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**LOCAL GOVERNMENT PARTNERSHIP**

**THIRD-PARTY IMPLEMENTER**

**ENERGY EFFICIENCY PROGRAM**

**IMPLEMENTATION PLAN**

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City and County of San Francisco, Department of the Environment

**EnergyAccess SF**

Initial Draft / Rev 05 / 08-2020

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# Program Overview

## Program Budget and Savings

1. Program Name: EnergyAccess SF
2. Program Identification Number: EEGA\_CODE\_#10
3. Program Budget Table: Please refer to “Table 1 – Program Budget,” below.

Table 1- Program Budget

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity Description** | **Input Year 1 Program Budget** | **Input Year 2 Program Budget** | **Input Year 3 Program Budget** |  |
| **Administration** | $69,268 | $63,682 | $66,545 | $199,495  |
| **Energy Coaches** | $421,492 | $434,137 | $447,161 | $1,302,791  |
| **Marketing and Outreach** | $73,914  | $61,896  | $14,190  | $150,000 |
| **Program Management** | $117,710  | $121,241  | $124,878  | $363,829  |
| **Data Support & Analysis** | $54,758 | $56,400 | $58,092 | $169,249 |
| **Program Software** | $76,309  | $94,294 | $94,294  | $264,897 |
| **Totals** | **$813,451** | **$831,650** | **$805,160** | **$2,450,261**  |

1. Program Gross Impacts Table: Not Applicable
2. Program Cost Effectiveness, TRC: Not Applicable
3. Program Cost Effectiveness, PAC: Not Applicable
4. Type of Program Implementer: Partnership
5. Market Sector(s): Residential and Commercial (non-residential)
6. Program Type: Non-resource
7. Market Channel(s) and Intervention Strategies: Marketing, Outreach, Audits, Technical Assistance

## Implementation Plan Narrative

### 1. Program Description

EnergyAccess SF (the Program) is a local government partnership (LGP) between PG&E and the City and County of San Francisco, Department of the Environment (SFE). The purpose of the LGP is to support the PG&E’s 2018 – 2025 Business Plan, in particular:

1. Supporting energy saving opportunities for hard-to-reach (HTR) and disadvantaged communities (DAC) customers.
2. Supporting building capacity to help save energy community-wide.

To that end, the Program goals are:

1. Increase penetration rate, as defined in California Public Utilities Commission (CPUC) Decision (D) 18-05-04 (the Decision), in residential and HTR SMB by 5% annually. This helps PG&E to comply with the Decision, which requires program administrators to increase small business penetration rate by 5% annually.[[1]](#footnote-1)
2. Influence customers to take energy efficiency (EE) actions and drive well-qualified leads to 3P, PG&E, and Bay Area Regional Energy Network (BayREN) programs.
3. Reduce customer acquisition cost and achieve deeper energy savings for 3P, PG&E, and BayREN programs.

And the Program objectives to meet the goals are:

1. Deploy an automated targeting and reporting system that refreshes quarterly.
2. Consistently provide third party (3P) implementers with pre-qualified customers and critical project information.
3. Deploy outreach and marketing that are low-touch and low-cost with automation, personalized messaging, and cultural appropriate strategic in-person recruitment.
4. Target a minimum 40% conversion rate (defined as prospect to completed project) in the residential sector and a minimum 66% in the small-medium businesses (SMB) HTR sector.

Overall, to achieve the objectives, the Program design and framework are supported by three strategic pillars:

Data-driven targeting looking for opportunity and propensity.

SFE’s role as a recognized brand and trusted messenger.

SFE’s knowledge of constituents, built over two decades of EE implementation work, to drive savings to programs administered by 3P, PG&E itself, and BayREN EE programs.

SFE chose to focus on serving the HTR and DAC customers because San Francisco’s municipal buildings are served by Hetch Hetchy Power. As a consequence, this sector is ineligible for PG&E program funding. Arguably, serving HTR and DAC customers are more challenging than serving public sector buildings, and this is a challenge SFE is uniquely qualified to meet given its decades of implementation experience. SFE has designed an innovative program that uses customized data-driven targeting, the fact that SFE is a recognized brand and trusted messenger, and SFE’s knowledge of constituents to provide *access* to EE products and services to HTR and DAC customers.

Accessing EE products and services also includes integration with demand response (DR). OhmConnect is partnering with SFE to bring DR to single and multifamily residents. OhmConnect pays enrolled participates to automatically turn-off or cycle Internet-connected appliances during DR events. In return, OhmConnect pays the enrollee annually. OhmConnect will build a custom landing page on the Internet for interested customers to enroll and learn more about OhmConnect. Furthermore, the Program will integrate with PG&E’s Fast Track DR-program for HTR SMB customers, as appropriate.

