.83

FY 2022-2023

FY 22/23 Salary	Projected Benefits	Combined	Projected Overhead FY 22/23	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$ 241,755	$ 80,452	$ 322,207	$ 89,820	$ 412,027	$ 198.09	$ 260.12
$ 180,622	$ 68,272	$ 248,894	$ 89,820	$ 338,714	$ 162.84	$ 213.83
$ 156,026	$ 63,534	$ 219,560	$ 89,820	$ 309,380	$ 148.74	$ 195.32
$ 168,834						
$ 156,250	$ 58,095	$ 214,345	$ 89,820	$ 304,165	$ 146.23	$ 192.02
$ 166,745	$ 60,258	$ 227,003	$ 89,820	$ 316,823	$ 152.32	$ 200.01
$ 135,676	$ 53,012	$ 188,688	$ 89,820	$ 278,508	$ 133.90	$ 175.83
$ 116,584	$ 48,457	$ 165,041	$ 89,820	$ 254,861	$ 122.53	$ 160.90
$ 95,927	$ 42,815	$ 138,742	$ 89,820	$ 228,562	$ 109.89	$ 144.29
$ 143,862	$ 55,210	$ 199,072	$ 89,820	$ 288,892	$ 138.89	$ 182.38
$ 117,910	$ 48,457	$ 166,367	$ 89,820	$ 256,187	$ 123.17	$ 161.73
$ 127,790	$ 49,572	$ 177,362	$ 89,820	$ 267,182	$ 128.45	$ 168.68
$ 91,910	$ 37,613	$ 129,523	$ 89,820	$ 219,343	$ 105.45	$ 138.47
$ 134,962	$ 52,824	$ 187,786	$ 89,820	$ 277,606	$ 133.46	$ 175.26
$ 134,961	$ 51,598	$ 186,559	$ 89,820	$ 276,379	$ 132.87	$ 174.48
$ 122,160	$ 49,572	$ 171,732	$ 89,820	$ 261,552	$ 125.75	$ 165.12
$ 115,362	$ 46,235	$ 161,597	$ 89,820	$ 251,417	$ 120.87	$ 158.72
$ 89,700	$ 37,613	$ 127,313	$ 89,820	$ 217,133	$ 104.39	$ 137.08
$ 100,486	$ 43,643	$ 144,129	$ 89,820	$ 233,949	$ 112.48	$ 147.70
$ 88,922	$ 40,484	$ 129,406	$ 89,820	$ 219,226	$ 105.40	$ 138.40
$ 80,653	$ 38,223	$ 118,876	$ 89,820	$ 208,696	$ 100.33	$ 131.75
$ 54,721	$ 32,453	$ 87,174	$ 89,820	$ 176,994	$ 85.09	$ 111.74
$ 49,842	$ 32,451	$ 82,293	$ 89,820	$ 172,113	$ 82.75	$ 108.66

FY 2023-2024

FY 23/24 Salary	Projected Benefits	Combined	Projected Overhead FY 23/24	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$ 250,519	$ 74,094	$ 324,613	$ 92,515	$ 417,127	$ 200.54	$ 263.34
$ 187,170	$ 63,888	$ 251,058	$ 92,515	$ 343,572	$ 165.18	$ 216.90
$ 161,682	$ 60,357	$ 222,039	$ 92,515	$ 314,554	$ 151.23	$ 198.58
$ 174,954						
$ 161,914	$ 54,215	$ 216,129	$ 92,515	$ 308,644	$ 148.39	$ 194.85
$ 172,790	$ 56,034	$ 228,824	$ 92,515	$ 321,338	$ 154.49	$ 202.86
$ 140,594	$ 49,810	$ 190,404	$ 92,515	$ 282,919	$ 136.02	$ 178.61
$ 120,810	$ 45,854	$ 166,664	$ 92,515	$ 259,179	$ 124.61	$ 163.62
$ 99,404	$ 40,847	$ 140,251	$ 92,515	$ 232,766	$ 111.91	$ 146.95
$ 149,077	$ 51,752	$ 200,829	$ 92,515	$ 293,344	$ 141.03	$ 185.19
$ 122,184	$ 45,854	$ 168,038	$ 92,515	$ 260,553	$ 125.27	$ 164.49
$ 132,422	$ 46,775	$ 179,197	$ 92,515	$ 271,712	$ 130.63	$ 171.54
$ 95,242	$ 35,732	$ 130,974	$ 92,515	$ 223,488	$ 107.45	$ 141.09
$ 139,854	$ 49,639	$ 189,493	$ 92,515	$ 282,008	$ 135.58	$ 178.04
$ 139,853	$ 48,341	$ 188,194	$ 92,515	$ 280,709	$ 134.96	$ 177.22
$ 126,588	$ 46,775	$ 173,363	$ 92,515	$ 265,878	$ 127.83	$ 167.85
$ 119,544	$ 43,923	$ 163,467	$ 92,515	$ 255,982	$ 123.07	$ 161.60
$ 92,952	$ 35,732	$ 128,684	$ 92,515	$ 221,199	$ 106.35	$ 139.65
$ 104,129	$ 41,514	$ 145,643	$ 92,515	$ 238,157	$ 114.50	$ 150.35
$ 92,145	$ 38,704	$ 130,849	$ 92,515	$ 223,364	$ 107.39	$ 141.01
$ 83,577	$ 36,698	$ 120,275	$ 92,515	$ 212,789	$ 102.30	$ 134.34
$ 56,705	$ 31,217	$ 87,922	$ 92,515	$ 180,436	$ 86.75	$ 113.91
$ 51,649	$ 30,828	$ 82,477	$ 92,515	$ 174,991	$ 84.13	$ 110.47

FY 2024-2025 (PRO FORMA)

FY 24/25 Salary	Projected Benefits	Combined	Projected Overhead FY 24/25	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total	FY 25/26 Salary
$256,197	$78,797	$ 334,994	$69,342	$ 404,336	$ 194.39	$ 255.26	$267,786
$192,465	$68,186	$ 260,651	$69,342	$ 329,993	$ 158.65	$ 208.33	$201,171
$166,514	$62,168	$ 228,682	$69,342	$ 298,024	$ 143.28	$ 188.15	$173,718
$165,873	$57,612	$ 223,485	$69,342	$ 292,827	$ 140.78	$ 184.87	$173,375
$164,340	$57,256	$ 221,596	$69,342	$ 290,938	$ 139.87	$ 183.67	$171,773
$144,012	$52,528	$ 196,540	$69,342	$ 265,882	$ 127.83	$ 167.85	$150,526
$123,764	$48,411	$ 172,175	$69,342	$ 241,517	$ 116.11	$ 152.47	$129,361
$101,823	$43,202	$ 145,025	$69,342	$ 214,367	$ 103.06	$ 135.33	$106,429
$152,709	$54,549	$ 207,258	$69,342	$ 276,600	$ 132.98	$ 174.62	$171,773
$126,583	$47,230	$ 173,813	$69,342	$ 243,155	$ 116.90	$ 153.51	$131,323
$136,026	$48,178	$ 184,204	$69,342	$ 253,546	$ 121.90	$ 160.07	$140,386
$96,194	$36,804	$ 132,998	$69,342	$ 202,340	$ 97.28	$ 127.74	$102,368
$143,245	$52,350	$ 195,595	$69,342	$ 264,937	$ 127.37	$ 167.26	$149,725
$143,246	$51,172	$ 194,418	$69,342	$ 263,760	$ 126.81	$ 166.52	$148,916
$113,785	$48,178	$ 161,963	$69,342	$ 231,305	$ 111.20	$ 146.03	$117,246
$93,881	$36,804	$ 130,685	$69,342	$ 200,027	$ 96.17	$ 126.28	$98,007
$106,661	$43,760	$ 150,421	$69,342	$ 219,763	$ 105.66	$ 138.74	$111,485
$94,395	$40,847	$ 135,242	$69,342	$ 204,584	$ 98.36	$ 129.16	$98,666
$58,075	$33,067	$ 91,142	$69,342	$ 160,484	$ 77.16	$ 101.32	$60,703
$52,165	$31,753	$ 83,918	$69,342	$ 153,260	$ 73.68	$ 96.76	$52,687
$ 84,412	$ 37,799	$ 122,211	$ 95,290	$ 217,501	$ 104.57	$ 137.31	$ 85,257
$ 57,272	$ 32,154	$ 89,425	$ 95,290	$ 184,715	$ 88.81	$ 116.61	$ 57,844
$ 52,165	$ 31,753	$ 83,918	$ 95,290	$ 179,208	$ 86.16	$ 113.14	$ 52,687

FY 2023-2024

FY 23/24 Salary	Projected Benefits	Combined	FTE Hourly Rate	Projected Overhead FY 23/24	Weighted Salary/Benefits & Overhead Total	Weighted Hourly Rate Total
$ 250,519	$ 74,094	$ 324,613	156.06	$ 92,515	$ 417,127	$ 200.54
$ 187,170	$ 63,888	$ 251,058	120.70	$ 92,515	$ 343,572	$ 165.18
$ 161,682	$ 60,357	$ 222,039	106.75	$ 92,515	$ 314,554	$ 151.23
$ 174,954			0.00		$ -	$ -
$ 161,914	$ 54,215	$ 216,129	103.91	$ 92,515	$ 308,644	$ 148.39
$ 172,790	$ 56,034	$ 228,824	110.01	$ 92,515	$ 321,338	$ 154.49
$ 140,594	$ 49,810	$ 190,404	91.54	$ 92,515	$ 282,919	$ 136.02
$ 120,810	$ 45,854	$ 166,664	80.13	$ 92,515	$ 259,179	$ 124.61
$ 99,404	$ 40,847	$ 140,251	67.43	$ 92,515	$ 232,766	$ 111.91
$ 149,077	$ 51,752	$ 200,829	96.55	$ 92,515	$ 293,344	$ 141.03
$ 122,184	$ 45,854	$ 168,038	80.79	$ 92,515	$ 260,553	$ 125.27
$ 132,422	$ 46,775	$ 179,197	86.15	$ 92,515	$ 271,712	$ 130.63
$ 95,242	$ 35,732	$ 130,974	62.97	$ 92,515	$ 223,488	$ 107.45
$ 139,854	$ 49,639	$ 189,493	91.10	$ 92,515	$ 282,008	$ 135.58
$ 139,853	$ 48,341	$ 188,194	90.48	$ 92,515	$ 280,709	$ 134.96
$ -	$ -	$ -	0.00	$ 92,515	$ 92,515	$ 44.48
$ 126,588	$ 46,775	$ 173,363	83.35	$ 92,515	$ 265,878	$ 127.83
$ 119,544	$ 43,923	$ 163,467	78.59	$ 92,515	$ 255,982	$ 123.07
$ 92,952	$ 35,732	$ 128,684	61.87	$ 92,515	$ 221,199	$ 106.35
$ 104,129	$ 41,514	$ 145,643	70.02	$ 92,515	$ 238,157	$ 114.50
$ 92,145	$ 38,704	$ 130,849	62.91	$ 92,515	$ 223,364	$ 107.39
$ 83,577	$ 36,698	$ 120,275	57.82	$ 92,515	$ 212,789	$ 102.30
$ 56,705	$ 31,217	$ 87,922	42.27	$ 92,515	$ 180,436	$ 86.75
$ 51,649	$ 30,828	$ 82,477	39.65	$ 92,515	$ 174,991	$ 84.13

