



# Residential & Commercial Community Needs Assessment

Final Research Report & Recommendations

July 2024

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# 1. Executive Summary





# 1. Executive Summary

## 1.1 Introduction

Sonoma Clean Power's (SCP) Mission is to turn the tide on the climate crisis through bold ideas and practical programs: programs that enhance quality of life, improve air quality and provide real benefits to customers.

SCP has made a commitment, through its Programs Strategic Action Plan & Equity Framework, to ensure customer programs are informed by the needs of the communities served. The Programs Strategic Action Plan & Equity Framework includes conducting community needs assessments to identify communities' unique needs, the underlying reasons or causes of issues, existing barriers, and the types of resources that are already available to address issues. Conducting community needs assessments provides the foundation for future program development under the strategies identified in the Programs Strategic Action Plan.

## 1.2 Commitment to Empower Communities

SCP is committed to supporting communities historically underrepresented in energy programs and their benefits. SCP has identified 10 vulnerable census tracts ("Empower Communities") in Sonoma and Mendocino counties most affected by pollution, socioeconomic challenges, and affordability issues. These Empower Communities, or Environmental and Social Justice Communities, include Covelo, Fort Bragg, Willits, and unincorporated Ukiah in Mendocino County, along with Taylor Mountain, Roseland, Bellevue, Kawana Springs, Comstock, and Bicentennial Park in Santa Rosa, Sonoma County. These areas will be the focus of SCP's outreach and resources. Additional details may be found in Appendix A.

## 1.3 Research Studies

SCP partnered with Sacramento Municipal Utility District (SMUD) to develop and field several studies of residential and commercial customers, contractors, community-based-organizations, and web assets.

SMUD is the 6<sup>th</sup> largest not-for-profit utility in the nation and has a full-service, utility-focused market research department. SMUD has built trust among customers by creating programs through high-quality market research and is dedicated to clean energy and decarbonization through electrification. SCP selected SMUD through a competitive process to help SCP complete needs assessments for the residential and commercial building sectors.

SMUD recommended four different research studies to get comprehensive feedback from SCP's customers on community needs. Figure 1 shows the research studies that were deployed.

Figure 1: Types of Research Studies Conducted for SCP



In addition to primary research, SMUD also conducted select secondary research, analyzing the results of SCP's annual Awareness Survey (located in the Appendix) and looking into programs offered by other Community Choice Aggregators (CCAs) and SMUD.

## 1.4 Key Findings

The research revealed much about community sentiments, problems, priorities and more. Key findings by study are summarized below.

### 1.4.1 Informant Interviews

- There is great diversity in the needs of SCP customers and serving them will require diversity in strategies.
- Not all customers get equal access to clean energy and the benefits, such as safer indoor environment, healthier air quality, and the opportunity to save energy by using more efficient appliances.
- Contractors reported that many of the residential customers they serve have already started the process of upgrading their homes with energy-efficient appliances.
- In contrast, most community-based organizations reported that the residents they serve have yet to begin clean energy upgrades.
- Community-based organizations and contractors have similar opinions of and hopes for SCP. They describe SCP as warm, collaborative, and a smart organization with out-of-the-box thinkers. They explicitly support SCP's mission especially resonating with the aspiration to bring such benefits as good air quality and stronger resilience to power outages to all members of the community.
- Because they are trusted by the communities they serve, community-based organizations see themselves as vital liaisons.
- Contractors see themselves as potential partners and could play the role of electrification ambassadors.
- Community-based organizations and contractors are looking for win-wins, mutually beneficial partnerships.
- The Advanced Energy Center<sup>1</sup> holds a lot of promise.
- Community-based organizations and contractors believe the community would benefit from knowing more about SCP, its mission, customer programs and unique offerings.

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<sup>1</sup> SCP's Advanced Energy Center was renamed SCP's Customer Center subsequent to the research conducted.

### 1.4.2 Website Usability Testing

- First impressions of the website were great - of warmth and feeling invited.
- EverGreen branding isn't established yet.
- It's difficult choosing between *Customers* and *For You* in the Menu.
- Menu can be simplified to reduce clutter and confusion.
- The *Offers & Incentives* page is interesting and engaging, but mobile users had to scroll a lot.
- The filter function on *Offers & Incentives* was polarizing and appears "below the fold" on mobile.
- Some program/service names and descriptions were not clear, and calls to action could be improved to minimize distractions from enrolling.
- Finding electric vehicle (EV) information was not easy.

### 1.4.3 Customer Surveys

SMUD conducted one Residential Survey and one Commercial Survey. For the residential survey, SCP was especially interested in the views of residents who live in Empower Communities (as defined in section 1.2) and how those differ from residents who do not live in Empower Communities. Therefore, results from the surveys were analyzed and shown by those who live in Empower Communities, those who do not live in Empower Communities (the General Population), as well as these groups combined (Overall Population).



Similarly, for the commercial survey, SCP was interested in the views of businesses located in Empower Communities and how those differ from businesses not located in Empower Communities. Therefore, results from the surveys were analyzed and shown by businesses located in Empower Communities, businesses not located in Empower Communities (the General Population), as well as these groups combined (Overall Population).

SMUD also provided results based on additional demographics such as renters and homeowners.

Figure 2 below is a summary of key findings from the Residential and Commercial Surveys shown side-by-side for comparison.

Blue/underlined/asterisk(\*) indicates that Empower Communities have a statistically significant higher score compared to the General Population. Green/underlined/caret(^) indicates that Empower Communities have a statistically significant lower score compared to the General Population.

Figure 2: Key Findings Summary for Residential and Commercial Surveys

	 Residential	 Commercial
Biggest Problems & Worries	<p><u>^Weather disasters</u></p> <p><u>*Paying for essentials</u></p> <p><u>*Rent or housing</u></p> <p>Climate change</p> <p><u>*High energy bills</u></p>	<p>Increasing overhead costs</p> <p>Finding and retaining quality employees</p> <p>Cash flow</p> <p>Increasing rent expenses</p> <p>Government regulations</p> <p>High energy bills</p> <p><u>^Power outages/public safety power shutoffs</u></p> <p>Climate change/greenhouse gas emissions</p>
Top Priorities	<p>Backup power during outages</p> <p>Building local renewables</p> <p><u>*Helping low-income families with energy bills</u></p>	<p><u>^Backup power during outages</u></p> <p>Building local renewables</p> <p>Load shift rewards</p> <p>Helping businesses reduce energy bills</p> <p>Helping low-income families with energy bills</p>
Energy-Related Engagement	<p>Many think about energy use a lot</p> <p>Most look at their bill each month</p> <p>High awareness of time-of-use rates</p> <p><u>*Low/moderate awareness of SCP programs</u></p> <p><u>*Low participation in SCP programs</u></p> <p>Prefer web, email, newsletters, bill inserts</p> <p><u>*Focused on reducing energy use/cost</u></p> <p>Aware of SCP and find SCP trustworthy</p> <p>Moderate satisfaction with SCP communication</p>	<p>Many think about energy use a lot</p> <p>Most look at their bill each month</p> <p>High awareness of time-of-use rates</p> <p>Low/moderate awareness of SCP programs</p> <p>Low participation in SCP programs</p> <p>Prefer web, email, newsletters, bill inserts</p> <p>Focused on cost reduction and affordability</p> <p>Aware of SCP and find SCP trustworthy</p> <p>Low satisfaction with SCP communication</p>



## 1.5 Customer Priorities

SMUD reviewed the top three responses for each question of the Residential Survey and the Commercial Survey. SMUD used top problems, top worries, top priorities and top descriptors (from Extent to Which Statements Describe Respondents question) to create a list, in no specific order, of Customer Priorities for both residential and commercial customers.

- **Reduce energy bills:** High energy bills are among the biggest worries of residential and commercial customers. This is true of the general population but especially true of the for those in Empower Communities.
- **Help low-income customers with energy bills:** SMUD found both residential and commercial respondents would prioritize helping low-income customers with their energy bills and those who live in Empower Communities would make it a higher priority.
- **Improve affordability of energy efficiency solutions:** When asked to describe themselves in the survey, commercial customers said they were energy cost-concerned and unable to afford energy-efficient equipment upgrades. Notably, the residential survey did not include this question, and exploring residential attitudes toward this issue could be valuable for future surveys.
- **Protect against power outages:** Power outages were identified as a top worry for both residential and commercial customers, and both residential and commercial customers identified backup power during outages as a top priority. However, commercial customers in Empower Communities ranked power outages and the need for backup power during outages significantly lower compared to the general population.
- **Address climate change:** Climate change was a top worry for both residential and commercial customers.
- **Build local renewables:** Residential and commercial customers wanted to prioritize building local renewables, although the survey did not provide a specific definition, leaving room for respondents to interpret it.
- **Improve access to information on rates and programs:** Improved access to information was exemplified by respondents' low awareness of and participation in SCP programs.

Figure 3 summarizes Customer Priorities.

*Figure 3: Customer Priorities*

Customer Priorities
<ul style="list-style-type: none"><li>- Reduce energy bills</li><li>- Help low-income customers with energy bills</li><li>- Improve affordability of energy efficiency solutions</li><li>- Protect against power outages</li><li>- Address climate change</li><li>- Build local renewables</li><li>- Improve access to information on rates and programs</li></ul>

## 1.6 Conclusions and Recommendations

For each Customer Priority, SMUD also provided some general recommendations summarized below.

### 1.6.1 Reduce Energy Bills and Help Low-Income Customers with Energy Bills

To help lower bills for everyone, SCP could promote energy efficiency and energy conservation.

- For customers on time-of-use (TOU) rates, SCP can provide more information and ways to move electricity use to off-peak times to lower energy bills.
- SCP could increase participation in GridSavvy Rewards, enabling all customers to reduce their energy use during peak times and save money.

For Empower Communities and low-income customers, SCP could help in several ways: providing emergency bill relief, discount electricity bills, or help reduce electricity usage. SCP could:

- Support low-income customers by providing emergency bill relief for those at risk of disconnection.
- Provide an additional low-income discount on top of the PG&E discount.
- Provide a special credit to low-income customers potentially based on degree of poverty or disadvantage.
- Directly install energy efficiency and conservation measures (such as window and door sealing, smart thermostats, smart power strips, LED lighting, etc.) to help reduce bills long-term.
- Target low-income customers to participate in GridSavvy Rewards, reducing their energy use during peak times and saving them money.

Reducing energy bills would lower costs and could help with paying for essentials and rent or housing, which was identified as a top problem, especially for those in Empower Communities.

### **1.6.2 Improve Affordability of Energy Efficiency Solutions**

Cost is a primary concern for commercial customers. They can't afford replacing equipment with energy efficient or clean energy-powered equipment.

To improve affordability of energy efficiency solutions for all commercial customers, SCP could:

- Help reduce the upfront cost.
- Offer post purchase rebates.
- Sell discounted products.
- Help commercial customers create an energy efficiency plan.

SCP could also target commercial customers to participate in GridSavvy Rewards, reducing their energy use during peak times, leveraging smart devices and electrification technologies, to save money.

For Empower Communities, SCP could provide larger rebates and discounts.

### **1.6.3 Protect Against Power Outages**

To help protect against power outages for everyone, SCP could:

- Provide rebated or discounted battery storage for homes and businesses, enabling them to store power and increase resilience.
- Pair battery storage systems with solar panels to further ensure a reliable power supply during outages.
- Provide emergency outage kits or backup battery generators.
- Target program participants to join GridSavvy Rewards, reducing their energy use during peak times, leveraging battery storage technologies, to save money. Encouraging participation in GridSavvy Rewards will also help stabilize the grid and reduce the likelihood of outages during peak demand times.

For Empower Communities, SCP could provide larger rebates and discounts.

Weather disasters were identified as a big problem for residential customers, particularly for the general population and homeowners. However, this issue was less pressing for Empower Communities. As weather disasters result in outages, protection against power outages could help address part of the concern around weather disasters.

### **1.6.4 Address Climate Change**

To help address climate change and reduce greenhouse gas emissions, SCP could:

- Promote energy efficiency technologies (see 1.6.2).



- Promote battery storage (see 1.6.3).
- Promote electrification technologies through either rebates or discounts.
- Promote GridSavvy Rewards.
- Build more local renewables (see 1.6.6).

For Empower Communities, SCP could provide larger rebates and discounts.

SCP could also plant shade trees which can reduce energy usage, sequester carbon and beautify neighborhoods. Although not a top concern, Empower Communities and renters rated the lack of trees, shade, natural areas, and open space higher than the General Population.

### **1.6.6 Build Local Renewables**

Since the survey did not specify the definition of "building local renewables," SCP could pursue several different approaches. SCP could:

- Implement a solar shares program (local build with customers buying shares of the system).
- Promote rooftop solar through partnerships paired with battery storage.

For Empower Communities, SCP could:

- Offer better solar shares rates.
- Offer a discount on EverGreen, SCP's 100% local, renewable electricity option.
- Offer discounted or direct install rooftop solar systems paired with battery storage.

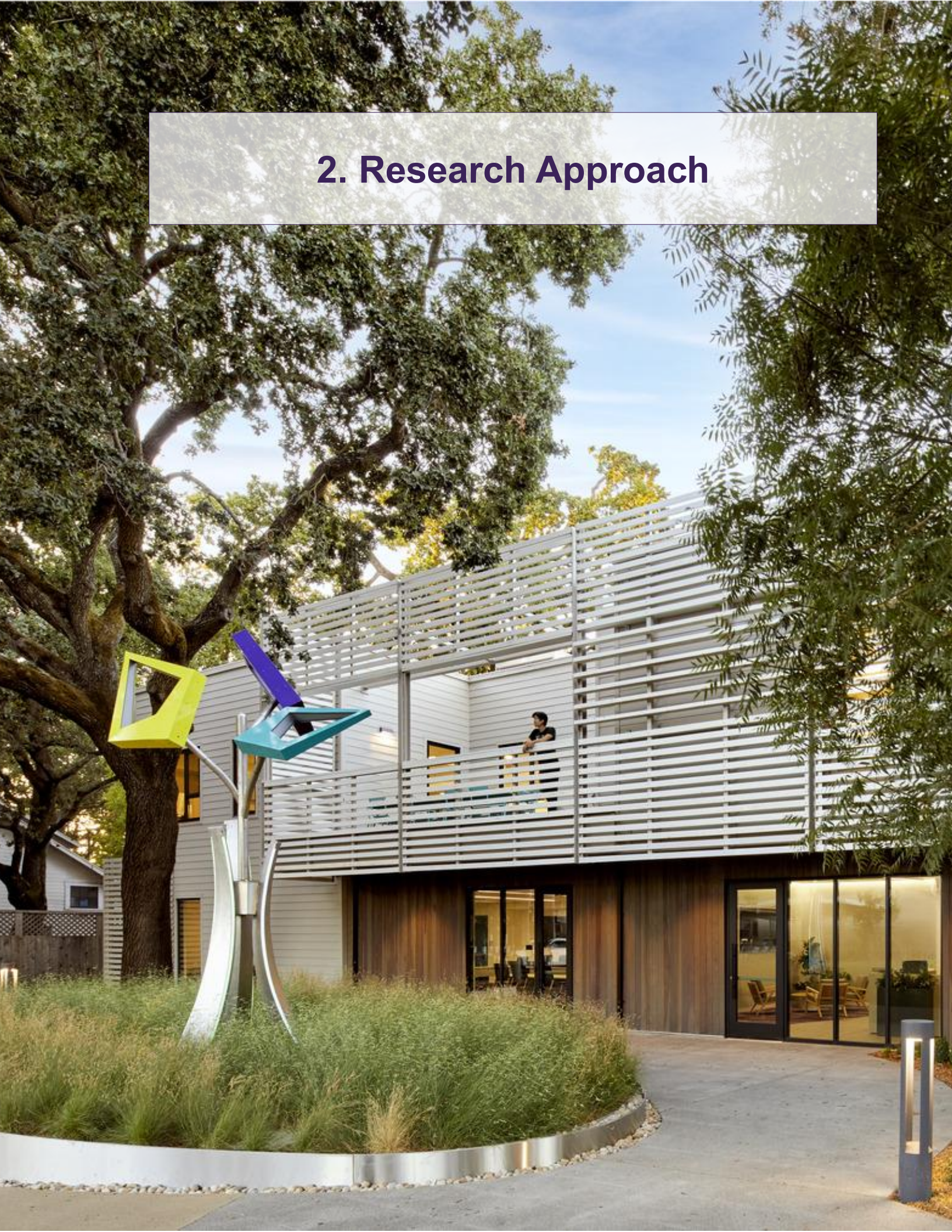
### **1.6.8 Improve Access to Information**

Continued efforts to raise awareness of programs is the most effective thing SCP can do to increase participation.

- Investigating bill inserts or enhanced bill messaging as well as "tell a friend" options could help raise awareness and participation.
- Implementing a program marketing strategy, especially in channels that appeal to the Empower Communities, could help boost awareness.
- Other program education channels such as a phone/email/chat concierge, or digital channels such as a My Account or Mobile App would appeal to certain demographics.
- Additionally, SCP can make website improvements to make programs easier to find (see Website Usability Study Report for details).



## 2. Research Approach



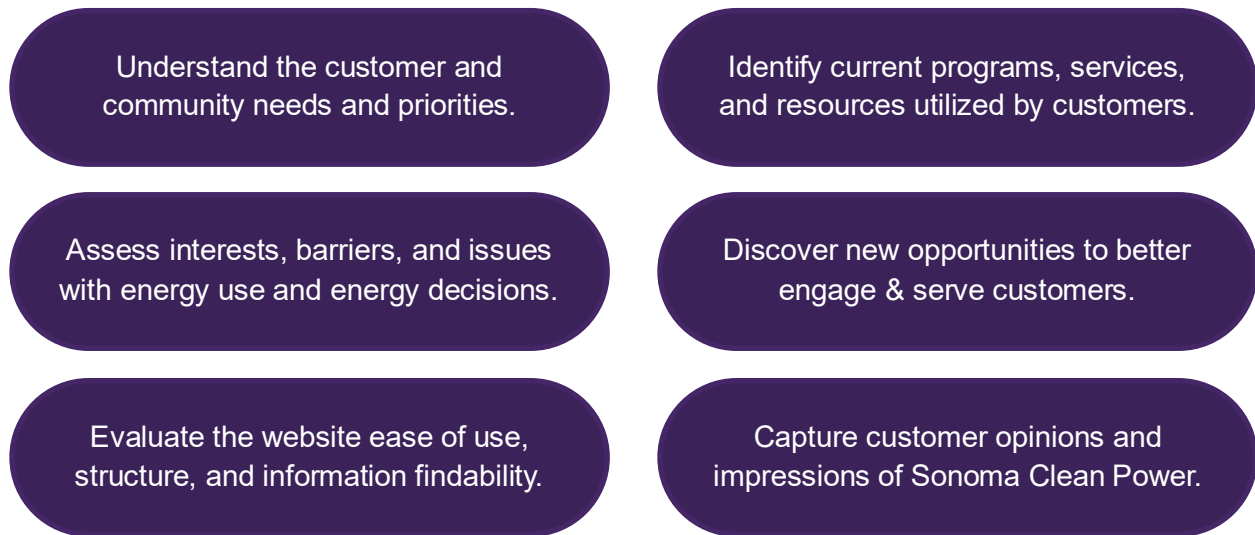


## 2. Research Approach

### 2.1 Research Objectives

Six main research objectives were identified using the clear direction of the Programs Strategic Action Plan & Equity Framework. Figure 4 shows the research objectives.

*Figure 4: Research Objectives*



### 2.2 Research Studies

SCP chose to engage with four important groups in Sonoma and Mendocino: residential customers, commercial customers, contractors and community-based organizations to get a diverse perspective on needs. SMUD selected three different research modalities to gather both qualitative and quantitative data: interviews, surveys and usability testing. Figure 4 shows the research studies that were deployed.



## 2.3 Research Methodology

SMUD crafted research methodologies that enabled maximum and diverse participation to incorporate many voices into final program recommendations. Strategies included enabling survey completion via web browsers, mobile devices and paper; providing incentives to recognize the value of people's time; and asking key questions more than one way to increase understanding.

Figure 5 shows a summary of the research methodology by study.

*Figure 5: Research Methodology*

<b>Informant Interviews</b> Randomized email recruitment 10 community-based organizations 7 contractors Virtual 1-1 interviews Visa e-gift card incentive	<b>Website Usability Testing</b> Administered in UserTesting platform Online unmoderated self-serve tasks 10 local residential residents 5 mobile tests & 5 desktop tests Mix of in-territory and territory-adjacent
<b>Residential Customer Survey</b> Randomized email recruitment 403 customers, 4% response Includes CARE/FERA* & Empower Communities Online & in-person survey (English & Spanish) Visa e-gift card incentive	<b>Commercial Customer Survey</b> Randomized email recruitment 102 customers, 4% response Includes Empower Communities Online survey (English & Spanish) Visa e-gift card incentive

\* CARE/FERA are programs for low-income households that provides a discount on the energy bill.