SFE recognizes that the Program represents a significant ratepayer and PG&E investment. Therefore, SFE is committed to not only delivering energy savings, but also on achieving the following outcomes. All Program activities will result in the corresponding direct, observable program outputs indicated below.

1. **Customer Lists with High Opportunity for Savings** – Energy consumption signatures that match the goodness-of-fit criteria indicating customers with high savings potential.
2. **Customer Lists with High Propensity for EE Action** – The lists include associated building characteristics and equipment information that match the goodness-of-fit criteria indicating customers with high propensity to participate.
3. **Customized Outreach Material**– This includes:
	* + 1. Customer-facing Energy reports detailing current energy consumption, improvement recommendations, potential savings, estimated construction costs, a clear call-to-action with instructions, and a single point of contact.
			2. Mailers with City and Department logos and clear call to action.
			3. Call scripts to engage residents and business owners with influence an EE outcome.
4. **Program Education and Enrollment**–Program staff shall provide education on EE benefits, furnish relevant program, and rebate details, and conduct on-the-spot enrollment into 3P, PG&E, and BayREN programs that best fit the customer’s needs.
5. **Improved Targeting and Modeling to Scale –** Again, the Program represents an investment because it serves as a testbed to iterate and refine the targeting process and ensuing analysis. Moreover, the daily usage of the energy-modeling application will provide an abundance of user-interface feedback that will refine the application. The sum of the experiential improvements is the ability to scale targeting and modeling to other jurisdictions. This significantly reduces project acquisition cost while improving access to EE, especially to the HTR and DAC customers.

Note that initial program design focused on referrals to new 3P programs. At this time, details about them are not available. Thus, LGPs are being encouraged to refer customers to financing only programs. Similarly, 2020 incentive funds for existing direct-install programs are fully subscribed. The Program’s early-stage outreach will focus on referrals to existing PG&E programs (including financing-only programs), BayREN and low-income programs where applicable.

### 2. Program Delivery and Customer Services

#### Program Target Customer Groups

Program activities will bring greater access to EE and DR products and services to the targeted customer groups: HTR residential (single- and multifamily), and small and medium business (SMB) customers. According to CPUC Decision D.18-05-041, a utility customer is considered HTR if the customer meets three of the following criteria, or two if one of the criteria met is the geographic criteria.[[2]](#footnote-2) The criteria are:

1. **Language** – Primary language spoken is other than English, and/or;
2. **Geographic** – Business or homes in Disadvantaged Communities (DAC) as identified by CalEPA pursuant to Health and Safety Code Section 39711 and/or;
3. For small business added criteria to the above include:
	1. **Business Size** – Less than ten (10) employees and/or classified as Very Small (Customers whose annual electric demand is less than 10 kW or whose annual gas consumption is less than 10,000 Therms, or both 0), and/or;
	2. **Lease or Rented Facilities** – Investments in improvements to a facility rented or leased by a participating business customer.
4. For residential added criteria to the above include:
	1. **Income** – Those customers who qualify for the California Alternative Rates for Energy (CARE) or the Family Electric Rate Assistance Program (FERA), and/or;
	2. **Housing Type** – Multi-family and Mobile Home Tenants (rent and lease).

The geographical focus for each year is chosen to ensure that a majority, if not all, customers meet HTR criteria.

#### Program Delivery Process

As aforementioned, the Programs is built on three (3) strategies based on 1) using advanced data analysis to identify prospects; 2) sending high-impact the EE message via SFE, a credible messenger, and; 3) customizing the program delivery channels and messages based on expert knowledge of the communities and its customers. Strategic implementation is reliant on thoughtful tactics delivered via effective marketing channels, as detailed below. Overall, SFE staff shall deliver the Program by:

1. **Step 1: Use advanced metering infrastructure (AMI) data analytics to target customers with high energy savings opportunities.** Collaborate with PG&E and Recurve Analytics (contractor) to develop effective targeting using AMI data to pre-screen potential program participants.
	* **Rationale:** PG&E research has shown that well-executed targeting can improve per-customer average savings by a factor of 2-3X by focusing recruitment efforts on the most attractive 25-50 percent of potential customers. This improved performance will translate into more efficient program delivery and improved cost effectiveness.
2. **Step 2: Use Radiant Labs’ Zero Cities Targeting Tool (ZCTT) to determine propensity to act.** Since 2017, Radiant Labs has partnered with SFE to develop the ZCTT under previous PG&E Strategic Energy Resource (SER) program and funding. In this Program, Radiant Labs will modify the user interface of the ZCTT for the Program. Radiant Labs will also enhance the ZCTT with additional sets of publicly available data. The ZCTT will filter utility accounts for propensity to act on EE opportunities.
* **Rationale:** In 2016, San Francisco Mayor’s Office’s team of DataSF scientists discovered that permitting is a reliable indicator for EE propensity. For example, a building that completed a retrofit was five times more likely to have applied for an electrical permit within the previous year, and three times more likely to have applied for a permit within the five years prior. Another example would be using permit data to identify if a home’s boiler is reaching or has passed its useful life, thus making the home eligible or likely to upgrade.
1. **Step 3: Use SFE’s brand-recognition and community trust for marketing EE programs and conduct outreach to potential customers.**
* **Rationale:** SFE has a strong foundation of legitimacy within the communities with regards to racial equity and inclusion. Customers will be reached via personalized mailers and email messages that include the City and Department logos.
1. **Step 4: Conduct recruitment to the top 50% of single-family and HTR SMB customers. This work will be done in-person wherever possible.** SFE’s Outreach Team will reinforce information from the energy reports and mailers and directly enroll the prospects into the best-fit program. Energy coaches will conduct on-site assessments to identify and document a full spectrum of EE savings opportunities, make program referrals and explore financing options.
* **Rationale:** Conducting in-person recruitment establishes a single-point-of-contact to eliminate market confusion. It also assures that customers’ energy needs are comprehensively addressed.

5. **Step 5: Hand-off to 3P, PG&E and BayREN Programs.**

* **Rationale:** This is the most critical step. At this point, the Program has successfully influenced the prospect into taking an EE action. At the same time, Program staff has also taken detailed notes about the project site, eligible measures, and compiled contact information into a “leads list” for the appropriate 3P or other EE programs. Program staff shall seamlessly transition these valuable leads and associated project details to the appropriate EE program for enrollment and installation.

In summary, Program delivery is illustrated below.

Figure 1 – Program Delivery Funnel

**Step 1 - PG&E Energy Consumption Targeting**

**Step 2 - Radiant Labs ZCTT City Data Targeting**

**Step 3 - Low Cost, Low Touch SFE Outreach**

**Step 5 - Hand-off to Third Party, PG&E or BayREN**

**Step 4 - Active Recruitment:**

**SFE Outreach = 50% Top Homes**

**SFE Energy Coach = 50% Top HTR SMB**

#### How will the Program Deliver Savings?

This section explains how each step of the Program Delivery Process will contribute to the delivery of savings. It will also describe the Program roll-out schedule, the San Francisco neighborhoods served, and the intended target sectors.

Data drives marketing. The Program initiates the process using a two-stage filtering process. This reduces customer acquisition costs for the resource programs, and allows the Program to deliver high-impact outreach material to the right audience. In the first stage, PG&E will filter data to identify customers within the target neighborhoods whose usage profiles indicate high savings potential. The analysis builds individual energy-models using weather-normalized energy consumption profiles for select customer profiles. Next, PG&E will analyze the annual hourly load profile of each building to identify baseline consumption criteria, such as summer peak and winter peak usage, which are used to identify the characteristics that lead to the highest savings. SFE will then request contact information (name, address, email and telephone number) from PG&E to match the initial set of filtered data.

In the second stage, Program staff uploads the filtered data in the ZCTT. The ZCTT will layer in publicly available datasets, such as permitting data, building characteristics, census, etc., to identify prospective customers with high propensity to participate. For the subset of pre-screened single-family residential customers in this list, the ZCTT will generate reports with a list of recommendations, construction estimates and potential savings, to be used in the outreach and marketing phase. Customers remaining after this two-stage filtering will then be uploaded into SFE’s database for outreach.

Program staff will repeat this process quarterly, ensuring no potential customers are missed. In years 2 and 3, the entire process will be repeated for relevant geographies. Year 3 activities in the Mission and Excelsior neighborhoods will solely focus on HTR SMB. Since 1st and 2nd stage filtering cannot reliably filter for HTR criteria, Program staff will screen for eligibility. Customers not meeting HTR criteria will be referred to another offering, while those do will have access to SFE Energy Coach services described in the ensuing section.

Table 2 – Program Service Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Neighborhood**  | **Segment** | **ZIP** | **Sectors** |
| Year 1 | Bayview-Hunters Point (BVHP) | DAC | 94124 | All Residential[[3]](#footnote-3) & HTR SMB |
| Year 2 | Tenderloin, South of Market (SOMA) | DAC | 94102 & 94103 | All Residential & HTR SMB |
| Year 3 | Mission, Excelsior | Highest # of HTR SMB | 94110 & 94134 | HTR SMB |

#### How will the Program Reach Customers?

With nearly twenty years of experience implementing numerous EE pilots and programs, including SFEW and its predecessors, SFE staff has experience with in-person engagement, especially with HTR and DAC customers. For example, SFE launched one of the country’s first municipal campaigns for environmental justice (EJ). It started in BVHP and has since expanded to serve the Mission, Tenderloin, and SOMA. Moreover, SFE staff possess the language skills to engage in customers’ preferred language, whether it be English, Chinese, or Spanish. SFE’s long-standing relationship with these communities provides a unique advantage for successfully influencing customers to make energy upgrades, and this Program improves SFE’s capacity to assist these communities.

