Sustainable Energy Home Improvement

Implementation Plan

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Table of Contents

Acronym Table

SEHI	Sustainable Energy Home Improvement
DAC	Disadvantaged Communities
PG&E	Pacific Gas and Electric Company
CBOs	Community-Based Organizations
SPOC	Single Point of Contact
ESA	Energy Savings Assistance Program
SGIP	Self-Generation Incentive Program
HEEHRA	Home Electrification and Appliance Rebates (Inflation Reduction Act)
IRA	Inflation Reduction Act
EBD	Equitable Building Decarbonization
TRC	Total Resource Cost Test
PAC	Program Administrator Cost Test
ZEEP	Zonal Electrification Equity Pilot
NMEC	Normalized Metered Energy Consumption
HVAC	Heating, Ventilation, and Air Conditioning
HPWH	Heat Pump Water Heater
FTM	Front of the Meter
BTM	Behind the Meter
CV	Central Valley
WE&T	Workforce Education and Training
CBSM	Community-Based Social Marketing

1 Program Overview

The Sustainable Energy Home Improvement Program (SEHI) is an equity-focused pilot designed to transition targeted zones away from natural gas reliance through comprehensive building electrification. SEHI will focus on disadvantaged communities (DAC) and low-income census tracts in Contra Costa County. While these areas are designated based on geographic and demographic criteria, individual households within these zones may vary in income levels. This approach aligns with the state's equity and decarbonization goals by maximizing energy efficiency and electrification opportunities across diverse communities.

SEHI addresses this equity challenge by covering the full cost of electrification for eligible customers in targeted zones, ensuring bill neutrality or, where possible, bill savings. This approach helps customers transition to cleaner energy sources without financial strain. By focusing on equity, SEHI will help DACs avoid rising gas costs while benefiting from long-term reductions in energy use and greenhouse gas emissions.

The program incorporates state, federal, and utility funds, including reallocated natural gas infrastructure funding, to provide no-cost energy-efficient upgrades, including advanced technologies like heat pumps, electric appliances, and panel upgrades. This strategy ensures households will have the necessary infrastructure for full electrification, reducing their dependency on natural gas and improving their quality of life. The program's success relies on leveraging diverse funding sources, including reallocated natural gas infrastructure dollars, federal and state grants, and utility incentives. By stacking these funds, SEHI ensures that project costs are minimized for participants while reducing the need for ratepayer-funded resources, allowing the program to maximize its reach within DACs.

The program will engage communities within these zones using high-touch outreach strategies, including partnerships with local community-based organizations (CBOs) and trusted local leaders to build trust and encourage participation. The approach ensures that residents fully understand the benefits of electrification and the opportunities for bill savings. Each zone must reach 100% customer commitments to proceed with electrification. If this threshold is met, all participating homes and businesses will receive direct installations of energy efficiency and electrification measures at no cost. These measures are carefully chosen to maintain or reduce energy bills, ensuring that participants do not experience financial burdens from the switch to electricity.

As a pilot program, SEHI will generate valuable data and insights on best practices for implementing zonal electrification and addressing equity challenges. The program aims to inform future scalable strategies for transitioning entire communities to clean energy while maintaining energy affordability for all. The primary challenge SEHI is testing is how to equitably and cost-effectively transition entire neighborhoods away from natural gas while

ensuring bill neutrality or savings for participants. SEHI aims to demonstrate that comprehensive zonal electrification is achievable, scalable, and financially viable for disadvantaged communities.

1.1 Program Budget and Savings

1.1.1 2024-2027 Program Details

Program Name	Sustainable Energy Home Improvement (SEHI) Pilot
Program ID	PG&E_Res_004b
Overall Program Cost Effectiveness (TRC)	N/A
Overall Program Cost Effectiveness (PAC)	N/A
Gross Impacts	N/A
Program Implementer Type	Third-Party
Market Sectors	Residential & Non-Residential
Program Type	Non-Resource & Equity
Market Channel	Downstream
Intervention Strategy	Direct Install
Campaign Goal	Electrify 72 residential and 12 non-residential premises over three years

1.1.2 Timeline

Launch Readiness	10/1/24 – 2/28/25
Program Ramp Up	3/1/25 – 6/60/25
Program Steady State	7/1/25 – 3/31/27
Program Ramp Down	4/1/27 – 9/30/27
Program Closeout	10/1/27 – 12/31/27

1.1.3 Program Budget

Administrative Costs	$72,110
Marketing & Outreach Costs	$345,021
Direct Impl. Non-Incentive Costs	$4,688,689
Direct Impl. Incentive & Rebate Costs	$503,725
Total	$5,609,545

2 Implementation Plan Narrative

2.1 Program Description

SEHI is an equity-focused initiative designed to promote energy efficiency and building electrification in disadvantaged and low-income communities within Contra Costa County. This program specifically targets sections of Pacific Gas and Electric Company's (PG&E) gas distribution system, where electrification is a strategic focus. By transitioning customers in these designated zones from natural gas to electric appliances, SEHI is simultaneously promoting cleaner energy use while enabling PG&E to leverage deferred gas maintenance funding for parts of its gas infrastructure, reducing the need for costly future maintenance and upgrades.

A key requirement of SEHI is the full electrification of all premises within a designated zone. This ensures that the area can be fully transitioned off natural gas, optimizing the efficiency and impact of the pilot, and enabling complete gas infrastructure decommissioning in these zones. The program provides a holistic package of services, energy efficiency and electrification customer information, energy efficiency upgrades, electric heat pump retrofits, electrical panel upgrades, etc. while leveraging multiple incentive programs to eliminate costs for participants. By transitioning these households off natural gas, the program protects them from rising gas costs, helping them achieve long-term financial stability while benefiting from improved energy efficiency and electrification.

As a pilot program, SEHI is designed to test and refine best practices for zonal electrification, focusing on effective customer engagement, incentive stacking and leveraging, and delivering equitable electrification services. The insights gained from this pilot will inform future zonal efforts.

2.2 Rationale

2.2.1 Equity and Access

Many disadvantaged and low-income communities face barriers to accessing energy efficiency programs and technologies, often due to financial limitations, lack of awareness, or trust in new technologies. SEHI specifically focuses on these underserved groups to ensure they benefit from energy efficiency and electrification efforts. One of the key drivers behind SEHI is the recognition that, as other customers electrify and decarbonize, the cost burden for maintaining natural gas infrastructure will increasingly fall on those who remain reliant on gas, which disproportionately affects disadvantaged communities (DACs). Without intervention, these communities could be left paying higher gas bills as the customer base for gas shrinks. The SEHI pilot will address this issue by promoting full electrification in targeted zones to ensure that low-income residents are not left behind in transitioning from natural gas to electricity.

The program seeks to remove the financial barriers to electrification by offering energy-efficient measures and electrification retrofits at little or no cost. It leverages external funding and incentives to cover project costs, ensuring participation is accessible to eligible households.SEHI will help protect these communities from future increases in gas costs, which will in turn align equity with broader decarbonization efforts.

2.2.2 Zonal Electrification to Decommission Gas Infrastructure

The SEHI pilot focuses on zonal electrification as a critical strategy for decommissioning PG&E's gas infrastructure. By transitioning customers within targeted zones from natural gas to electric appliances, SEHI enables the full decommissioning of portions of PG&E's gas distribution network. PG&E selects these zones based on two main criteria: whether the area is designated as a disadvantaged community (DAC) or a low-income census tract, and whether it is slated for an upcoming gas infrastructure maintenance project with costs that could instead be redirected to support electrification. SEHI will then assess the feasibility of transitioning entire neighborhoods or communities to electric systems within these pre-selected zones. This zonal approach reduces the need for costly maintenance of PG&E's natural gas infrastructure, allowing the utility to allocate resources more efficiently. Decommissioning entire zones, rather than piecemeal upgrades, creates a long-term solution for managing energy infrastructure more effectively in DACs and low-income communities. .

The program serves as a pilot to gather data and insights that will inform PG&E's future efforts to scale zonal electrification. The lessons learned from SEHI will help guide decisions on how best to expand building electrification to other zones in a cost-effective and customer-friendly manner.

2.2.3 Environmental and Public Health Benefits

Electrifying buildings through SEHI directly supports California's climate goals by reducing reliance on natural gas, which is a significant source of greenhouse gas emissions. As SEHI facilitates the transition from gas-powered systems to electric system within entire zones, it will enable PG&E to decommission portions of its gas infrastructure, this further contributing to the reduction of leaks, such as methane gas leaks, and other emissions associated with natural gas. This zonal electrification approach in turn is simultaneously reducing the carbon footprint of participant homes and businesses while having a broader environmental impact by eliminating the need for ongoing maintenance of outdated infrastructure.

Additionally, electrification offers greater public health benefits by eliminating combustion-related emissions produced by gas appliances. Homes participating in SEHI will experience improved air quality, especially in low-income households who often experience higher rates of respiratory conditions due to lack of quality air. The program's focus on reducing household emissions helps lower exposure of pollutants such as nitrogen dioxide and carbon monoxide, common emissions associated with gas appliances.

2.2.4 Learning Rationale

As a pilot program, SEHI is designed to explore effective methods for implementing zonal electrification in disadvantaged and low-income communities. Rather than aiming for immediate, broad adoption across the state, SEHI focuses on testing targeted approaches that could serve as the foundation for future scalable solutions. The program's limited scope within a select number of eligible zones allows SEHI to focus on practical, measurable objectives that inform best practices for achieving equitable electrification.

2.3 Objectives

SEHI is an equity-focused pilot designed to achieve comprehensive building electrification and energy efficiency upgrades within specific zones. SEHI's objectives emphasize maximizing community participation, minimizing participant costs, and generating long-term energy savings. The primary objectives of SEHI include:

2.3.1 Zonal Electrification and Energy Efficiency

- Facilitate full electrification of all residential and non-residential premises within designated zones, covering key energy uses such as space heating, water heating, cooking, and laundry appliances. By transitioning entire zones away from natural gas, SEHI enables PG&E to fully decommission its gas infrastructure in these areas, thereby reducing future maintenance costs and advancing California's decarbonization goals.