### 2.3.1 Focus on Empower Communities

SCP was especially interested in understanding the perspectives of Empower Communities and how those differ from non-Empower Communities. As mentioned in Section 1.2, Empower Communities, or Environmental and Social Justice Communities, are defined as living in one of 10 different census tracts that are most vulnerable to, and impacted by, pollution, socioeconomic issues and challenges of affordability as identified by SCP. Additional details may be found in Appendix A.

Results from the Surveys are shown for Empower Communities, the General Population (non-Empower Communities), and Overall Population (everyone combined). SMUD also provided insights based on other demographics information, such as renters versus homeowners.

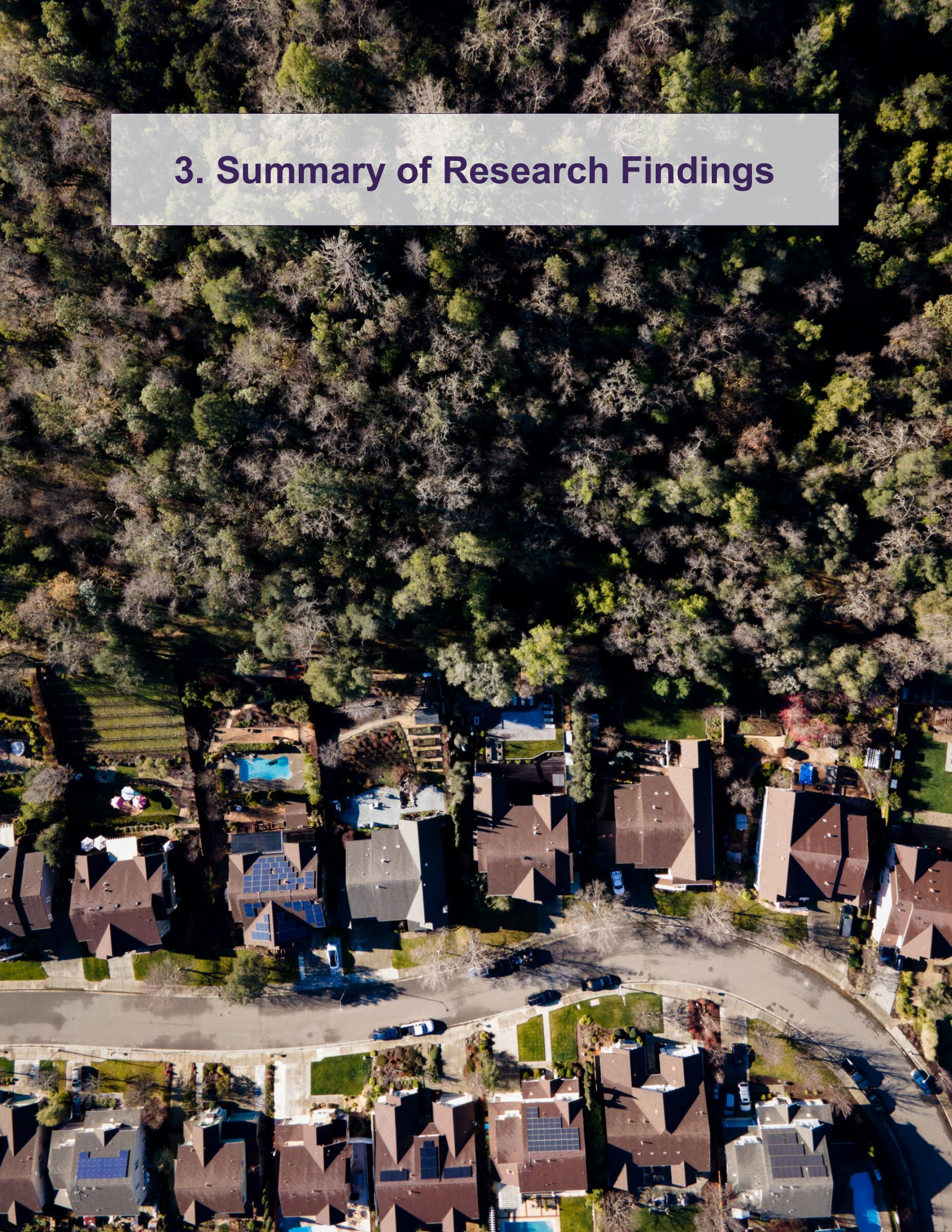
This segmentation helps us understand the unique challenges and needs of each group, ensuring that SCP's portfolio of programs is inclusive and effectively address the specific issues faced by different communities.

## **2.4 Research Outcomes**

SMUD's approach delivered on the research objectives highlighted in Figure 4. SMUD heard from over 500 residents and businesses and identified clear trends in customer issues and needs. Importantly, SMUD's analysis revealed statistically significant differences between various subgroups of customers, providing valuable insights into the diverse perspectives and unique challenges faced by different segments of the population. Additionally, SMUD gathered many ideas for programmatic design, ensuring that future initiatives of SCP are well-informed and tailored to address the specific needs and preferences of the community.



### 3. Summary of Research Findings





## 3. Summary of Research Findings

### 3.1 Informant Interviews

SMUD conducted Informant Interviews with 17 contractors and community-based organizations and asked a series of questions to help inform the design of the surveys which would come next. Representatives from 10 community-based organizations serving diverse groups and vulnerable populations were interviewed. These organizations offer a broad spectrum of services, including housing protection, food security, health and family services, rights advocacy, economic development, and community building. Nearly all contractors provide space heating, cooling, and ventilation services. Additionally, three contractors handle electrical prewiring and panel upgrades, while two offer electric vehicle charging, insulation, and water heating services. To honor confidentiality commitments, the names of the organizations or interviewees will not be disclosed. Below is a summary of the major realizations from the Informant Interviews.

**There is great diversity in the needs of SCP customers and serving them will require diversity in strategies.** Selecting two distinct groups – community-based organizations and contractors – as informants truly highlighted the range of SCP customer experiences and priorities. Community-based organizations highlighted many pressing concerns of residents, including lack of affordable housing in the area.

“ *Lack of affordable housing for those who are able to live independently, or with some support. Money to be able to do things in the community and transportation – or ability to use transportation independent of assistance – is a barrier.* ”

Community Based Organization

**Not all customers get equal access to clean energy and the benefits, such as safer indoor environment, healthier air quality, and the opportunity to save energy by using more efficient appliances.** Those that contractors engage with for energy projects tend to be homeowners, educated and affluent. Those that community-based organizations engage with tend to be renters with lower disposable income that are less aware of SCP’s services and efforts in the community. When asked about barriers to participating in energy-related programs, community-based organizations noted lack of disposable income and lack of homeownership.

“ *Homeownership. Salary – they don’t make enough to think about the future. They’re surviving the present times. Vehicle rebates might be the most likely utilized because people can own that.* ”

Community Based Organization

**Contractors reported that many of the customers they serve have already started the process of upgrading their homes with energy-efficient appliances.** Most customers who contact them are well-informed, they are aware of clean energy benefits, they have access to funding to carry out electrification and efficiency projects, and they are ready to take action and take advantage of SCP programs. Efficiency, safety, and performance of the electric equipment are important but often are not the key reasons for the switch from gas to electric. Many are proactively switching to electric equipment because “it’s the right thing to do”.

“

*People seem to want to go electric, not many going from electric to gas.  
90% of customers have heard about going electric and are interested in it.*

”

Contractor

**In contrast, most community-based organization reported that the residents they serve have yet to begin clean energy upgrades.** Many come from vulnerable and underserved communities. Many are renters and, as such, do not have control over their home or the equipment. At the same time, these customers tend to live in environmentally disadvantaged areas and reside in outdated housing. Although they have the greatest need and could benefit the most from energy improvements, they don’t have the financial means to participate in most of SCP programs. Some residents served by the community-based organizations SMUD interviewed face far more pressing challenges, such as basic housing affordability, personal safety, physical and mental health issues. For them, clean energy action may not a high or immediate priority, and it is often not within reach for financial or other reasons.

“

*Unless they’re going to get a free appliance, the programs available from SCP  
may not be a priority to our members. A lot of people live in places they may  
not have control over or are just renting.*

”

Community Based Organization

**Community-based organizations and contractors have similar opinions of and hopes for SCP.** Both community-based organizations and contractors hold very positive opinions of SCP. They describe SCP as warm, collaborative, and a smart organization with out-of-the-box thinkers (producing a telenovela to better connect with Spanish-speaking customers for example). Community-based organizations and contractors explicitly support SCP's mission, especially resonating with the aspiration to bring such benefits as good air quality and stronger resilience to power outages to all members of the community. Community-based organizations in particular appreciate SCPs focus on the underserved and vulnerable populations.

“

*I'm so impressed with SCP. They're cutting edge and doing such good work. Smart staff, explain things in a way we understand what's at stake and what they're doing.*

”

Community Based Organization

**Because they are trusted by the communities they serve, community-based organizations see themselves as vital liaisons.** Community-based organizations are very willing to connect SCP to their members. Community-based organizations provide a unique, maybe exclusive, channel to certain populations and are dedicated to improving lives including promoting clean energy benefits.

“

*Our mission is to make community more sustainable, healthy, and economically thriving. We are involved with both residential and commercial. We are trying to localize economy, especially local food, be energy independent, look at health issues, and environmental issues.*

”

Community Based Organization.

**Contractors see themselves as potential partners and could play the role of electrification ambassadors.** Contractors are very knowledgeable about all-electric technologies; they have a strong influence over the equipment customers choose to install in their homes. Contractors want SCP to engage more with them, specifically mentioning regular meetings to exchange ideas and strategize.

“

*I have a lot of effect on them [customers] – I've been in the business a long time and know what I'm talking about. The products typically sell themselves.*

”

Contractor

**Community-based organizations and contractors are looking for win-wins, mutually beneficial partnerships.** They can help with education, dispersion of information, influence (webinars, question and answer sessions, community events), and would welcome SCP's financial support, grants, and referrals.

“

*Let's work together – webinar or maybe through sponsorship.  
Provide a physical space for a collaboration. Put our names together.*

”

Community Based Organization

**The Advanced Energy Center<sup>2</sup> holds a lot of promise.** The Energy Center is not only a storefront that enables customers to experience electrification and efficiency in-person, but it's also been a referral source—customers have sought out contractors after visiting there and contractors have sent prospective customers there. It's met the objective of promoting clean energy, but also achieved bringing the community together.

“

*I found it very cool how they had mock setups of what a solar powered/electric powered home could look like at the Energy Center. I also received emails about vehicles and rebates for non-profits, which is interesting because we do a lot of field trips.*

”

Community Based Organization

**Community organizations and contractors believe the community would benefit from knowing more about SCP, its mission, customer programs and unique offerings.** SCP does so much good in the community but many people don't know about it. Sharing the stories of impactful initiatives will help customers connect more with SCP.

“

*I don't think that they're super visible. If they [SCP] were to build stronger community relationships, more people would understand how they're engaging with community and the services they offer.*

”

Community Based Organization

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<sup>2</sup> SCP's Advanced Energy Center was renamed SCP's Customer Center subsequent to the research conducted.



## 3.2 Website Usability Testing

SMUD conducted Website Usability Testing, administered in SMUD's UserTesting platform. Users interacted with the SCP website and performed self-service tasks. They described their thinking out loud as they conducted the tasks and were recorded.

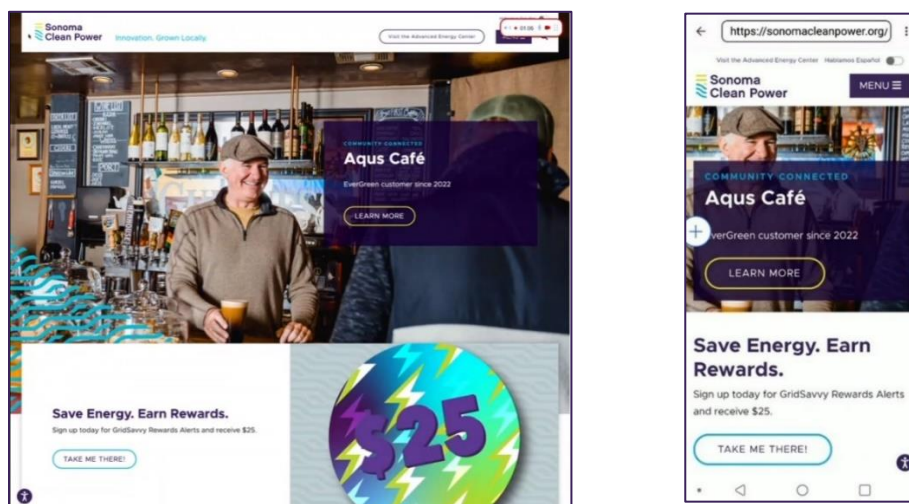
SMUD selected 10 California residents, predominantly in Sonoma and Mendocino Counties. Some testers were familiar with SCP services and are likely SCP customers. By design, the study also included testers who live adjacent to SCP territories to replicate “new visitor” experiences. This study focused on website content for residential customers, no businesses representatives or industry experts were included. Five tests were conducted on desktop. Five tests were conducted on mobile device. Below is a summary of the major discoveries.

### 3.2.1 Home Page

- First impressions were great – of warmth and feeling invited
- Imagery led to misconceptions particularly for newcomers
- Not everyone immediately saw the buttons
- EverGreen branding isn't established yet and they don't know what it is

Figure 6 shows SCP's website home page on desktop and mobile devices.

Figure 6: Home Page



“

*I feel invited. I feel welcomed. Everything looks very bright and cheerful. It looks interesting.*

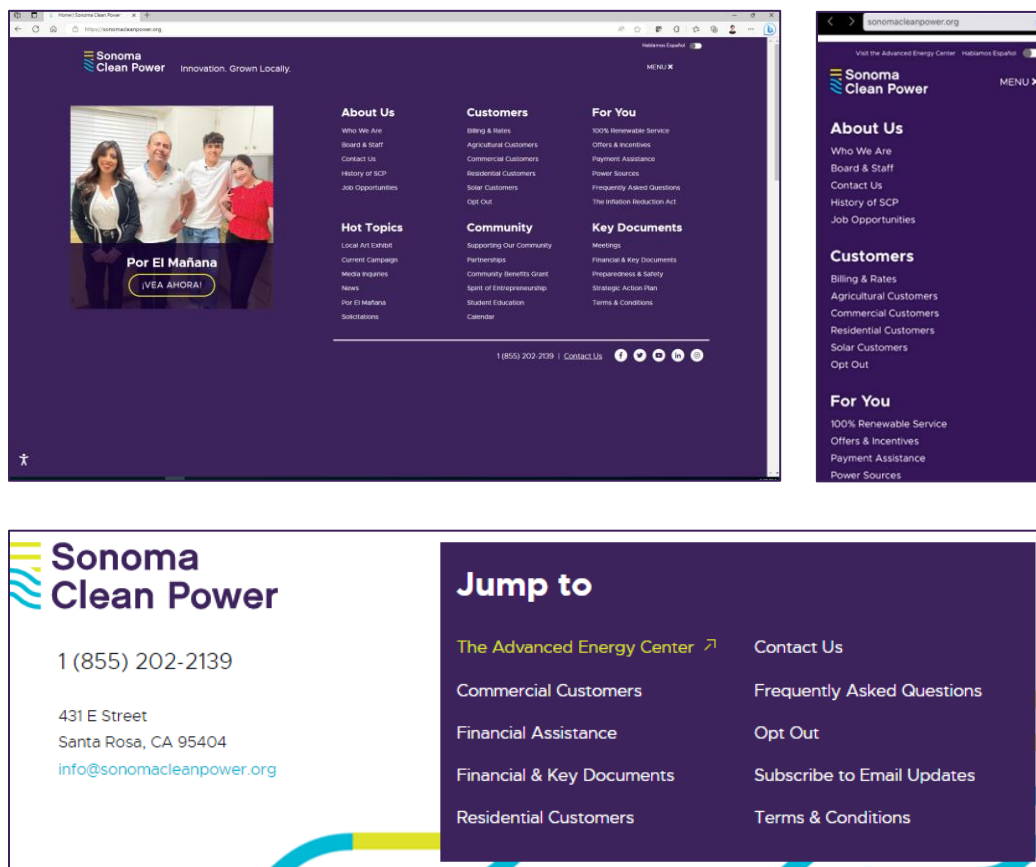
”

### 3.2.2 Menu

- Parts of the Main Menu work well; *Customers* and *For You* are most utilized
- Users had a hard time choosing between *Customers* and *For You*
- Limited exit options from the menu led to confusion
- Users found promotional content in the menu drawer (in this case, the telenovela *Por El Mañana*), which is not a typical use or purpose of a menu, and was slightly distracting
- There are opportunities to simplify
- Some users didn't see certain parts of the menu as relevant to them
- Some parts of the menu were confusing, such as the *Community* category
- The *Jump To* menu at the bottom of the page was underutilized

Figure 7 shows SCP's website menu.

Figure 7: Menu



“ The Customers and the For You. That’s a little confusing. If I am not a customer, is this giving me information on wanting to become a customer? And then Customers is for existing customers? ”

### 3.2.3 Offers & Incentives Page

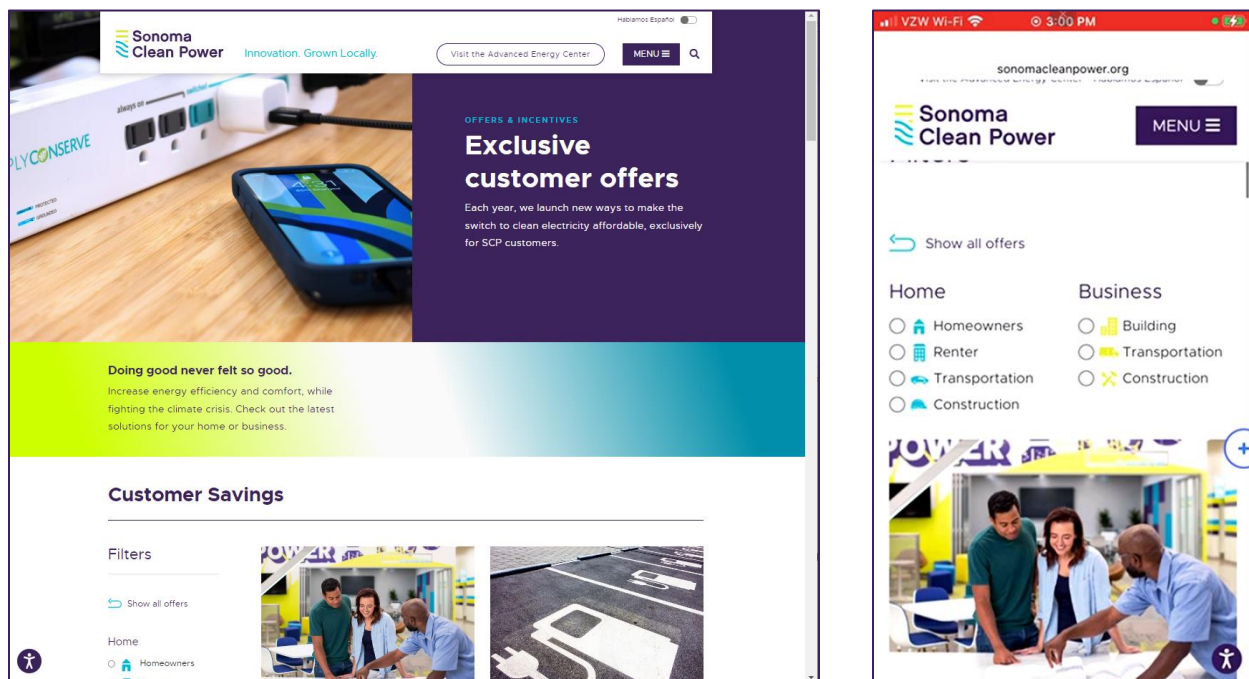
- Users felt the information was interesting and engaging
- Large images led to more scrolling and didn't provide additional content
- Mobile users had to scroll a lot
- Users did not think the filtering system worked well

Users gave *Offers & Incentives* a rating of 4 out of 5, which is good. Overall, they were pleased with the amount of information they could find there and how relevant it was to their needs and interests.

Users would have liked a more concise presentation of the information, clearer program descriptions, and better organized content, particularly for the mobile version.

Figure 8 shows SCP's website *Offers & Incentives* page on both desktop and mobile.