The first step to reach customers is to develop compelling mailers, both printed and digital, with a clear call-to-action. The SFE Outreach Team will design and send (mail and email) them to single-family homeowners, multifamily property owners, and HTR SMB owners. Their content will leverage principals of community-based social marketing, such as using social norming and overcoming barriers to participation. The mailers include the City seal and SFE logo to inspire legitimacy and capture attention.

Following the mailers, the SFE Outreach Team will call the top 50% of single-family residences and HTR SMB customers. Due to conditions caused by the COVID-19 pandemic (the pandemic), in-person follow ups are presently paused. The phone call would be replaced with an in-person follow up when pandemic conditions change sufficiently to allow this. The SFE Outreach Team will call the homeowner with the intent to reinforce the call-to-action in the mailer, provide additional information and sign-up the customer for a 3P program.

The pandemic has significantly shifted outreach from in-person to digital. Therefore, residents requiring more program information will be invited to a virtual information session to learn more about program benefits and enrollment options. As needed follow-up calls or emails will be made to reinforce messaging, provide a reminder, and offer support.

Exclusive to the HTR SMB sector, and as pandemic conditions allow, the SFE Energy Coach will visit the HTR SMB to conduct an in-person follow-up, with the intent to assess the business. Once a site assessment is completed, the Energy Coach will provide a single-page report highlighting the findings, appropriate retrofits, and direct the customer to the most appropriate 3P program. For both residential and commercial sectors, Program staff will create and submit a quarterly project referral report for the appropriate 3Ps and PG&E to facilitate project start up.

For select HTR SMB sites, the SFE Energy Coach will facilitate refrigeration equipment monitoring. Since 2017, OptumSoft has partnered with SFE to implement a refrigeration program to repair, retro-commission, or replace refrigeration equipment based on equipment monitoring. Like Radiant Labs’ ZCTT, the refrigeration monitoring program was also funded by PG&E SER. Under EnergyAccess SF, the SFE Energy Coach will prioritize sites with dilapidated equipment for monitoring. The resulting data will be provided to the decision-maker, with the intent to use data to influence an EE outcome.

In summary, marketing, outreach, and project acquisition approaches described above are designed specifically for DAC and HTR customers. These groups of customers are often time constrained, juggling multiple priorities, lack trust in new 3Ps, and lack awareness of EE programs and benefits. The tailored offerings will identify measures that will reduce the energy cost burden and improve conditions in the customers’ home or business and provide direction for implementation. Table 3 below summarizes how the Program will reach targeted group of customers.

Table 3 – Outreach Tactics Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Segment** | **1st Touch** | **2nd Touch** | **3rd Touch** | **4th Touch** | **Outcomes** |
| Single-family | * Call to Action Mailer
* Custom Energy Report
* OhmConnect
 | SFE follow-up call  | * Virtual Info Session or In-person Visit (SFE Outreach Team)
 | As needed follow-up Email and Call | * Enrollment into an EE Program
* Enrollment into OhmConnect
 |
| Multifamily | * Call to Action Mailer
* OhmConnect
 | SFE follow-up call | * Virtual Info Session or In-person Visit (SFE Outreach Team)
 | As needed follow-up Email and Call | * Enrollment into an EE Program
* Enrollment into OhmConnect
 |
| HTR SMB | * Call to Action Mailer
 | SFE follow-up email | * SFE Energy Coach Audit (in-person or virtual)
* OptumSoft Refrigeration Data Monitoring
 | As needed Follow-up Email and Call | * Enrollment into an EE / Financing Programs
* Enrollment into PG&E Fast Track
 |

### 3. Program Design and Best Practices

Overall, the Program’s strategic approach of merging AMI data analysis with proven outreach tactics, delivered by a trusted messenger, is considered a best practice. This is because the approach leverages the power of AMI and publicly available data to reduce project acquisition costs. This approach also allows marketing and outreach to target the right audience - customers with high energy opportunity and propensity to act. Next, the approach integrates best practices from community-based social marketing with high-impact messages – all to be delivered by a credible, trusted messenger.

For context, California Assembly Bill (AB) 802 removed historic restrictions around energy data transfer. Specifically, it created an opportunity to significantly expand the use and application of energy data. As cost-effectiveness pressures increase on ratepayer-funded EE programs, SFE recognizes the opportunity within AB 802 to significantly reduce customer acquisition costs and broaden EE reach and depth.