FY 2024-2025

FY 24/25 Salary	Projected Benefits	Combined	FTE Hourly Rate	Projected Overhead FY 24/25	FTE Hourly Rate	Weighted Hourly Rate Sub-Total	FY 25/26 Salary
$256,197	$78,797	$ 334,994	161.05	$69,342	$ 404,336	$ 194.39	$267,786
$192,465	$68,186	$ 260,651	125.31	$69,342	$ 329,993	$ 158.65	$201,171
$166,514	$62,168	$ 228,682	109.94	$69,342	$ 298,024	$ 143.28	$173,718
$165,873	$57,612	$ 223,485	107.44	$69,342	$ 292,827	$ 140.78	$173,375
$164,340	$57,256	$ 221,596	106.54	$69,342	$ 290,938	$ 139.87	$171,773
$144,012	$52,528	$ 196,540	94.49	$69,342	$ 265,882	$ 127.83	$150,526
$123,764	$48,411	$ 172,175	82.78	$69,342	$ 241,517	$ 116.11	$129,361
$101,823	$43,202	$ 145,025	69.72	$69,342	$ 214,367	$ 103.06	$106,429
$152,709	$54,549	$ 207,258	99.64	$69,342	$ 276,600	$ 132.98	$171,773
$126,583	$47,230	$ 173,813	83.56	$69,342	$ 243,155	$ 116.90	$131,323
$136,026	$48,178	$ 184,204	88.56	$69,342	$ 253,546	$ 121.90	$140,386
$96,194	$36,804	$ 132,998	63.94	$69,342	$ 202,340	$ 97.28	$102,368
$143,245	$52,350	$ 195,595	94.04	$69,342	$ 264,937	$ 127.37	$149,725
$143,246	$51,172	$ 194,418	93.47	$69,342	$ 263,760	$ 126.81	$148,916
$113,785	$48,178	$ 161,963	77.87	$69,342	$ 231,305	$ 111.20	$117,246
$122,918	$47,618	$ 170,536	81.99	$69,342	$ 239,878	$ 115.33	$128,479
$93,881	$36,804	$ 130,685	62.83	$69,342	$ 200,027	$ 96.17	$98,007
$106,661	$43,760	$ 150,421	72.32	$69,342	$ 219,763	$ 105.66	$111,485
$94,395	$40,847	$ 135,242	65.02	$69,342	$ 204,584	$ 98.36	$98,666
$58,075	$33,067	$ 91,142	43.82	$69,342	$ 160,484	$ 77.16	$60,703
$52,165	$31,753	$ 83,918	40.35	$69,342	$ 153,260	$ 73.68	$52,687
$ 84,412	$ 37,799	$ 122,211	58.76	$ 95,290	$ 217,501	$ 104.57	$ 85,257
$ 57,272	$ 32,154	$ 89,425	42.99	$ 95,290	$ 184,715	$ 88.81	$ 57,844
$ 52,165	$ 31,753	$ 83,918	40.35	$ 95,290	$ 179,208	$ 86.16	$ 52,687

SFE Hourly Billing Spreadsheet

FY 2025-2026

Projected Benefits	Combined	Projected Overhead FY 25/26	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$82,833	$ 350,619	$81,322	$ 431,941	$ 207.66	$ 272.69
$71,936	$ 273,107	$81,322	$ 354,429	$ 170.40	$ 223.76
$64,033	$ 237,751	$81,322	$ 319,073	$ 153.40	$ 201.43
$60,163		$81,322			
$59,797	$ 231,570	$81,322	$ 312,892	$ 150.43	$ 197.53
$54,916	$ 205,442	$81,322	$ 286,764	$ 137.87	$ 181.04
$50,674	$ 180,035	$81,322	$ 261,357	$ 125.65	$ 165.00
$45,297	$ 151,726	$81,322	$ 233,048	$ 112.04	$ 147.13
$59,794	$ 231,567	$81,322	$ 312,889	$ 150.43	$ 197.53
$51,135	$ 182,458	$81,322	$ 263,780	$ 126.82	$ 166.53
$49,624	$ 190,010	$81,322	$ 271,332	$ 130.45	$ 171.30
$43,764	$ 146,132	$81,322	$ 227,454	$ 109.35	$ 143.59
$54,730	$ 204,455	$81,322	$ 285,777	$ 137.39	$ 180.41
$52,555	$ 201,471	$81,322	$ 282,793	$ 135.96	$ 178.53
$49,624	$ 166,870	$81,322	$ 248,192	$ 119.32	$ 156.69
$37,909	$ 135,916	$81,322	$ 217,238	$ 104.44	$ 137.15
$45,901	$ 157,386	$81,322	$ 238,708	$ 114.76	$ 150.70
$42,895	$ 141,561	$81,322	$ 222,883	$ 107.16	$ 140.71
$34,873	$ 95,576	$81,322	$ 176,898	$ 85.05	$ 111.68
$32,706	$ 85,393	$81,322	$ 166,715	$ 80.15	$ 105.25
$ 38,933	$ 124,189	$ 97,196	$ 221,385	$ 106.44	$ 139.76
$ 33,118	$ 90,963	$ 97,196	$ 188,158	$ 90.46	$ 118.79
$ 32,706	$ 85,392	$ 97,196	$ 182,588	$ 87.78	$ 115.27

FY 2026-2027 (PRO FORMA)

FY 26/27 Salary	Projected Benefits	Combined	Projected Overhead FY 26/27	Sub-Total	FTE Hourly Rate	Weighted Hourly Rate Sub-Total
$275,820	$ 85,318	$ 361,138	$ 83,762	$ 444,899	$ 213.89	$ 280.87
$207,206	$ 74,094	$ 281,300	$ 83,762	$ 365,062	$ 175.51	$ 230.47
$178,930	$ 65,954	$ 244,884	$ 83,762	$ 328,645	$ 158.00	$ 207.48
$178,576						
$176,926	$ 61,591	$ 238,517	$ 83,762	$ 322,279	$ 154.94	$ 203.46
$155,042	$ 56,563	$ 211,605	$ 83,762	$ 295,367	$ 142.00	$ 186.47
$133,242	$ 52,194	$ 185,436	$ 83,762	$ 269,198	$ 129.42	$ 169.95
$109,622	$ 46,656	$ 156,278	$ 83,762	$ 240,039	$ 115.40	$ 151.54
$176,926	$ 61,588	$ 238,514	$ 83,762	$ 322,276	$ 154.94	$ 203.46
$135,263	$ 52,669	$ 187,932	$ 83,762	$ 271,693	$ 130.62	$ 171.52
$144,598	$ 51,113	$ 195,710	$ 83,762	$ 279,472	$ 134.36	$ 176.43
$105,439	$ 45,077	$ 150,516	$ 83,762	$ 234,278	$ 112.63	$ 147.90
$154,217	$ 56,372	$ 210,589	$ 83,762	$ 294,350	$ 141.51	$ 185.83
$153,383	$ 54,132	$ 207,515	$ 83,762	$ 291,277	$ 140.04	$ 183.89
$120,763	$ 51,113	$ 171,876	$ 83,762	$ 255,638	$ 122.90	$ 161.39
$100,947	$ 39,046	$ 139,993	$ 83,762	$ 223,755	$ 107.57	$ 141.26
$114,830	$ 47,278	$ 162,108	$ 83,762	$ 245,869	$ 118.21	$ 155.22
$101,626	$ 44,182	$ 145,808	$ 83,762	$ 229,569	$ 110.37	$ 144.93
$ 62,524	$ 35,919	$ 98,443	$ 83,762	$ 182,205	$ 87.60	$ 115.03
$ 54,268	$ 33,687	$ 87,955	$ 83,762	$ 171,716	$ 82.56	$ 108.41
$ 87,814	$ 40,101	$ 127,915	$ 100,112	$ 228,027	$ 109.63	$ 143.96
$ 59,580	$ 34,112	$ 93,691	$ 100,112	$ 193,803	$ 93.17	$ 122.35
$ 54,268	$ 33,687	$ 87,954	$ 100,112	$ 188,066	$ 90.42	$ 118.73

FY 2025-2026

Projected Benefits	Combined	FTE Hourly Rate	Projected Overhead FY 25/26	Weighted Salary/Benefits & Overhead Total	Weighted Hourly Rate Total
$82,833	$ 350,619	168.57	$81,322	$ 431,941	$ 207.66
$71,936	$ 273,107	131.30	$81,322	$ 354,429	$ 170.40
$64,033	$ 237,751	114.30	$81,322	$ 319,073	$ 153.40
$60,163	$ 233,538	112.28	$81,322	$ 314,860	$ 151.38
$59,797	$ 231,570	111.33	$81,322	$ 312,892	$ 150.43
$54,916	$ 205,442	98.77	$81,322	$ 286,764	$ 137.87
$50,674	$ 180,035	86.56	$81,322	$ 261,357	$ 125.65
$45,297	$ 151,726	72.95	$81,322	$ 233,048	$ 112.04
$59,794	$ 231,567	111.33	$81,322	$ 312,889	$ 150.43
$51,135	$ 182,458	87.72	$81,322	$ 263,780	$ 126.82
$49,624	$ 190,010	91.35	$81,322	$ 271,332	$ 130.45
$43,764	$ 146,132	70.26	$81,322	$ 227,454	$ 109.35
$54,730	$ 204,455	98.30	$81,322	$ 285,777	$ 137.39
$52,555	$ 201,471	96.86	$81,322	$ 282,793	$ 135.96
$49,624	$ 166,870	80.23	$81,322	$ 248,192	$ 119.32
$49,887	$ 178,366	85.75	$81,322	$ 259,688	$ 124.85
$37,909	$ 135,916	65.34	$81,322	$ 217,238	$ 104.44
$45,901	$ 157,386	75.67	$81,322	$ 238,708	$ 114.76
$42,895	$ 141,561	68.06	$81,322	$ 222,883	$ 107.16
$34,873	$ 95,576	45.95	$81,322	$ 176,898	$ 85.05
$32,706	$ 85,393	41.05	$81,322	$ 166,715	$ 80.15
$ 38,933	$ 124,189	59.71	$ 97,196	$ 221,385	$ 106.44
$ 33,118	$ 90,963	43.73	$ 97,196	$ 188,158	$ 90.46
$ 32,706	$ 85,392	41.05	$ 97,196	$ 182,588	$ 87.78

FY 2026-2027 (PRO FORMA)