Figure 8: Offers & Incentives Page



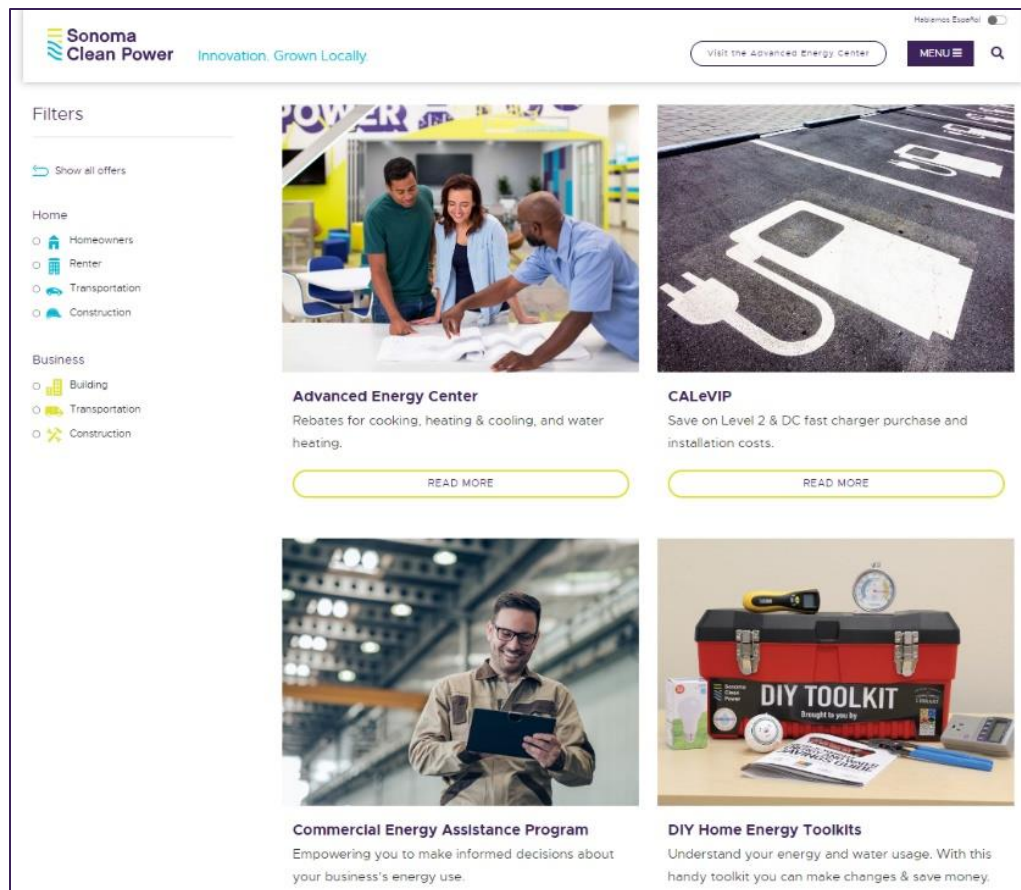
“  
*I thought the filter system was a little confusing, I didn't really like it because it didn't seem like it was changing anything at the bottom [researcher: below the fold] (mobile user)*  
”

### 3.2.4 Program Filters on Offers and Incentives webpage

- Some programs really hit the mark, such as GridSavvy Rewards
- Some program names and descriptions were not clear
- Call to actions could be more direct

Figure 9 shows SCP's website and Program Filters on desktop.

Figure 9: Programs Filters



“ The names don't really mean anything. Advanced Energy Center – what is that? It doesn't mean anything to me. CALeVIP – again, this name means absolutely nothing to me... The assumption is that I know what it means and I don't know what it means. ”



### **3.2.5 Tasks**

SMUD had users perform the following four tasks to determine ease and speed in researching common or high-interest topics:

Task 1. Find ways to save money or perks related to energy use at home. The easiest task to complete, in part, due to GridSavvy Rewards program being featured on the home page.

Task 2. Find incentives and perks for renters. Hardest task to complete. Many users looked for renter-focused programs on Residential Customer webpage.

Task 3. GridSavvy Rewards: Describe the program and its benefits. Users excited about the program but unclear about the rewards.

Task 4. Find resources or perks for electric car drivers. Users did not know where to go.

SMUD asked users to score the ease of each task. SMUD also recorded the amount of time users spent on each task.

Task 1 was scored 4.4 out of 5.0. Task 2, 3 and 4 scored 2.8, 4.4 and 3.4 respectively. A score of 4.0 or above is ideal. See Appendix B, Website Usability Testing Details, for more information.

### **3.2.6 Summary**

Overall, customers liked the website and are excited about the programs that SCP offers. They had difficulty finding the information in some cases. Making the website easier to navigate will likely increase understanding and participation.

### **3.3 Residential Customer Survey**

SMUD conducted a survey of over 400 residential customers. SCP was especially interested in the views of Empower Communities and how those differ from non-Empower Communities. As mentioned previously, Empower Communities, or Environmental and Social Justice Communities, are 10 different census tracts that are most vulnerable to, and impacted by, pollution, socioeconomic issues and challenges of affordability as identified by SCP. Additional details may be found in Appendix A.

#### **3.3.1 Focus on Empower Communities**

The survey results were analyzed and shown by respondents who live in Empower Communities, the General Population (respondents who do not live in Empower Communities), and Overall Population (everyone combined). SMUD also analyzed results based on other demographics such as renters versus homeowners to gain a better understanding of diverse viewpoints.

SCP is committed to working to ensure inclusivity and effectiveness in their program portfolio. By comparing different segments, SCP aims to tailor solutions that address specific needs and challenges faced by different community groups. This approach supports SCP's goal to provide equitable and impactful energy solutions that benefit all residents, especially those most vulnerable to environmental and social disparities.

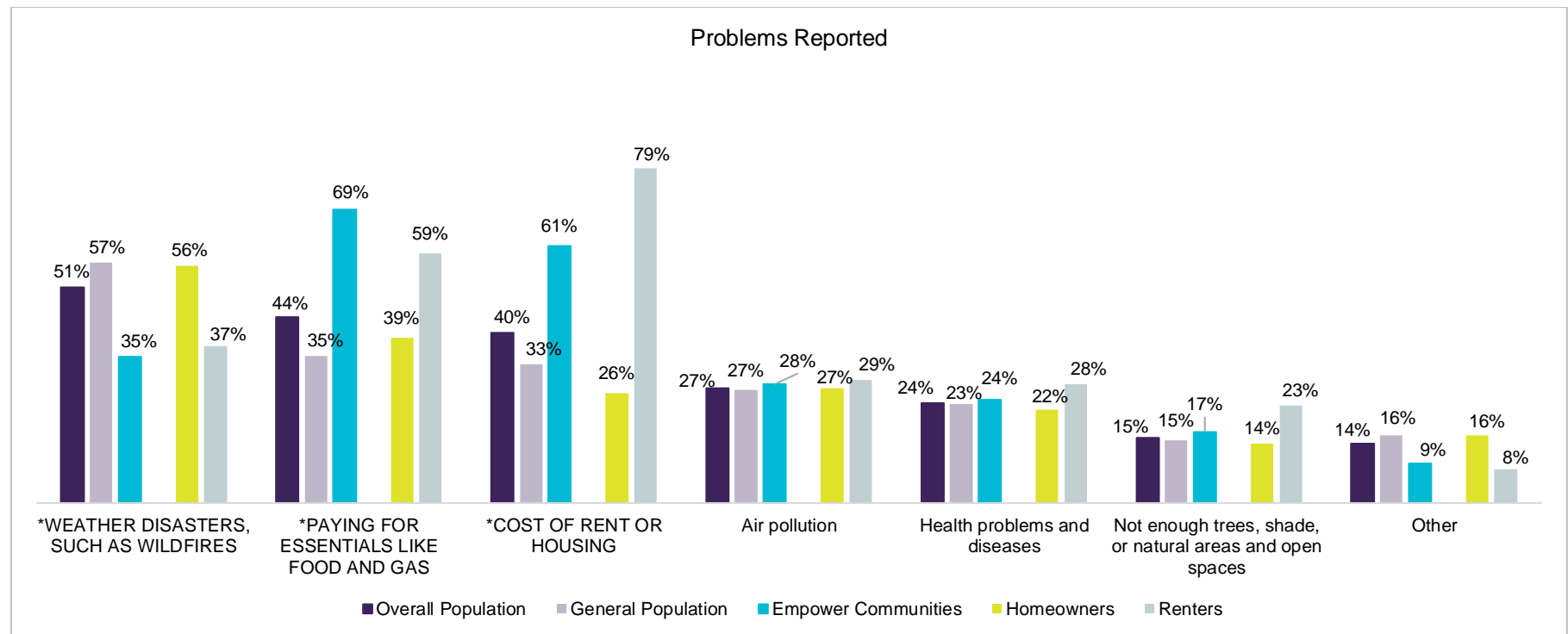
The survey asked questions to quantitatively report on problems, issues, priorities and more. Below is a summary of the findings.

### 3.3.2 Biggest Problems for Residential Customers

Survey responses revealed that the biggest problems facing the General Population are weather disasters followed by paying for essentials and rent or housing. Whereas the biggest problems facing the Empower Communities are reversed, first paying for essentials and rent, then weather disasters. **Programs that lower costs and address disaster risk would help alleviate top problems for the Overall Population.**

Figure 10 shows residential customers' biggest problems.

Figure 20: Residential Problems



\*ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.

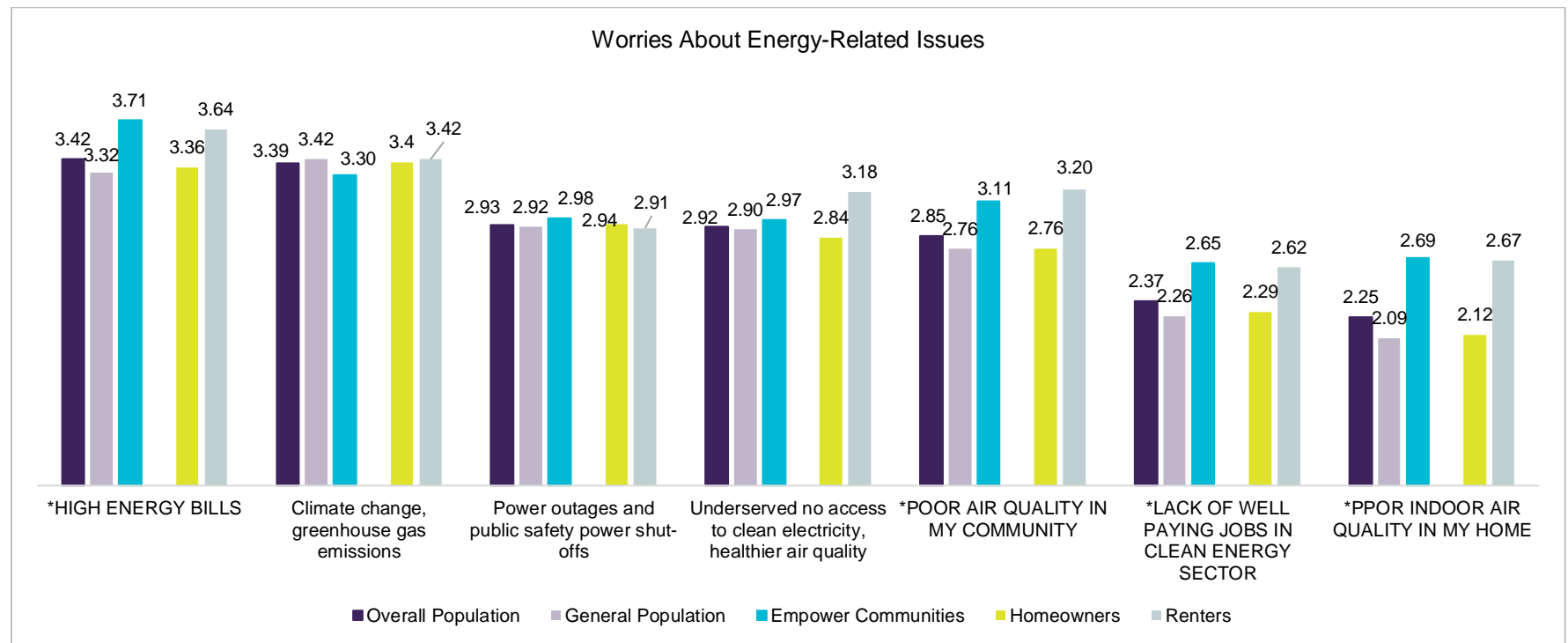


### 3.3.3 Biggest Worries of Residential Customers

The biggest worries facing the General Population survey respondents are first climate change followed by high energy bills. Whereas the biggest problems facing the Empower Communities are again reversed, high energy bills first and then climate change. **Programs that lower costs and address climate change would help alleviate top worries for the Overall Population.**

Figure 11 shows residential customers' biggest worries.

Figure 31: Residential Worries



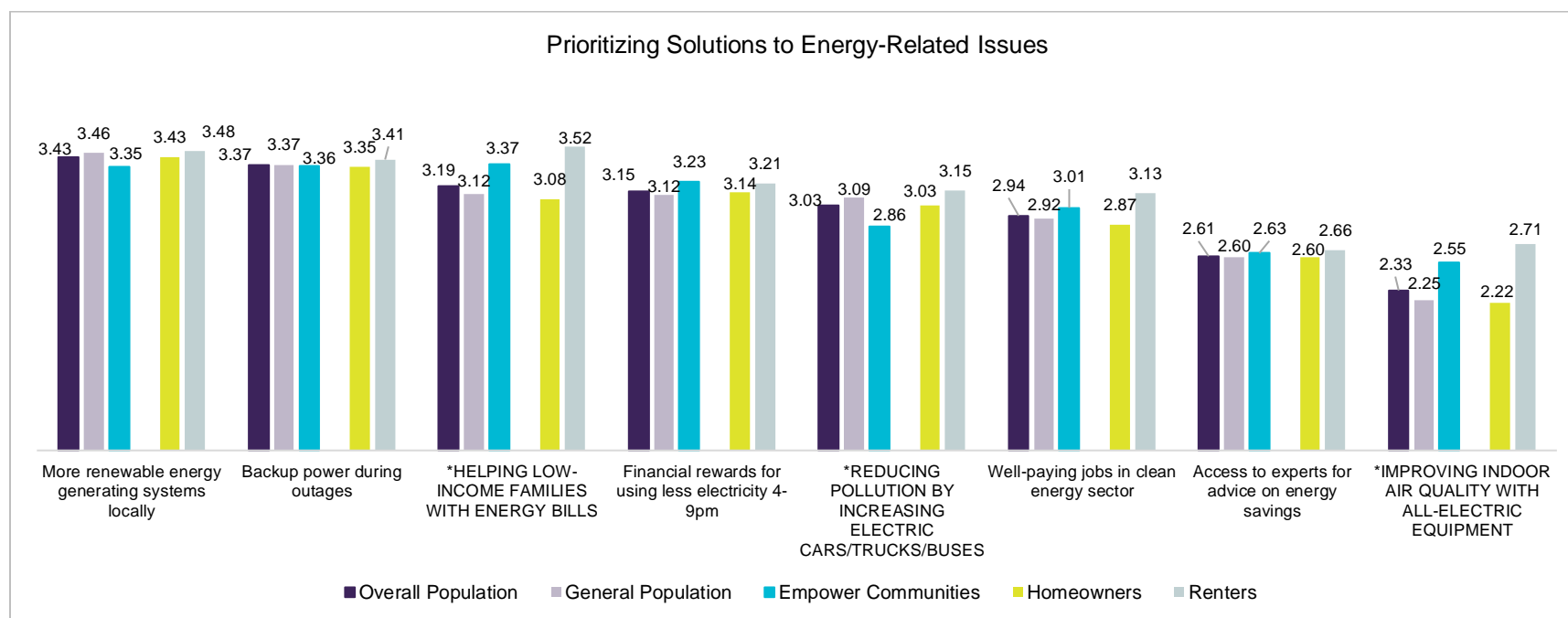
\*ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.  
 Five-point scale: 4 = very, 3 = somewhat, 2 = not very, 1 = not at all, 0 = not sure

### 3.3.4 Top Priorities of Residential Customers

Top priorities of the General Population survey respondents include building local renewables and backup power during outages. It's important to note that the concept of "building local renewables" may vary among individuals. The survey did not provide a specific definition, leaving room for respondents to interpret it as rooftop solar installations or larger utility-scale solar projects. Top priorities of the Empower Communities include helping low-income families afford bills and backup power during outages. Although both the General Population and the Empower Communities disagree on the top priority, they do agree on the number two priority, power outage protection.

Figure 12 shows residential customers' top priorities.

Figure 42: Residential Priorities



\*/ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.

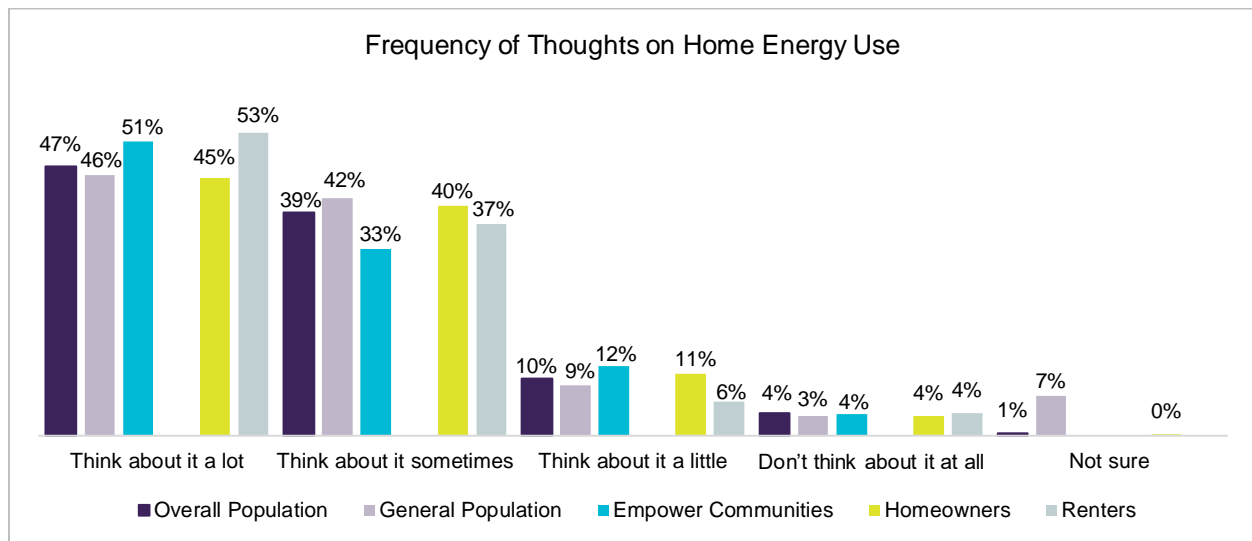
Five-point scale: 4 = high, 3 = medium, 2 = low, 1 = not, 0 = not sure

### 3.3.5 Thoughts on Home Energy Use from Residential Customers

Nearly half of Overall Population survey respondents think about home energy use a lot. Most respondents take a quick look or a detailed look at their bill every month. Energy costs are an important consideration.

Figure 13 shows residential customers' thoughts on home energy use.

Figure 53: Residential Energy Thoughts





### 3.3.6 Program Awareness of Residential Customers

The majority of Overall Population survey respondents are aware of time-of-use rates. Many are aware of electric vehicle and energy efficiency incentives. Some are aware of SCP's purchase of local renewables, SCP's load shifting program and electric vehicle charging incentives. Less than 25% of the Overall Population are aware of other programs.

It's important to note that awareness of programs is lower for the Empower Communities across all programs. **Program marketing in channels that appeal to the Empower Communities could help equalize awareness.**

Figure 14 shows residential customer awareness of SCP programs.

Figure 64: Residential Program Awareness

Program Awareness	Overall Population	General Population	Empower Communities	Homeowners	Renters
Time-of-use electricity rates offer lower price using electricity during certain times	70%	72%	64%	72%	68%
<b>*Electric car incentives &amp; rebates for electric cars</b>	48%	<b>54%</b>	<b>32%</b>	<b>54%</b>	<b>34%</b>
Incentives to improve energy efficiency of appliances, lighting, and equipment	46%	47%	45%	47%	45%
<b>*Purchasing 100% local, renewable electricity</b>	35%	<b>41%</b>	<b>21%</b>	37%	30%
Energy usage/demand management programs encourages shifting energy use during certain hours of day	37%	39%	32%	39%	30%
<b>*Electric vehicle charging equipment incentives &amp; rebates</b>	31%	33%	23%	<b>36%</b>	<b>16%</b>
Incentives to replace gas with clean electricity-powered alternatives	24%	26%	21%	27%	19%
Technical assistance where experts can identify energy-saving opportunities	22%	22%	21%	25%	16%
Other	3%	3%	4%	2%	6%
Not aware of any local programs available	16%	15%	20%	15%	17%

**\*/Bold** Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.

### 3.3.7 Program Participation of Residential Customers

In addition to being aware of time-of-use rates, the majority of Overall Population survey respondents participate in time-of-use rates. Participation in other programs is low. Empower Communities and Renters are much less likely to participate in programs than the General Population. The primary reason for not participating is not knowing about the programs. **Continued efforts to raise awareness of programs is the most effective thing SCP can do to increase participation.**

Figure 15 shows residential customer participation in SCP programs.