SFE also sees an opportunity to leverage its recognized brand and venerable role as a trusted messenger to effectively reach DAC and HTR customers. Again, for over twenty years, SFE’s Outreach, EJ, and Energy staff have worked with community groups, residents, property and business owners, establishing relationships and trust in every corner of the City, especially in DAC.

Additionally, SFE has identified opportunities to recruit HTR SMB customers outside of the DAC. The table below indicates that the Mission and Excelsior neighborhoods have a high number of SMB and a high percentage of the population that speaks a language other than English. Since SMB must meet at least two other HTR-criteria (as related to business size and lease/split incentive barrier) it is reasonable to conclude that these neighborhoods will have a high concentration of HTR SMB. Despite historic EE activities, these neighborhoods remain rich in energy savings, as indicated by Table 4, “San Francisco Neighborhoods with High HTR SMB #s.”

Table 4 – San Francisco Neighborhoods with High HTR SMB #s

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Neighborhood** | **Zip Code** | **Population[[4]](#footnote-4)** | **% of Population that Speaks a Language Other than English[[5]](#footnote-5)** | **# of SMB[[6]](#footnote-6)** |
| Mission | 94110 | 64,665 | 43% | 2,411 |
| Excelsior | 94112 | 20,835 | 70% | 1,325 |

The Program approach is informed by research. As aforementioned, in 2016, the San Francisco Mayor’s Office DataSF scientists discovered that permitting is a reliable indicator for EE-propensity. For example, a building that completed a retrofit was five times more likely to have applied an electrical permit within the previous year, and three times more likely to have applied for a permit within the five years prior.

Figure 2 - Propensity & Permitting Relationship



Additionally, a 2018 PG&E whitepaper[[7]](#footnote-7) explains that energy consumption-based customer targeting “improves per-customer average savings by a factor of 2-3x by pre-screening potential customers using data-driven targeting methods,” and “focusing recruitment efforts on the most attractive 25-50% of potential customers.”

Furthermore, a 2016 ACEEE study*[[8]](#footnote-8)* cites instances of EE programs where local governments successfully “served as trusted program messengers within communities that may not trust traditional program administrators*.*” Essentially, leveraging established relationships to serve HTR populations has allowed local governments to effectively increase program awareness and participation in those areas.

Market barriers to both HTR and DAC within SMB and residential sectors are well documented by EE industry leaders such as the American Council for an Energy Efficient Economy[[9]](#footnote-9) and US National Labs.[[10]](#footnote-10),[[11]](#footnote-11)

Lastly, the Program approach is informed by lessons learned from years of successful implementation of SFEW. For instance, SFE staff experience and SFEW project records indicate that the Mission and Excelsior have a high concentration of verified HTR SMB qualifying in the following categories: low employee count and energy usage, owners with English not as the primary language, and leased spaces. SFE expects that these neighborhoods will be challenging for project acquisition, and potentially less of a focus for 3P programs in particular. As a result, the Program will ensure that this large segment of HTR customers will receive the support – and access - needed to successfully complete EE projects.

#### Strategies to Reduce Identified Market Barriers by Customer Targeted Groups

Based on the research and lessons learn, the Program shall deploy the following strategies to overcome identified market barriers.

1. S1 - Identify customers with highest opportunities and propensity using energy consumption and City data.
2. S2 - Develop and deliver low-cost, personalized outreach material from a trusted messenger.
3. S3 - Provide strategic in-person follow-up to drive customers to 3P, PG&E, and BayREN programs.

Table 5 below provides a succinct summary of understood market barriers and the related mitigation strategy the Program will deploy to overcome them.