FY 26/27 Salary	Projected Benefits	Combined	FTE Hourly Rate	Projected Overhead FY 26/27	Weighted Salary/Benefits & Overhead Total	Weighted Hourly Rate Total
$275,820	$ 85,318	$ 361,138	173.62	$ 83,762	$ 444,899	$ 213.89
$207,206	$ 74,094	$ 281,300	135.24	$ 83,762	$ 365,062	$ 175.51
$178,930	$ 65,954	$ 244,884	117.73	$ 83,762	$ 328,645	$ 158.00
$178,576	$ 61,968	$ 240,544	115.65	$ 83,762	$ 324,306	$ 155.92
$176,926	$ 61,591	$ 238,517	114.67	$ 83,762	$ 322,279	$ 154.94
$155,042	$ 56,563	$ 211,605	101.73	$ 83,762	$ 295,367	$ 142.00
$133,242	$ 52,194	$ 185,436	89.15	$ 83,762	$ 269,198	$ 129.42
$109,622	$ 46,656	$ 156,278	75.13	$ 83,762	$ 240,039	$ 115.40
$176,926	$ 61,588	$ 238,514	114.67	$ 83,762	$ 322,276	$ 154.94
$135,263	$ 52,669	$ 187,932	90.35	$ 83,762	$ 271,693	$ 130.62
$144,598	$ 51,113	$ 195,710	94.09	$ 83,762	$ 279,472	$ 134.36
$105,439	$ 45,077	$ 150,516	72.36	$ 83,762	$ 234,278	$ 112.63
$154,217	$ 56,372	$ 210,589	101.24	$ 83,762	$ 294,350	$ 141.51
$153,383	$ 54,132	$ 207,515	99.77	$ 83,762	$ 291,277	$ 140.04
$120,763	$ 51,113	$ 171,876	82.63	$ 83,762	$ 255,638	$ 122.90
$132,333	$ 51,384	$ 183,717	88.33	$ 83,762	$ 267,479	$ 128.60
$100,947	$ 39,046	$ 139,993	67.30	$ 83,762	$ 223,755	$ 107.57
$114,830	$ 47,278	$ 162,108	77.94	$ 83,762	$ 245,869	$ 118.21
$101,626	$ 44,182	$ 145,808	70.10	$ 83,762	$ 229,569	$ 110.37
$ 62,524	$ 35,919	$ 98,443	47.33	$ 83,762	$ 182,205	$ 87.60
$ 54,268	$ 33,687	$ 87,955	42.29	$ 83,762	$ 171,716	$ 82.56
$ 87,814	$ 40,101	$ 127,915	61.50	$ 100,112	$ 228,027	$ 109.63
$ 59,580	$ 34,112	$ 93,691	45.04	$ 100,112	$ 193,803	$ 93.17
$ 54,268	$ 33,687	$ 87,954	42.29	$ 100,112	$ 188,066	$ 90.42

Building Upgrade Prize (Buildings UP) Phase 2 –Equity-Centered Innovation Pathway: Prize Acceptance Form

January 06, 2025

Dear San Francisco Environment Department,

Congratulations on winning Phase 2 of the American-Made Buildings Upgrade Prize (Buildings UP). You have won a $400,000 cash award of the total prize amount of $400,000. Please read through this letter, fill out the questions, sign, and return to us via e-mail to buildingsup@nrel.gov no later than January 10, 2025.

The U.S. Department of Energy (DOE) Buildings Upgrade Prize (Buildings UP) is be governed by 15 U.S.C. §3719 and the Official Rules document. This is not a procurement under the Federal Acquisitions Regulations and will not result in a grant or cooperative agreement under 2 CFR 200. Prizes are not associated with a CDFA number.

Prize Payment

Submission or Entry Title: 200 x 200: Fast Upgrades, Equitable Outcomes

Lead Organization Name: San Francisco Environment Department

The Payment Recipient below, labeled as 'Entity Name,' has been updated from the name listed on the HeroX Submission Form as the designated recipient by the Lead Organization Team Captain. If you need to change the 'Entity Name' listed below, please contact buildingsup@nrel.gov.

Entity Name: City and County of San Francisco DBA SF Environment Department

Split amount of the total award ($400,000) as designated by the Lead Organization Team Captain: $400,000 (100% of total award).

You will also need to submit an ACH and W9 form for payment which must both match the 'Entity Name' receiving payment. Please note that the entity receiving the prize payment will be responsible for paying all associated taxes.

Printed Name: Lowell Chu

Relationship to Entity (if applicable): Energy Program Manager

Signature: Lowell Chu

Date: 01/06/2025

Please return this form by January 10, 2025 to buildingsup@nrel.gov.

Supported by the U.S. Department of Energy, Building Technologies Office;
Directed by the National Renewable Energy Laboratory

200x200: Fast Upgrades, Equitable Outcomes
Pilot Initiative Implementation Plan

This report includes detailed information describing the implementation plan for the San Francisco Home Improvement Program for Everyone (SFHIPE) Building Upgrade Initiative to take place between March 2025 and September 2025.

1. Pilot Initiative Summary

The Full-Scale Program will upgrade 200 homes in 200 days (200 x 200) with heat pump water heaters (HPWH) and efficiency improvements in San Francisco's low-income and disadvantaged communities. To achieve this, the Project Team will start with a Pilot Initiative (the Pilot) in the Bayview Hunters Point (BVHP) and parts of Visitacion Valley (Vis Valley) neighborhoods, collectively known as the Building Upgrade Zone. The BVHP—a state-designated disadvantaged community—and Vis Valley neighborhoods are located in the southeastern part of the city, and both are recognized as Justice 40 communities. The Building Upgrade Zone is noted for its diversity, density, vibrancy, ongoing transformation, and strong sense of community. The Pilot will focus on installing 120-volt HPWH and implementing energy efficiency and weatherization measures in 20 single-family homes, and/or small multifamily (2–4-unit) buildings. At this time, the Team has not selected the final 20, so is assuming a Pilot for single family homes. However, the Team is prepared for both single family and small multi-family installations. The Pilot is scheduled to run March - Sept 2025, with the Full-Scale Program to follow once learnings and scaling recommendations have been developed and supplemental funding sources identified.

Table 1. Pilot Initiative Building Types and Number of Upgrades Anticipated

Pilot Initiative Stage	Building Types			
	Single-Family Homes	Multifamily Buildings	Small Commercial (Under 25K SF)	Large Commercial (Over 25K SF)
Quantity	20	0	Not applicable	Not applicable

2. Pilot Initiative Offerings Summary

Table 2. Summary of Pilot Initiative Offerings

Technology/Service Offering	Technology/ Work force Qualifiers	Building Type Qualifiers	Income Qualifiers	Financial Offering(s)
120V HPWH	Must replace natural gas water heater ENERGY STAR® rated with mixing valve Must use initiative-approved contractor	Single or small (2 to 4 unit) multifamily residential	None	100% of upfront costs covered by existing heat pump rebate programs
Weatherization	Blow-in wall and ceiling insulation Air-sealing (caulking, gasket, sealants, and weather-stripping)	Single or small (2 to 4 unit) multifamily residential	At or below 120% AMI	Up to 100% of project cost covered by Bay Area Regional Energy Network (BayREN) single family rebate program, EASE After BayREN EASE, remaining project cost covered by San Francisco

				Energy Efficiency and Conservation Block (EECBG) program
Energy Efficiency	Smart thermostat LED Lighting	Single or small (2 to 4 unit) multifamily residential	At or below 120% AMI	100% of upfront cost or thermostat covered by BayREN EASE 100% of upfront cost of LED lighting (up to 16 lamps) covered by Rising Sun Green House Call program
Home Remediation Service	Structural repairs – not replacement – of roof, ceiling, wall and windows Repair electrical and indoor plumbing systems	Single or small (2 to 4 unit) multifamily residential	120% of AMI	Up to 100% of upfront cost covered by BayREN EASE After BayREN EASE, remaining project cost covered by San Francisco Energy Efficiency and Conservation Block (EECBG) program

3. Team Capabilities, Roles, and Responsibilities

Team capabilities

The Team has a combined four decades of experience in residential energy efficiency and electrification, workforce development, and community engagement. The Team has extensive expertise and established credibility with communities in the Building Upgrade Zone which will ensure the successful, equitable implementation.

San Francisco Environment Department (SFE) – SFE is a leading municipal agency in San Francisco, responsible for implementing the 2021 Climate Action Plan. SFE excels in marketing, education, and outreach, engaging diverse audiences in multiple languages to help the city achieve its net-zero emissions goal by 2040. SFE has decades of experience designing and managing public energy programs, effectively using state and federal grants to advance energy policies. SFE is an expert with years of experience advising on, growing and leveraging local and regional energy efficiency incentive programs. Currently, SFE is supporting the San Francisco Climate Equity Hub with implementing a residential HPWH program. SFE assists participants by stacking all available rebates to reduce their out-of-pocket costs.

SFE also collaborates with the California Energy Commission (CEC) and BayREN to provide feedback on resource needs and future incentives. Our extensive work in programming, policy, environmental justice, and grantmaking has established SFE as a trusted presence in communities across the city and region. SFE implements the Bay Area Regional Energy Network Efficiency and Sustainable Energy (BayREN EASE) Home program. This program is the primary source of funding for upgrades and basic home repairs in the Pilot. Therefore, completed Pilot projects and their energy benefits are directly attributable to BayREN EASE. As such, a portion of the BayREN EASE's administrative budget could be leveraged to support Pilot administration.

Pilot Role and Responsibilities - SFE is the Pilot and Full-Scale Program lead. As such, SFE will deploy 1.0 FTE Subscriber Success Specialist (the Specialist). The Success Specialist will be responsible for ensuring the effective implementation and overall success of the Pilot. This role involves supporting Team

members, various aspects of Pilot delivery, coordinating with interested parties, and addressing any issues that arise to ensure that the Pilot meets its objectives and delivers intended outcomes. SFE will also oversee quality control for each installation. The Success Specialist will be responsible for:

- Coordinate, lead and facilitate weekly and ad-hoc internal and external meetings
- Liaise with Team Members and other City Departments
- Support all community engagement Discovery Events
- Liaise with BayREN EASE Home program coordinator and technical assistance provider
- Conduct post-installation field quality control inspections and document findings
- Liaise with the Home Assessment Advisor and the Contractor to resolve post-installation issues
- Disseminate electronic Subscriber satisfaction surveys
- Develop case-studies and support SFE Outreach in promoting the Pilot in social media
- Report progress, findings, and results to the San Francisco Commission on the Environment, U.S. Department of Energy (DOE), District Supervisors, etc.
- Meet with law and policy makers, regulators, and advocates to develop a strategy to request incentive funding to supplement the Full-Scale Program
- Conduct stakeholder engagement in preparation for Phase 3
- Research potential economic advantage of bulk purchasing and group buys
- Liaise with the City Attorney to ratify contracts; support processing invoices from Team members and other administrative tasks
- Lead the preparation and mobilization for Phase 3

SFE will lead administrative tasks during the Pilot. SFE will liaise with the City Attorney Office to ratify contracts with Team members. SFE's Contracts Administration Team will support compliance, and the Accounts Payable department will process invoices and update budgets. SFE's contribution to the Pilot's administrative budget is detailed in the Pilot Initiative Administrative Budget and Staffing Workbook. During the Pilot SFE will lead the advocacy and exploration of supplemental financing pathways to support Full-Scale Program deployment. Specifically, SFE will be proactive in meeting with regulators and lawmakers to find ways to wholly or partially cover Subscriber copays in the Full-Scale Program.

San Francisco Climate Equity Hub (the Hub) – The Hub, a partnership between SFE and community-based organizations (CBO), directs resources to homeowners and renters to increase demand for equitable electrification retrofits. SFE is currently implementing its new HPWH direct-install program. It aims to simplify the permitting and installation processes while reducing participant costs by accessing all available rebate programs. Committed to High Road Jobs, the Hub ensures quality working conditions, fair wages, benefits, and career growth, thereby creating local job opportunities in HPWH installation and other electrification projects. This approach supports workforce training and apprenticeships, helping the city meet electrification workforce needs while benefiting local workers.

Pilot Role and Responsibilities – For the Pilot, the Hub will continue to serve in an advisory role to review and provide feedback on the final Implementation Plan. Through its direct-install program, The Hub will also continue to provide the Team with guidance on permitting requirements and processes to streamline construction and installation.