- Implement energy efficiency measures alongside electrification to reduce overall energy demand, improve building performance, and ensure that customers experience efficient and sustainable energy use post-electrification.

2.3.2 Ensure Bill Savings and Financial Sustainability for Participants

- Ensure that program participants experience neutral or positive bill savings through a combination of electrification and energy efficiency measures. Through a combination of high-efficiency electric appliances and energy-saving measures, SEHI aims to protect participants from rising natural gas costs while delivering financial benefits. Tools such as the bill impact calculators are used to estimate cost impacts before implementation, with post-installation analysis by Recurve Analytics to confirm savings outcomes.

- Provide comprehensive customer support, from energy assessments to post-installation education, ensuring that participants understand the financial and environmental benefits of transitioning to electrification.

2.3.3 Maximize Leverage of External Funding Sources

We will strategically layer multiple funding sources to cover the full cost of electrification. SEHI funds will be applied only after these other sources are leveraged. The Pilot has developed a streamlined process for stacking incentives to minimize or eliminate costs for participants,

providing an accessible pathway to electrification that requires minimal or no out-of-pocket expenses.

2.3.4 Generate Data and Insights

- As a pilot, SEHI is designed to test best practices for zonal electrification, with a focus on effective community engagement, financial optimization, and scalable processes. By collecting data on customer responses, costs, and operational efficiencies, SEHI will establish a replicable model for zonal electrification that can be applied across California's diverse communities. And, the pilot will evaluate and refine scalable methods, including stakeholder engagement and funding coordination, to create a replicable framework that supports equitable and sustainable community electrification statewide.

2.4 Team Roles and Responsibilities

Behind SEHI is a dedicated team of experts committed to driving meaningful changes in disadvantaged communities. With extensive experience in energy efficiency, electrification, and community engagement, the team brings together professionals from diverse fields to ensure the pilot's success. Their focus on innovation and equity will help shape the future of energy transition for California's most vulnerable populations. The Implementation Team includes:

Quantum Energy Services & Technologies, Inc. (QuEST): QuEST is the lead implementer responsible for overseeing all aspects of SEHI program delivery. This includes coordinating program activities, ensuring quality assurance, and reporting to PG&E. QuEST manages both residential and non-residential components, providing leadership in customer education, enrollment, and post-installation support, while also overseeing subcontractors and managing day-to-day operations.

The Ortiz Group (TOG): TOG handles residential customer education and enrollment, installation coordination, and supervision of day-to-day installation activities. They ensure quality control throughout the installation process and maintain customer satisfaction post-installation. TOG is also the Single Point of Contact (SPOC) for residential participants, providing clear communication on project timelines, expectations, and next steps.

Building Decarbonization Coalition (BDC)
BDC is tasked with designing and implementing the SEHI marketing and outreach strategy. They develop campaign materials, execute social media initiatives, and continuously refine outreach efforts to ensure effective customer engagement, with a particular focus on disadvantaged and low-income communities.

Energy Solutions (ES): Energy Solutions is responsible for developing customer-specific plans, managing the coordination of various incentive programs, and overseeing the stacking of incentives. They ensure that incentive opportunities are maximized and properly integrated to reduce costs for participants, while also supporting operational refinements to enhance program delivery.

Recurve Analytics, Inc.: Recurve leads the pre-implementation data analytics, using meter-based analysis to prioritize electrification opportunities. They also handle post-installation tracking, providing insights into program performance and ensuring that the program's impact is thoroughly measured and reported monthly.

Installation Subcontractors
Installation subcontractors are responsible for executing on-site assessments, obtaining necessary permits, and completing all installations according to SEHI program guidelines. They handle retrofitting natural gas appliances with electric systems, upgrading electrical infrastructure as required, and ensuring that all work meets safety and quality standards.

3 Program Delivery and Customer Services

3.1 Program Strategies and Tactics

3.1.1 Community-Based Approach

SEHI will implement a community-based outreach strategy, leveraging trusted local messengers, such as Community-Based Organizations (CBOs), community leaders, and electrification champions. These individuals and groups will serve as key influencers to build trust within the community and encourage participation.

3.1.2 Targeted Outreach and Engagement

The program will develop zone-specific marketing, education, and outreach plans tailored to the characteristics of each selected zone or community. PG&E has selected zones where deferred maintenance can be avoided by transitioning all premises to electric alternatives, and in turn, allowing for the complete decommissioning of section of the utility's gas distribution system. SEHI

Implementers will receive the list of zones from PG&E and determine strategy for which zone to target first, with the analytics of residential and non-residential usage data conducted by Recurve.

Once the pre-assessment analytics are completed, the team will identify the zones that are most conducive for electrification, SEHI will craft outreach, messaging and communication strategies to engage customers and encourage their participation – and will test those. This will include leveraging trusted community leaders and influencers to ensure an effective outreach approach. The program will gather insights into the most effective methods for increasing customer participation with a focus on gathering unique characteristics of each community.

3.1.3 Pre-Implementation Analysis

A meter-based analysis will be conducted of PG&E zones in Contra Costa County to assess customer energy usage, load profiles, and potential bill impacts from electrification and energy efficiency measures. This analysis will prioritize outreach to customers within targeted zones based on criteria such as location, customer type, potential savings opportunities, and service upgrade needs, with a particular focus on ensuring that electrification will result in bill neutrality or savings for all participants.

Given that bill savings are a primary equity metric and a critical factor in achieving the program's objectives, SEHI will proceed only with premises demonstrating bill neutrality or positive financial impacts from electrification. Premises that do not meet this requirement will not advance; however, the SEHI implementer may refer to such cases to PG&E for further evaluation. PG&E may, at its discretion, allow projects to move forward if additional benefits or considerations justify an exception. Additionally, SEHI will conduct comprehensive energy assessments to identify opportunities for energy savings and equipment electrification at customer premises. To reduce costs and optimize project feasibility, SEHI will prioritize strategies that minimize the need for behind-the-meter upgrades. This includes recommending high-efficiency appliances and load management measures that reduce overall demand and prevent the need for extensive electrical panel or service upgrades. Additionally, the program will only recommend measures that support bill savings or at least neutrality for participants, ensuring that each electrification project is financially beneficial. Comprehensive, individualized energy assessments will identify solutions tailored to each customer's circumstances, balancing energy efficiency improvements with affordability.

3.1.4 Enrollment and Commitment Process

The program will facilitate walk-through assessments for eligible residential and non-residential customers. These assessments will provide customers with detailed reports outlining the energy efficiency measures and electrification retrofits, financial incentives, an implementation plan, and an estimated bill savings analysis. This assessment will include a breakdown of how the recommended upgrades will impact their energy consumption and long-term utility costs to ensure that the participant understands the financial benefits of electrification.

In multi-meter zones, full participation from all customers is required before electrification projects can proceed. This, in turn, will encourage community-wide adoption, and maximize the effectiveness of zonal electrification. The program will work with customers located in these multi-meter zones to develop strategies that promote zone-wide commitments to ensure all targeted premises are included in the transition to electrification.

3.1.5 Seamless Implementation

Once customers commit to the program, a SEHI project coordinator and single point of contact (SPOC) will oversee the full scope of work, including permitting, service upgrades, and the installation of energy efficiency and electrification measures. The project coordinator will also ensure that all available funding sources, such as gas decommissioning funds, the Energy Savings Assistance (ESA) program, and other state and federal incentives, are strategically leveraged to minimize or eliminate out-of-pocket costs for participants. This approach to incentive stacking is a foundational strategy for SEHI, as external funding sources are essential to covering most project costs, given the program's limited budget for direct installations.

SEHI's funding leverage strategy is designed to maximize the use of external funds to cover project costs, ensuring that the program remains financially accessible to participants in disadvantaged communities (DACs) and low-income households. This strategy prioritizes securing funds from sources such as:

- PG&E Gas Decommissioning Funds: SEHI will utilize PG&E's gas decommissioning funds as a primary funding source. This funding is critical to offsetting installation and infrastructure upgrade costs.
- State and Federal Incentive Programs: Programs like TECH Clean California, Self-Generation Incentive Program (SGIP), and the Inflation Reduction Act (IRA) rebates will be layered onto each project, enabling further reduction of participant costs.
- Utility and Bill Discount Programs: SEHI will integrate eligible customers into utility bill discount programs, such as CARE and FERA, to help mitigate energy expenses and contribute to overall utility bill neutrality or savings.

Recurve will assess bill impacts one (1) year after installation is complete. If, after one year, bill savings are not realized, the SEHI team will conduct a follow-up with the participant to determine the cause. This follow-up will include confirming that appliances were properly commissioned, providing refresher training on optimal appliance use, and analyzing energy consumption patterns to identify any specific drivers of increased costs, including rate increases. If necessary, SEHI may provide additional efficiency upgrades or load management solutions to help bring energy costs to a neutral or positive impact.

3.2 Market Channels

3.2.1 Direct Outreach & Referrals from Other Programs

The program will use a combination of direct mail, email, and in-person outreach through trusted local messengers to inform and engage customers about program offerings.

- Localized Media: Awareness building communication that could include outdoor media, earned media, and social media campaigns will be used to raise awareness and create visibility for the program in the target zip codes.

- Community Events and Gatherings: SEHI will organize neighborhood town hall meetings and community gatherings where customers can learn about the benefits of electrification, ask questions, and interact with program staff, community leaders, and participants who have already transitioned to electric systems.

3.3 Target Market and Customer Group

SEHI is focused on serving the following customer groups in Contra Costa County:

- Disadvantaged and Low Income Communities: SEHI specifically targets residential and non-residential utility customers located in designated / eligible zones of Contra Costa County, as defined by PG&E. These customers are considered to live and operate in disadvantaged communities (DACs) as defined by the California Public Utilities Commission (CPUC) or are in low-income census tracts. These groups often face significant barriers to adopting new technologies, including limited financial resources, language barriers, and lack of awareness or trust in new technologies.