Table 5 - Market Barriers & Strategies Summary

|  |  |  |
| --- | --- | --- |
| **Market Barrier Description** | **Strategy #** | **Strategy Description** |
| DAC & HTR customers are expensive for Implementers to serve.  | S1 | Reduce project acquisition cost by using:* Energy consumption data to identify accounts with highest opportunities to take energy actions to yield savings.
* City datasets, permit information and building characteristics, to further identify accounts that exhibit highest propensity for participation.
 |
| Lack of trust in companies and organizations that are not local or made up of local community members.  | S2 & S3 | Use a trusted messenger. With over two decades of energy and EJ and EE experiences, SFE Outreach are surrogates for the implementers. |
| Lack of awareness on available EE programs. | S1 & S2 | By intentionally targeting areas with personalized EE reports and messages, HTR and DAC customers will become aware of the EE programs available.SFE will also educate on the benefits of EE, whole-home upgrades, and shifting energy consumption to non-peak times with OhmConnect. |
| Lack of capital; cannot afford the high up-front cost of whole-house improvements and the payback period is often protracted.   | S3 | SFE Energy Coach and Outreach Team will refer residents and businesses to appropriate programs that offer low-cost improvements incentives. This tactic serves as an “on-ramp”, eventually leading to participation in a whole-house / business improvement programs. Where applicable, the SFE Energy Coach will also introduce and provide access to financing such as PG&E’s On-bill Financing (OBF) and BayREN Microloan (for projects with loans <$5,000). |
| Lack of time required to research the benefits of EE. Many HTR and DAC customers do not have time to analyze the pros and cons of programs and to choose installation contractors. | S2 & S3 | Personalized messages and energy reports that concisely communicate EE benefits, recommendations, savings, call-to-action with instructions and a single point of contact.Strategic in-person follow up will reinforce the message and assist with driving customers to the best-suited program.  |
| EE interventions are not aligned with customers' needs, such as “emergency replacements” and interests.  | S1 & S3 | Data targeting and resultant report preemptively prevents emergency replacements of equipment. The report is a roadmap to not only EE, but also a capital planning tool with financing and rebate options. |

### 4. Innovation

The EE Procurement Review Group (EE-PRG) recently updated the definition of “innovation.” As a result of the update, for any ratepayer-funded EE program to be “innovative,” it must demonstrate that it will ultimately increase the uptake of cost-effective energy efficiency by advancing a technology, marketing strategy, or delivery approach in a manner different from previous efforts. The EE-PRG update is apropos to the Program design pillars and marketing approach.

The Program is innovative because it forms a *novel combination of strategies* that integrate different forms of data-targeting to yield leads. Targeting customers for energy savings opportunity is nascent, but not new. The innovation of EnergyAccess SF lies in the deployment of publicly available data, such as permitting history, building-level information, and census data to determine the propensity to act. Determining this characteristic and combining it with data-targeting for high savings potential, theoretically increases the likelihood for a utility account holder to take EE action. Moreover, by using the desk-top data analysis to inform and prepare for the field work, valuable time and resources are saved. Finally, targeting marketing and outreach tactics to the right audience, at the right time, suppresses project acquisition costs.

Furthermore, the marketing tactics alone are not innovative, but the combining them with dual-filtered data analysis is extraordinary. Data is only useful if one knows what to do with it. Thus, the innovation lies in taking the data to inform the message and delivery channel. Ultimately, this innovative combination will suppress project acquisition cost *and* deliver cost-effective energy savings.

Finally, the Program and its tools are scalable. Once successful, the combination of filtering may be applied to other jurisdictions, with little to no modification besides importing location-specific publicly available datasets into the ZCTT. The Program’s potential to scale has no geographical constraints. For instance, the criteria chosen to filter AMI data can be adjusted to the EE program’s core measures.

### 5. Metrics

#### Program Goals

The metrics are intrinsically linked to the Program metrics. Before detailing the metrics, this section explains each goal in greater detail before identifying the metrics, or key performance indicators (KPI). As aforementioned, the goals are:

1. Increase penetration rate, as defined in the Decision, in residential and HTR SMB by 5% annually. This helps PG&E to comply with the Decision, which requires program administrators to increase small business penetration rate by 5% annually.[[12]](#footnote-12)
2. Influence customers to take EE actions and drive well-qualified leads to 3P, PG&E, and BayREN programs.
3. Reduce customer acquisition cost and achieve deeper energy savings for 3P, PG&E, and BayREN programs.

The first goal is to increase the penetration rate, defined as a customer taking an energy action directly tied to a program administrator's offerings (though claimable energy savings may or may not result). For HTR SMB this includes:

1. Interacting with energy savings recommendations via a PG&E’s online platforms (e.g. Marketplace)
2. Completing an energy audit
3. Benchmarking
4. Sign-up for Share My Data or Green Button
5. Completing site profiles or checklists (e.g. Business Energy Checkup)
6. Completing a retrofit

The second and third goals are achieved by reducing market confusion (with SFE as a single point of contact) and from well-executed targeting. Since information on San Francisco 3Ps is currently unavailable, ramp-up will be focused on understanding customer eligibility to inform data filters. SFE will engage with all relevant Implementers serving the City to understand program qualifications (e.g. Size/annual usage, equipment, minimum savings potential) to tailor the two-phase filtering. Ultimately, this pre-screened group of customers will have the highest likelihood of participation.