Figure 75: Residential Program Participation

Program Participation	Overall Population	General Population	Empower Communities	Homeowners	Renters
Time-of-use electricity rates offer lower price using electricity during certain times	54%	57%	48%	58%	48%
Energy usage/demand management programs encourages shifting energy use during certain hours of day	20%	21%	14%	22%	12%
Incentives to improve energy efficiency of appliances, lighting, and equipment	18%	19%	15%	20%	13%
<b>*Purchasing 100% local, renewable electricity</b>	16%	18%	9%	<b>19%</b>	<b>10%</b>
<b>*Electric car incentives &amp; rebates for electric cars</b>	14%	16%	8%	<b>18%</b>	<b>6%</b>
<b>*Electric vehicle charging equipment incentives &amp; rebates</b>	13%	15%	7%	<b>17%</b>	<b>4%</b>
Incentives to replace gas with clean electricity-powered alternatives	7%	9%	4%	9%	4%
Technical assistance where experts can identify energy-saving opportunities	6%	4%	9%	6%	6%
Other	3%	2%	5%	6%	4%
Have not participated in these programs	26%	25%	31%	23%	35%

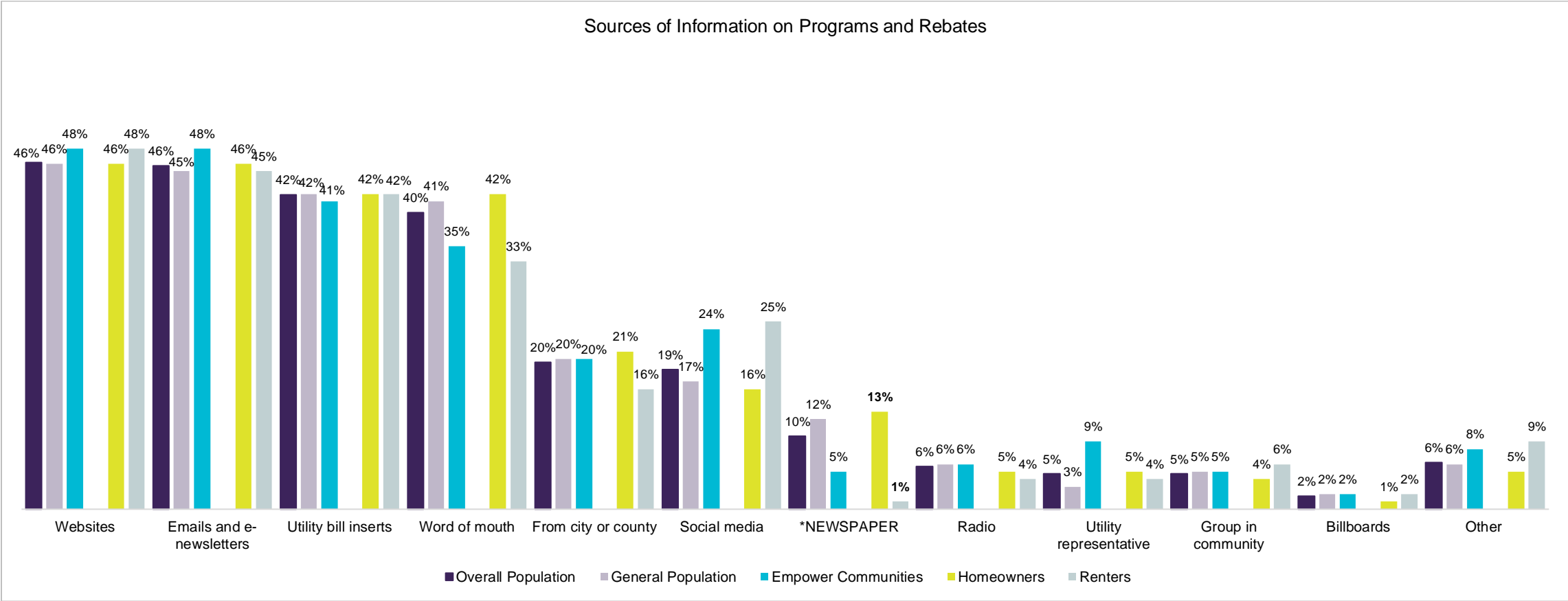
**\*/Bold** Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.

3.3.8 Information Sources for Residential Customers

Websites, emails, newsletters, bill inserts, and word of mouth are all sources of information Overall Population survey respondents use. **Investigating bill inserts or enhanced bill messaging as well as “tell a friend” options could help raise awareness and participation.**

Figure 16 shows residential customers’ sources of information.

Figure 86: Residential Sources of Information



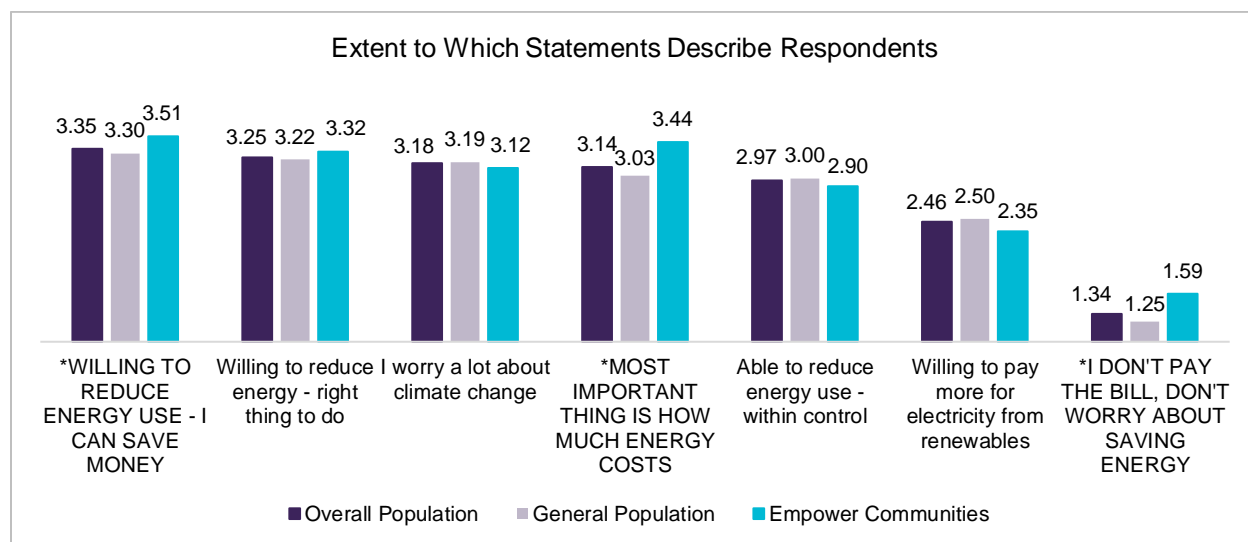
\*/ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.

### 3.3.9 Personal Descriptions of Residential Customers

The General Population survey respondents describe themselves overwhelmingly as willing to reduce energy use and as worrying about climate change. The Empower Communities overwhelmingly describe themselves as willing to reduce energy use and as placing the most importance on energy costs. Overall, the respondents are willing to use less energy, for either “money saving” or “doing the right thing” reasons.

Figure 17 shows residential customers’ personal descriptions.

Figure 17: Residential Personal Descriptions



\*/ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance. Five-point scale: 4 = very well, 3 = somewhat well, 2 = not very well, 1 = not at all, 0 = not sure



### 3.3.10 Awareness and Trustworthiness of SCP from Residential Customers

Most of Overall Population respondents are aware of SCP and find SCP trustworthy. Half are satisfied with SCP communications. Empower Communities and Renters are less aware of SCP and find SCP less trustworthy.

Figure 18 shows residential customers' awareness of SCP and how trustworthy they find SCP.

*Figure 98: Residential SCP Awareness, Trustworthiness, Satisfaction*

	Awareness of SCP	Trustworthiness of SCP	Satisfaction with SCP Communications
Customer Type	% "Yes"	% "Very" or "Somewhat"	% "Very" or "Somewhat"
Overall Population	80%	62%	52%
General Population	82%	63%	51%
Empower Communities	76%	58%	53%
Homeowners	83%	65%	52%
Renters	75%	57%	56%

### 3.3.11 Summary of Residential Survey

SCP's community has been significantly affected by wildfires. This comes across strongly in the survey results. The community cares about climate change and is willing to help. **However, the Empower Communities struggle to meet basic needs, and this is their top priority. SCP has programs that can help, but many don't know about them. Moreover, new programs that address these top areas of importance would likely be welcomed by everyone.**

### **3.4 Commercial Customer Survey**

SMUD conducted a survey of over 100 commercial customers. SCP was especially interested in the views of Empower Communities and how those differ from non-Empower Communities. As mentioned previously, Empower Communities, or Environmental and Social Justice Communities, are 10 different census tracts that are most vulnerable to, and impacted by, pollution, socioeconomic issues and challenges of affordability as identified by SCP.

#### **3.4.1 Focus on Empower Communities**

The survey results were analyzed and shown for businesses located in Empower Communities, the General Population (businesses located in non-Empower Communities), and Overall Population (all business locations combined). Additional details may be found in Appendix A.

SCP is dedicated to fostering inclusivity and effectiveness across its program portfolio. By comparing different population segments, SCP aims to customize solutions that address the specific needs and challenges of various community groups, including commercial customers. This approach aligns with SCP's goal to deliver equitable and impactful energy solutions that benefit all customers, particularly those facing environmental and social disparities.

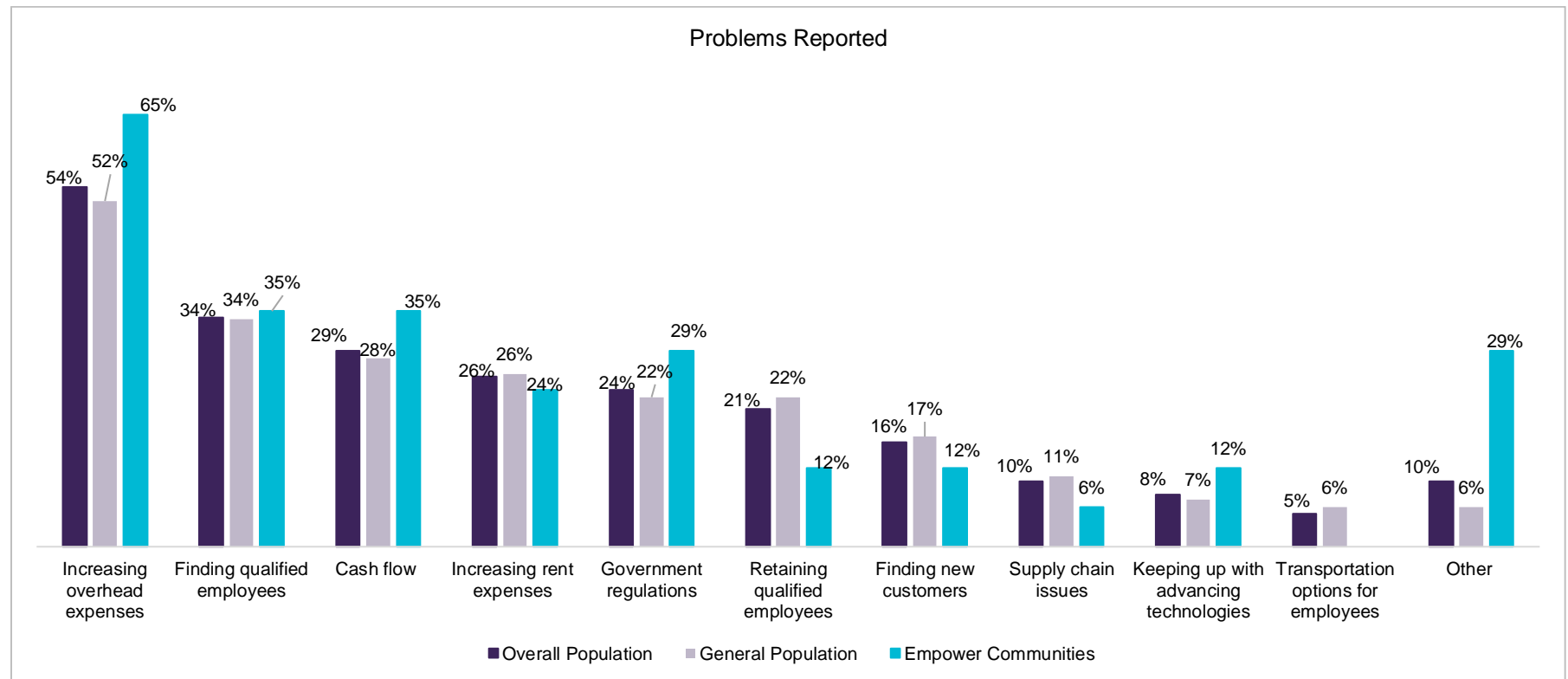
The survey asked questions to quantitatively report on problems, issues, priorities and more. Below is a summary of the findings.

### 3.4.2 Biggest Problems of Commercial Customers

The survey responses revealed that the biggest problems facing the General Population are increasing overhead costs, finding and retaining quality employees, cash flow, increasing rent expenses, and government regulations. The biggest problems facing businesses in Empower Communities are very similar, with a little more emphasis in increasing overhead expenses, cash flow, and government regulations. **Programs that lower costs would help alleviate the top problem for the Overall Population.**

Figure 19 shows commercial customers' biggest problems.

Figure 19: Commercial Problems

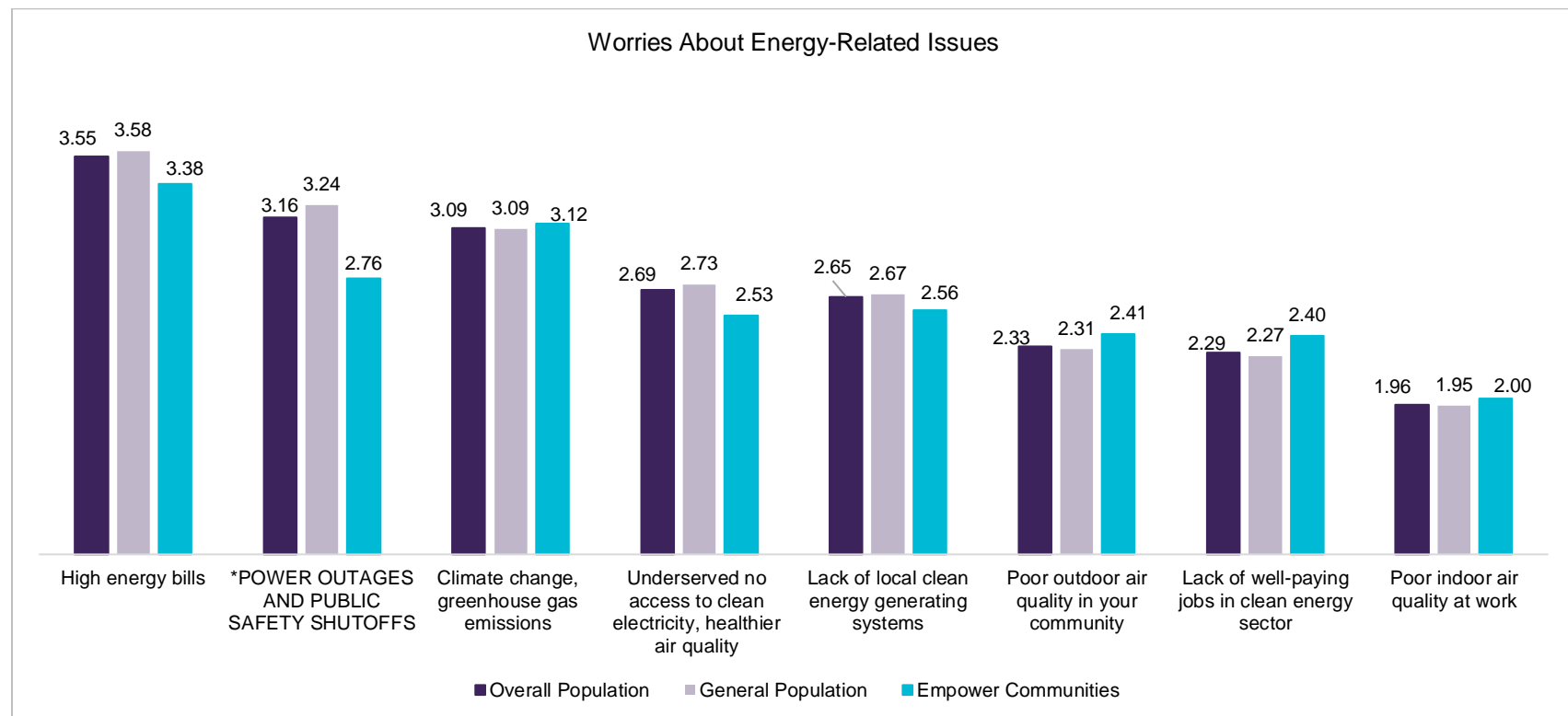


### 3.4.3 Biggest Worries of Commercial Customers

The biggest worries facing the General Population and Empower Communities commercial survey respondents are high energy bills, power outages/public safety power shutoffs (PSPS), and climate change/greenhouse gas emissions. **Programs that lower costs, protect against power outages, and address climate change would help alleviate top worries for the Overall Population.**

Figure 20 shows commercial customers' worries.

Figure 20: Commercial Worries



\*/ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.  
Five-point scale: 4 = very, 3 = somewhat, 2 = not very, 1 = not at all, 0 = not sure



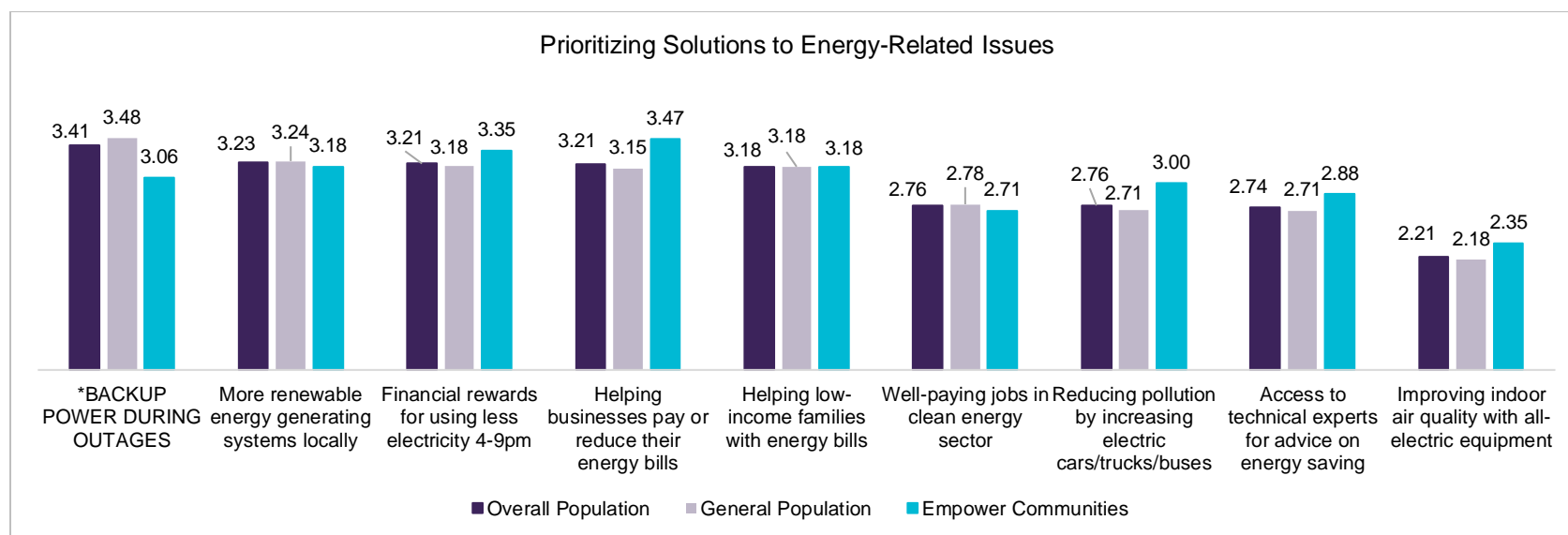
### 3.4.4 Top Priorities of Commercial Customers

Top priorities of the General Population commercial survey respondents include backup power during outages and building local renewables. As with the residential survey, it's important to note that the concept of "building local renewables" may vary among individuals. The survey did not provide a specific definition, leaving room for respondents to interpret it as rooftop solar installations or larger utility-scale solar projects.

Top priorities of Empower Communities include helping businesses reduce energy bills, and financial rewards for using less electricity from 4-9pm. Although both the General Population and the Empower Communities disagree on the top priority, they do align in the top five priorities - backup power, building local renewables, load shift rewards, helping businesses reduce energy bills, and helping low-income families reduce energy bills.

Figure 21 shows commercial customers' top priorities.