- Residential and Non-Residential Customers: the pilot will serve both residential and non-residential customers within eligible zones. The emphasis is on low-income households and small businesses that may benefit from electrification, but also need additional support due to limited resources or capacity to undertake such projects independently.

3.3.1 Services and Tools Provided

Energy Efficiency and Electrification Measures: SEHI will provide direct installation of energy efficiency measures (e.g., HVAC, insulation) and full building electrification, including electric appliances and fuel substitution retrofits. The program also offers electrification-enabling measures (e.g., electrical panel upgrades) to ensure homes and businesses can transition smoothly.

Customer Education: The program offers education on electrification and its benefits (both energy and non-energy related), ensuring that customers understand how these improvements will impact their comfort, safety, and energy bills.

Ongoing Customer Technical Support: the program will also provide ongoing technical support to address any issues or questions that may arise after installation.

Bill Impact Assessment: SEHI includes a bill impact calculator to provide customers with detailed estimates of how electrification and energy efficiency measures will affect their utility bills. This analysis helps ensure that customers experience net benefits, or at least neutral bill impacts after participation.

3.4 Financial Incentive Stacking

The program will help customers access multiple funding sources, including state and federal incentives, to cover the costs of electrification. The goal is to minimize or eliminate out-of-pocket costs for low-income households, with SEHI incentives being applied as a last resort after other available programs (e.g., CCAs/MCE, TECH Clean California, CEC Equitable Building Decarbonization, HEEHRA, etc.) have been leveraged. The program prioritizes using non-ratepayer and ratepayer funded sources before applying SEHI incentives.

Based on availability, the key programs and incentives that SEHI plans to leverage include:

PG&E Gas Funding: PG&E gas funding is a primary funding source for SEHI and will be leveraged to support full electrification efforts in all eligible zones. Each zone selected for the program is associated with PG&E gas funding.

Equitable Building Decarbonization Program
This program provides incentives for low-income and disadvantaged communities to transition to all-electric homes and buildings, helping to cover the costs of electrification measures.

TECH Clean California
SEHI will leverage incentives from TECH Clean California, a statewide initiative that supports the adoption of heat pumps and other electrification technologies. These incentives help reduce the cost of installing electric appliances and heat pump systems.

Self-Generation Incentive Program (SGIP)
The SGIP provides rebates for energy storage systems and heat pump water heaters, which will be incorporated into SEHI projects to reduce customer costs and promote energy efficiency.

Home Efficiency Rebates (HOMES) and Home Electrification and Appliance Rebates (HEEHRA)
These rebates, part of the Inflation Reduction Act of 2022, will be used to cover costs associated with home electrification projects, such as replacing gas appliances with electric ones and upgrading electrical infrastructure.

Energy Savings Assistance Program (ESA)
SEHI will leverage the ESA Program, which offers no-cost energy efficiency improvements for income-qualified households. This program will help offset the cost of energy-saving measures and provide additional support for low-income participants.

Simplified Savings Program for Small Business
For non-residential customers, SEHI will integrate incentives from the Simplified Savings Program, which helps small businesses implement energy efficiency upgrades, thus minimizing the cost of electrification measures.

GoGreen Financing and PG&E On-Bill Financing
For projects that require customer co-payments, especially for non-residential participants, SEHI will offer access to *GoGreen* Financing and PG&E On-Bill Financing to help customers finance their share of the project costs.

3.5 Installation Subcontractors & Training

The program provides no-cost installations of energy-efficient measures and electrified upgrades for eligible customers. Only SEHI Installation subcontractors will be permitted to perform program services. Subcontractors will be trained to conduct electrification specific tasks, such as load calculations, and will be provided with assessment assistance tools to ensure consistent, high-quality outcomes. This will support contractors in developing tailored recommendations for participants. Their responsibilities include the following:

- Installation subcontractors are responsible for conducting customer site visits to assess the existing conditions of the building's energy systems. They evaluate the feasibility of proposed electrification upgrades and energy efficiency measures, ensuring they align with the program's goals.
- Handle obtaining the necessary permits and approvals before starting work. Installation subcontractors also work closely with SEHI's other partners, such as The Ortiz Group (responsible for residential customer education) and PG&E's Service Planning and Design team, to ensure that all work is properly coordinated, especially for electrical service upgrades.
- Ensure that all required materials and equipment are obtained and available on-site. They perform the installation of energy-efficient measures and electrification retrofits, such as replacing natural gas appliances with electric alternatives and upgrading electrical panels and wiring as needed.
- Follow all relevant codes and standards during the installation process. This includes adhering to safety protocols and ensuring that installations meet the quality standards set by the program.
- Following completion of work, ensure that all measures are installed correctly and are functioning properly. They also document the work performed, including before-and-after photos, to support quality assurance efforts and meet program guidelines.
- SEHI will provide post-installation bill monitoring for up to 12 months to assess the net bill impact of the measures installed and help ensure customers experience the expected financial and energy-saving benefits.

3.6 Customer Services

3.6.1 Post-Installation Quality Assurance

After installation, the program will conduct quality assurance walkthroughs to ensure that the work meets safety and quality standards. Customers will also receive training on how to properly use and maintain their new equipment to ensure they can maximize the benefits of the upgrades. These services will be coordinated through the program's Single Point of Contact to ensure effective communication and quality customer support.

3.6.2 Single Point of Contact

To streamline the process, each customer will be assigned a single point of contact who will manage the coordination between SEHI installation subcontractors, PG&E's service planning and design team, and leveraged program contractors.

3.6.3 Enrollment in Leveraged Programs

SEHI will assist customers in enrolling and coordinating their participation in other available programs, such as the Energy Savings Assistance Program (ESA), HEEHRA, CEC Equitable Building Decarbonization (EBD), and Strategic Early Retirement Pilot, and others, to maximize financial benefits. These programs provide additional incentives that SEHI will leverage to offset direct installation costs, ensuring that customers receive the maximum available support to reduce or eliminate out-of-pocket expenses.

The program's SPOC will be responsible for overseeing all aspects of customer participation in these programs, including facilitating the application process, tracking incentive payments, and ensuring that each customer receives the full range of benefits for which they qualify. The installation subcontractor will focus on executing energy efficiency and electrification measures at customer premises, while the SPOC ensures seamless integration of the various incentive programs to achieve cost-effective delivery for participants.

3.6.4 Special Considerations for Hard-to-Reach Groups

SEHI will ensure accessibility by (1) providing materials in multiple languages to serve non-English-speaking participants; (2) offer weekend and evening appointments to accommodate customers with restrictive schedules, particularly those in low-income households or small businesses that may not have flexible work hours; and (3) addressing financial barriers by facilitating enrollment support into customer bill discount programs (e.g., CARE, FERA) to ensure that participants facing potential bill increases receive tailored energy efficiency measures to lower overall energy use and alleviate potential cost increases due to electrification.

4 Program Design and Best Practices

4.1 Addressing Market Barriers

SEHI employs a set of strategies and tactics designed to address key market barriers and ensure success in reaching the targeted customer group, particularly disadvantaged and hard-to-reach communities. These strategies are aligned with best practices and informed by lessons learned from previous programs, making SEHI both innovative and replicable. The following items outline these barriers, strategies, tactics, and the software tools supporting program implementation:

4.1.1 Limited Financial Resources

Barrier: Many disadvantaged and low-income communities lack the financial resources to invest in electrification and energy efficiency upgrades.
Strategy: SEHI will leverage multiple external funding sources, such as TECH Clean California, SGIP, ESA, and other incentives before applying its own program funds. This ensures that participants face minimal or no out-of-pocket costs, particularly for low-income households.
Tactic: By employing a layered incentive model, SEHI reduces upfront costs for all participants. Additionally, the program will assist with rebate applications and financing options like GoGreen Financing and PG&E On-Bill Financing to ensure affordability for non-residential customers.
Best Practice: Stacking incentives from multiple programs not only reduces customer costs but also maximizes the use of various funding sources. This model has been shown to enhance customer uptake in other electrification and energy efficiency programs by reducing cost barriers.

4.1.2 Potential for Bill Increases

Barrier: Full electrification can lead to increased electricity consumption in the short term, potentially resulting in higher utility bills compared to previous gas usage. This is a significant challenge SEHI must address to ensure that program participants do not experience financial strain due to electrification.
Strategy: SEHI incorporates targeted energy efficiency measures to offset any increase in electricity consumption and actively promotes enrollment in bill discount programs such as CARE and FERA. These measures aim to minimize the financial impact of higher electricity usage while maximizing cost savings.
Tactic: To provide customers with transparency and manage expectations, SEHI uses the Building Electrification Bill Impact Calculator Tool to conduct bill impact assessments. This tool generates detailed, customized estimates of how electrification will impact each customer's energy bills. By offering tailored energy efficiency measures, SEHI can further reduce or eliminate any negative bill impacts.
Best Practice: Providing accurate, data-driven bill impact forecasts builds customer confidence and addresses the real financial challenges of electrification. By integrating efficiency measures alongside electrification, SEHI aligns with best practices from successful

programs, which show that customers prefer solutions with guaranteed or improved cost outcomes.

4.1.3 Lack of Awareness and Trust in Electric Technologies

Barrier: Many customers, particularly in disadvantaged communities, may be unfamiliar with or skeptical of the benefits of electrification.
Strategy: SEHI uses community-based social marketing (CBSM) to promote electrification through trusted community voices, such as local leaders, CBOs, and electrification champions.
Tactic: SEHI will engage these community members to serve as trusted messengers and conduct educational workshops, neighborhood town halls, and local events to demonstrate the benefits of electrification and energy efficiency in a familiar and supportive environment.
Best Practice: CBSM has been shown to be effective in influencing behavior by using social proof and trusted sources within the community. SEHI's approach reflects lessons learned from similar programs that successfully utilized local messengers to overcome skepticism and build trust.