PODER is a CBO whose mission is to build power among historically marginalized communities in San Francisco's most diverse neighborhoods. PODER specializes in developing consensus among diverse groups and finding innovative solutions to address the needs of underrepresented groups. Through their work, PODER strives to ensure that the voices and concerns of marginalized communities are heard and

integrated into the decision-making processes that impact their lives. Throughout the Pilot, PODER will play a central role engaging community members using vetted and effective in-language tactics to ensure community members' and potential Subscribers' concerns, ideas, and feedback help to shape the final project.

Pilot Role and Responsibilities – For the Pilot, PODER will continue to serve as the Team's community engagement lead. In this role, PODER is responsible for:

- Notify relevant CBO, business associations, faith-based organizations, and other community-focused entities about the Pilot, how it will work, and invite their attendance at Discovery Events.
- Recruit community members to attend Discovery Events using various channels (e.g. tabling, social media, and etc.)
- Prepare outreach and Discovery event material, requesting feedback from select entities, and provide Spanish translation.
- Schedule, coordinate, host, and facilitate four Discovery Events. Take notes at each event and share all post-event material with SFE.
- Set up and manage tables or stations at three community events to raise awareness about the benefits of energy efficiency and home electrification, and to promote Discovery Events and the program website.
- Schedule and host two focus groups. Ensure that participation is inclusive and representative of the relevant research topics. The first event will aim to gather detailed feedback on barriers and concerns related to residential upgrades. The second event will explore these issues from the perspectives of renters, landlords, and building maintenance providers.
- Make recommendations to the Team on how to resolve concerns and overcome barriers.

Rising Sun Center for Opportunity (Rising Sun) is a CBO that leads the development and implementation of High Road Jobs Training Partnerships in the Bay Area, emphasizing job quality in residential decarbonization. With a presence across the region, Rising Sun's 23-year-old Climate Careers program has a strong track record of employing youth for home energy efficiency retrofits. Additionally, Rising Sun runs a high-impact construction career training program designed to support community members facing various employment barriers.

Pilot Role and Responsibilities – For the Pilot, Rising Sun will engage small business enterprises (SBE) that already partner with them, especially those hiring Multi-Craft Core (MC3) graduates. MC3 is a pre-apprenticeship curriculum developed in 2008 for the construction trades. By leveraging these existing partnerships, Rising Sun aims for quicker mobilization and alignment with its mission. Contractors will be chosen based on capacity, adherence to High-Road labor standards, and support for the Pilot and workforce development. Additionally, Rising Sun's Green House Calls program, run by Climate Careers alumni, will conduct energy audits and minor efficiency upgrades—such as installing LED lamps, checking window seals, and fitting low-flow faucets and showerheads—allowing the Pilot's contractors to focus on more complex tasks like insulation and HPWH installations.

QuitCarbon is a private vendor that serves as the Pilot's software provider, technical consultant, and implementer. In addition to these roles, QuitCarbon manages many aspects of the Subscriber journey. The company specializes in identifying low-voltage appliances and addressing technical and financial challenges related to electrification. QuitCarbon has developed a software platform designed to streamline home energy assessments, optimize electrification strategies, identify lowest-cost/highest-rebate scopes of work, manage procurement effectively, and predict utility bill impacts. With extensive expertise in electrifying residential sectors, QuitCarbon focuses particularly on HPWH installations.

Services include designing cost-effective electrical plans, stacking rebates and incentives, commissioning equipment, and providing ongoing monitoring to ensure maximum savings on utility bills.

Pilot Roles and Responsibilities – For the Pilot, QuitCarbon is responsible for:

- Implement and expedite the Subscriber journey, from screening for eligibility to facilitating trouble-free deployments
- Contracting and managing the Contractor
- Addressing supply chain challenges and procuring HPWH
- Deploy their proprietary software platform to track the status of Pilot projects and verify the expected energy savings
- QuitCarbon will host a website
- with information about the Pilot and ways to provide feedback. The website serves as the primary access point for residents to stay in touch with the Team

Decision-making and coordination

SFE leads the Pilot and Full-Scale Program. At the start of Phase 2, SFE led the development of a detailed project plan, assigning specific responsibilities and tasks to Team members in both leadership and supporting roles. During Phase 2, SFE held bi-weekly meetings with leads from PODER, QuitCarbon, Rising Sun, and the Hub to review progress, identify and address barriers, and detail next steps.
This collaborative approach will be maintained during the Pilot Phase. Each Team member will retain ownership and responsibility for their tasks. Each lead will conduct research, validate each task, and seek support from other Team members as needed to ensure successful completion. After the lead completes the tasks, the Team will review the results and make adjustments as necessary. Community leadership and participation will be integrated immediately during Discovery Events, which will be led by PODER, with support from SFE. PODER will also actively engage with CBOs from the Building Upgrade Zone to conduct activities outlined in the Community Accountability Plan. There are no changes in team members or staff.

4. Pilot Initiative Technologies, Metrics, and Goals

Summary of Goals

The Pilot will furnish low-voltage (120V) HPWH to replace existing gas water heaters and provide energy-efficiency upgrades as well as home remediation as needed and as budget allows. The business-as-usual approach to upgrades has been to wait for gas water heater failures, then replace the unit quickly with a very similar gas water heater. The business-as-usual approach to insulation and weatherization in San Francisco's historically mild climate zone is to simply ignore it and perform no upgrades. The Team's innovative approach will rapidly retrofit gas water heaters to HPWH and simultaneously perform weatherization and insulation upgrades. HPWH are most efficient in mild climates, like San Francisco. Additionally, because, as a side effect of their operation, they slightly cool and dehumidify the surrounding area, and installations will be coupled with insulation and weatherization, Subscribers will also benefit from a more comfortable home environment in the summer. Traditionally, these two measures are considered and pursued independently, but combining them into a single package helps to mitigate our region's changing climate and rising utility rates, while leveraging available funding resources into a one-stop-shop for Subscribers.

The Team will prioritize HPWH installations because they are a relatively simple upgrade with huge carbon, methane, NOx, and other pollution-cutting potential. For many homes in the Building Upgrade Zone, gas water heaters are the single largest source of climate and air quality pollution. Local, regional, and state-level funding for HPWH in low- and moderate-income (LMI) homes is significant; in many

cases, the full cost of the HPWH upgrade will be covered by a stack of funding sources that does not require any funding from the Subscriber.

While the climate benefits of HPWH are significant, and funding is relatively abundant at this time, HPWH tend to produce little if any change in utility bills, so to achieve the goal of reducing bills for Subscribers, the Team must add a second measure to the package. Building insulation and weatherization upgrades will help Subscribers maintain warmth in their homes during the Bay Area's mild winters while reducing reliance on conventional gas and electric heaters. Adding a programmable thermostat complements these measures. By decreasing energy use for home heating, Subscribers will see modest savings on their energy bills, fulfilling the program's goal of reducing overall energy consumption. Offering building insulation, weatherization, and a programmable thermostat, in addition to HPWH, is a means of balancing the climate and air quality benefits, the availability of funding, and benefits to the Subscribers (in the form of utility bill reductions).

Technologies

The Team will include the following **minimum technologies and strategies** in the Pilot Initiative:

- Efficient, low-voltage (120V) HPWH
- Insulation and weatherization
- Low-flow showerheads and faucet aerators
- LED lamps
- Programmable thermostats

Heat Pump Water Heaters (HPWH) - HPWH use electricity to move heat from the surrounding air to water in a tank, rather than generating heat directly. They consist of a compressor, evaporator coil, condenser coil, and water tank. The purpose of HPWH technology is to heat water more efficiently than traditional electric resistance water heaters. HPWH typically use 60-70% less electricity, resulting in lower energy costs and reduced environmental impact.

There are two physical configurations of HPWH and two voltages, as shown in the following table. The Team will typically install unitary 120V HPWH, but split and 240V options will be available as needed to meet the physical, electrical, and hot water usage characteristics of the homes in the Pilot and Full-Scale Program.

Table 3. Summary of HPWH by Configurations

Feature	Split HPWH	Unitary HPWH
Installation	Split outdoor and indoor units, flexible locations for both	Integrated unit, simple installation
Efficiency	Potentially slightly more efficient	Efficient
Space Requirements	Tanks available in compact dimensions (short and wide, tall and skinny). Compressors require outdoor installation, unless placed in larger basements.	Requires indoor space of up to 1,000 cubic. Produces some sound at location of tank.
Ideal Use	Homes with specific spatial constraints	Various residential settings, typically in basements, garages, and large utility rooms

Table 4. Summary of HPWH by Electrical Voltage

Feature	120V HPWH	240V HPWH
Installation	- Easier installation in homes with existing 120V outlets - Plug-and-play, no need for new electrical work in most cases	- May require new electrical work if 240V outlet not available
Efficiency	- Slightly less efficient than 240V models - Longer recovery times	- Slightly more efficient overall - Faster recovery times
Ideal Use	- Smaller households with lower hot water demand - Replacing gas heaters in existing homes with limited electrical capacity	- Larger households with higher hot water demand - Homes with plenty of electrical capacity - Replacing electric resistance water heaters

Weatherization – Weatherization is a range of measures, like windows and doors, insulation, air-sealing, and weatherstripping, aimed at improving a building's energy efficiency and comfort. In particular, insulation is the use of materials to reduce heat transfer between the interior and exterior of a building. Common insulation materials include fiberglass, cellulose, foam, and mineral wool. Insulation is typically installed in walls, attics, floors, and crawl spaces. The purpose of insulation is to:

- Improve energy efficiency and longevity of heating and cooling systems
- Reduce heating and cooling costs
- Enhance indoor comfort
- Prevent moisture-related issues due to water leaks, etc.

The following energy efficiency measure will create a more stable indoor environment and can reduce a home's energy consumption and associated utility bills.

- **LED lamps** offer energy efficiency, longevity, and reduced environmental impact. They consume significantly less power compared to traditional incandescent lamps, leading to lower electricity bills and a smaller carbon footprint. Additionally, LEDs have a much longer lifespan, often lasting up to 25,000 hours or more, which reduces the frequency of replacements and waste. Their durability and low heat emission also contribute to a safer, cooler environment.
- **Low-flow showerheads and faucet aerators** provide substantial water conservation benefits while maintaining performance. By reducing water flow without sacrificing pressure, they help cut down on water usage, leading to lower utility bills and a decrease in water wastage. Efficient use of water reduces the energy required to heat water which mitigates electricity costs increases of HPWH.
- **Smart thermostats** offer significant advantages in both energy savings and convenience. By allowing users to set specific heating and cooling schedules, smart thermostats help optimize energy use, ensuring that the Subscriber's home is only heated (or cooled if applicable) when necessary. This can lead to substantial reductions in energy bills and lower overall energy consumption. Additionally, smart thermostats often come with features such as remote control and smart home integration, which enhance user convenience and provide greater control over indoor climate settings.

Metrics

The Team will apply the following metrics to track building upgrade scenarios and progress throughout the Pilot. The physical starting point of the building includes, but is not limited to, the following:

- Building characteristics – age, type of construction, number of occupants, bedrooms, bathrooms, etc.
- Details of the existing gas water heater – size, location, age, etc.
- Details of the existing electrical infrastructure – main service amperage, configuration of circuit breaker panels, availability of unused or underused circuits, etc.
- Conditions impacting energy use (e.g. leaky doors and windows)

Additionally, the Team will track:

- Details of the upgrades
- Size, voltage, location, etc. of upgraded HPWH
- Details of air-sealing and insulation upgrades, including number of days to complete work
- Details of any home remediation work performed, including number of days to complete work
- Building's energy usage before and after upgrades, measured in both kWh and therms
- Factor weather conditions into the measurements (i.e. "weather normalize" the measurements)
- Energy cost savings (energy bill comparisons) for both electricity and gas
- Isolate usage-based costs from other contributing cost factors (i.e. weather and tariff-normalize)
- Implementation costs (before and after incentives) for project Team
- Implementation time (in number of days from mobilization to passing final field inspection)
- GHG emissions reduced (metric tons) before and after building upgrades
- Effectiveness of using software to monitor and track utility costs resulting in savings

b. Pilot Initiative Evaluation Framework

The following framework outlines the key elements and metrics that the Team will track and evaluate during the Pilot. This evaluation will inform the development of a Full-Scale Program by identifying areas for improvement and validating the assumptions made during the Pilot.