Figure 21: Commercial Priorities



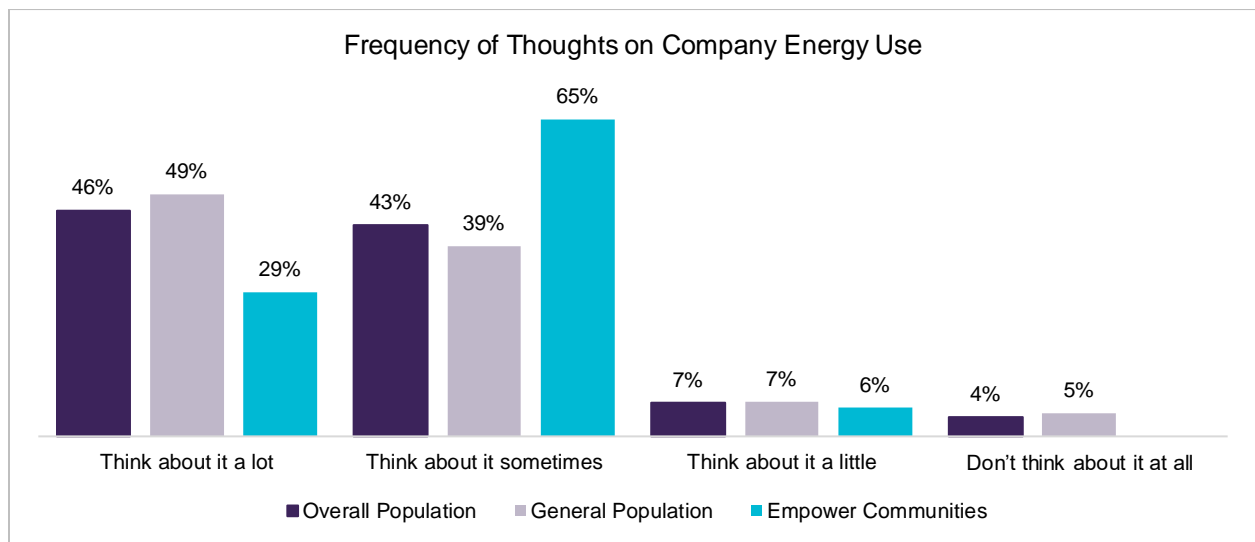
\*ALL CAPS Differences between the groups of comparison on that aspect are large enough to reach a level of statistical significance.  
Five-point scale: 4 = high, 3 = medium, 2 = low, 1 = not, 0 = not sure

### 3.4.5 Thoughts on Energy Use from Commercial Customers

Nearly half of Overall Population survey respondents think about business energy use a lot. Most respondents take a quick look or a detailed look at their bill every month. Energy costs are an important consideration.

Figure 22 shows commercial customers' thoughts on energy use.

Figure 22: Commercial Energy Thoughts



### 3.4.6 Program Awareness of Commercial Customers

The majority of Overall Population survey respondents are aware of time-of-use rates. Some respondents are aware of energy usage/demand management programs, energy-efficiency programs, electric vehicle incentives, and the options to purchase renewable energy. Less than 25% of respondents are aware of other programs.

Awareness of programs is lower for the Empower Communities across all programs. **Implementing a program marketing strategy across the board, especially in channels that appeal to the Empower Communities, could help boost awareness.**

Figure 23 shows commercial customers' awareness of SCP programs.

Figure 23: Commercial Program Awareness

Program Awareness	Overall Population	General Population	Empower Communities
Time-of-use electricity rates offer lower price using electricity during certain times	63%	66%	47%
Energy usage/demand management programs encourages shifting energy use during certain hours of day	32%	33%	29%
Incentives to improve energy efficiency of appliances, lighting, and equipment	29%	31%	24%
Electric car incentives & rebates for businesses who buy or lease electric cars	29%	29%	29%
Option of purchasing 100% local, renewable electricity from your utility	28%	28%	29%
Incentives to replace gas with clean electricity-powered alternatives	25%	26%	18%
Electric vehicle charging equipment incentives & rebates	22%	20%	29%
Technical assistance where experts can identify energy-saving opportunities	13%	15%	-
Other	3%	4%	-
Not aware of any local programs available	27%	25%	35%

### 3.4.7 Program Participation of Commercial Customers

Despite having high awareness of time-of-use rates, Overall Population survey respondents have a gap in participation. This gap increases amongst Empower Communities. Participation in other programs is low across the board. The primary reason for not participating is not knowing about the programs. **Continued efforts to raise awareness of programs is the most effective thing SCP can do to increase participation.**

Figure 24 shows commercial customers' participation in SCP programs.

Figure 24: Commercial Program Participation

Program Participation	Overall Population	General Population	Empower Communities
Time-of-use electricity rates offer lower price using electricity during certain times	41%	45%	18%
Option of purchasing 100% local, renewable electricity from your utility	15%	14%	18%
Energy usage/demand management programs encourages shifting energy use during certain hours of day	13%	14%	9%
Electric vehicle charging equipment incentives & rebates	8%	6%	18%
Electric car incentives & rebates for businesses who buy or lease electric cars	7%	6%	9%
Incentives to improve energy efficiency of appliances, lighting, and equipment	5%	6%	-
Technical assistance where experts can identify energy-saving opportunities	3%	3%	-
Incentives to replace gas with clean electricity-powered alternatives	1%	2%	-
Other	3%	3%	-
Have not participated in these programs	43%	41%	55%

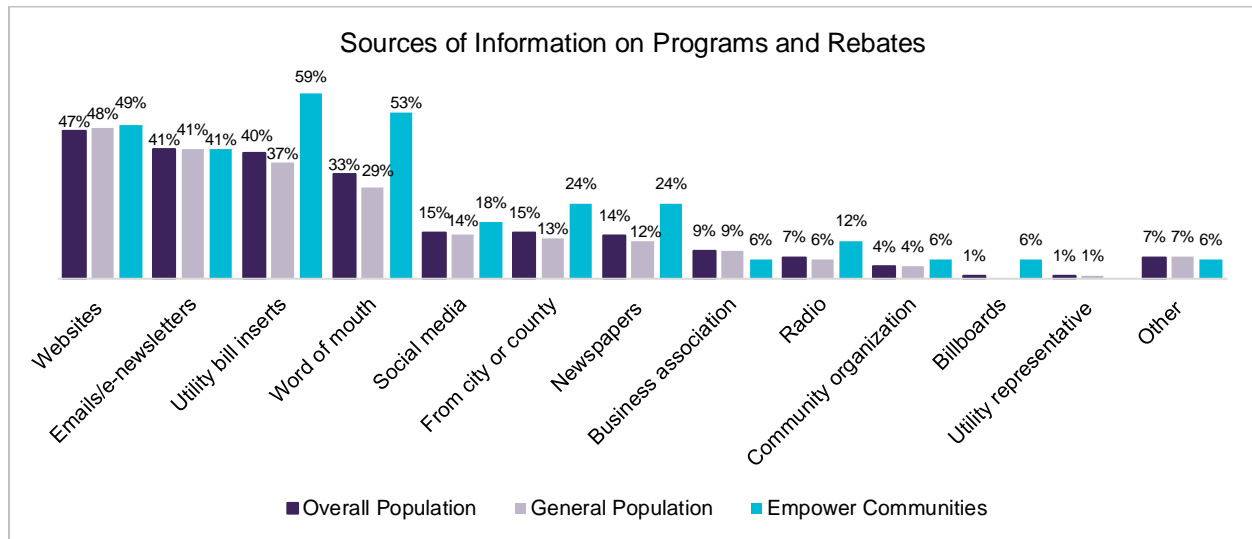


### 3.4.8 Information Sources from Commercial Customers

Websites, emails, newsletters, bill inserts, and word of mouth are all sources of information Overall Population survey respondents use. **Investigating bill inserts or enhanced bill messaging as well as “tell a friend” options could help raise awareness and participation.**

Figure 25 shows commercial customers’ information sources.

Figure 25: Commercial Sources of Information

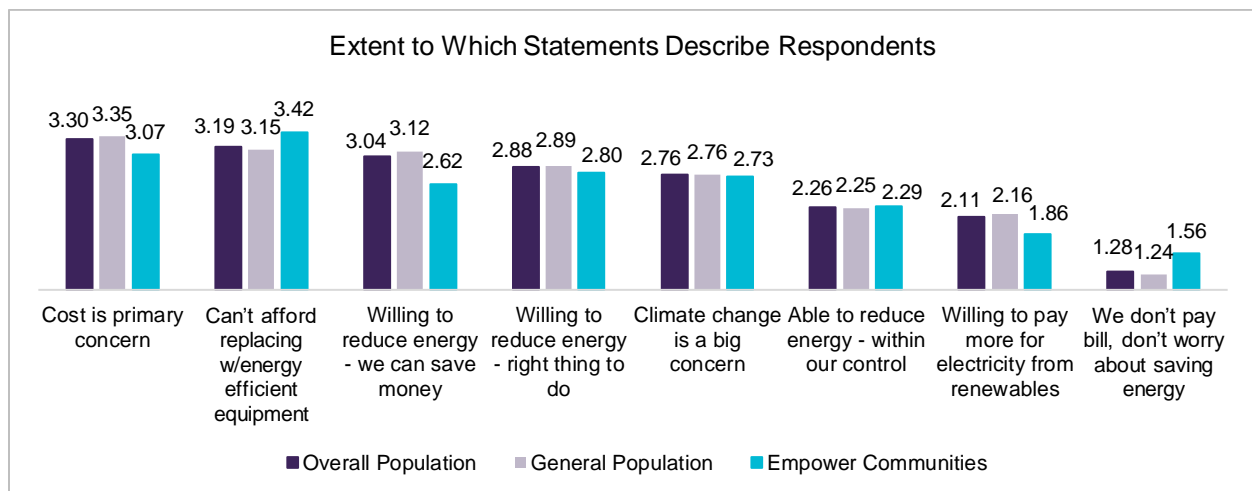


### 3.4.9 Personal Descriptions of Commercial Customers

The General Population commercial survey respondents describe themselves as energy cost-concerned, unable to afford energy-efficient equipment upgrades, and willing to reduce energy use to save money. The Empower Communities describe themselves as unable to afford energy-efficient equipment upgrades and energy cost-concerned. Overall, the respondents are focused on cost reduction and affordability.

Figure 26 shows commercial customers' personal statements.

Figure 26: Commercial Personal Statements



Five-point scale: 4 = high, 3 = medium, 2 = low, 1 = not, 0 = not sure

### 3.4.10 Awareness and Trustworthiness of SCP from Commercial Customers

Most of Overall Population respondents are aware of SCP and find SCP trustworthy. However, less than half are satisfied with SCP communications.

Figure 27 shows the commercial customers' awareness of SCP, SCP trustworthiness and SCP satisfaction.

Figure 27: Commercial SCP Awareness, Trustworthiness, Satisfaction

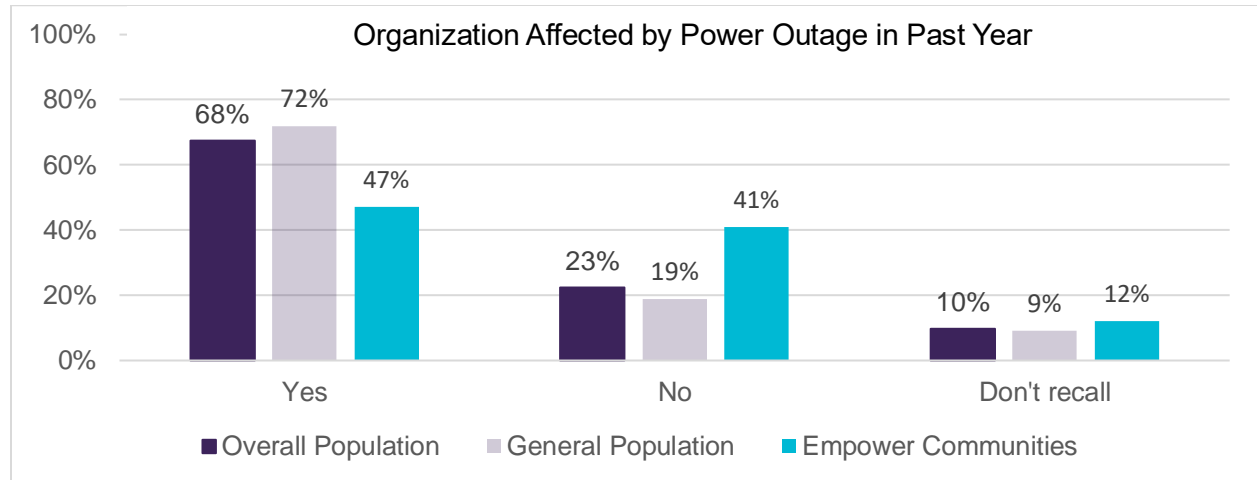
	Awareness of SCP	Trustworthiness of SCP	Satisfaction with SCP Communications
Customer Type	% "Yes"	% "Very" or "Somewhat"	% "Very" or "Somewhat"
Overall Population	76%	59%	40%
General Population	75%	58%	42%
Empower Communities	77%	65%	29%

### 3.4.11 Energy Resilience Needs and Solutions for Commercial Customers

Nearly 3/4ths of the General Population and nearly half of Empower Communities believe they have been affected by power outages in the past year.

Figure 28 shows the volume of impact on organizations as it relates to power outages.

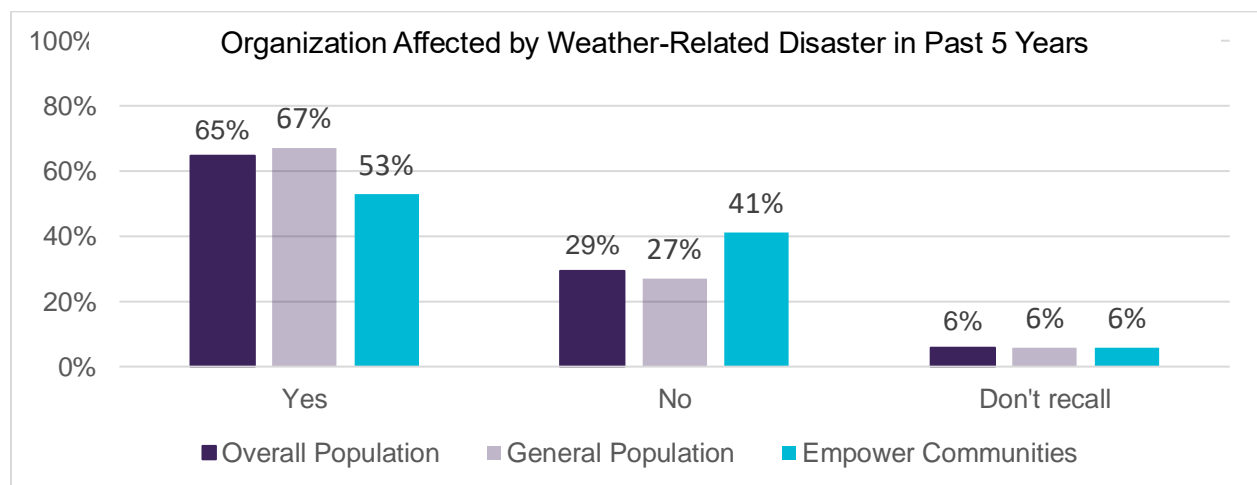
Figure 28: Affected by Outage Past Year



The majority of the General Population and more than half of Empower Communities have been affected by a weather-related disaster in the past five years.

Figure 29 shows the volume of impact on organizations as it relates to weather-related disasters.

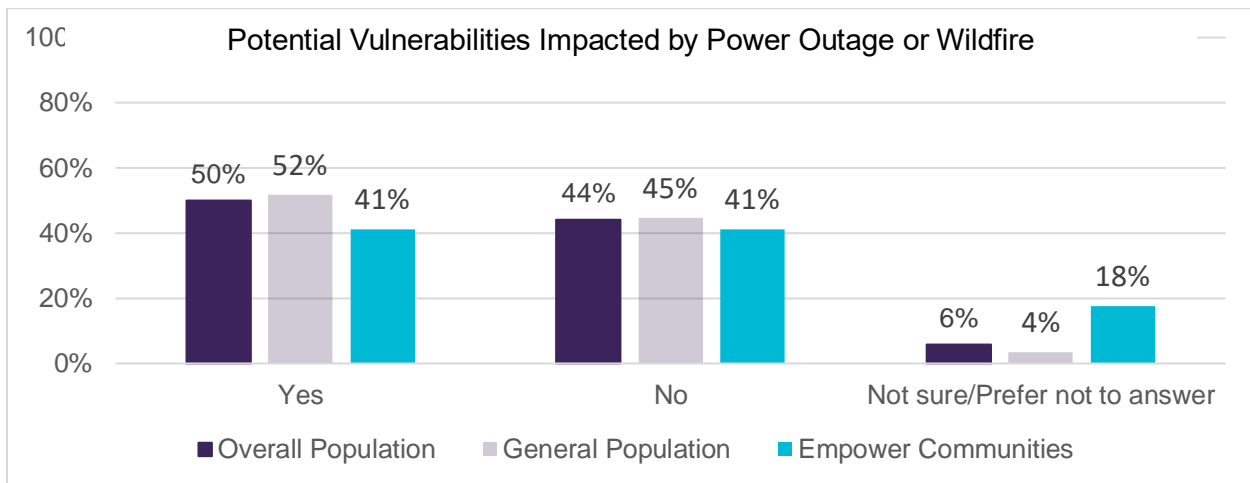
Figure 29: Affected by Weather-Related Disaster Past Five Years



More than half of the General Population and over 40% of Empower Communities feel vulnerable to outages or wildfire.

Figure 30 shows if there are vulnerabilities at the organization that could be greatly impacted by power outages or wildfires.

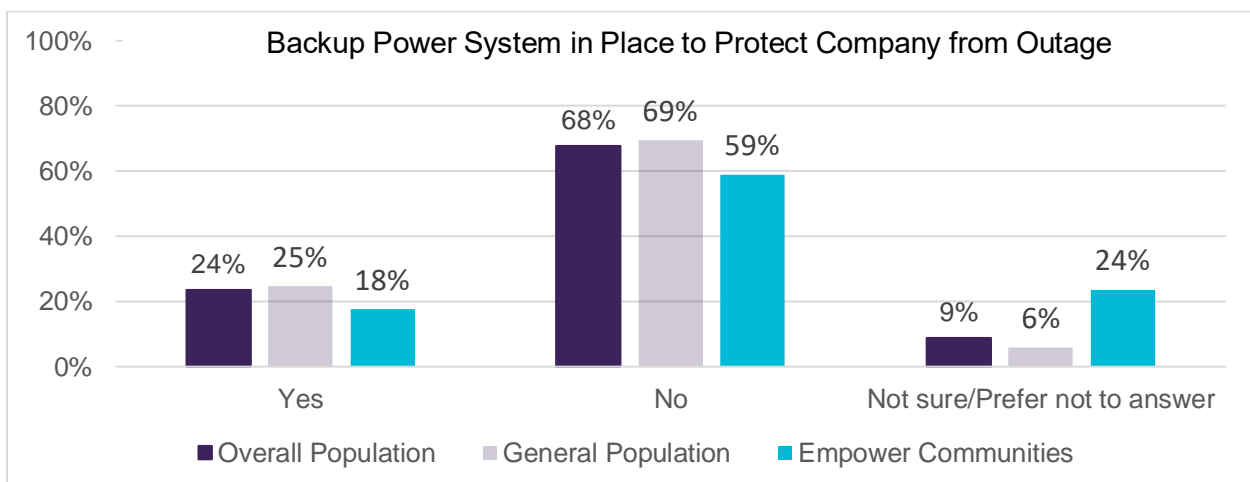
Figure 30: Vulnerabilities



The majority of the General Population and Empower Communities do not have any backup power system.

Figure 31 shows the presence of a backup power system to protect from a power outage.

Figure 31: Backup Power

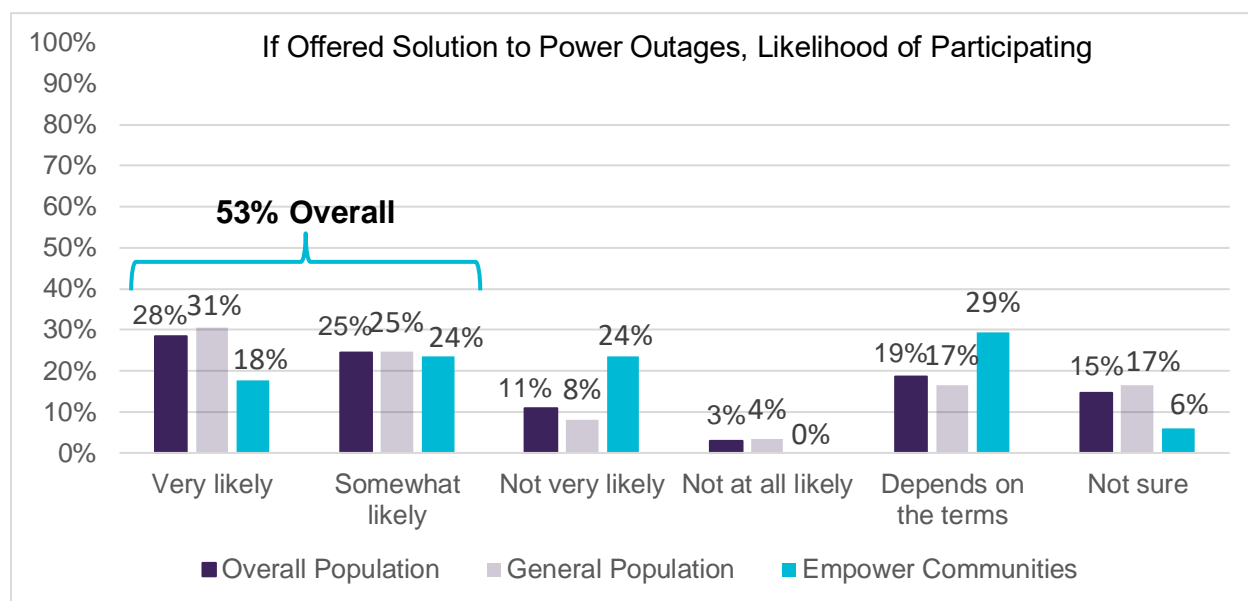




More than half of the General Population and more than 40% of Empower Communities would participate in a program solution if offered.