4.1.4 Complexity of Electrification Process

Barrier: Customers may be deterred by the complexity of electrification, which involves multiple contractors, service upgrades, and potential disruptions.
Strategy: SEHI simplifies the process by providing comprehensive project management, coordinating all necessary steps from assessment, permitting, through installation, and offering a single point of contact for each customer.
Tactic: SEHI assigns a dedicated project coordinator who handles all communication and coordination with subcontractors, PG&E's Service Planning and Design team, and permitting authorities. This minimizes customer involvement in logistics and ensures seamless experience.
Best Practice: By streamlining the customer experience and managing all aspects of the project, SEHI removes barriers to participation. Similar strategies in prior programs have shown that reducing complexity leads to higher participation and satisfaction rates.

4.1.5 Language Barriers and Accessibility

Barrier: Non-English-speaking customers or those with accessibility challenges may have difficulty accessing information or understanding program offerings.
Strategy: SEHI ensures that all program materials, including marketing, education, and outreach, are provided in multiple languages and accessible formats.
Tactic: SEHI will offer translated materials and bilingual customer service representatives to assist non-English speakers. Outreach efforts will include in-person events in communities where customers may have limited digital access or language barriers.
Best Practice: Providing multilingual resources and in-person support has been a successful tactic in improving engagement from diverse communities. This is a lesson learned from prior energy efficiency programs that struggled with reaching non-English speaking households.

4.2 Program Software Tools Supporting Implementation

Building Electrification Bill Impact Calculator Tool: This proprietary tool plays a key role in helping SEHI estimate the potential bill impacts of electrification and energy efficiency upgrades. It uses customer-specific data (e.g., historical energy usage and local weather patterns) to provide detailed forecasts of how bills will change after project implementation. The tool aligns with CalTRACK methods, using weather-adjusted energy savings estimates and statistical models to provide reliable forecasts. The tool's ability to model post-installation scenarios helps reduce concerns about unexpected costs and improves customer decision-making.

Recurve Analytics Platform: SEHI uses the Recurve Platform to conduct pre-implementation meter-based analytics, identifying customers with high potential savings and prioritizing them for outreach. This platform also tracks and reports post-installation program performance, including energy savings and bill impacts. The Recurve Platform has been widely recognized for its ability to provide actionable insights based on advanced analytics, ensuring that program resources are directed where they can have the greatest impact. This data-driven approach supports a more efficient and targeted outreach strategy.

Energy Solutions IRIS Platform to Incentive Layering & Management: SEHI employs the IRIS Platform to manage and process incentive claims. This platform tracks the application of incentives from various sources, ensuring that non-ratepayer incentives are applied first, followed by ratepayer-funded programs and finally SEHI's own funds. The platform efficiently managing incentives through a centralized platform reduces administrative overhead and ensures that participants receive the maximum possible financial assistance, which has been shown to increase participation and reduce program costs.

4.3 Why SEHI Constitutes "Best Practices" and "Lessons Learned"

By stacking financial incentives and carefully managing them through a structured hierarchy, SEHI maximizes cost savings for participants and ensures program sustainability. This approach has been proven effective in other energy efficiency programs where cost barriers were the primary obstacle to adoption. SEHI's use of advanced analytics to identify high-impact customers and tailor outreach accordingly ensures that program efforts are directed efficiently, a lesson learned from previous programs that lacked this targeted approach. The program's project management model, which provides a single point of contact and handles all logistics, simplifies the process for participants, addressing concerns about complexity and disruption. This approach aligns with best practices from successful energy efficiency programs where customer satisfaction and ease of participation were prioritized.

4.4 Key Innovative Elements

The SEHI pilot program is structured to serve as a learning and reporting platform, gathering insights into innovative strategies for energy efficiency and electrification in disadvantaged and hard-to-reach communities. Unlike typical third-party programs, SEHI's unique scope includes a comprehensive approach to testing and documenting best practices, challenges, and solutions. This enables SEHI to not only implement innovative elements in real-time but also evaluate their potential for future zonal equity programs. Key innovative elements being piloted include:

4.4.1 Layered Incentive Approach

SEHI introduces a multi-tiered incentive structure, stacking incentives from diverse funding sources such as TECH Clean California, SGIP, and IRA federal rebates. By prioritizing non-ratepayer-funded incentives first, SEHI ensures customers can receive significant financial assistance with minimal or no out-of-pocket costs.

This integrated funding approach streamlines access to a broad range of incentives, reducing both complexity and financial barriers. The SEHI pilot will evaluate how well this layered approach addresses affordability barriers and document its impact on program participation. Findings will guide the design of similar funding structures for future programs.

4.4.2 Community-Based Social Marketing (CBSM) Strategy

SEHI employs CBSM to build trust and drive participation through engagement with local community leaders and electrification champions. These community figures deliver program messages in culturally and linguistically relevant ways, ensuring effective outreach to disadvantaged and hard-to-reach communities.

Traditional marketing often relies on mass media, which may miss low-income or disadvantaged groups. SEHI's CBSM approach will be assessed for its effectiveness in increasing participation, fostering long-term behavioral change, and achieving program retention. Insights gained will inform future marketing strategies in similar demographic areas.

4.4.3 Integrated Technology Solutions

SEHI combines advanced electrification technologies, such as heat pumps and electric water heaters, with targeted energy efficiency measures to ensure customers achieve maximum energy savings. The program also includes upgrades like panel and wiring improvements, which support the seamless integration of these technologies and prepare homes for additional clean energy installations in the future.

By integrating electrification technologies with energy efficiency upgrades, SEHI creates a comprehensive solution that enhances both immediate and long-term energy performance. The pilot will document operational challenges, customer feedback, and cost-benefit results

associated with these combined upgrades. Insights from SEHI will help refine future programs, ensuring that electrification efforts are both effective and resilient to evolving energy needs.

4.4.4 Use of Advanced Analytics for Customer Targeting

SEHI leverages the Recurve Analytics Platform for pre-implementation analysis, allowing targeted outreach to high-value customers based on energy usage profiles and potential savings. This data-driven approach prioritizes disadvantaged and hard-to-reach customers most likely to benefit from electrification and energy efficiency.

SEHI's use of advanced targeting will be evaluated for its impact on program cost-effectiveness and resource allocation. The pilot will track outcomes to understand how data-driven outreach can enhance energy savings and bill reductions, informing more precise customer targeting in future programs.

4.4.5 Streamlined Delivery and Single Point of Contact (SPOC)

The Pilot uses a Single Point of Contact (SPOC) model to simplify customer experiences by coordinating assessments, incentive management, installations, and follow-ups. This approach reduces confusion and provides continuity for the participants.

The SPOC model addresses the typical complexity of electrification projects. SEHI will assess its effectiveness in improving customer satisfaction and retention, and the findings will provide a basis for scaling SPOC models in similar programs, particularly those with complex multi-step processes.

4.5 How SEHI Minimizes Lost Opportunities

SEHI's integrated, customer-centric approach prevents lost opportunities by combining electrification with efficiency measures, providing customers with all available benefits upfront. This approach mitigates the risk of "stranded assets," where partial upgrades require future interventions. By monitoring project outcomes and identifying improvement areas, SEHI is structured to continually learn and refine methods that maximize immediate and long-term customer benefits.

4.5.1 Scalability and Replicability

SEHI's innovation elements are designed with scalability in mind, including the multi-tiered incentive structure, CBSM strategy, and advanced analytics approach. Each of these elements is being piloted with a focus on documenting lessons learned and adapting best practices to future programs. The insights gathered through SEHI's learning and reporting structure will enable its model to be adapted to various geographic regions, customer segments, and sectors, making it a sustainable blueprint for broad-reaching electrification and efficiency efforts.

4.6 Program Metrics

4.6.1 2024-2027 Key Performance Indicators

Metric	• Description	Target
Electrified Zones	Number of electrified zones	27
Residential Premises	Number of residential premises electrified	72
Non-Residential Premises	Number of non-residential premises electrified	12
Residential Bill Savings	Average Residential Bill Saving	$162
Non Residential Bill Savings	Average Non-Residential Bill Saving	$138

4.7 Pilots

The SEHI Program is entirely a pilot program. All innovations are described above and herewith.

4.8 Workforce Education and Training

N/A - Not Applicable to pilot.

4.9 Workforce Standards

Pilot will comply with workforce standards where applicable to measures implemented.

4.10 Disadvantaged Worker Plan

The program supports a Disadvantaged Worker Plan through several key actions:

- The program will make available information and opportunities for Implementation Parties to pursue certifications, learn about apprenticeship programs, accredited degrees, or other workforce training programs available to improve overall skills in the delivery of Program services. SEHI will promote certification or apprenticeship programs for workers, particularly those from disadvantaged backgrounds. This includes encouraging participation in electrification-related training, such as heat pump systems and HVAC installation.

- The program commits to utilizing diverse and small businesses, including those certified by the Department of General Services (DGS) and the Supplier Clearinghouse. This provides disadvantaged businesses with opportunities to contribute to program delivery while fostering economic growth within these communities.

- SEHI includes specific provisions for Disadvantaged Worker Reporting as part of its Quarterly Business Review. This ensures ongoing tracking and accountability for how the program supports disadvantaged workers and businesses involved in the delivery of electrification services.

4.11 Additional Information

N/A - Not Applicable to this program.

5. Supporting Documents

5.1 Program Manual and Program Rules

See Appendix A

5.2 Program Theory and Logic Model

See next page.