Subscriber Satisfaction

Key Questions:

- How satisfied are Subscribers with the installation of HPWH and insulation?
- What aspects of the service (installation, communication, timeliness) do Subscribers find most and least satisfactory?
- Did the upgrades and home repairs result in changes to your energy use and costs?

Metrics:

- Survey results on overall satisfaction, rated on a scale from 1 to 5
- Specific feedback on installation process, including contractor professionalism and clarity of information provided
- Repeat engagement interest, measured using the standard Net Promoter Score (NPS) survey. The NPS survey is a tool used to measure customer loyalty and satisfaction and is designed to gauge how likely customers are to recommend a product or service to others.
- Did the tracking and monitoring of post-installation utility costs through QuitCarbon's platform result in energy reduction and utility cost savings?

Contractor Satisfaction

Key Questions:

- How satisfied are contractors with the Pilot requirements?
- How satisfied are contractors with the permitting and inspections process?
- How satisfied are contractors with Team communication?
- Did the project proceed according to schedule?
- Did the project costs align with expectations?

Metrics:

- Survey results on satisfaction with Pilot program requirements, rated on a scale from 1 to 5
- Survey results on satisfaction with permitting and inspections, rated on a scale from 1 to 5
- Survey results on satisfaction with SF HIPE communications, rated on a scale from 1 to 5
- Analysis of open-ended survey results with specific feedback on friction points pertaining to requirements, processes, communications, timing, and costs
- NPS survey

Occupant Comfort

Key Questions:

- Has occupant comfort changed pre- and post-installation, esp. in relation to water heating?
- Are there issues or improvements in indoor air quality and humidity levels/thermal comfort?

Metrics:

- Pre- and post-installation comfort levels, assessed through Subscriber surveys
- Qualitative feedback on any perceived changes in indoor environment quality

Workforce Capacity

Key Questions:

- What was the overall capacity and readiness of the local workforce to meet the Pilot needs?
- Is there a need to grow the local workforce via training and certification?

Metrics:

- Ratio of available contractors to installations required
- Assessment of any workforce shortages and their impact on the project timeline

Supply Chain Assessment

Key Questions:

- Were there any delays or issues in procuring HPWH for the Pilot?
- Were there sufficient quantities of HPWH available to meet the Pilot's needs?

Metrics:

- Percentage of orders delivered on time versus delayed
- Average lead time from order placement to delivery

Outreach and Discovery Event Effectiveness

Key Questions:

- How effective was the outreach in informing and engaging Subscribers about the Pilot?
- What methods of communication were most successful in reaching the target audience?

Metrics:

- Analysis of communication channels used (e.g., online ads, direct mail, referrals from other CBOs) to recruit attendees for the Discovery Events + website, and their relative effectiveness.
- Number of strategic partners receiving outreach

- Number of attendees in each Discovery event
- Number of attendees from Building Upgrade Zone who attended each Discovery event
- Number of attendees opted-out of the Pilot
- Typical website analytics
- Number of visitors who expressed interest in joining the Pilot via the website
- Number of visitors who provided comments and feedback via the website
- Number of parties on the waiting list for the Full-Scale Program
- Analysis of communication channels used (e.g., online ads, direct mail, referrals from other CBOs) to recruit attendees for the Discovery Events, and their relative effectiveness.

Building Repairs and Health and Safety Measures

The process for addressing basic building repairs and energy-related health and safety measures starts with a site assessment conducted by the Team's Contractor and their trade-specific subcontractors. During this walk-through, they will identify and prioritize necessary repairs and safety measures. They will also identify and address any pre-existing health conditions in the home to ensure that weatherization efforts do not worsen these issues. The assessment will cover several key areas:

- **Structural Deficiencies:** Identifying and prioritizing any structural issues for home remediation.
- **Electrical Issues:** Evaluating electrical systems, including inspecting insulating knob-and-tube wiring and repairing overloaded circuits.
- **Fire Hazards:** Assessing potential fire risks such as inadequate combustion appliance clearances and creosote buildup. Check for presence of smoke detectors in every bedroom and basement.

After the site assessment, the Contractor will provide a report of the findings to the Home Assessment Advisor and Subscriber for review and feedback. The report identifies all basic building repairs and energy-related health and safety needs. The Advisor will map out which rebate program would cover what aspects of the upgrades and home remediation. Should the Subscriber decide to proceed with the repairs and upgrades, the Advisor will transfer the Subscriber to the BayREN EASE program.

BayREN EASE is a regional rebate program that provides up to 100% upgrade and home remediation costs. It has a dedicated technical assistance provider who will support the Subscriber throughout the process. BayREN EASE allocates 30% of its incentives for deferred maintenance work essential for energy efficiency and weatherization upgrades. For low- and moderate-income (LMI) Subscribers, BayREN EASE caps copayments at 20% of project costs, up to $1,000. In the event the home repair portion of the project exceeds the copayment cap, the Subscriber can request financial relief from the San Francisco Energy Efficiency and Conservation (EECBG) program. The EECBG program provides up to $5,000 in rebates for home repairs necessary for energy efficiency and efficient electrification upgrades. The Advisor will refer the Subscriber to the SFE's Success Specialist to enroll into the EECBG program.

To further ensure healthy outcomes after installation, the Pilot requires the Contractor and subcontractors to strictly adhere to lead-safe weatherization procedures. Although lead abatement is not included, following the procedures minimizes lead paint exposure risks. The Team will also confidentially identify any residents with pre-existing health conditions to ensure that weatherization efforts do not worsen these issues and will use measures to ensure safety during construction.

Financing Approach

The goal of the Pilot is to test the Team's approach to Full-Scale Program implementation. The objectives are to complete 20 projects at no cost to the Subscribers within the timeline. The Team's

financing approach is critically dependent on existing and planned local and state rebate programs. As such, the Team's evaluation will consist of the following:

Track and Assess Existing Rebate Programs
Key Questions:

- What is the status of each program's incentive budget?
- Have the eligibility requirement(s) changed?
- Determine if there is sufficient budget remaining to accommodate the Full-Scale Program.

Assess Pilot Project Financial Metrics
Key Questions:

- What are the equipment costs for HPWH, insulation (sq-ft), programmable thermostats, LED light bulbs (by form factor), air sealing material (linear ft), and low-flow showerheads and faucet aerators?
- What are the installation costs?
- Determine key project metrics: average project cost, number of projects exceeding the budget and % excess, per-project and average energy savings ratio (Annual Forecasted Energy Savings/Project Cost), and rebate-to-cost ratio (Rebate Amount/Total Project Cost)
- Compare actual project costs with average HPWH from the TECH Clean California Reporting database and QuitCarbon's proprietary database specifically for San Francsico. Analyze any differences to understand the reasons for discrepancies
- Compare actual project costs with estimates provided in the Implementation Plan
- Use historical data to forecast budgetary needs in Full-Scale Program

Analyze the Strategy for Full-Scale Program
Key Questions:

- Is funding from the current and planned rebate programs sufficient to yield a rebate-to-cost ratio of 1 for each project?
- If not, what is the expected $-gap?
- How could the Team fill the gap?
- Consult with financial and energy professionals to develop and assess possible approaches
- Did the tracking and monitoring of post-installation utility costs result in energy reduction and utility cost savings and should it be continued in the Full-Scale Program?

5. Subscriber Strategy

a. Pilot Initiative Design/Program Model

The Pilot is designed to ensure that all eligible homes within the Building Upgrade Zone are under consideration. To the extent possible, the Team will notify community organizations about the Pilot and how it will work and invite them to attend a Discovery Event. Held monthly, and conducted in both English and Spanish, these events will allow attendees to learn about the benefits of energy efficiency and efficient electrification, discover more about the Pilot and opt-out enrollment approach, and provide input to shape the Full-Scale Program. At each Discovery Event, the Team will give an overview of HPWH and explain their benefits for residents and the environment. They will also describe the Pilot program and outline the vision for the Full-Scale Program. Participants are encouraged to share their feedback, raise any concerns, and discuss issues affecting their community. Event staff will carefully document all feedback and concerns. Since the Pilot is testing an opt-out approach for recruiting

Subscribers, meaning that all residents in the Building Upgrade Zone are automatically considered for inclusion in the Pilot, all attendees whose residences are in the Building Upgrade Zone are automatically considered for the Pilot unless they explicitly choose to opt out. Since the Pilot is limited to 20 projects, residents must either attend a Discovery Event or visit the website to join the Pilot Interest List. The Team aims to compile a list of 100 interested residents, from which 20 will be selected as Subscribers. The remaining individuals will be placed on a waiting list for the Full-Scale Pilot. The Team expects that some residents may choose to opt out after learning more about the Pilot. Some may opt out further down the journey because of the results of feasibility and eligibility screenings or situations where project costs exceed available incentives, despite efforts to zero-out Subscriber costs. To ensure an adequate number of qualified Subscribers, the Team will lower the barriers to participation by:

- Hosting monthly in-language Discovery Events and promoting the website
- Taking a staged approach to Subscriber screening and approval
- Engaging deeply with the community via outreach and support from community organizations
- Providing a single point-of-contact Home Assessment Advisor for Subscribers, minimizing the logistical challenges that residents typically face when planning and preparing for upgrades

Initial Subscriber Screening *Graphic 1. Screening Flow Diagram*

After the screening stage, the Team will assess whether the project is ready to proceed with HPWH installation and insulation/weatherization upgrades. If additional home remediation is needed to prepare for these upgrades, the Team will conduct further evaluation before moving forward.

Broad Communications

District Supervisor Offices, local businesses, community groups, and other entities will be engaged to spread the word about the program to encourage broad and inclusive participation. The Team will work

with PODER for on-the-ground engagement such as tabling in community events. The Team will provide program information to all residents in the Upgrade Zone that will:

- Be translated in multiple languages and distributed through multiple channels
- Build knowledge within the community about energy efficiency, efficient electrification, potential energy savings and pollution reduction, and the impact of upgrades on daily life
- Provide residents with a variety of pathways to access, learn about, ask questions, and provide input to the Pilot and Full-Scale Program

b. Subscriber Audience and Eligibility Criteria

Subscribers for the Pilot and Full-Scaled program are residents in the Building Upgrade Zone, which is fully defined in the Community Accountability Plan and Analysis and Engagement Report. As aforementioned, to be considered for the Pilot, residents must attend a Discovery Event. After compiling a list of 100 potential Subscribers for the Pilot, the Team will use additional screening factors including the age of the water heater and how much home remediation is needed to select the final 20 Pilot homes, as well as screening and prioritization criteria gathered from the community, which is described in the Analysis and Engagement Report.