Figure 32 shows the likelihood of the respondent to participate in program solutions to reduce the impact of power outages.

Figure 32: Likelihood to Participate

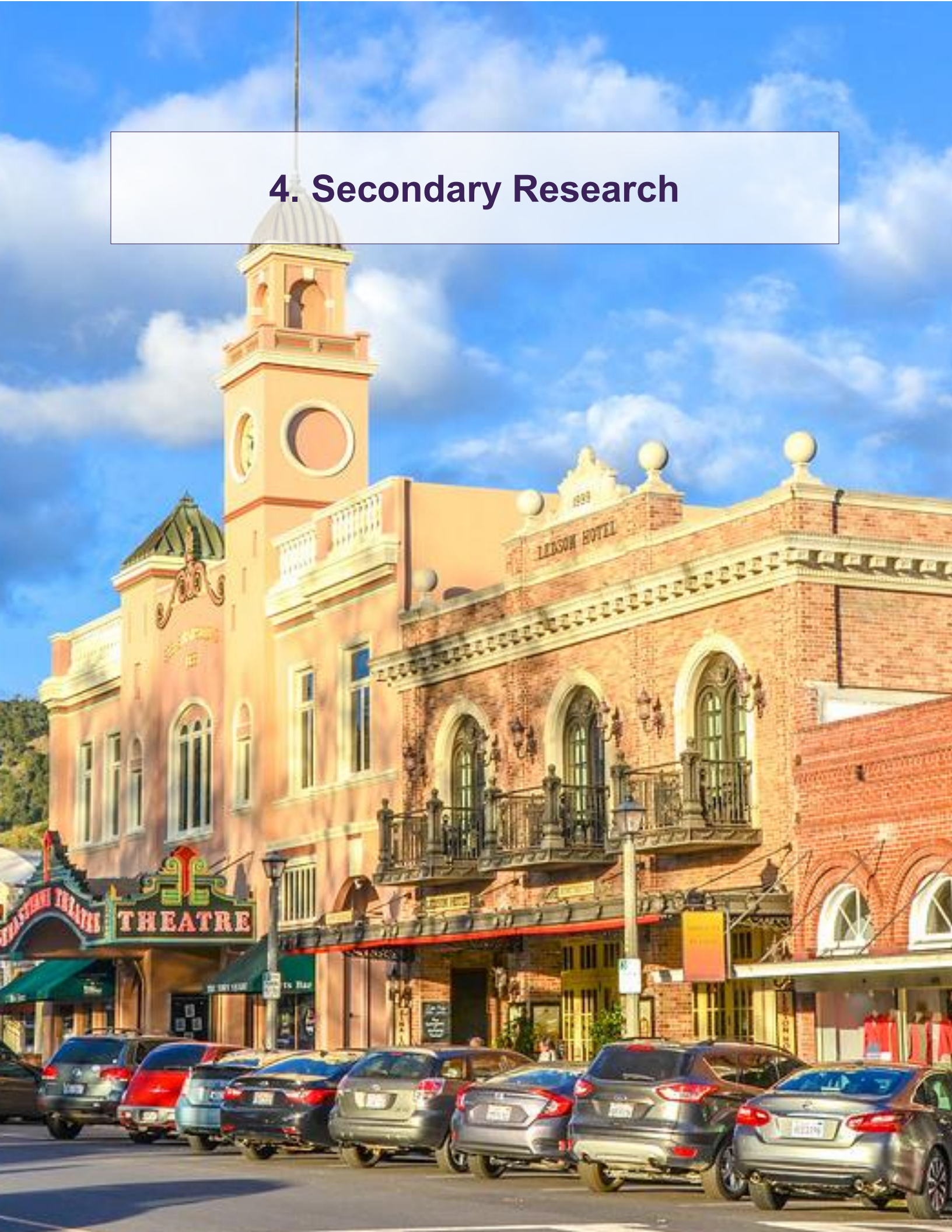


### 3.4.12 Summary of Commercial Survey

SCP's community has been significantly affected by wildfires. This comes across strongly in the survey results. The community cares about climate change and is willing to help. **However, businesses are primarily focused on the costs to operate – spending less on overhead and maintaining a quality workforce. Respondents are also worried about and would prioritize backup power, the General Population more so than the Empower Communities. SCP has programs that can help, but many don't know about them. Moreover, new programs that address these top areas of importance would likely be welcomed by everyone.**

**Businesses have been affected by outages, feel vulnerable, don't have a backup power solution and would participate in a program offered by SCP. There are no statistical differences in how the General Population and Empower Communities.**

## 4. Secondary Research



## 4. Secondary Research

While conducting primary research on the top priorities and concerns of SCP customers is the focus of these needs assessments, SMUD also considered SMUD's own programs for insights, reviewed SCP's Programs Strategic Action Plan, evaluated SCP's current programs and examined offering from other community choice aggregators (CCAs).

### 4.1 SMUD Programs Analysis

As a municipal utility, SMUD regularly performs an assessment of SMUD's nearly 100 customer programs offered. SMUD assessed each program's alignment with four key measures:

1. How well the program serves and satisfies customers
2. How well the program helps reduce carbon emissions
3. How efficient the program is run
4. How effective the program is in achieving critical key performance indicators (KPIs)

As part of this process SMUD implemented customer satisfaction surveys, conduct segmentation analysis, gather historical program measurements, enter data (75 different data points per program) into an analytical model to calculate scores for each program.

SMUD has learned so much from this approach. It drives SMUD's program process improvements, new marketing strategies, program sunseting and new program design efforts. Here are some key discoveries from SMUD that are pertinent to the program recommendations for SCP:

- Customers who are aware of programs are more satisfied with SMUD.
- Even lower levels of awareness of environmental programs in particular can drive utility-level satisfaction.
- Customers who participate in satisfying programs are more satisfied with their utility than those who are just aware of those programs.
- Program participation increases satisfaction in direct relationship to the number of programs participated in.
- Programs that are more memorable to participants have higher satisfaction, memorability marked by either solving a big problem and/or ongoing engagement (appliance recycling, paperless billing and shade trees had great memorability while rebates and air conditioning load management did not. It's important to have ongoing engagement plans for rebate programs.)
- Focusing on customer experience improvements for programs with top participation can markedly increase utility level satisfaction.
- Customers are very satisfied with free programs and services.
- Products discounted at time of purchase provide more financial benefits to the customer than products with a post-purchase rebate.
- Services with positive human interactions are very satisfying.



- Potential areas dissatisfaction includes finding the right person to talk to, quality of contractors, clarity of costs, and information after signing up, if not done right.
- Carbon reduction programs perform best on all four key measures.
- Appliance recycling, discounted lighting and paperless billing are the top scoring programs.

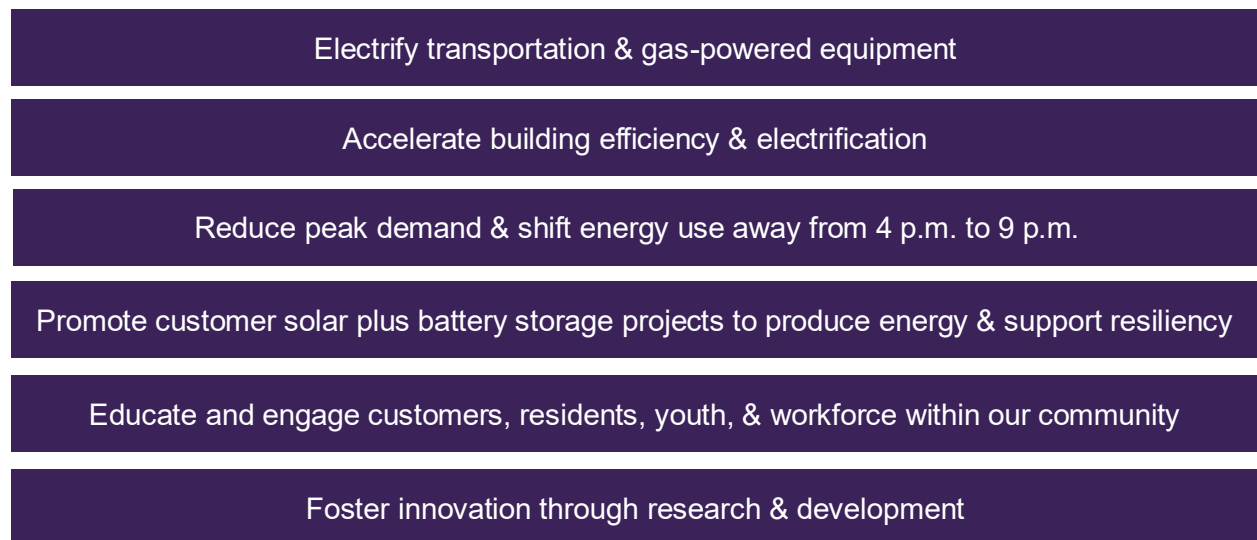
SMUD provided 10 Example Programs in Appendix E based on those found to be most successful.

## 4.2 Programs Strategic Action Plan Review

When developing Example Programs (Appendix E), the primary consideration was on customer priorities, which resulted from the four research studies conducted. However, SMUD also considered strategies and direction from SCP's Programs Strategic Action Plan.

SCP's Programs Strategic Action Plan identifies six Program Strategies shown in Figure 33. SMUD considered these Program Strategies in development of Example Programs for SCP.

*Figure 33: Programs Strategic Action Plan Priority Strategies*



SCP's Programs Strategic Action Plan also specifies Customer Types: those aligned with SCP's mission, or not, and those in need of financial assistance, or not; and specifies both market transformation and avoided cost programs. Therefore, in addition to Alignment with Strategic Priorities, SMUD also shows Customer Type and whether a program is considered Market Transformation or Avoided Cost in the Example Programs in Appendix E.

### 4.3 Current Programs Analysis

Today, SCP offers a number of programs for residential customers: energy efficiency solutions, peak curtailment (reducing electricity use when the demand for electricity is high), electrification rebates for all-electric equipment and appliances. There are no-cost services, like induction cooktop check out and options for renters like the energy savings box. For homeowners looking to make large equipment and appliance purchases, there are sizable rebates plus rewards for smart device management. For lower-income residential customers, there are extra incentives for home electrification.

Businesses are offered energy consultation, help with electric vehicle (EV) fleet electrification charging, and grants for e-bikes. Multifamily properties can access incentives for multifamily properties for EV chargers and electric panel upgrades. Non-profits are eligible for EV and EV charger rebates. Government agencies can take advantage of incentives for heat pump water heater incentives.

While there are numerous programs SCP offers today, respondents want more programs that lower expenses, improve the affordability of energy efficient equipment, protect against outages, and build local renewables.

### 4.4 CCA Programs Analysis

According to an inventory conducted by CalCCA, SCP currently offers more customer programs than most CCAs. However, there are a few areas where other CCAs have programs that SCP does not currently have, such as resiliency and solar and storage.

Below is additional information on resiliency and battery storage programs from other CCAs:

#### 4.3.1 Resiliency and Battery Storage

Resiliency and battery storage offerings are diverse and range including contractor referral tools, preferred pricing, and post-purchase rebates.

- Ava Community Energy offers battery rebates to Medical Baseline customers, and preferred pricing for solar and battery systems.
- Clean PowerAlliance offers rebates for solar and battery systems (\$750) with an additional rebate for low-income customers (\$250).
- MCE offers a \$20 bill credit to customers with battery systems who discharge during peak periods.
- Silicon Valley Clean Energy offers a contractor referral program for solar and battery systems.
- Pico Rivera Innovative Municipal Energy has partnered with Tesla to offer solar and storage systems to be installed with no upfront costs and purchase of power consumed.

Respondents want programs that protect against outages.



## 5. Recommendations



741





## 5. Recommendations

### 5.1 Introduction

This report was created to provide guidance to SCP in improving existing programs and designing and implementing new programs. SMUD combined learnings from informant interviews, website usability testing, commercial and residential opinion surveys and created Customer Priorities. SMUD then summarized research under each priority and provided general recommendations for meeting that priority.

#### 5.1.1 Customer Priorities

SMUD reviewed the top three responses for each question of the Residential Survey and the Commercial Survey. SMUD used top problems, top worries, top priorities and top descriptors to create a list, in no specific order, of Customer Priorities for both residential and commercial customers.

- **Reduce energy bills:** High energy bills are among the biggest worries of residential and commercial customers. This is true of the general population but especially true of the for those in Empower Communities.
- **Help low-income customers with energy bills:** SMUD found both residential and commercial respondents would prioritize helping low-income customers with their energy bills and those who live in Empower Communities would make it a higher priority.
- **Improve affordability of energy efficiency solutions:** When asked to describe themselves in the survey, commercial customers said they were energy cost-concerned and unable to afford energy-efficient equipment upgrades. Notably, the residential survey did not include this question, and exploring residential attitudes toward this issue could be valuable for future surveys.
- **Protect against power outages:** Power outages were identified as a top worry for both residential and commercial customers, and both residential and commercial customers identified backup power during outages as a top priority. However, commercial customers in Empower Communities ranked power outages and the need for backup power during outages significantly lower compared to the general population.
- **Address climate change:** Climate change was a top worry for both residential and commercial customers.
- **Build local renewables:** Residential and commercial customers wanted to prioritize building local renewables, although the survey did not provide a specific definition, leaving room for respondents to interpret it.
- **Improve access to information:** Improved access to information was exemplified by respondents' low awareness of and participation in SCP programs.

Figure 34 summarized Customer Priorities.

Figure 34: Customer Priorities

Customer Priorities
<ul style="list-style-type: none"> <li>- Reduce energy bills</li> <li>- Help low-income customers with energy bills</li> <li>- Improve affordability of energy efficiency solutions</li> <li>- Protect against power outages</li> <li>- Address climate change</li> <li>- Build local renewables</li> <li>- Improve access to information on rates and programs</li> </ul>

## 5.2 Reduce Energy Bills and Help Low-Income Customers with Energy Bills

### 5.2.1 Residential Survey Customers

Paying for essentials like food and gas and paying for rent or housing were the biggest problems residential survey respondents faced.

	Paying For Essentials		Paying For Rent or Housing	
	Rating	Rank	Rating	Rank
<b>General Population</b>	35%	2	33%	3
<b>Empower Communities</b>	69%	1	61%	2
<b>Renters</b>	59%	2	79%	1

High energy bills are top energy-related worries.

	Energy-Related Worry	
	Rating (of 5)	Rank
<b>General Population</b>	3.32	2
<b>Empower Communities</b>	3.71	1
<b>Renters</b>	3.64	1

Respondents would reduce energy use to save money.

	Describe Respondents	
	Rating (of 5)	Rank
<b>General Population</b>	3.30	1
<b>Empower Communities</b>	3.51	1

Respondents would prioritize helping low-income customers with energy bills.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.12	3 or 4
<b>Empower Communities</b>	3.37	1
<b>Renters</b>	3.52	1

## 5.2.2 Commercial Survey Customers

Current expenses, including increasing overhead costs and cashflow, are the biggest problems commercial respondents faced.

	<b>Increasing Overhead</b>		<b>Cashflow</b>	
	Rating	Rank	Rating	Rank
<b>General Population</b>	52%	1	35%	3
<b>Empower Communities</b>	65%	1	28%	2 or 3 (tied)

High energy bills are top energy-related worries.

	<b>Energy-Related Worry</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.58	1
<b>Empower Communities</b>	3.38	1

Respondents, specifically the Empower Communities, would prioritize helping businesses pay or reduce their bills.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.15	5
<b>Empower Communities</b>	3.47	1

Respondents would also prioritize financial rewards for using less during peak times.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.18	3 or 4 (tied)
<b>Empower Communities</b>	3.35	2

Respondents would be somewhat willing to reduce energy to save money.

	<b>Describe Respondents</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.12	3
<b>Empower Communities</b>	2.62	5

Respondents would prioritize helping low-income customers with energy bills.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.18	3 or 4 (tied)
<b>Empower Communities</b>	3.18	3 or 4 (tied)

### 5.2.3 Conclusion and Recommendations

Both residential and commercial surveys indicate that living and business expenses are currently a top problem. While SCP cannot reduce costs of essentials like food, gas, rent or housing, SCP can help reduce energy bills through various initiatives.

Programs that lower energy bills would help alleviate top problems and address a top worry. Residential respondents would participate in load reduction programs. Commercial respondents would prioritize support for businesses and load reduction programs.

To help lower bills for everyone, SCP could promote energy efficiency and energy conservation.

- For customers on time-of-use (TOU) rates, SCP can provide more information and ways to move electricity use to off-peak times to lower energy bills.
- SCP could increase participation in GridSavvy Rewards, enabling all customers to reduce their energy use during peak times and save money.

For Empower Communities and low-income customers, SCP could help in several ways: providing emergency bill relief, discount electricity bills, or help reduce electricity usage. SCP could:

- Support low-income customers by providing emergency bill relief for those at risk of disconnection.
- Provide an additional low-income discount on top of the PG&E discount.
- Provide a special credit to low-income customers potentially based on degree of poverty or disadvantage.
- Directly install energy efficiency and conservation measures (such as window and door sealing, smart thermostats, smart power strips, LED lighting, etc.) to help reduce bills long-term.
- Target low-income customers to participate in GridSavvy Rewards, reducing their energy use during peak times and saving them money.

Reducing energy bills would lower costs and could help with paying for essentials and rent or housing, which was identified as a top problem, especially for those in Empower Communities.



## 5.3 Improve Affordability of Energy Efficiency Solutions

### 5.3.1 Commercial Survey Customers

Commercial Survey Respondents described themselves as unable to afford energy-efficient equipment upgrades.

	Describe Respondents	
	Rating (of 5)	Rank
<b>General Population</b>	3.15	2
<b>Empower Communities</b>	3.42	1

### 5.3.2 Conclusion and Recommendations

Cost is a primary concern for commercial customers. They can't afford replacing equipment with energy efficient or clean energy-powered equipment.

To improve affordability of energy efficiency solutions for all commercial customers, SCP could:

- Help reduce the upfront cost.
- Offer post purchase rebates.
- Sell discounted products.
- Help commercial customers create an energy efficiency plan.

SCP could also target commercial customers to participate in GridSavvy Rewards, reducing their energy use during peak times, leveraging smart devices and electrification technologies, to save money.

For Empower Communities, SCP could provide larger rebates and discounts.

## 5.4 Protect Against Power Outages

### 5.4.1 Residential Survey Customers

Weather disasters are a top problem.

	Weather Disasters	
	Rating	Rank
<b>General Population</b>	57%	1
<b>Empower Communities</b>	35%	3
<b>Renters</b>	37%	3

Power outages and public safety power shutoffs are top energy-related worries.

	<b>Energy-Related Worry</b>	
	Rating (of 5)	Rank
<b>General Population</b>	2.92	3
<b>Empower Communities</b>	2.98	4
<b>Renters</b>	2.91	5

Respondents would prioritize backup power during outages.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.37	2
<b>Empower Communities</b>	3.36	2
<b>Renters</b>	3.41	3

#### 5.4.2 Commercial Survey Customers

Power outages and public safety power shutoffs are top energy-related worries.

	<b>Energy-Related Worry</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.24	2
<b>Empower Communities</b>	2.76	3

Respondents would prioritize backup power during outages.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.48	1
<b>Empower Communities</b>	3.06	2

Half of the Overall Population would participate in a program solution if offered.

#### 5.4.3 Conclusion and Recommendations

Programs that lower disaster risk and power outages would help address top problems, alleviate top worries, and meet customer priorities.

To help protect against power outages for everyone, SCP could:

- Provide rebated or discounted battery storage for homes and businesses, enabling them to store power and increase resilience.
- Pair battery storage systems with solar panels to further ensure a reliable power supply during outages.
- Provide emergency outage kits or backup battery generators.

- Target program participants to join GridSavvy Rewards, reducing their energy use during peak times, leveraging battery storage technologies, to save money. Encouraging participation in GridSavvy Rewards will also help stabilize the grid and reduce the likelihood of outages during peak demand times.

For Empower Communities, SCP could provide larger rebates and discounts.

Weather disasters were identified as a big problem for residential customers, particularly for the general population and homeowners. However, this issue was less pressing for Empower Communities. As weather disasters result in outages, protection against power outages could help address part of the concern around weather disasters.

## 5.5 Address Climate Change

### 5.5.1 Residential Survey Customers

Climate change is a top energy-related worry.