PG&E Zonal Electrification Equity Program Pilot Logic Model

BARRIERS

Limited information to optimize pilot investment:

Lack of information on customer usage, costs, grid reliability impacts, infrastructure planning and limited program accessibility due to **language barriers**

Customer complexity and lack of awareness:

- **Limited customer financial resources**/ obtaining customer buy-in requires close to 100% cost coverage
- **Lack of awareness/trust of electric technologies** (heat pumps, induction), concern with bill impacts and grid reliability
- **Property owner / tenant issues**

Project complexity:

- **Need for layering to pay for high project costs creates multiple site visits,** coordination with many parties, data collection inconsistencies, including coordination with PG&E service upgrade
- Multiple customer personas need to all buy in (in zones with more than one meter)
- **Potential bill increases** from electrification

ACTIVITIES

Pre-implementation analysis & planning:

- Personalize customer value proposition in customer's native language:
  - Estimated bill impacts and load profile based on assessment
  - Assess feasibility of electrification based on existing service and consumption analysis
- Optimize engagement strategy:
  - Geographic area, customer type, zone, savings opportunity, etc.
  - Identify suite of marketing tools and outreach methods best suited for each zone
- Identify standard offers

Customer engagement:

- Multiple engagement pathways for individuals / entire zones
- Culturally and ideologically relevant marketing
- Customized offers, marketing, and outreach methods

Project execution:

- Ongoing customer engagement, single program point of contact manages site visits, enrollment, permitting, construction process
- Streamline and manage incentive process for customers & contractors
- Coordination with leveraged programs' adminstrators

OUTPUTS

Zonal Electrification Plan:

- Align key parties on messaging, standard offers, customer engagement strategies, imple-mentation timeline, milestones and roles
- Community outreach, engagement, best practices
- Project execution, layering, and data col-lection best practices

Project materials

Project execution

Reporting & Analysis

- Customer engagement ME&O best practices
- Load, bill impact analysis

OUTCOMES

Short-term (1–2 years): Show market reach

Successful zonal projects build awareness and **momentum**

Customer engagement strategy is effective

- # of zones attempted / converted
- # of customers touched (commercial, residential)
- # first time LI/DAC customers in EE
- # of customers moved from "maybe" to "yes"
- "Hold outs" identified to inform strategies
- # of projects completed with panel/ infrastructure upgrades and without

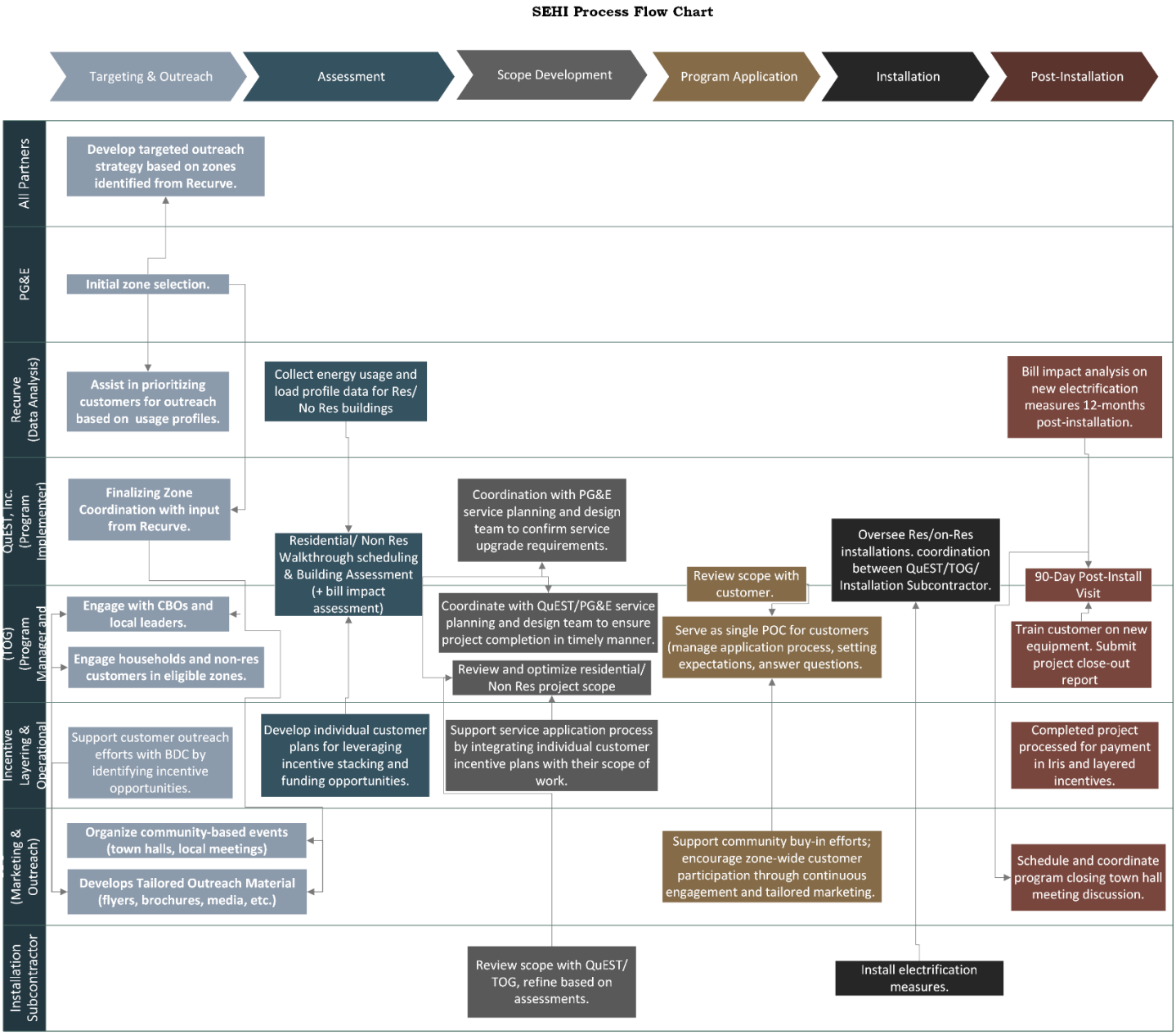
Customers are satisfied with ZEEP

- 90% customer satisfaction
- 75% of customers' bills reduced or neutral
- Successful zonal projects
- Projects not requiring major infrastructure upgrades completed in less than 3 months.

Program data informs key policy/planning decisions

Quantified investment costs & project benefits inform viable regulatory construct, customer strategy, project finance model, for future feasibility assessment.

5.3 Process Flow Chart



5.4 Incentive Table, Workpapers, Software Tools

Customer incentives in SEHI, combined with leveraged funding resources, are designed to fully cover project costs for eligible residential customers within the target zones. These costs include building electrification, energy efficiency upgrades needed to maintain bill neutrality or generate bill

savings, and necessary behind-the-meter (BTM) electrical upgrades, as well as minimal remediation to ensure the safe and effective installation of measures.

For projects using non-subcontracted installers, the customer is responsible for paying their installer directly. Once their project is complete and approved by SEHI, the customer will receive the applicable program incentives. For projects utilizing SEHI-approved installation subcontractors, incentives will be paid directly to the subcontractors, based on the installed measures and negotiated pricing. Residential participants are only responsible for any project costs that exceed the incentives and leveraged funding provided by SEHI.

SEHI prioritizes the use of external, non-ratepayer-funded resources to minimize direct program costs. Leveraged resources will be applied in the following order:

- PG&E Natural Gas Decommissioning Funds: PG&E funds allocated for natural gas decommissioning in targeted zones will be prioritized for infrastructure improvements, including front-of-the-meter (FTM) and BTM upgrades, demand-side resources, and community-based incentives. These funds will also cover any remaining costs related to electrification and energy efficiency that are not fully addressed by the funding sources above.
- Federal Inflation Reduction Act (IRA) and California Equitable Decarbonization Programs: For eligible residential projects, SEHI will apply funds from the IRA and California's Equitable Building Decarbonization programs to cover specific costs associated with electrification, including heat pumps, electric water heaters, and other approved technologies.
- TECH Clean California: When applicable, TECH funds will cover BTM electrical system upgrades and heat pump-based HVAC and domestic hot water electrification costs for residential projects. This ensures cost-effectiveness and reduces the need for direct program funding.
- Ratepayer Programs: Where possible, SEHI will leverage ratepayer-funded programs like the Energy Savings Assistance (ESA) program for energy efficiency measures and necessary remediation work. These ratepayer resources, where eligible, will be used to enhance the affordability and effectiveness of the overall program.
- SEHI Program Funds: SEHI's program funds will be used as a final layer to offset any remaining project costs associated with electrification and energy efficiency measures that were not covered by the above leveraged funding. SEHI aims to minimize the use of program funds to ensure that resources are available for the widest possible number of participants within the targeted zones.

Any additional leveraging opportunities, as they become available, will be integrated into the program to further reduce direct costs, pending PG&E approval.

5.4.1 Incentive Coverage

For residential projects, SEHI will cover 100% of project costs after accounting for all leveraged resources.

For non-residential projects, it is possible that only partial funding will be achieved. In these cases, SEHI will ensure that customers are billed only for a small portion of the total project cost, with the majority covered by SEHI and the combined leveraged resources.

Upon full installation and completion of the project, the SEHI implementation team will submit project documentation to PG&E for review and payment approval. SEHI will then fulfill any remaining obligations under incentive agreements made with participants within the fully electrified zone.