#### KPIs

From San Francisco’s building data, the Program expects to request data for approximately 12,000 customer accounts in Year 1, 19,000 customer accounts in Year 2 and 3,800 customer accounts in Year 3. The following assumptions are made when determining the Key Performance Indicators:

1. The first pass filter conducted by PG&E will remove approximately 50% of the customer accounts
2. The second pass filter conducted by the ZCTT will remove an additional 50% of customer accounts
3. 100% of residential prospects are acceptable for energy modeling
4. All accounts that pass the first and second filtering will receive a mailer
5. 50% of prospective customers will receive a phone call and/or email
6. 50% of prospective residential customers will receive a site visit, if pandemic conditions allow
7. 50% of prospective SMB customers will receive a site visit, if pandemic conditions allow
8. 66% of prospective SMB customer site visits turn into energy assessments and EE reports
9. 60% of prospective SMB customer energy assessments turn into 3P leads

Table 7 - Projected Targets

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **# of Residential Building Modelled** | **# of mailers sent** | **# of residential customers receiving a site visit** | **# of SMB customers receiving a site visit** | **#of SMB customers receiving an energy assessment and EE report** | **# of site assessments turning into 3P leads** |
| **Year 1** | 2,101 | 2,917 | 1,051 | 383 | 252 | 151 |
| **Year 2** | 950 | 4,724 | 475 | 466 | 308 | 185 |
| **Year 3** | N/A | 934 | N/A | 467 | 308 | 185 |

#### Additional Program Targets

1. 10% of prospective residential customers sign up for OhmConnect
2. Customers enrolled with OhmConnect average 3% energy savings
3. 60% of prospective SMB 3P leads converted to project applications
4. 50% of prospective residential 3P leads converted to project applications

### 6. For Programs Claiming to-Code Savings

This section is not applicable to the Program.

### 7. Pilots

This section is not applicable to the Program.

### 8. Workforce Education and Training

This section is not applicable to the Program.

### 9. Workforce Standards

This section is not applicable to the Program.

### 10. Disadvantaged Workforce

This section is not applicable to the Program.

### 11. Additional Information

# Supporting Documents

## 1. Program Manuals and Program Rules

Please refer to Attachment A.

## 2. Program Theory and Program Logic Model

Table 8 - Program Theory Summary

###

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **Key Stakeholders**  | **Key Barriers** | **Key Strategy** |
| Single-family | * Homeowners
* Renters
 | * High Cost
* Lack of Time
* Lack of Awareness
* Competing Financial Priorities
* Emergency Replacement
* Split Incentives
 | * Personalized Energy Report
* Upstream Rebates
* Downstream Programs
* Trusted Messenger
* Limited In-person Follow-up
* City-Data Targeting to Preempt Emergency Replacement
 |
| Multi-family | * Property Managers
* Renters
* Property Owners
* Homeowners Associations
 | * High Cost
* Lack of Time
* Lack of Awareness
* Competing Financial Priorities
* Emergency Replacement
* Split Incentives
 | * Downstream Programs
* Trusted Messenger
* Single Point of Contact
* City-Data Targeting to Preempt Emergency Replacement
 |
| HTR SMB | * Building Owners
* Business Managers
 | * Access to Capital
* Lack of Time
* Lack of Awareness
* Competing Priorities
* Market Confusion

  | * Downstream Programs and Financing
* Single Point of Contact
* Technical Assistance from In-person Follow-up
 |

Figure 3- EnergyAccess SF Logic Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Inputs****(What we invest)** |  | **Outputs****(What we do and who we do it to)** |  | **Outcomes – Impact****(The incremental events/changes that occur as a result of the outputs)** |
| Activities | Participation | Short (12 months) | Medium (2-3 Years) | Long (Over 3 Year) |
| * Residential and HTR SMB sector screening and segmentation via public records and energy usage data
* Local government as a “trusted messenger” that promote the program by reaching out HTR SMB and residences in DAC’s (per CalEnvironScreen 3.0) in San Francisco and HTR SMB in the Mission and Excelsior districts.
* Clear referral process to 3P, PG&E, and BayREN programs and financing options.
 |  | * Promote the Program through outreach and targeted marketing, using AMI data and publicly available ata sets.
 | * SMB and building owners and managers; SMB tenants
* Single-Family Homes
* Local government staff and elected officials
* 3P, PG&E, and BayREN programs
 |  | * Pre-qualifed Leads
* Increased awareness of the Program, resulting in eligible customers and increased market penetration
* Data collected on customer sites to inform program optimization and targeting
 | * Improvement of data analysis from program and targeting tool optimization
* Increased local government capacity, partnerships with Implementers, and EE awareness
* Increased energy savings, persistence, and cost-effectiveness achieved for Implementers
 | * Support SB350 requirements to double statewide EE saving and achieve San Francisco’s net-zero emission goal by 2050 and PG&E’s EE Portfolio Vision
 |
| Program evaluation would assess (thru analysis, metrics, evaluation, interviews, etc.) the effectiveness of these inputs in helping to accomplish the long term goal. For example:* Did the participation track meet the needs of the program participants?
* What was the response rate from the SFE Outreach?
 |  |  |  |  |
| ENERGYACCESS SF tracking data can serve as indicators. |  | ENERGYACCESS SF tracking data can serve as indicators. | ENERGYACCESS SF tracking data, plus surverys and interviews, can serve as indicators. |  |

|  |  |  |
| --- | --- | --- |
| **Assumptions*** A percentage of utility accounts will not be eligible after dual data filtration
* A percentage of utility accounts will close due to dire economic conditions
 |  | **External Factors*** Economic disruptions will reduce residential and SMB interest in EE
* Program evaluation would also address the extent to which assumptions and external factors impacted the Program
 |