Strategic Partnerships

The Team will build on existing strategic partnerships to promote Subscriber recruitment. Team member PODER will leverage its established relationships with Emerald Cities Collaborative, Candlestick Point Park Advisory Committee, BVHP Community Advocates, and faith-based organizations to maximize attendance at Discovery Events and increase website visits. To compliment these existing partnerships, PODER will also contact local businesses associations and District Supervisor offices. During Phase 2, the Team learned that on-the-ground outreach is vital for maximizing inclusion. Therefore, Team representatives will use existing strategic partnerships to enable tabling at community events to promote the Discovery Events and website. Recurring events such as Sundown Cinema, Sunday Streets, and Celebrating Communities, Families, & Health provide excellent opportunities to connect with community members. Team member Rising Sun will form strategic partnerships with SBE Contractors, whose workers are recent graduates of MC3 curriculum. Rising Sun will attempt to recruit one or two Contractors into the Pilot. For the Full-Scale Program, Rising Sun will nurture existing partnerships while forging new ones with support from the SFPUC's Contractor Assistance Center and SFE.

Community Meetings

The Team's monthly Discovery Events are designed for business owners, interested parties, and residents to learn about the Full-Scale Program and the Pilot. At these events, attendees will receive educational materials that highlight the benefits of upgrades, such as:

- **Improved energy efficiency**
- **Cost savings**
- **Environmental sustainability** (including pollution reduction)
- **Greater resiliency during disasters**

Process for Participation:

In addition to attending the Discovery Events, an online form will be available for community members to express interest in the Pilot. All interested parties will be placed on the Pilot Interest List to receive regular, direct communication and updates from the Pilot's Home Advisor. Once residents are on the list, their homes will be screened per the eligibility criteria noted in section 5b, to narrow the final group of selected Pilot Subscribers. Interested parties will be notified as to whether or not they are still eligible

for the Pilot. Once the final list of Pilot Subscribers is established — including back-up Subscribers for last-minute drop-offs—the following process takes places:

Step 1: Get on the Pilot Interest List

- All Discovery Event attendees with primary residences in the Building Upgrade Zone are automatically placed on the Pilot Interest List unless they explicitly decline.
- Parties that are interested in the Pilot but did not attend a Discovery Event can be added to the Pilot Interest List through the website.

Step 2: Initial Screening

- Once the Pilot Interest List reaches 100, QuitCarbon's Home Assessment Advisor will close it.
- QuitCarbon's Home Assessment Advisor screens the interested parties for eligibility. If eligible, the party is further assessed for prioritization in the Pilot. Those not eligible are placed on a waiting list for the Full-Scale Program.

Step 3: Remote Home Assessment

- The Advisor conducts a remote home assessment and prepares an analysis using QuitCarbon's software. The analysis report, Consumer Protection Document, and the Pilot Participation Agreement form, are sent to the interested party for review and approval.

Step 4: Conversion

- After returning the completed forms, the interested party is converted to a Subscriber. The Advisor schedules a Green House Call and refers the Subscriber to a Contractor for a construction walkthrough. The Subscriber, and the landlord, must return a signed Consumer Protection and Disclosure Form.

Step 5: Conduct Rising Sun's Green House Call

- Rising Sun's Climate Career graduates conduct a Green House Call, installing LED lamps, low-flow showerheads and faucet aerators, and provide energy efficiency recommendations

Step 6: Conduct Construction Walkthrough

- The Contractor conducts the required construction walkthrough and - at no cost to the Subscriber – provides a construction estimate including needs for home repair and a construction schedule and outlines the next steps.

Step 7: Review, Feedback, and Approval

- The Advisor reviews the construction bid and schedule, providing feedback to the Subscriber and/or Contractor. Once the Subscriber approves the revised bid and schedule, they notify the Advisor to proceed to the next step.

Step 8: Enroll in Rebate Programs

- If necessary, the Advisor assists the Subscriber and Contractor with completing required rebate enrollment documents, such as applications and site access agreements.

Step 9a: Schedule and Permitting (Projects Requiring Home Remediation)

- The Contractor schedules mobilization and construction and pulls permits for home remediation in preparation for HPWH and efficiency installations.

Step 9b: Schedule and Permitting (Projects Requiring No Home Remediation)

- The Contractor schedules and obtains permits for HPWH and weatherization or insulation upgrades.

Step 10: Project Completion

- The Contractor completes the installation and provides copies of permit and installation verification forms to QuitCarbon. The Advisor then educates the Subscriber on the efficient operation of the new HPWH, assists with warranty enrollment, and ensures the Subscriber is signed up for the lowest-cost electric rate and relevant demand-response programs.

Step 11: Finish Rebate Process

- As needed, the Advisor helps the Contractor and Subscriber complete rebate closeout documents to complete the rebate process.

Step 12: Complete Satisfaction Survey

- The process concludes with the Advisor sending an electronic satisfaction survey to the Subscriber for completion.

6. Approval Processes

Table 5. Summary of Required Approvals for Building Upgrades

Building Type/Upgrade Type	Approval Documentation Needed	Who Obtains Approval
HPWH replacement of gas water heater with weatherization, efficiency, and home remediation (as needed) in **owner-occupied** home	Signed Consumer Protection and Disclosure Form	Home Assessment Advisor
	Building permit from local permitting department	Contractor
	Homeowner association approval (if applicable)	Subscriber
	Stacking incentive program approvals	Home Assessment Advisor
HPWH replacement of gas water heater with weatherization, efficiency and home remediation (as needed) in **tenant-occupied** home	Signed Consumer Protection and Disclosure Form	Home Assessment Advisor
	Signed Consumer Protection and Disclosure Form	Renter
	Building permit from local permitting department	Contractor
	Stacking incentive program approvals	Home Assessment Advisor

The proposed building upgrades will not alter the historical characteristics of the buildings that are 45 years or older, and the Pilot is therefore eligible to bypass the EQ-1 Form Process. See the Buildings UP Standard Upgrade Worksheet for details. Before any work is conducted, Subscribers will receive thorough Consumer Protection Documentation outlining the process, risks, and benefits of program participation.

7. Funding and/or Financing Options

Financing and Funding Narrative:

The Pilot will utilize available California and regional rebates to fund HPWH and any necessary related electrical upgrades. Weatherization measures will be financed through a mix of regional and federal funds. By combining these various funding sources, the Team will ensure that 100% of the Pilot project costs are covered for Subscribers. A summary of all available funding is shown in the Table below.

Table 6. Summary of Financing and Funding Available for Building Upgrades

Funding/ Financial Offering (loan, rebate, etc.)	Funding Source Name	Total Funding Available for Pilot Initiative Building Upgrades	Anticipated Number of Upgrades the Funding Source Can Support
Rebates for HPWH	Golden State Rebate	$18,000 ($900/unit)	20
Rebates for HPWH	BayREN Mid-Stream HPWH Incentive for Participating Contractors	$20,000 ($1,000/unit)	20

Rebates for HPWH	California Energy Commission, Equitable Building Decarbonization	$20,000 ($1,000/unit) - anticipated	20
Rebates for weatherization measures, smart thermostat, home repairs	BayREN EASE	$240,000 ($12,000/unit)	20
Funding for HPWH, weatherization measures, home repairs	Energy Efficiency and Conservation Block Grant (EECBG)	$800,000	20
Total Funding Available for Building Upgrades		$1,080,000	

Proportion of Costs Covered (Equity-Centered Innovation teams only):
In the Pilot, the financial offering is expected to cover 100% of the costs of upgrades. As indicated in the following "Financials for Example Scenarios," table, federal, state, and regional rebate programs are available to substantially or completely cover the cost of home remediation. Subscribers will experience modest decreases in utility bills. See scenarios below for details.

Table 7. Financials for Example Scenarios

Scenario 1: Heat Pump Water Heater and Weatherization (no Home Remediation) A natural gas water heater in a low-income owner-occupied single-family home is replaced with a high efficiency, 120V HPWH. In addition, the home is treated with weatherization measures. The Subscriber qualifies for the following HPWH rebates: $900 from Golden State Rebates, $1,000 from the BayREN Mid-Stream HPWH Incentive, $1,000 Equitable Building Decarbonization direct install rebate. The Subscriber qualifies for weatherization and home repair rebates from BayREN EASE and San Francisco EECBG. **Does this upgrade scenario take place in an Equity-eligible building?** Yes		
Item	**Costs***	**Description**
Total Installed Cost of Upgrade	$25,000	• HPWH: $10,000 • Weatherization: $15,000
Funding/Financing Amount 1	($900)	Golden State Rebate HPWH Incentive
Funding/Financing Amount 2	($1,000)	BayREN Mid-Stream HPWH Incentive
Funding/Financing Amount 3	($1,000)	CEC Equitable Building Decarbonization HPWH Rebate
Funding/Financing Amount 4	($17,680)	BayREN EASE: HPWH and weatherization (covers max 80% of remaining project cost)
Funding/Financing Amount 5	($4,420)	San Francisco EECBG
Net Cost	*$0*	Subscriber Copay
Proportion of Upfront Cost Covered	100%	This exceeds the Buildings UP requirement to cover 75% of installed cost of upgrades in equity-eligible buildings.
Annual Utility Bill Impact	($100)	Utility bill neutral or modest savings
Annual Maintenance Costs	$0	No expected annual maintenance

Total Annual Net Impact	($100)	decrease in total annual costs. $100 savings/year
Years to Payback	0	0-year payback for Subscriber
Change in Cost to Building Occupants	($100)	Subscriber saves $100/year in energy bill costs

Scenario 2: Heat Pump Water Heater, Weatherization, and Home Remediation (minimal home remediation intervention)

A natural gas water heater in a low-income owner-occupied single-family home is replaced with a high efficiency, 120V HPWH. In addition, the home is treated with weatherization and home remediation measures. The Subscriber qualifies for the following HPWH rebates: $900 from Golden State Rebates, $1,000 from the BayREN Mid-Stream HPWH Incentive. The Subscriber qualifies for weatherization and home repair rebates from BayREN EASE and San Francisco EECBG.

Does this upgrade scenario take place in an Equity-eligible building? Yes

Item	**Costs***	**Description**
Total Installed Cost of Upgrade	$20,000	• HPWH: $10,000 • Weatherization: $5,000 • Home repairs: $5,000
Funding/Financing Amount 1	($900)	Golden State Rebate HPWH
Funding/Financing Amount 2	($1,000)	BayREN Mid-Stream HPWH
Funding/Financing Amount 3	($1,000)	CEC Equitable Building Decarbonization HPWH Rebate
Funding/Financing Amount 4	($13,680)	BayREN EASE: HPWH, home repairs, and weatherization (covers max 80% of remaining project cost)
Funding/Financing Amount 5	($3,420)	San Francisco EECBG
Net Cost	*$0*	Subscriber Copay
Proportion of Upfront Cost Covered	100%	This exceeds the Buildings UP requirement to cover 75% of installed cost of upgrades in equity-eligible buildings.
Annual Utility Bill Impact	($100)	Utility bill neutral or modest savings
Annual Maintenance Costs	$0	No expected annual maintenance
Total Annual Net Impact	($100)	decrease in total annual costs. $100 savings/year
Years to Payback	0	0-year payback for Subscriber
Change in Cost to Building Occupants	($100)	Subscriber saves $100/year in energy bill costs

Scenario 3: Heat Pump Water Heater, Weatherization, and Home Remediation (moderate home remediation intervention)

A natural gas water heater in a low-income owner-occupied single-family home is replaced with a high efficiency, 120V electric HPWH. In addition, the home is treated with weatherization measures and home remediation measures. The Subscriber qualifies for the following HPWH rebates: $900 from Golden State Rebates, $1,000 from the BayREN Mid-Stream HPWH Incentive. The Subscriber also qualifies BayREN EASE for weatherization and home remediation rebates, but not the CEC Equitable Building Decarbonization HPWH program because the program has oversubscribed.