	Energy-Related Worry	
	Rating (of 5)	Rank
<b>General Population</b>	3.42	1
<b>Empower Communities</b>	3.30	2
<b>Renters</b>	3.42	2

### 5.5.2 Commercial Survey Customers

Climate change is a top energy-related worry.

	Energy-Related Worry	
	Rating (of 5)	Rank
<b>General Population</b>	3.09	3
<b>Empower Communities</b>	3.12	2

### 5.5.3 Conclusion and Recommendations

Programs that lower address climate change would help address a top worry for everyone.

To help address climate change and reduce greenhouse gas emissions, SCP could:

- Promote energy efficiency technologies (see 1.6.2).
- Promote battery storage (see 1.6.3).
- Promote electrification technologies through either rebates or discounts.
- Promote GridSavvy Rewards.
- Build more local renewables (see 1.6.6).

For Empower Communities, SCP could provide larger rebates and discounts.

SCP could also plant shade trees which can reduce energy usage, sequester carbon and beautify neighborhoods. Although not a top concern, Empower Communities and renters rated the lack of trees, shade, natural areas, and open space higher than the General Population.

## **5.6 Build Local Renewables**

### **5.6.1 Residential Survey Customers**

Respondents would prioritize more local renewable energy.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.46	1
<b>Empower Communities</b>	3.35	3
<b>Renters</b>	3.48	2

### **5.6.2 Commercial Survey Customers**

Respondents would prioritize more local renewable energy.

	<b>Prioritizing Solutions</b>	
	Rating (of 5)	Rank
<b>General Population</b>	3.24	2
<b>Empower Communities</b>	3.18	3 or 4 (tied)

### **5.6.3 Conclusion and Recommendations**

Programs that result in more local renewable energy would appeal to everyone.

Since the survey did not specify the definition of "building local renewables," SCP could pursue several different approaches. SCP could:

- Implement a solar shares program (local build with customers buying shares of the system).
- Promote rooftop solar through partnerships paired with battery storage.

For Empower Communities, SCP could:

- Offer better solar shares rates.
- Offer a discount on EverGreen, SCP's 100% local, renewable electricity option.
- Offer discounted or direct install rooftop solar systems paired with battery storage.

## **5.8 Improve Access to Information on Rates and Programs**

### **5.8.1 Residential Survey Customers**

For Residential Survey respondents, the majority are aware of time-of-use rates. Many are aware of electric vehicle and energy efficiency incentives. Some are aware of SCP's purchase of local renewables, SCP's load shifting program and electric vehicle charging incentives. Less than 25% of the Overall Population are aware of other programs. Awareness of programs is lower for the Empower Communities across all programs.

In addition to being aware of time-of-use rates, the majority of survey respondents participate in time-of-use rates. Participation in other programs is low. Empower Communities and Renters are much less likely to participate in programs than the General Population. The primary reason for not participating is not knowing about the programs.

Websites, emails, newsletters, bill inserts, and word of mouth are all sources of information Overall Population survey respondents use.

### **5.8.2 Commercial Survey Customers**

The majority of survey respondents are aware of time-of-use rates. Some respondents are aware of energy usage/demand management programs, energy-efficiency programs, electric vehicle incentives, and the options to purchase renewable energy. Less than 25% of respondents are aware of other programs.

Despite having high awareness of time-of-use rates, survey respondents have a gap in participation. This gap increases amongst Empower Communities. Participation in other programs is low across the board. The primary reason for not participating is not knowing about the programs.

### **5.8.3 Conclusion and Recommendations**

Continued efforts to raise awareness of programs is the most effective thing SCP can do to increase participation.

- Investigating bill inserts or enhanced bill messaging as well as "tell a friend" options could help raise awareness and participation.
- Implementing a program marketing strategy, especially in channels that appeal to the Empower Communities, could help boost awareness.
- Other program education channels such as a phone/email/chat concierge, or digital channels such as a My Account or Mobile App would appeal to certain demographics.
- Additionally, SCP can make website improvements to make programs easier to find (see Website Usability Study Report for details).



# Appendix

## Appendix A

### Empower Communities

SCP identified 10 different census tracts that are most vulnerable to, and impacted by, pollution, socioeconomic issues and challenges of affordability.

These Empower Communities were identified by more than one (comparatively scored highest or lowest) of the following national, state, and local methodologies and datasets:

- Human Development Index (HDI)
- CalEnviroScreen 4.0
- California Public Utilities Commission's Affordability Ratio/Socioeconomic Vulnerability Index Analysis
- Senate Bill 535 Disadvantaged Communities

These communities are listed below. Please note that Laytonville was added to the list of Empower Communities after the Community Needs Assessments began and is therefore not included in this report.

**Covelo**

**Fort Bragg**

**Willits**

**Unincorporated  
Ukiah**

**Santa Rosa**

Taylor Mountain, Roseland, Bellevue, Kawana Springs, Comstock,  
Bicentennial Park

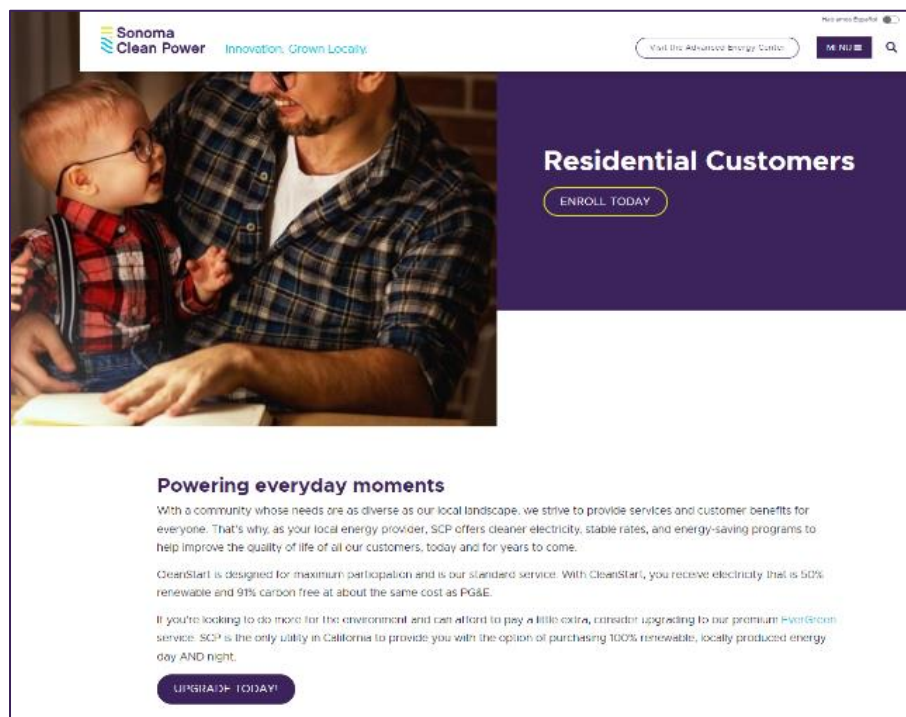
## Appendix B

### Website Usability Testing Details

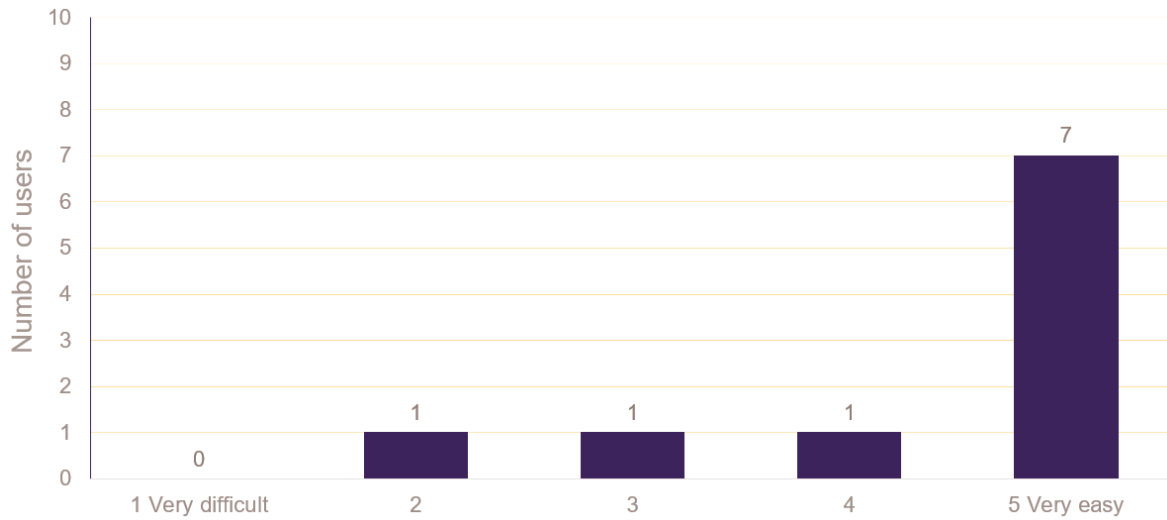
Below is more information on the four Tasks SMUD asked website users to perform.

#### Task 1: Find ways to save money or perks related to energy use at home

- Tied as the easiest task to complete, in part, due to GridSavvy Rewards program being featured on the homepage
- Users tried a lot of different paths to achieve the same objective
- Some users got lost under *Residential Customers*
- What the Advanced Energy Center is, and its benefits were unclear

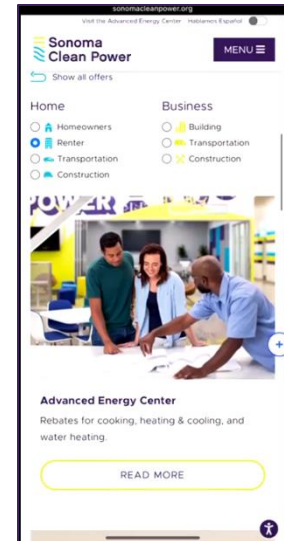
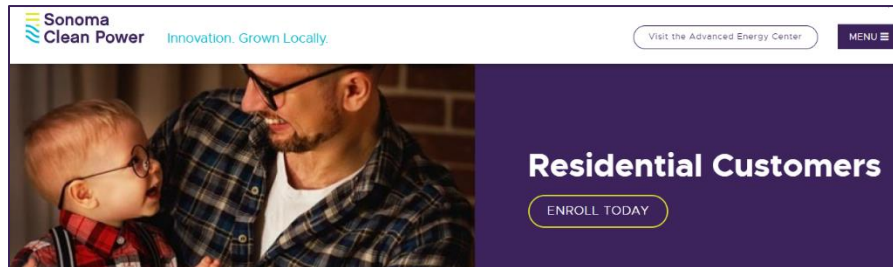


Ease of Task: **4.4 out of 5.0** This is the highest score tie among all 4 tasks  
Average Time on Task (Desktop): **02:24**  
Average Time on Task (Mobile): **01:56**



## Task 2: Find incentives and perks for renters

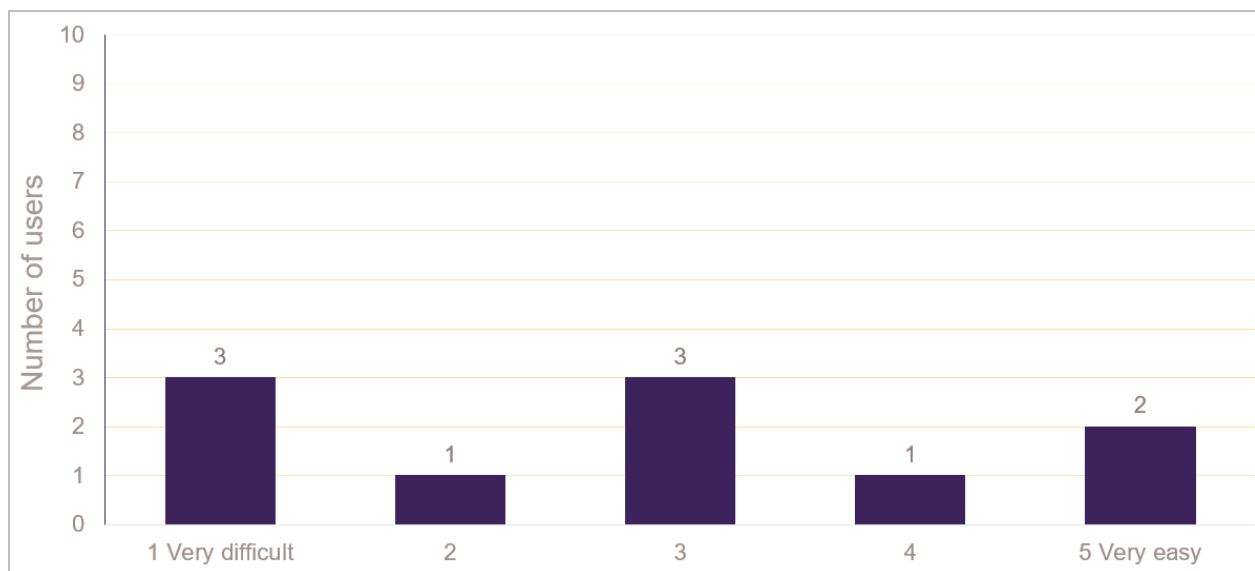
- Hardest task to complete. Many users looked for renter-focused programs on Residential Customer webpage
- Renter options are hard to find
- Filter function was not intuitive due to results appearing below the fold on mobile



Ease of Task: **2.8 out of 5.0** This is the lowest score among all 4 tasks.

Average Time on Task (Desktop): **02:19**

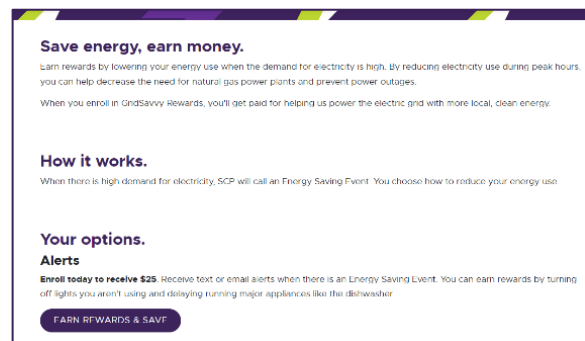
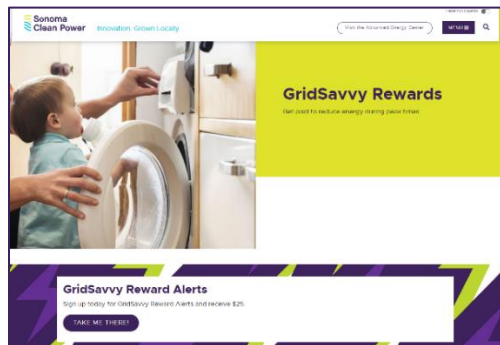
Average Time on Task (Mobile): **01:11**



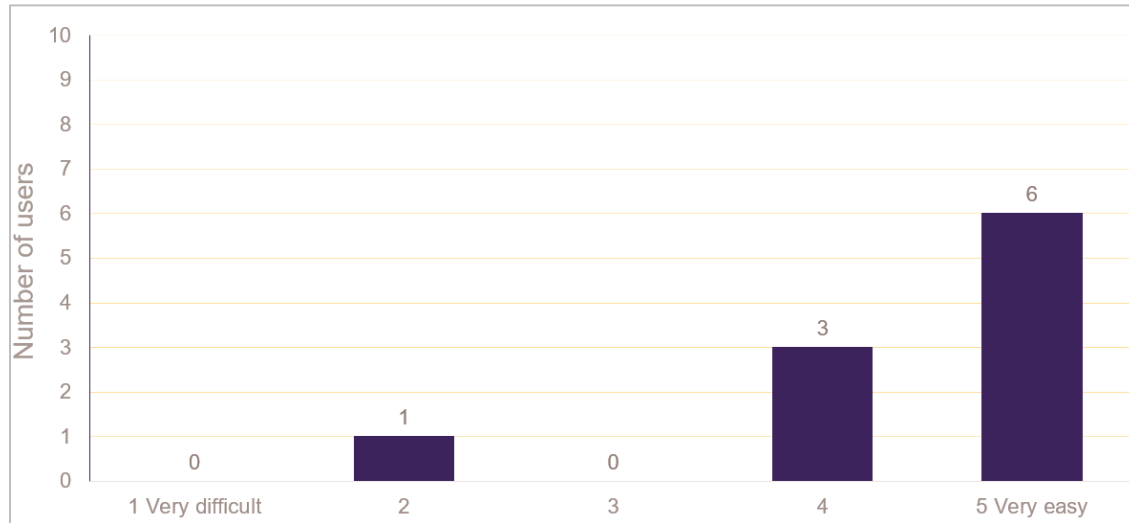


### Task 3: GridSavvy Rewards: Describe the program and its benefits

- Users are excited about the program but unclear about the rewards
- Mobile users had a little harder time
- There were some extra clicks and some missed content
- Button language could be more direct
- There are a lot of calls to action, creating a distraction from the main action – enrolling



Ease of Task: **4.4 out of 5.0** This is the highest score tie among all 4 tasks.  
Average Time on Task (Desktop): **02:12**  
Average Time on Task (Mobile): **01:07**



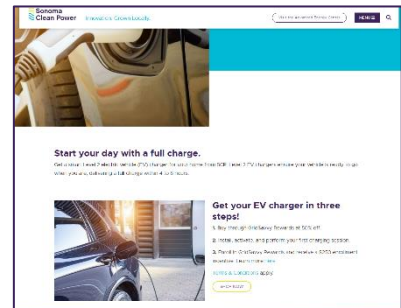
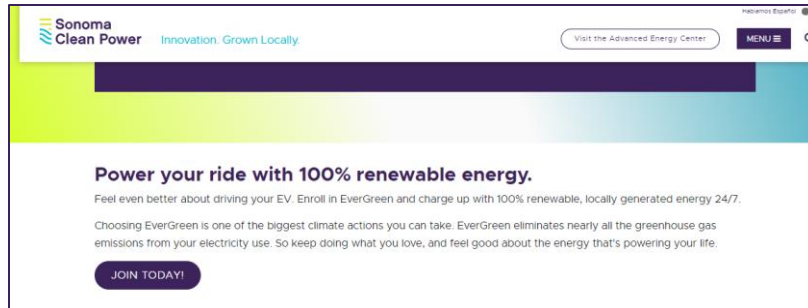
“

*You sign up for alerts and receive \$25... So just for enrolling \$25, and then you can earn rewards – doesn't say what those are – by turning off lights.*

”

#### Task 4: Find resources or perks for electric car drivers

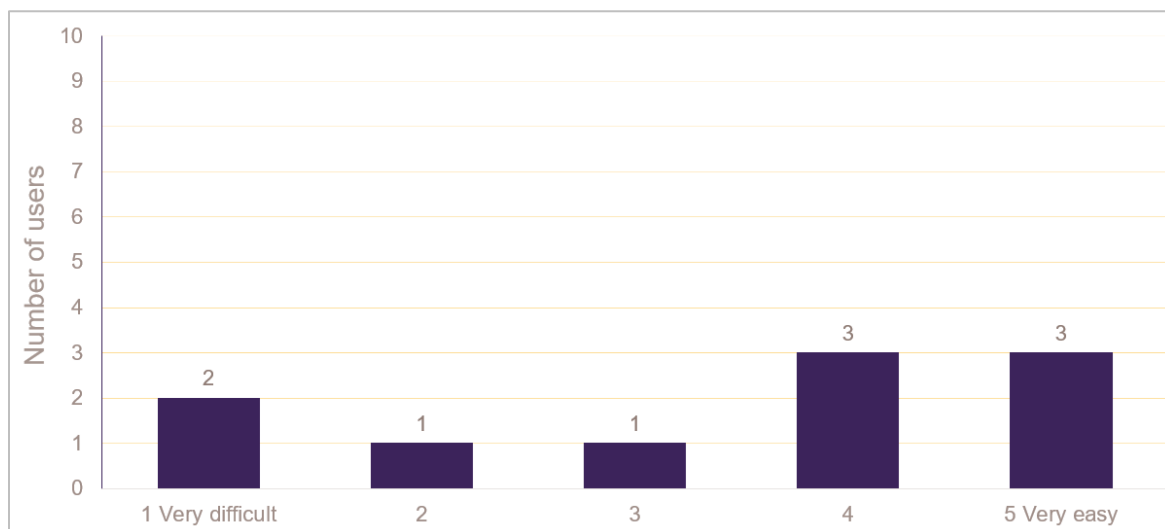
- Users did not know where to go
- Finding EV information was not easy
- Not knowing much about EVs didn't help
- Opportunity to better explain GridSavvy Rewards and EV nexus
- A definition of EverGreen may help



Ease of Task: **3.4 out of 5.0**

Average Time on Task (Desktop): **02:09**

Average Time on Task (Mobile): **01:45**



## Appendix C

### Awareness Survey Segment Analysis

SCP conducts an annual Brand/Program Awareness Survey of customers (Persuasion Monitor), which is separate from this Community Needs Assessment research. Although it falls outside the needs assessment scope, SMUD analyzed the 2022 survey responses by customer demographic group to gather additional insights, acknowledging it does not approach customer priorities in the same way as initiatives like Empower Communities. SCP will look for opportunities to leverage future Awareness Surveys to understand trends and to conduct data analyses by Empower Communities.