## 3. Process Flow Chart

Single and Multi-family: OhmConnect Enrollment via Ohm/SFE Landing Page

Figure 4 - EnergyAccess SF Process Flow Chart

**RES:** Directly enroll residential customers to the best-fit EE programs

Coordinate with 3Ps and PG&E to identify deployment schedules, sectors, measures, and ideal project profile

City Data Analysis for Propensity

Design & Produce Energy Reports, Messages, Call Scripts

AMI Data Analysis for Energy Savings

1st Round of Outreach – Printed / Electronic Mailers

2nd, 3rd & 4th Follow-up Outreach Activities

**HTR SMB:**

* Complete applicable enrollment forms
* Conduct assessment perform energy
* Perform saving calculation
* Install refrigeration tracking
* Transition to best-fit EE programs
* Enroll in PG&E Fast Track, if appropriate

SFE

PG&E

Chart Legend

## 4. Incentive Tables, Workpapers, Software Tools:

 Since this is a non-resource program, EnergyAccess SF will not provide incentives and does not have any measures.

However, the Program intends to identify core measures incented by 3P, PG&E and BayREN programs. Overall, as stated in the Program Manual, the Program will focus on the following technology sector.

Table 9 – Eligible Measures by Technology Sector

|  |  |  |
| --- | --- | --- |
| Lighting, Indoor & Outdoor and Control Systems | Building Envelope & Fenestration | Heating Equipment, Duct Insulation and Smart Thermostats |
| Domestic Hot water Equipment, Controls and Piping Insulation | Smart Power Strips with Demand-Response Enablement | Refrigeration and Piping Insulation |
| Energy Star Rated Appliances | Retro-Commissioning | Limited Refrigeration Monitoring |

 Table 10 – Summary of Software Tools

|  |  |
| --- | --- |
| Zero Cities Targeting Tool Application | Microsoft Office Suite |
| Salesforce Customer Relationship Management | Recurve Analytics  |
| City Databases | Optum Soft Application |

## 5. Quantitative Program Targets

This section is not applicable to the Program.

## 6. Diagram of Program

The Program intends to integrate with 3P, PG&E and BayREN EE programs by making direct referrals to those programs. At the time of the writing, the details of the 3P and PG&E-implemented programs are not know.

## 7. Evaluation, Measurement and Verification

The Program shall fully comply with all process evaluation or other evaluation efforts that PG&E and/or the CPUC intend to undertake.

## 8. Normalized Metered Energy Consumption (NMEC)

This section is not applicable to the Program.

**END OF IMPLEMENTION PLAN**

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2. Public Utilities Commission of the State of California, Resolution G-3497, December 14, 2014 [↑](#footnote-ref-2)
3. Residential includes single-family inclusive of 2 to 4 unit-buildings and multifamily (5 units or more). [↑](#footnote-ref-3)
4. US Census Bureau. *American FactFinder* [↑](#footnote-ref-4)
5. US Census Bureau. (October 2015). Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over: 2009-2013). Retrieved from <https://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html> [↑](#footnote-ref-5)
6. 2018 San Francisco Land Use and San Francisco Assessors Data [↑](#footnote-ref-6)
7. PG&E. (2018). *Energy Efficiency Program Targeting*, Borgeson, Geraci, Dahlquist, Kasman & Sheer, P.5 [↑](#footnote-ref-7)
8. ACEEE. (2016). *Power to the People: Using Community-Based Approaches to Deliver Efficiency and Sustainability to Hard-to-Reach Populations*. Retrieved from: <https://www.aceee.org/sites/default/files/publications/researchreports/e136.pdf> [↑](#footnote-ref-8)
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11. US Department of Energy, Lawrence Berkeley National Laboratory, University of California. (1996). *Market Barriers to Energy Efficiency. Retrieved at* https://emp.lbl.gov/sites/all/files/lbnl-38059.pdf [↑](#footnote-ref-11)
12. CPUC. (05/23/2018). *Decision on Energy Efficiency Business Plan*, P.28 [↑](#footnote-ref-12)