Does this upgrade scenario take place in an Equity-eligible building? Yes

Item	Costs*	Description
Total Installed Cost of Upgrade	$25,000	• HPWH: $10,000 • Weatherization: $5,000 • Home repairs: $10,000
Funding/Financing Amount 1	($900)	Golden State Rebate – heat pump water heater
Funding/Financing Amount 2	($1,000)	BayREN Mid-Stream HPWH Incentive
Funding/Financing Amount 3	$ 0	CEC Equitable Building Decarbonization HPWH Rebate is out of rebates
Funding/Financing Amount 4	($18,480)	BayREN EASE: HPWH, home repairs, and weatherization (covers max 80% of remaining project cost)
Funding/Financing Amount 5	($4,620)	San Francisco EECBG
Net Cost	$ 0	Subscriber Copay
Proportion of Upfront Cost Covered	100%	This exceeds the Buildings UP requirement to cover 75% of installed cost of upgrades in equity-eligible buildings.
Annual Utility Bill Impact	($100)	Utility bill neutral or modest savings
Annual Maintenance Costs	$0	No expected annual maintenance
Total Annual Net Impact	($100)	decrease in total annual costs. $100 savings/year
Years to Payback	0	0-year payback for Subscriber
Change in Cost to Building Occupants	($100)	Subscriber saves $100/year in energy bill costs

**Negative costs, shown in parentheses, indicate savings.*

The Team aims to maintain the zero-cost feature for Subscribers in the Full-Scale Program as much as possible. However, there is a risk that current local and state rebate programs might end sooner than anticipated due to budget constraints. For example, in August, the California State Legislature proposed an amendment to accelerate the closure of several popular energy-related programs, including a rebate program for self-generation and another providing no-cost solar and solar hot-water heating to affordable multifamily housing.

The Team, led by SFE, will engage state and local representatives, including lawmakers and officials from the CEC, state utility regulator, and the local community choice aggregator to request supplemental funding for Subscriber incentives. The goal is to highlight the Pilot's impact on the speed and quality of residential efficiency and electrification in disadvantaged communities, address funding shortfalls, and reduce Subscriber copays during the Full-Scale Program. Concurrently, the Team will also explore bulk purchasing discounts for equipment with industry stakeholders. The Team is aware of several group buy programs, one in the Bay Area, and another in Colorado. As such, SFE will contact their administrators to identify potential opportunities to effectuate the Full-Scale Program.

8. Workforce and Supply Chain Capacity

Summary: In the Pilot, Rising Sun's contractor engagement and workforce capacity initiative focuses on testing the effectiveness of connecting small business enterprises (SBEs) with residential energy audits and decarbonization projects. By coordinating efforts between the Pilot program and contractors, the Team aims to develop a scalable approach that supports local small and minority-owned businesses (SBEs) and offers opportunities for workforce development.

Contractor Engagement: For the Pilot, Rising Sun will prioritize SBEs that already partner with them, particularly those that hire graduates from the MC3 construction trades program. Leveraging these existing partnerships will allow for faster mobilization and alignment of the Pilot objectives with Rising Sun's mission. If additional contractors are required, Rising Sun will collaborate with the SFPUC Contractors Assistance Center to identify local SBEs committed to hiring MC3 graduates. Contractors will be selected based on their capacity, alignment with high-road labor standards, and ability to support a Pilot focused on decarbonization and workforce development. Contractors engaged in the Pilot must adhere to high-road labor standards, which include:

- Paying prevailing wages and offering healthcare, retirement plans, and paid time off.
- Prioritizing the hiring of local workers from disadvantaged communities, particularly those trained by Rising Sun.
- Providing mentorship and career development opportunities for entry-level workers.
- Ensuring a safe, inclusive, and compliant workplace environment that upholds all safety regulations and labor codes.

Integration of Green House Calls Program: Rising Sun's Green House Calls program, conducted by Climate Careers alumni, will play a pivotal role in the Pilot by performing energy audits and identifying homes for decarbonization projects. This preliminary work will allow contractors to focus on more technical installations such as insulation, air sealing, and HPWH retrofits, providing contractors with a detailed overview of the home's needs before they begin their work. By aligning Green House Calls audits with contractor schedules, the Pilot will minimize disruptions for residents and optimize the contractors' workflow, particularly benefiting SBEs with limited resources. Green House Calls alumni will perform these audits independently, ensuring contractors can focus on installations without delays.

Funding and Contractor Support: Recognizing the financial challenges faced by SBEs, the Pilot will align with existing rebate programs and other sustainable funding sources to cover equipment and labor costs. Rising Sun will maintain clear communication with contractors regarding funding availability, timelines, and reimbursement processes to reduce financial strain. Timely reimbursements will help smaller contractors manage cash flow and participate competitively alongside larger firms.

Capacity Building through Continuous Learning: To build workforce capacity for the Full-Scale Program, the Pilot will include continuous learning opportunities for contractors and workers. Regular workshops

will focus on emerging energy efficiency technologies, decarbonization methods, and installation best practices. Mentorship programs will pair experienced workers with new hires, providing guidance and on-the-job training. Safety training and project management workshops will ensure that all workers have the skills needed to succeed both during the Pilot and in future projects.

Table 8. Summary of Workforce Training Programs

Training Provider	Training Program	Training Capacity	Credentials Associated with Training	Energy Skilled Recognized
Rising Sun Center for Opportunity	Opportunity Build Construction Trades Multi-core (MC3)	15 students / cohort	NATE Certification with Heat Pump Installation Specialty	Yes
Rising Sun Center for Opportunity	Climate Careers – Green House Calls Training Program	15 students / cohort	Home Electrification and Decarbonization Building Performance Analyst	Yes
Rising Sun Center for Opportunity	Heat Pump Water Heater Hybrid Training Course	15 students / cohort	NA	NA

The Pilot creates a structured pathway for both installers and general contractors to benefit from growing demand in sustainable building technologies. General contractors will be integral to the success of the initiative as they not only manage the installation of HPWH but also take on the responsibility of mentoring the local workforce—installers trained using the MC3 Construction Trades Curriculum.

By incorporating apprentices from this training program, the Pilot contractors will have access to a reliable, skilled labor pool, allowing them to efficiently scale up their operations while maintaining quality control. This creates multiple benefits for contractors, as they can reduce labor shortages, ensure project deadlines are met, and enhance their reputations as leaders in energy-efficient construction. The mentorship role provides contractors the opportunity to cultivate a future-ready workforce, while reinforcing their own operational capabilities in an evolving industry.

In addition to these workforce benefits, the Pilot contractors will also gain from being part of a movement toward decarbonization, positioning themselves for future contracts in the growing green construction sector. The combination of workforce development and high-quality project execution ensures a lasting economic impact for both contractors and their apprentices.

For contractors, we are implementing several strategies to align their practices with the Department of Labor's Good Jobs Principles:

- **Job Quality**: Contractors participating in the initiative will be encouraged to adopt best practices that include offering competitive wages and comprehensive benefits. By working with trained apprentices, contractors can provide sustainable, long-term employment opportunities that align with these principles.
- **Mentorship and Skill Development**: Contractors will serve as mentors to installers and apprentices, directly contributing to their professional growth. This hands-on experience, guided by seasoned contractors, ensures that apprentices gain real-world skills in HPWH installation and home electrification. This aligns with the Good Jobs Principle of providing clear career pathways and fostering professional development within the workforce.

- **Workplace Equity and Inclusion**: Contractors will be encouraged to build diverse teams by incorporating installers from various backgrounds, especially from underrepresented communities. This commitment to diversity, equity, and inclusion ensures that all workers have access to the economic opportunities created by the initiative.
- **Worker Health and Safety**: Contractors will be required to implement and maintain high standards of workplace safety. As part of this, they will ensure that both installers and apprentices adhere to all safety protocols during heat pump installations and electrification work. Ongoing safety training will be provided to prevent workplace incidents and create a safe working environment for all employees.

Supply Chain Readiness

See "Analysis and Engagement Report - Section: Workforce and Supply Chain Analysis" for details on Supply Chain Readiness. The table below summarizes HPWH supply chain capacity.

Table 9. Summary of Supply Chain Capacity

Equipment	Supplier	Capacity	Supply Sufficient to Meet Demand?
Heat pump water heaters (HPWH)	Pace Supply, Lowes, Heieck Supply, Cal-Steam, Ferguson, Bayshore Supply	Each of these suppliers typically stocks one or more units of one or more varieties and can quickly acquire stock from other locations	Yes

9. Quality Assurance Plan

The Pilot features a comprehensive Quality Assurance Plan to ensure highest level quality installations and a positive experience for Subscribers, which are crucial for the Pilot's success. To achieve these goals, the Team will employ highly qualified Home Assessment Advisors and experienced installation contractors who have the expertise to build trust throughout the Subscriber journey. Additionally, the Team will actively engage with interested parties and Subscribers through Discovery Events, the website, and other channels to address their concerns and gather feedback. This feedback will be used to continually improve the service, with insights shared directly with Advisors and contractors.

The Team will maintain open and transparent communication with Subscribers, setting appropriate expectations on timing and potential utility cost impacts. Each Subscriber will receive detailed project plans outlining the retrofits. They will also be provided with cost projections, generated by QuitCarbon's software platform, showing estimated utility savings. However, Subscribers will be informed that actual utility costs after the project may not decrease due to factors beyond the Pilot's control, such as colder weather, higher utility rates, or changes in energy usage due to changes in occupant's behavior. Elements of the Pilot's Quality Assurance Plan are outlined below.

Technology Performance/Installation Quality

Equipment optimization – The Pilot will use QuitCarbon's software platform to collect home assessments and provide optimized equipment recommendations to ensure that Subscribers receive the optimal HPWH for their particular home environment. The Advisor will review contractor bids to ensure alignment with recommended scopes of work and with rebate program requirements.

Installation optimization – Completing 200 upgrades in 200 days requires utmost installation optimization without sacrificing safety and quality of installations. Therefore, in the Pilot, the Team will test various tactics to enhance and speed up the installation process for both Subscribers and Contractors (including subcontractors) in preparation for the Full-Scale Program. Initially, the Team will collect the addresses of all Subscribers to identify geographic clusters and proximity. The Contractor will schedule the in-field assessments to minimize disruption, particularly for Subscribers with children, and to ensure full access of the buildings. Following the assessments, the Contractor will provide construction costs and schedule to the Advisor and Subscriber. To ensure complete satisfaction, both parties can provide feedback to the Contractor.

Based on proximity and needs, the Contractor will draft a preliminary construction schedule. The schedule will segment homes with home remediation needs and homes that are eligible for immediate retrofits. The Contractor and subcontractors will mobilize parallel pathways: retrofit homes that are ready while home remediation work is being conducted in other homes.

At each project location, the Contractor and subcontractors will implement a series of best practices to minimize number of trips to project site, disruption to the residents and neighbors, and ensure installed equipment performs to the manufacturer's specifications of performance. The installation practices will be modeled after the US DOE quality installation check list developed by Pacific Northwest National Laboratory. After installation, the SFE Success Specialist will liaise between Subscriber and the Contractor to resolve any issues.