5.5 Quantitative Program Targets

PROGRAM OUTCOMES					
Annual Target: Average Expected Bill Impact [A] AVERAGE EXPECTED BILL IMPACT (ANNUALIZED FIRST-YEAR BILL SAVINGS)					
ZEEP					
	2024	2025	2026	2027	Total Average
Residential; in dollars	$ -	$ (162)	$ (162)	$ (162)	$ (162)
Non-Residential; in dollars	$ -	$ (138)	$ (138)	$ (138)	$ (138)

Annual Target: Premises Electrified [B] NUMBER OF PREMISES ELECTRIFIED**					
	2024	2025	2026	2027	Total
Total Number Electrified Residential Premises		20	43	9	72
Total Number of Non-Residential Premises Electrified	-	1	10	1	12
TOTAL NUMBER OF PREMISES	-	21	53	10	84

Annual Target: Zones Electrified [C] NUMBER OF ZONES ELECTRIFIED					
	2024	2025	2026	2027	Total
Number of electrified zones with 1 meter		3	6	-	9
Number of electrified zones with 2-4 meters		7	4	-	11
Number of electrified zones with 5 OR MORE meters	-	1	5	1	7
TOTAL NUMBER OF ZONES	-	11	15	1	27

5.6 Diagram of Program

[IN PROGRESS]

5.7 Evaluation, Measurement & Verification (EM&V)

Verification provides the data necessary for reliable EM&V processes. All installed measures under SEHI will undergo verification to ensure quality and compliance. Installation subcontractors will submit detailed documentation, including equipment specifications, installation photos, costs, dates, etc. SEHI will perform (100%) comprehensive, post-installation verification to confirm that all measures meet program eligibility requirements, are installed to quality standards, and are correctly commissioned for optimal performance. All project data, including verification findings, will be tracked through the SEHI program's management platform, ensuring transparency and easy access for audits and future analysis. SEHI implementation processes support the following:

1. Verification confirms that all measures have been installed according to program standards and specifications, ensuring that the anticipated energy savings from EM&V modeling can be attributed to the correct measures. Without this step, EM&V assessments might inaccurately measure or attribute energy savings.
2. Verified installations provide precise data points—such as model, efficiency ratings, installation dates, and baseline information—that EM&V models rely on for accurate evaluation. This step ensures that EM&V has reliable data on which measures were implemented, helping to evaluate their actual impact on energy use and bills.
3. EM&V requires a clear understanding of the starting point (baseline) and what has changed post-intervention. Measure verification confirms that installations align with the program's proposed energy efficiency or electrification measures, allowing EM&V to accurately compare pre- and post-installation performance.
4. Verification is part of the quality control process that supports program integrity. By ensuring that measures are installed correctly and are functioning as intended, verification reduces the risk of underperformance, which could otherwise skew EM&V results and impact perceived program success.

5.7.1 Post-Installation Bill Monitoring

To ensure bill neutrality or savings, SEHI will monitor customer bills using Recurve Analytics' Fleet Manager platform to track and report the impacts of program interventions on a bi-yearly basis (or other timeframe dictated by data feed). Tracking and reporting criteria will include, adjusted energy impacts (kWh), customer bill impact estimates ($), and GHG emission reductions, assuming adequate data is provided to inform analysis.

If a participant's bills indicate unexpected increases, the SEHI team will investigate potential causes, which may include recommissioning equipment, offering additional customer training, or identifying high-consumption patterns. These corrective actions aim to bring the customer's bill impacts back within the neutral or savings range.

5.8 Normalized Metered Energy Consumption (NMEC)

N/A – not applicable to pilot.

6. APPENDIX A – PROGRAM MANUAL

1) PROGRAM SUMMARY

The Sustainable Energy Home Improvement (SEHI) Pilot is a comprehensive, equity-centered program designed to support zonal electrification in Disadvantaged Communities (DACs) and low-income neighborhoods within Contra Costa County. This initiative targets regions with outdated or high-maintenance gas infrastructure, facilitating a full transition from natural gas to efficient electric systems. SEHI's mission aligns with California's decarbonization goals by promoting energy independence, improving indoor air quality, and enhancing financial resilience through lower utility costs for underserved households.

SEHI will deploy a holistic array of electrification measures, including electric heat pumps for HVAC and water heating, high-efficiency electric appliances, and building insulation enhancements. SEHI also coordinates financial support to cover full or near-full costs for participating households, ensuring that DAC residents benefit directly and meaningfully from this energy transition.

SEHI is designed to facilitate the comprehensive conversion of gas-dependent systems to electric alternatives across entire neighborhoods. This approach enables the full decommissioning of gas infrastructure in these zones, reducing long-term maintenance costs for both PG&E and the ratepayers while establishing a model for equitable electrification.

Financial feasibility for participants is central to SEHI's design. The program leverages multiple funding sources, including federal and state incentives, utility rebates, and PG&E gas decommissioning funds, to ensure bill neutrality or, where possible, cost savings for all program participants. Through efficiency upgrades and bill management tools, SEHI minimizes energy costs while transitioning households away from gas.

SEHI prioritizes community trust and participation through a high-touch outreach approach involving local Community-Based Organizations (CBOs) and trusted community leaders. By establishing a Single Point of Contact (SPOC) for each participant, SEHI ensures a streamlined, supported experience from enrollment through project completion.

SEHI's pilot structure includes data tracking and evaluation mechanisms to document best practices, identify challenges, and gather insights for future electrification efforts.

2) MEASURE ELIGIBILITY

The SEHI Pilot provides a carefully selected set of electrification and energy efficiency measures tailored to the needs of low-income and Disadvantaged Communities (DACs) within Contra Costa

County. Each measure in the SEHI program has been chosen for its potential to support the program's core objectives: reducing reliance on natural gas, enhancing energy efficiency, maintaining bill neutrality or cost savings, and improving indoor air quality.

Eligible SEHI measures include a full suite of upgrades designed to optimize building performance and support a seamless transition to electric energy sources. These measures cover critical household systems such as HVAC, water heating, and cooking, which are often significant energy consumers. SEHI's measure selection balances high-impact energy savings with affordability, ensuring that each improvement contributes directly to reducing energy demand and costs for participants. The SEHI measures fall into the following key categories:

Fuel Substitution and Electrification: Including electric heat pump HVAC systems, heat pump water heaters, induction cooktops, and electric ranges to replace natural gas appliances. These upgrades reduce greenhouse gas emissions and eliminate indoor pollutants associated with gas combustion.

Energy Efficiency Enhancements: Such as ceiling insulation, crawl space insulation and sealing, and efficient lighting installations. These improvements work alongside electrification measures to further reduce energy usage, helping to maintain bill neutrality for participants.

Behind-the-Meter (BTM) Electrical Upgrades: Essential electrical upgrades, including panel and circuit enhancements, ensure that households have the infrastructure needed to accommodate electric systems effectively and safely.

The list of measures is included below:

Measure Category	Measure Name	Description	Measure ID Package	Measure Dollar Cap	Comments as Applicable
Fuel Substitution	Electric induction Cooktop, Residential	Remove existing gas cooktop, properly dispose of the old gas equipment, cap the gas line, install an appliance circuit and disconnect (as required per manufacturer's instruction), install cooktop, standard one (1) year labor warranty, and manufacturer's product warranty.	SWAP013-03	N/A	
Fuel Substitution	Electric Resistance Wall Oven, Residential	Remove existing gas, properly dispose of the old gas equipment, cap the gas line, install an appliance circuit and disconnect (as required per manufacturer's instruction), install wall oven, standard one (1) year labor warranty, and manufacturer's product warranty.	SWAP013-03	N/A	
Fuel Substitution	Electric Range with Induction Cooktop, Residential	Remove existing gas range, properly dispose of the old gas equipment, cap the gas line, install range, standard one (1) year labor warranty, and manufacturer's product warranty.	SWAP013-03	N/A	

Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Single Zone; Base Case: Standard efficiency wall furnace and window AC	Remove existing gas furnace, properly dispose of the old furnace and window AC, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 18,000 BTU; 1.5 Tons
Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Single Zone; Base Case: Standard efficiency wall furnace	Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 15,000 BTU; 1.25 tons; primary heat source only

Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Dual Zone; Base Case: Standard efficiency wall furnace and window AC	Remove existing gas furnace and window ac unit, properly dispose of the old furnace and window ac, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 24,000 BTU; 2 tons
Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Dual Zone. Base Case: Standard efficiency wall furnace	Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 20,000 BTU; 1.67 Tons; primary heat source only

Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Tri Zone Base Case: Standard efficiency wall furnace and window AC	Remove existing gas furnace and window ac unit, properly dispose of the old furnace and **window** ac, cap the gas **line**, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 24,000 BTU; 2 tons
Fuel Substitution	Heat pump HVAC mini-split system, Residential (ductless, inverter driven) ALTERNATE - Quad Zone; Base Case: Standard efficiency wall furnace and window AC	Remove existing gas furnace and window ac unit, properly dispose of the old furnace and **window** ac, cap the gas **line**, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC044-04	N/A	SEER2 >= 17; 48,000 BTU; 4 tons

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 2 ton; Package Unit	Heat Pump HVAC: Residential legacy-rated split/pkgHP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >= 16.

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 2 ton; Split Unit	Heat Pump HVAC: Residential legacy-rated split/pkg HP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >=16.

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 3 ton; Package Unit	Heat Pump HVAC: Residential legacy-rated split/pkgHP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >= 16.

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 3 ton; Split System	Heat Pump HVAC: Residential legacy-rated split/pkg HP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, attain permit, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >= 16.

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 4-ton Package Unit	Heat Pump HVAC: Residential legacy-rated split/pkg HP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, attain permit, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >= 16.