Post-installation Inspections – A certified Quality Control Inspector (QCI) from SFE will conduct all on-site efficiency quality control inspections. Each inspection entails a thorough evaluation process designed to ensure that energy-saving measures and installations meet the highest standards of performance and reliability. During this inspection, the QCI evaluates all installed measures, such as insulation, lighting, thermostat, and HPWH HVAC systems, to verify that they are installed correctly and functioning as intended.

The QCI also verifies all applicable permits were pulled and finished, identifies any issues or inefficiencies, and ensures that all materials and techniques used are consistent with best practices. This meticulous review helps confirm that the energy efficiency and electrification measures will deliver the expected benefits, such as reduced energy consumption and lower utility bills, while maintaining overall system effectiveness and durability.

Utility savings tracking – The Advisor will track and analyze utility data in QuitCarbon's proprietary software platform. Utility usage for at least one year prior to retrofit will be compared to the same months for at least one year post retrofit. Weather normalization will be applied, when necessary (e.g. if the weather in a given month is notably different from the same month a year later).

Long-term maintenance – Insulation, weatherization, and home remediation upgrades require no maintenance. HPWH require a simple annual cleaning of the air filter. Subscribers will be instructed in how to perform filter cleaning and will be reminded annually (via email) to do so.

Subscriber Grievances

The Team will provide easy access to the SFE's Residential Program Success Specialist (via phone, email, and in-person contact) for Subscribers to report equipment issues, air grievances, and provide feedback

regarding the Pilot. The Success Specialist can activate a no-cost contractor call back for Subscribers for a period of one year to address any concerns regarding the operation and performance of the installed equipment. This is in addition to the support offered under the manufacturers and contractors' standard warranties.

SFE's Success Specialist will log all inquiries from Subscribers including the nature of the issue or grievance and any actions taken to resolve it. Given that one purpose of the Pilot is to discover issues that must be addressed as we advance to the Full-Scale Program, the Team will be proactive in seeking feedback and addressing Subscriber concerns throughout the Pilot.

10. Risk Assessment and Mitigation Strategies

In preparation for the Pilot implementation, the Team has proactively identified potential implementation and Subscriber risks and is developing strategies to mitigate them. Leveraging their experience with energy projects and community outreach, the Team is using this expertise to shape their approach to risk assessment and mitigation. Detailed overviews of the risk assessment and mitigation strategies are provided in the tables below.

Table *10*. Implementation Risk and Mitigation Strategy Table

Risk Description (e.g., nature of the risk, location/timing of risk, magnitude of risk)	**Mitigation Strategy**
Reduction in available rebates and incentives	Identify any and all sources of funding; optimize project timing to take advantage of short-term rebates; negotiate bulk purchase for equipment and services to keep costs low
Challenging installation conditions in building upgrade sites	Develop criteria to identify and select ideal installation candidates; identify other funding sources to cover home remediation measures; identify "off ramps" for candidates whose needs are greater than what Pilot projects can accommodate
Low participation rates	Implement an "opt-out" approach in which all single-family homes in the Building Upgrade Zone are assumed to be eligible and filter candidates/projects out as we gain knowledge of their details

The Table below outlines Subscriber risks and mitigation strategies; community risks are addressed in the Community Accountability Plan.

Table 11. Subscriber Risk and Mitigation Strategy Table

Risk Description (e.g., nature of the risk, location/timing of risk, magnitude of risk)	**Mitigation Strategy**
Utility bill increase Magnitude of risk: Moderate	• Install weatherization and complimentary energy efficiency measures • Prioritize Subscribers who qualify for rate assistance programs

	• Conduct a utility-rate review to ensure Subscriber is on the most appropriate residential electric rate. • The Home Assessment Advisor will provide information to educate Subscribers on efficient use of equipment.
Rent increase Magnitude of risk: Low	• During each Discovery Event, PODER will remind attendees that the San Francisco Rent Ordinance does not allow zero-cost improvements to be passed on to tenants. • The website will clearly state that rent increases will not occur as a result of the upgrades we implement.
Decreased availability/reliability of hot water service Magnitude of risk: Moderate	• Conduct Quality Control Inspection on every completed project. • Negotiate with Contractors to provide rapid response for equipment issues. • The Team to establish a process to quickly resolve HPWH -related issues and complaints.
120V HPWH reliability Magnitude of risk: Moderate	Although they are commercially available, 120V HPWH are nascent as compared to their 240V equivalents. Therefore, to ensure highest reliability to maintain Subscriber satisfaction, the Team will: • Conduct due diligence in selecting the most reliable 120V HPWH • Meet with HPWH distributor to determine most common parts, points of failure. • Evaluate the HPWH distributor to ensure sufficient back-stock for most commonly failed parts. • Based on the discussions with HPWH distributor and the Team, establish a process to quickly resolve HPWH -related issues and complaints. • Monitor the reliability and number of Contractor callbacks associated with the 120V HPWH installed in the Pilot. • SFE's Subscriber Success Specialist will gather feedback from Contractor, Subscriber, and Home Assessment Advisor during the Pilot and make necessary adjustments to address any problems or limitations.
Occupant disruption during construction Magnitude of risk: Moderate	• Develop a process that streamlines installation • Educate and train new workers to execute the process consistently.

SAN FRANCISCO ENVIRONMENT DEPARTMENT

Daniel Lurie
Mayor

Tyrone Jue
Director

October 20, 2025

TO: Angela Calvillo, Clerk of the Board

FROM: Tyrone Jue, Director, San Francisco Environment Department

SUBJECT: Buildings Up/HeroX Accept and Expend Retroactive Language for Prize Winnings – Phases 1 and 2

The San Francisco Environment Department (SFE) is the lead agency responsible for developing the City's Climate Action Plan (CAP), and has a successful track record of actively seeking and winning external funding from multiple state and federal sources to support CAP strategies, including eliminating fossil fuels in San Francisco's buildings, promoting EV adoption, and facilitating urban greening.

This pair of resolutions seeks authorization for SFE to retroactively Accept and Expend two allocations of prize funds, each in the amount of $400,000, from the United States Department of Energy (DOE).

We request retroactive authorization because:

- During 2024, SFE budgeted this revenue and associated expenditures in the FY 2024-25/FY 2025-26 budget for the first three phases of this prize, totaling $800,000 in FY 2024-25 for the first two phases of the prize and $400,000 in FY 2025-26 for the third phase.

- This funding from the DOE is a **prize award.** It is not considered a grant by the Federal Government and is not conditioned on SFE producing any deliverables. SFE budgeted these revenues in account 444936 (Federal Direct Contracts) based on the Department's assessment that this was the best available account for this type of funding. SFE did not budget this as a grant because the federal government is clear that it considers this award a prize, not a grant. The U.S. Department of Energy (DOE) Buildings Upgrade Prize (Buildings UP) is governed by 15 U.S.C. §3719 and is not a procurement under the Federal Acquisitions Regulations and does not result in a grant or cooperative agreement under 2 CFR 200. Hence, there is no grant agreement.

- Prize winnings come directly to the winner, up-front, and all at once. Use of the funds is not governed by a grant agreement, and SFE is not required to provide the federal government with documentation of its use of the funds. SFE is not required to expend the funds for a specific purpose or within a specific time period.

- A prize is clearly neither a traditional gift nor a grant, and, as such, the Controller's Office does not currently have a policy or procedure specific to this funding. Since there is no existing funding category

for prize funds, the City Attorney's Office, the Controller's Office, and SFE held extensive discussions on how the prize funding should be handled.

- The discussions were protracted and required supporting research. Ultimately, after a shared meeting in March 2025 with multiple Deputy City Attorneys, it was confirmed that under our local definition of a grant, the prize should be treated as a grant. The Department is therefore following administrative policies and procedures prescribed for grants, including these Accept and Expend resolutions.

- Based on the Department's belief that it had received final appropriation authority from the final passage of the City and County of San Francisco Budget and Appropriation Ordinance (File no. 240595, Ordinance No. 190-24), as well as receipt of the prize winnings from the federal government with direction to proceed, SFE began to use the prize funds to prepare for subsequent rounds of the Buildings Up/Hero X competition, enabling the Department to win the Phase 2 prize. Accordingly, SFE is currently submitting retroactive Accept and Expend resolutions for both prizes that the Department won from the DOE.

- The City Attorney's Office has informed us that it will work with the Controller's Office to assist in clarifying the Controller's P&Ps and to simplify where possible.

Please contact me or my office if you have any questions regarding this request for retroactive authorization.

Sincerely,

Tyrone Jue

Director

San Francisco Environment Department

TO: **Angela Calvillo, Clerk of the Board of Supervisors**

FROM: **Alice Hur, Senior Policy and Public Affairs Coordinator, San Francisco Environment Department**

DATE: **October 20, 2025**

SUBJECT: **Accept and Expend Resolution for Subject Grant**

GRANT TITLE: **United States Department of Energy - Buildings Upgrade Challenge, Phase 2**

Attached please find the original* and 1 copy of each of the following:

X Proposed grant resolution; original* signed by Department, Mayor, Controller

X Grant information form, including disability checklist

X Grant budget

X Grant application

X Grant award letter from funding agency

N/A Ethics Form 126 (if applicable)

N/A Contracts, Leases/Agreements (if applicable)

N/A Other (Explain):

Special Timeline Requirements:

Departmental representative to receive a copy of the adopted resolution:

Name: Alice Hur Phone: (415) 355-3709

Interoffice Mail Address: alice.hur@sfgov.org

Certified copy required Yes ☐ No ☒

(Note: certified copies have the seal of the City/County affixed and are occasionally required by funding agencies. In most cases ordinary copies without the seal are sufficient).

Updated August 7, 2014

SAN FRANCISCO
ENVIRONMENT
DEPARTMENT

Daniel Lurie
Mayor

Tyrone Jue
Director

November 10, 2025

Angela Calvillo, Clerk of the Board of Supervisors
1 Dr. Carlton B. Goodlett Place,
Room 244 San Francisco, CA 94102

Dear Ms. Calvillo:

Attached please find the necessary documents for a department submission of two retroactive Accept & Expend resolutions for Board of Supervisors approval.

These resolutions would retroactively authorize the Environment Department to accept and expend Phases 1 and 2 of the U.S. Department of Energy's Buildings Upgrade Prize. This federal prize pertains to capacity-building projects focused on reducing greenhouse gas emissions in existing buildings through energy efficiency and efficient electrification. The Environment Department's funded concept, "200 x 200: Fast Upgrades, Equitable Outcomes," seeks to upgrade up to 200 San Francisco homes in 200 days with heat pump water heaters and energy efficiency measures.

The scope of the Phase 1 prize, received in December 2023, was planning a pilot for this concept in partnership with three co-applicants. The scope of the Phase 2 prize, received in March 2025, is implementing a 20-home pilot to inform full-scale implementation. Each prize was in the amount of $400,000.

Relevant City codes include:

- SEC. 10.170-1
- As discussed in the retroactive letter included in the packets, the Controller's Office does not currently have a policy or procedure specific to prize funding. Consequently, the cited City code section refers generally to acceptance and expenditure of grant funds.

The following is a list of accompanying documents for each packet:

- Proposed Resolution with CON and MYR signatures
- Cover Letter
- Grant Information Form
- Prize Application
- Award Notification
- Prize Budget
- Retroactive Letter

Due to this award being a federal prize and not a grant, these packets do not include a Form 126 or grant agreement.

The following person may be contacted regarding this matter: Alice Hur, Senior Policy and Public Affairs Coordinator at the Environment Department – 415-355-3709, alice.hur@sfgov.org.

Sincerely,

Tyrone Jue, Director, San Francisco Environment Department