Fuel Substitution	Heat Pump HVAC, Residential (ducted & inverter-driven); replacing AC and Gas Furnace 4 ton; Split System	Heat Pump HVAC: Residential legacy-rated split/pkgHP, SEER >= 16 and HSPF >= 9, replacing AC and gas furnace. Remove existing gas furnace, properly dispose of the old furnace, cap the gas line, coordinate condensing unit location (consider aesthetics, refrigerant piping run length, noise), install condensing unit pad or stand, install indoor unit(s), run refrigerant piping, install thermostat, complete the job closure paperwork, attain permit, standard one (1) year labor warranty, and manufacturer's product warranty.	SWHC045	N/A	SEER >= 16.
Fuel Substitution	Heat Pump Clothes Dryer, Residential, Vented Standard	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	

Fuel Substitution	Heat Pump Clothes Dryer, Residential, Vented Compact	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	
Fuel Substitution	Heat Pump Clothes Dryer, Residential, Vented Compact 120v	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	
Fuel Substitution	Heat Pump Clothes Dryer, Residential, Ventless Standard	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	
Fuel Substitution	Heat Pump Clothes Dryer, Residential, Ventless Compact	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	

Fuel Substitution	Heat Pump Clothes Dryer, Residential, Ventless Compact 120v	Remove existing gas dryer, properly dispose of the old gas equipment, cap the gas line, install dryer, repair and paint walls to original condition as required, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWAP014-03	N/A	
Fuel Substitution	Heat Pump Pool Heater, Residential, DWELLING	Remove existing pool heater, properly dispose of the old gas equipment, cap the gas line, install new hp heater, add 50A service to breaker feeding pool area, run new wiring and cabling for higher service power (est. 50'). Expand concrete pad, cap existing gas line, standard one (1) year labor and warranty, and manufacturer's product warranty.	SWRE005-03	N/A	
Fuel Substitution	Heat pump water heater, Residential (80 gallon, 240V)	Remove existing gas water heater, properly dispose of the old water heater, cap the gas line, install the drain pan, install the heat pump water heater and condensate draining per manufacturer’s instruction based on location, install new safety straps, install venting per manufacturer’s instructions including ducting if required, install noise and vibration reduction components	SWWH025-07	N/A	
Fuel Substitution	Heat pump water heater, Residential (65 gallon, 240V)		SWWH025-07	N/A	
Fuel Substitution	Heat pump water heater, Residential (50 gallon, 240V)		SWWH025-07	N/A	

Fuel Substitution	Heat pump water heater, Residential (80 gallon, 120V)	(flexible pipe connectors, rubber mat, rubber grommet at pipe-wall penetrations, rubber grommet where seismic strapping meets wall,) install expansion tank as required, install thermostatic mixing valve, complete job closure paperwork, standard one (1) year labor warranty, and manufacturer's product warranty.	SWWH025-07	N/A	
Fuel Substitution	Heat pump water heater, Residential (65 gallon, 120V)		SWWH025-07	N/A	
OTHER	Induction Cookware - Residential 5-pan set	Provide 5 pc induction cookware	NA		
OTHER	Permit				
OTHER	Crane Fees	Crane fees for roof top HVAC			
EE	Insulation / Sealing for Crawl Space - Residential	Add to the crawlspace a vapor barrier that covers entire crawlspace and wall area; rigid spray foam sealing and insulation applied on the crawl space interior walls, over the vapor barrier. For any external crawl space entries, an insulated cover with a tight-fitting gasket, to complete sealing integrity while still allowing exterior access; an airflow path through the conditioned crawlspace using transfer registers, ductwork, and/or fans.	SWWB006-03	N/A	

EE	Ceiling Insulation - Residential; Blown in Cellulose (R-60)	The measure case is defined as the installation of ceiling insulation on top of existing (if any) vintage specific ceiling insulation.	SWBE006-03	N/A	
EE	Ceiling Insulation - Residential; Blown in Cellulose (R-38)	The measure case is defined as the installation of ceiling insulation on top of existing (if any) vintage specific ceiling insulation.	SWBE006-03	N/A	
EE	Ceiling Insulation - Residential; Blown in Cellulose (R-19)	The measure case is defined as the installation of ceiling insulation on top of existing (if any) vintage specific ceiling insulation.	SWBE006-03	N/A	
EE	Low Flow Showerhead, Residential	The measure case technology is defined as reducing the pre-existing flow rate of a showerhead using a flow control valve or an efficient showerhead that replaces a base case showerhead head. Less than 2gpm.	SWWH002-04	N/A	
Fuel Substitution	NR - Fryer, Commercial	The measure case specification represents the performance characteristics of equipment that meets or exceed the ENERGY STAR certification requirements; replaces standard commercial gas fryer; existing equipment to be disposed and gas line capped.	SWFS021-04	N/A	

Fuel Substitution	NR - Full Size Convection Oven, Commercial	The measure case specification represents the performance characteristics of equipment that meets or exceed the ENERGY STAR (Program Requirements Product Specification for Commercial Ovens - Version 3.0") certification requirements; replaces standard commercial convection oven. Includes disposal of existing unit and capping of gas line.	SWFS022	N/A	
Fuel Substitution	NR - Half Size Convection Oven, Commercial	The measure case specification represents the performance characteristics of equipment that meets or exceed the ENERGY STAR (Program Requirements Product Specification for Commercial Ovens - Version 3.0") certification requirements; replaces standard commercial convection oven. Includes disposal of existing unit and capping of gas line.	SWFS022	N/A	

Fuel Substitution	NR - Packaged Heat Pump AC, Commercial (2 ton)	The measure case is an all-electric commercial air-source heat pump using electric resistance heating only if supplemental heating is required. The measure case exceeds the prevailing code requirements and is available in the size, equipment categories, and efficiency tier. Commercial IEER-rated package heat pump, 65 to 134 kBtu/hr., IEER16.0 COP3.4	SWHC046-03	N/A	
Fuel Substitution	NR - Packaged Heat Pump AC, Commercial (3.5 ton)	The measure case is an all-electric commercial air-source heat pump using electric resistance heating only if supplemental heating is required. The measure case exceeds the prevailing code requirements and is available in the size, equipment categories, and efficiency tier. Commercial IEER-rated package heat pump, 65 to 134 kBtu/hr., IEER16.0 COP3.4	SWHC046-03	N/A	

Fuel Substitution	NR - Packaged Heat Pump AC, Commercial (5 ton)	The measure case is an all-electric commercial air-source heat pump using electric resistance heating only if supplemental heating is required. The measure case exceeds the prevailing code requirements and is available in the size, equipment categories, and efficiency tier. Commercial IEER-rated package heat pump, 65 to 134 kBtu/hr., IEER16.0 COP3.4	SWHC046-03	N/A	
Fuel Substitution	NR - Split Heat Pump AC, Commercial (2 ton)	The measure case is an all-electric commercial air-source heat pump using electric resistance heating only if supplemental heating is required. The case exceeds the prevailing code requirements and is available in the size, equipment categories, and efficiency tier. Commercial IEER-rated package heat pump, 65 to 134 kBtu/hr., IEER16.0 COP3.4	SWHC046-03	N/A	

Fuel Substitution	NR - Split Heat Pump AC, Commercial (4 ton)	The measure case is an all-electric commercial air-source heat pump using electric resistance heating only if supplemental heating is required. The measure case exceeds the prevailing code requirements and is available in the size, equipment categories, and efficiency tier. Commercial IEER-rated package heat pump, 65 to 134 kBtu/hr., IEER16.0 COP3.4	SWHC046-03	N/A	
Fuel Substitution	Heat Pump Water Heater, Commercial	Heat pump water heater, > 75 gal, UEF = 3.75. Cap Existing gas line. Demolish existing vent. Install water heater electrical hookup 30amp-240-volt receptacle, 25' wiring.	SWWH027	N/A	
Fuel Substitution	Heat Pump Water Heater, Commercial	Heat pump water heater, 66 gal, UEF = 3.75. Cap Existing gas line. Demolish existing vent. Install water heater electrical hookup 30amp-240-volt receptacle, 25' wiring.	SWWH027	N/A	
Fuel Substitution	Heat Pump Water Heater, Commercial	Heat pump water heater, 66-gal, 120 v Cap Existing gas line. Demolish existing vent. Install water heater and outlet as needed.	SWWH027	N/A	
BTM	BTM Electrical Upgrade - New Circuit Res		N/A	N/A	

BTM	BTM Electrical Upgrade - INDOOR Rated- New Panel Res		N/A	N/A	
BTM	BTM Electrical Upgrade - OUTDOOR Rated- New Panel Res		N/A	N/A	
BTM	BTM Electrical Upgrade - New Sub-Panel Res		N/A	N/A	
BTM	BTM Electrical Upgrade - New Circuit NonRes		N/A	N/A	
BTM	BTM Electrical Upgrade - INDOOR Rated - New Panel NonRes		N/A	N/A	
BTM	BTM Electrical Upgrade - OUTDOOR Rated -- New Panel NonRes		N/A	N/A	
BTM	BTM Electrical Upgrade - New Sub-Panel NonRes		N/A	N/A	

FTM	FTM Service Upgrades - Overhead Res		N/A	$ 6,000	
FTM	FTM Service Upgrades - Underground Res		N/A	$ 10,000	
FTM	FTM Service Upgrades - Overhead NonRes		N/A	$ 6,000	
FTM	FTM Service Upgrades - Underground NonRes		N/A	$ 10,000	
Remediation	Remediation - HPWH Res	Relocated to outdoors. Concrete pad. Shelter. Retrofit and upgrade dwelling plumbing up to code to make installation feasible.	N/A	$2,500	The remediation cap is set at the project level and is inclusive of all remediation measures
Remediation	Remediation - Electrical Res	For example, upgrading existing wiring to handle increased electrical load; upgrade with properly sized wiring.; ensuring electrical system is properly grounded and bonded, etc.	N/A		
Remediation	Remediation - Cooking Res	Add outlet / receptacle.	N/A		
Remediation	Remediation - Clothes Dryer Res		N/A		
Remediation	Remediation - HVAC NonRes	Repair venting / ducting. Strapping for ducts when exposed. Lifts.	N/A	$2,500	The remediation cap is set at the project level and is inclusive of
Remediation	Remediation - HPWH NonRes	Repair / replace water lines.	N/A		

Remediation	Remediation - Electrical NonRes	Wiring replacement and or upgrade; grounding system upgrades, AFCI installation where required by code	N/A		all remediation measures
Remediation	Remediation - Cooking NonRes	E.g., repair flooring as needed to support new appliance.	N/A		
OTHER	Circuit Sharing Device				
OTHER	Circuit Control Units				

3) CUSTOMER ELIGIBILITY

Customer Eligibility Requirements
SEHI is designed for residential and non-residential PG&E customers that meet the following criteria:

- Properties must be in a SEHI designated zone in Contra Costa County.
- Customers must receive electric and natural gas service from PG&E and must commit to full electrification.
- Residential customers must agree to work with a SEHI approved installation subcontractor
- Like Residential customers, Non-Residential customers must agree to fully electrify for participation, and the project must demonstrate a neutral or positive impact on their utility bill, including any measures installed or leveraged by SEHI. If a project is anticipated to negatively impact the bill, PG&E Program Manager's prior written approval is required for eligibility.

4) INSTALLATION SUBCONTRACTOR ELIGIBILITY

Installation Sub-Contractors engaged in the SEHI Program play a critical role in ensuring the successful implementation of high-quality electrification and energy efficiency measures. SEHI requires that all participating installation sub-contractors possess specific qualifications, expertise, and certifications aligned with California's building electrification goals and installation standards.

To participate in SEHI, installation sub-contractors must be licensed in California and possess credentials relevant to their scope of work, including HVAC, electrical, and general contracting. They should be proficient with electrification technologies, including the installation and troubleshooting of heat pumps, induction appliances, and other program-approved measures. They must also be capable of performing necessary upgrades to customer electrical panels and circuits to support new electric loads introduced through the SEHI measures. They will be required to maintain valid insurance coverage, including general liability, and workers' compensation.

Prior experience working with low-income and DAC projects is preferred, as installation sub-contractors are expected to understand the unique needs of these communities and demonstrate a commitment to high standards of workmanship and customer care. Contractors should possess strong communication skills and a proven ability to work with diverse customers. They must adhere to SEHI's guidelines for respectful, clear, and empathetic communication, especially when working with customers who may be unfamiliar with electrification or energy efficiency upgrades.

Installation Sub-Contractors must adhere to SEHI's quality assurance and quality control processes, including site inspections and project documentation. This includes submitting installation reports, adhering to SEHI's specified procedures, and cooperating in post-installation evaluations. They will be expected to maintain thorough records and documentation for each project, ensuring transparency and facilitating program evaluations that contribute to SEHI's data-driven approach to program improvement.

5) PARTICIPATING INSTALLATION SUB-CONTRACTORS, MANUFACTURERES, RETAILERS, DISTRIBUTORS, AND PARTNERS

SEHI is strengthened by partnerships that enhance its outreach, material procurement, and implementation capabilities. By collaborating with a diverse network of organizations, SEHI ensures that each step of the electrification process is supported, cost-effective, and community-centered, maximizing benefits for low-income and Disadvantaged Community (DAC) residents.

SEHI partners with CBOs and trusted community figures to engage residents, build program awareness, and foster trust. These organizations help tailor the program's outreach to meet the specific cultural and linguistic needs of each community, ensuring inclusivity and effective communication. CBOs and local leaders will also assist in coordinating outreach events, workshops, and neighborhood meetings, helping residents understand the benefits of electrification and navigate the enrollment process.

SEHI will work closely with PG&E and other energy program administrators, including Marin Clean Energy and BayREN, to coordinate incentives, streamline processes, and reduce administrative overlap. By aligning with existing programs, SEHI enhances the overall value delivered to participants, often enabling multiple incentives to be combined for maximum financial impact.

SEHI will work with vetted and licensed installation subcontractors experienced in energy efficiency and electrification. These contractors are essential for achieving SEHI's customer-centric approach. They will receive program-specific training on best practices for working with DACs, including respectful and clear communication, minimizing disruptions, and providing post-

installation education to ensure participants can operate and maintain their new systems effectively.

6) ADDITIONAL SERVICES

SEHI offers a robust suite of additional services to enhance participant experience, ensuring each household receives comprehensive, personalized assistance throughout their electrification journey. By emphasizing a Single Point of Contact (SPOC) approach, SEHI aims to provide consistent, culturally sensitive support that accommodates linguistic diversity, addresses income-related challenges, and builds trust within Disadvantaged Communities (DACs) and low-income neighborhoods.

Every participating household is assigned a dedicated SPOC who guides them through the entire SEHI process, from initial outreach and enrollment to post-installation support. This SPOC acts as a direct liaison, offering clarity, consistency, and accountability throughout the project. SPOCs are trained to understand and address the unique needs of low-income and DAC communities, ensuring interactions are empathetic, respectful, and solution-focused. By fostering a supportive relationship with each participant, the SPOC reduces barriers to engagement and ensures participants feel confident and comfortable with the electrification process.

SEHI recognizes the linguistic diversity of the communities it serves. Program materials, assessments, and communications are offered in multiple languages to meet the needs of non-English-speaking participants. SPOCs and outreach staff are trained in culturally sensitive communication practices, taking into account each community's values, traditions, and potential apprehensions about new technologies. This approach helps SEHI build stronger connections with participants and reinforces its commitment to inclusivity and respect.

SEHI assists participants in accessing available energy efficiency programs and financial incentives, leveraging funds from state, federal, and utility sources to cover electrification costs.

After installation, SPOCs conduct a final walkthrough with participants to review the new equipment, answer questions, and ensure participants are comfortable operating their upgraded systems. The pilot also offers ongoing technical support for installed measures, with SPOCs available to assist participants if they encounter issues or have questions about maintenance. This follow-up service reinforces SEHI's commitment to participant satisfaction and long-term energy savings.

7) AUDITS

SEHI provides residential and non-residential audits to ensure each participant's premises are well-prepared for electrification, maximizing both the efficiency and sustainability of the upgrades provided. Audits are essential to accurately assess each building's energy profile, identify specific areas for improvement, and ensure that installed measures meet SEHI's standards for quality and performance.

Each audit encompasses a comprehensive review of the following systems and areas:

1. Building Envelope: Auditors evaluate insulation, windows, and air sealing to understand heat retention and loss, identifying necessary improvements that will support energy efficiency and comfort. Enhancements to the building envelope are foundational to SEHI's strategy, as they reduce the demand on heating and cooling systems, resulting in lower energy costs and a more comfortable living environment.

2. Heating, Ventilation, and Air Conditioning (HVAC): The audit assesses the existing HVAC system, examining its efficiency, age, and compatibility with proposed electrification measures such as heat pumps. Understanding the current state of HVAC systems is needed for selecting effective upgrades.

3. Water Heating: Auditors assess the home's water heating system, noting its fuel type, efficiency, and potential for replacement with a high-efficiency electric or heat pump water heater.

4. Electrical System and Panel Capacity: Audits include a detailed inspection of the home's electrical infrastructure, including panel capacity, circuit availability, and wiring conditions. This is crucial to ensure that the system can handle the increased load from electrification upgrades safely and effectively. If upgrades to the electrical panel or circuits are needed, these will be included in the overall project scope to support a seamless transition to electric systems.

5. Major Appliances and Lighting: Auditors review existing appliances (e.g., stoves, ovens) and lighting systems to identify opportunities for replacement with energy-efficient electric models.

6. Energy Usage and Bill Impact Assessment: The audit includes an analysis of the participant's historical energy usage patterns to model the expected bill impact of proposed measures. This allows SEHI to ensure that the electrification process is cost-neutral or results in savings, a key consideration for low-income households. By understanding current energy use, SEHI can customize upgrades to align with participant needs and financial expectations.

Following each audit, SEHI provides participants with a detailed report that outlines recommended measures, expected benefits, and an estimated project timeline. This report ensures participants are fully informed about their home's energy profile and how the SEHI upgrades will impact their energy use and costs.

8) QUALITY ASSURANCE

The pilot's Quality Assurance (QA) protocols are designed to maintain the highest standards of safety, performance, and customer satisfaction throughout the electrification process. Quality assurance is integral to ensure that each installation achieves SEHI's objectives of energy savings, cost neutrality, and long-term reliability. Through rigorous QA processes, SEHI safeguards the program's impact and provides participants with a dependable transition to clean energy.

Before installation, SEHI verifies the readiness of each home through detailed pre-installation assessments. This step ensures that the site conditions align with the program's requirements and that planned upgrades are feasible and will meet the expected outcomes. Pre-installation documentation is collected to establish a baseline for all systems undergoing upgrade, providing a benchmark against which SEHI can measure improvements post-installation. This documentation includes photos, detailed site assessments, and technical specifications of existing equipment.

SEHI will conduct periodic, mid-project inspections to monitor installation progress and address any issues as they arise. This proactive approach ensures that installation sub-contractors adhere to program standards, safety protocols, and quality requirements throughout the process. These inspections are particularly important for complex installations, such as electrical panel upgrades and heat pump installations, where adherence to detailed technical specifications is essential for both safety and performance.

Following installation, SEHI performs a thorough verification process, which includes on-site inspections and performance testing of upgraded systems. This stage confirms that each measure has been installed correctly and is operating as expected, delivering the anticipated energy efficiency and electrification benefits. Post-installation checks also involve evaluating customer comfort and satisfaction, ensuring that participants fully understand how to operate and maintain their new systems.

SEHI values participant input and incorporates it into its QA processes. Following installation, participants are invited to provide feedback on the entire process, from audit to installation. This feedback helps SEHI identify areas for improvement and enhance the participant's experience. SPOCs are available to support participants with any questions or issues that may arise post-installation, providing additional guidance on system use and ensuring participants feel confident in their new electrification upgrades.

SEHI's QA program includes ongoing monitoring of project performance across the program. This data-driven approach allows SEHI to track key performance metrics, such as energy savings and customer satisfaction, and adjust as needed to maintain program integrity and impact. QA findings are systematically reviewed to inform future program improvements.

9) OTHER PROGRAM METRICS

KPI	Description	Type
Measure Pass Rate	The percentage of Program measures that pass inspection, divided by the total number Program measures submitted for inspection.	Metric
Budget Forecast Accuracy	The average quarterly budget forecast variance for each quarter. The variance for an individual quarter is calculated by summing up the monthly forecast for an entire quarter as submitted immediately prior to the start of that quarter and comparing it to the sum of monthly actuals for that quarter immediately following the end of that quarter.	Metric
Number of Zones Electrified Forecast Accuracy	The average quarterly budget forecast variance for each quarter. The variance for an individual quarter is calculated by summing up the monthly forecast for an entire quarter as submitted immediately prior to the start of that quarter and comparing it to the sum of monthly actuals for that quarter immediately following the end of that quarter.	Metric
Customer Satisfaction	Customer satisfaction with their program experience will be evaluated on a quarterly basis, via survey developed and administered by QuEST.	Metric
Program Quality Data	Provided program data complete, accurate, and timely. This will be delivered in the form of monthly reports for PG&E to review.	Indicator