The survey asks questions about

- Awareness of SCP, favorability of SCP
- Priorities
- Rates
- Opinions of the Advanced Energy Center
- Electric vehicle (EV) interest, familiarity, experience, purchase and ownership
- Clean energy
- Willingness to take action
- Concerns about climate change

SMUD was able to find statistically relevant differences in responses for three demographic groups of interest, versus the general population: young customers, Hispanic customers and multifamily customers. Below is a summary of findings.

#### Young People

Young people were defined as being between the ages of 18 and 34. They:

- Represented 182, or 11%, of survey responses
- Are less likely to be aware of and consider SCP
- Believe PG&E rates are lower and are less critical of PG&E
- Value lower rates and clean energy more than older folks
- Are likely to convert appliances to electric
- Are more likely to have investigated EVs and consider ownership
- Are less likely to have access to electric vehicle charging stations
- Have a positive opinion of the Advanced Energy Center, if familiar

SMUD concluded that social channels are great options for this customer group, along with the SCP Customer Center (formerly Advanced Energy Center), and SCP's website. Based on SMUD data for the same customer group, a mobile app or a "my account" may also be highly valued. Key messages are competitive rates, clean energy, electrification, public charging, and the SCP

Customer Center. Key social strategies are challenges, internships, influencers and SCP Customer Center evolution.

## **Hispanic Customers**

Hispanic people were defined as speaking Spanish at home. They:

- Represented 175, or 10%, of survey responses
- Are less likely to be aware of and consider than non-Spanish speakers
- Believe PG&E rates are lower and are less critical of PG&E
- Rate SCP less on providing cleaner energy than non-Spanish speakers
- Value lower rates and clean energy more than non-Spanish speakers
- Are more likely to own EVs and to have driven one than non-Spanish speakers
- Are less aware of EV low emissions and the fact that they can save money on fuel and driving costs

SMUD concluded that key channels for Hispanic customers are Spanish Google Ads, Spanish media, mobile app or a “my account”. Key messages are competitive rates, clean energy, electric vehicles and community. Tools include translation apps and web browser translation.

## **Multifamily Customers**

Multifamily customers were defined as living in a multifamily dwelling. They:

- Represented 330 or 19% of survey responses
- Are less likely to be aware of, consider, and currently use SCP compared to single family counterparts
- Value lower rates, clean energy and help converting appliances more
- Are less likely to have investigated EVs, ridden an EV and spoken to an EV owner
- Are less likely to have access to charging stations
- Are more likely to have visited the Advanced Energy Center and have a higher opinion of it
- Are more likely to participate in e-Bike demos and battery classes

SMUD concluded that key channels to reach multifamily customers are property managers/owners, mobile app or a “my account” and the Advanced Energy Center. Key messages are electrification, competitive rates, clean energy, public charging, the Advanced Energy Center, community and customer service. Key strategies include renter-specific content on the web and neighborhood events.



## Appendix D

### SCP Community-Based Organization Survey

SCP conducted a survey of Community Based Organizations (CBOs) who had previously participated in SMUD's Informant Interviews. They were provided with a draft of the research conclusions and Example Programs (Appendix E). Their feedback was incorporated into the final report. Below are the results from six respondents.

**On a scale of 0-5, how do the informant interview and survey results align with the lived experiences of the community members you serve? 0 - Does not align 5 - Aligns closely**

Average Score          3.8

**If you would like to share more, please write in the space below on how the findings align, or not, with the lived experience of the community members you serve.**

The various sectors of the AAPI [Asian American Pacific Islander] communities don't live in specific geographical areas due to the diversity of culture and socioeconomic status. So the census tracks don't mean much for your outreach efforts. However, they do rely on word of mouth and other specific ways to communicate, e.g. WeChat in their own languages. so **your key findings with regard to Engagement Channels & Opportunities are spot on**, in terms of joining forces with TRUSTED CBOs to spread the message. Engagement activities should be language and culturally appropriate. My comments below refer only to those who are recent immigrants or refugees and those in the low-income sector.

Main concerns are **cost \quality of life and housing**

the connection between the two is lost. Informants say something and then there are the results. There is no specific connection between the two.

Overall your survey results align with the families we have and currently work with especially with regards to energy equity and access to clean energy, financial assistance, and overall understanding of the subject of transitioning off of fossil fuels as soon as possible.

I think you nailed it. The results accurately captures what i hear and see cost is important how can you **lower cost or offer incentives/** rebates keep us safe from fires and a concern about the environment

## Which of the key findings should be the top priorities for SCP to focus on addressing?

<p>Cost-saving is a high priority since many AAPIs, especially immigrants and refugees from SE Asia (Vietnam, Cambodia, Laos, Thailand) and also Pacific Islanders (Fijians and Samoans) are in the lower-income sector. Awareness of cost-saving of energy-efficient appliances is only part of the solution. I'd propose adding ideas such as modification of the hard and soft structure of their living places, such as planting trees, using blinds, and creating cross-currents. These do not necessarily seem immediately evident or common sense for new arrivals to a strange country. Under "Engagement with SCP", you noted the key barriers being awareness, cost, and homeownership. There is no easy way to overcome these barriers since these are systemic. The following may be some ideas to work towards overcoming them. Saving money and saving the Earth can and must work hand in hand. I think <b>bringing people together in the community</b> in whatever grouping they prefer (language, age, generation, jobs &amp; profession, and educational attainment) to discuss their community's problems and find solutions together would ultimately be the best way forward. AAPI immigrants are very hardworking and frugal. However, many of our AAPI community members are not very engaged in the issues in society at large. So instead of continuing to complain about cost or power outages, <b>conducting more focused and targeted community engagement activities</b> can be a way to end the problem of community isolation, and at the same time, spread the message of the importance of climate protection. I also propose <b>focusing on outreach to the younger people</b> in the AAPI community. Immigrant families often have huge generation gaps due to the dislocation and fracturing of their traditional culture and norms. The younger people can lead in areas of the environment and climate protection. They should be given the opportunity to learn and practice leadership skills. SCP is well positioned as a key partner with CBOs in their community outreach efforts. However, including other environmental nonprofits is important for the messaging part of the strategy.</p>
<p><b>Greening initiatives , nature based solutions</b>, education and equity specially around low income communities</p>
<p>How any one can afford these things with the increase in rent, food, etc.</p>
<p><b>empahsizing improving air quality</b> as important and <b>reducing costs of electrifying for low-income customers and more rebates</b></p>
<p>Continuing to raise awareness of SCP (both mission and offerings) is paramount. Also, continuing to find new and exciting ways to work with community-based organizations and then subsequently telling those stories over multiple mediums would go a long way.</p>
<p><b>Lower costs or tiered pricing dependent on income level</b></p>

### What are ways you would like to see SCP engage in these areas?

See answer to Item 3.
<b>Help plant trees, educate in water conservation, community gardens and educate in energy conservation</b>
figure out how to <b>lower energy rates</b> and even for those who can afford it, they <b>can't find a contractor</b> to install it.
<b>Expand rebate programs and make incentive program easier to understand.</b> Have more information about various areas of health and home that can be improved with energy switches, such as asthma, allergies, and illness mitigation through <b>clean air</b> . <b>Work with landlords</b> to make clean energy switched on behalf of low-income renters who don't have control over the home upgrades.
Continue to help fund exciting projects through unique partnerships. SCP has an opportunity to continue to deepen the spread of clean energy gospel and be a conduit between residential customers (including renters), contractors, appliance manufacturers, the list goes on.
<b>Identify individuals with past due accounts</b> , check their income levels i see higher heating costs in the winter and people unable to afford paying their heating bills

### Are there any aspects that you find unclear or confusing?

None. The points are well laid out.
?
Yes... <b>how you got from what the informants said to what you say are the results...the connection makes no sense.</b>
Everything is clear.
Not particularly, great job overall.
No, the information was well-presented

### Are there any key issues or perspectives that you believe are missing from the findings?

Refer to Item 3.
Make sure POC are part of the leadership
How you directly got the statements to how you drew your conclusions....do the math
I like the concept of electric vehicles but the ethical problems of the technology are prohibitive. I know that EV are better for the environment vs. gas cars, however <b>EVs are not better for the environment than robust public transportation</b> (trains, buses, bike lanes, etc) and certainly not for the people who are dying in genocidal conflict. We should be curbing car usage in general in favor of expanding bus and train schedules, safer bike lanes, and refusing urban sprawl that necessitates heavy car usage.
Which community-based organizations, contractors, etc. participated in the study.
<b>Community Solar Power Grid??? I seen alot of solar panels in a field</b>

Please rank the suggested programs you like to see SCP implement? The top of the list should be the most important programs for SCP to implement, and the bottom should be the least important for SCP to implement. Click and drag each item into the ranked location, or use the up/down arrow keys on the right to move them into a ranked list.

Suggested Program	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Respondent 6	Average	Rank
Increased incentives for low-income customers	5	2	2	4	3	2	3.0	1
Programs that directly address wildfire risk	2	3	7	3	6	4	4.2	2
Programs to protect against power outages	4	7	4	1	8	3	4.5	3
Programs that directly lower costs for customers who live in Empower Communities	10	5	1	8	2	1	4.5	3
Programs that reduce the cost of energy technologies	3	4	6	2	9	5	4.8	4
Community programs that encourage more trees, shade or preserving open spaces	1	1	10	9	1	10	5.3	5
Services that make it easy for people to learn more about their bill and energy use	6	8	3	5	4	9	5.8	6
Programs that partner local schools and businesses to encourage vocational training to help address the challenge of finding and retaining quality employees for businesses	8	6	5	7	5	7	6.3	7
Programs that reduce overhead operating expenses for commercial customers	9	10	8	6	10	6	8.2	8
Workshops, forums, or other resources for local business to better understand and navigate government regulations related to energy	7	9	9	10	7	8	8.3	9

**If you have any additional thoughts or comments, please share them here.**

Thank you for developing this community needs assessment. I'm sorry for being late submitting the survey.
Thank you
Spell out exactly how the information you say that you received from informants is directly tied to what you conclude....provide examples.
Thank you for listening!
<b>Sonoma Clean Power's story</b> (and CCA's in general too of course) is a powerful one and it should told more vividly and frequently by more people; moreover, not just the establishment but why it is so important i.e. money that was going out of our county and to PG&E shareholders is now staying in our county and enriching our residents, buildings, and quality of life. This is super uplifting. This story should be one that everyone knows and can recite. I have used it for years now in framing the importance of community-based climate solutions and I deeply am in support of your mission but most people don't have the time or bandwidth to engage on a deeper level so unique and creative storytelling could go a long way.
I appreciate SCP commitment to identify and address customers' needs and their leadership by planting seeds about the idea and reality that we must transition to alternative sources of energy

SCP's qualitative survey largely supports the findings of the larger, quantitative surveys conducted.



## Appendix E

### Example Programs

#### Key Components




SMUD reviewed its more than 100 operational programs. Based on the Customer Priorities identified as an outcome of the research studies, SMUD provided the following Example Programs for consideration.

To help prioritize and operationalize the Example Programs, SMUD included information on whether the program would be a new program to SCP, a change to a current program or simply a change to the way a program is messaged.




SMUD also made recommendations on the timing of implementation based on the complexity of the program and the likely cost, using SMUD budgets as a guide.

Per SCP's Programs Strategic Action Plan, SMUD identified whether the program was a market transformation program or an avoided cost program.




Finally, SMUD provided recommended customer target groups, using the primary research studies as the basis.

Recommendation Type		
		
New Program or Service	Change to Current Program	Change to Messaging



  

Recommendation Phase		
		
Short-Term (next 6 months)	Mid-Term (next 1-2 years)	Long-Term (next 5+ years)





  

Budget Size		
		
Low(<\$50K)	Medium (\$50K - \$250K)	Large (>\$250K)

Program Type	
	
Market Transformation	Avoided Cost

Customer Target			
			
Residential	Commercial	Empower Community	Renter

### 5.1.3 SCP Alignment Areas

SMUD also showed alignment to the Program Strategies and Customer Types per SCP's Programs Strategic Action Plan for each Example Program.

#### Program Strategies

- Electrify transportation & gas-powered equipment
- Accelerate building efficiency & electrification
- Reduce peak demand & shift energy use away from 4 p.m. to 9 p.m.
- Promote customer solar plus battery storage projects to produce energy & support resiliency
- Educate and engage customers, residents, youth, & workforce within our community
- Foster innovation through research & development

#### Customer Types

- Mission aligned, need financial assistance
- Mission aligned, don't need financial assistance
- Not mission aligned, need financial assistance
- Not mission aligned, don't need financial assistance

### 5.1.4 Operational Considerations

Finally, for each Example Program, SMUD provided operational considerations, outlining major aspects of program design. Additionally, Example Programs also showed likely funding source and included primary key performance indicators to measure program success.

Program Design
<i>Recommendation-specific</i>

Funding
<ul style="list-style-type: none"><li>- Internal as this is an avoided cost program</li><li>- Internal as this is funded by new revenue</li><li>- Internal as this is low cost</li><li>- Internal</li></ul>

KPIs & Measurements
<i>Recommendation-specific</i>

### 5.1.5 Summary

SMUD provided Example Programs for consideration that align to the Customer Priorities identified through research studies. SMUD also showed alignment to the Program Strategies outlined in the Programs Strategic Action Plan. In addition, SMUD considered market transformation and avoided cost programs, as well as Customer Types per the Programs Strategic Action Plan. Example Programs were developed that encompassed both short and long-term strategies and options that have low, medium, and high budgets. Each Example Program identifies a targets customer group.






Below are SMUD's Example Programs:

- Battery Storage Rebates
- Energy Gift
- Appliance Recycling
- Appliance Store
- Concierge Service
- Shade Trees
- My Account and Mobile App
- Outdoor Equipment Rebates
- Expanded Electrification Rebates

# Battery Storage Rebates

Offer customers rebates for battery storage purchases. Backup power during outages is a Top Priority in both the Residential and Commercial Survey.

## Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Mid-Term (next 1-2 years)	 Large (>\$250K)	 Market Transformation Avoided Cost	 Residential Commercial Empower Community

## SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Reduce peak demand &amp; shift energy use away from 4 p.m. to 9 p.m.</li> <li>- Promote customer solar plus battery storage projects to produce energy &amp; support resiliency</li> </ul>

Customer Priorities
<ul style="list-style-type: none"> <li>- Improve affordability</li> <li>- Protect against power outages</li> <li>- Slow climate change</li> </ul>

Customer Types
<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> <li>- Not mission aligned, need financial assistance</li> <li>- Not mission aligned, don't need financial assistance</li> </ul>

## Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Make stackable with California Public Utilities Commission (CPUC) Self-Generation Incentive Program (SGIP)</li> <li>- Educate battery installers so they share the program for SCP</li> <li>- Provide contractor list of experienced installers to customers</li> <li>- Promote along with GridSavvy Rewards</li> </ul>









Funding
<ul style="list-style-type: none"> <li>- Internal as this is an avoided cost program</li> </ul>

KPIs & Measurements
Number of rebates claimed, total net cost per rebate claimed (rebate, admin, marketing costs less net new consumption revenue, reduced procurement costs and reduced Resource Adequacy), overall program satisfaction

## Energy Gift

Ask customers to donate to a fund to be used to pay the electric bills of qualified customers whose electric service is about to be turned off. Helping low-income customers was a Top Priority in the Residential Survey.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Short-Term (next 6 months)	 Low <\$50K	 Avoided Cost	    Residential Commercial Empower Community Renter

### SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- Reduce expenses</li> <li>- Help low-income customers</li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> <li>- Not mission aligned, need financial assistance</li> <li>- Not mission aligned, don't need financial assistance</li> </ul>

### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Increase satisfaction for donors, recipients and those simply aware</li> <li>- Use an online donation portal</li> <li>- Provide funds to community-based organizations that service PG&amp;E's Relief for Energy Assistance through Community Help (REACH) program</li> <li>- Match customer donations or contribute to the fund</li> </ul>

Funding
<ul style="list-style-type: none"> <li>- Internal as this is funded by new revenue</li> <li>- Internal as this is low cost</li> </ul>









KPIs & Measurements
Number of donations, amount of donations, number of low-income customers helped, overall program satisfaction



# Appliance Recycling

Pick up and recycle old gas and electric appliances at no cost. This can improve indoor air quality, a **Worry and Priority** that is higher for **Empower Communities**.

## Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Mid-Term (next 1-2 years)	 Medium (\$50K - \$250K)	 Avoided Cost	    Residential Commercial Empower Community Renter

## SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Accelerate building efficiency &amp; electrification</li> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- Slow climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> <li>- Not mission aligned, need financial assistance</li> <li>- Not mission aligned, don't need financial assistance</li> </ul>

## Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Create a most-memorable-program</li> <li>- Work with vendors that will pick up equipment for free</li> <li>- Require vendors to properly recycle equipment</li> <li>- Take advantage of a home visit to share information about other programs</li> </ul>






Funding
<ul style="list-style-type: none"> <li>- Internal as this is an avoided cost program</li> </ul>

KPIs & Measurements
Number of appliances recycled, total net cost per appliance recycled (recycle, admin, marketing costs), overall program satisfaction

## Appliance Store

Offer small portable energy efficiency, energy conservation, smart devices, and electrification appliances for purchase from an online and/or brick and mortar location. This recommendation supports renters as identified in the Awareness Survey analysis.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Mid-Term (next 1-2 years)	 Large (>\$250K)	 Market Transformation	 Residential Commercial Empower Community Renter

### SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Electrify transportation &amp; gas-powered equipment</li> <li>- Accelerate building efficiency &amp; electrification</li> <li>- Reduce peak demand &amp; shift energy use away from 4 p.m. to 9 p.m.</li> <li>- Promote customer solar plus battery storage projects to produce energy &amp; support resiliency</li> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- Slow climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> </ul>

### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Create a super engaging online experience</li> <li>- Sell portables that appeal to renter such as surge protectors and window air conditioners</li> <li>- Work with water districts to provide water measures</li> </ul>






Funding
<ul style="list-style-type: none"> <li>- Internal as this is funded by new revenue</li> </ul>

KPIs & Measurements
Number of appliances sold, total net cost per appliance sold (appliance, admin, marketing costs less direct revenue and net new consumption revenue), store visits, overall program satisfaction

## Concierge Service

Offer customers high quality energy conservation, energy efficiency and electrification advice through a number of channels (phone, chat, email, web). Providing new channels for accessing SCP programs will help with low Residential and Commercial Program Awareness.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Short-Term (next 6 months)	 Large (>\$250K)	 Market Transformation Avoided Cost	 Residential Commercial Empower Community Renter

### SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Electrify transportation &amp; gas-powered equipment</li> <li>- Accelerate building efficiency &amp; electrification</li> <li>- Reduce peak demand &amp; shift energy use away from 4 p.m. to 9 p.m.</li> <li>- Promote customer solar plus battery storage projects to produce energy &amp; support resiliency</li> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- Slow climate change</li> <li>- Improve access to information</li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> </ul>

### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Help customers understand and apply for rebates, find contractors, and evaluate quotes</li> <li>- Provide electrification plans</li> <li>- Help customers enroll in CARE/FERA and other programs</li> <li>- Combat contractor dissemination of misinformation about the technologies</li> </ul>









Funding
<ul style="list-style-type: none"> <li>- Internal as this is an avoided cost program</li> </ul>

KPIs & Measurements
Number of contacts, overall program satisfaction, impact on feeling toward electrification

## Shade Trees

Plant shade trees near homes to reduce air conditioning demand and beautify neighborhoods. Not enough trees or shade was identified as a problem in the Residential Survey more so by those who live in Empower Communities.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Mid-Term (next 1-2 years)	 Medium (\$50K - \$250K)	 Avoided Cost	    Residential Commercial Empower Community Renter

### SCP Alignment Areas

Program Strategies	
<ul style="list-style-type: none"> <li>- Accelerate building efficiency &amp; electrification</li> <li>- Reduce peak demand &amp; shift energy use away from 4 p.m. to 9 p.m.</li> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>	
Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- Slow climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> <li>- Not mission aligned, need financial assistance</li> <li>- Not mission aligned, don't need financial assistance</li> </ul>






### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Partner with a tree foundation</li> <li>- Offer trees for existing and new residential and commercial construction</li> <li>- Provide tree drop off and planting instructions</li> </ul>
Funding
<ul style="list-style-type: none"> <li>- Internal as this is an avoided cost program</li> </ul>
KPIs & Measurements
Number of trees planted, total net cost per tree (tree, admin, marketing costs less avoided energy cost), overall program satisfaction

## My Account and Mobile App

Offer an online authentication portal and mobile experience for customers to get personalized information and transact. Providing new channels for accessing SCP programs will help with low Residential and Commercial Program Awareness. These channels are especially valuable to young people, Hispanics, and renter customers of SMUD.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Long-Term (next 5+ years)	 Large (>\$250K)	 Market Transformation	 Residential Commercial Empower Community Renter

### SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities	Customer Types
<ul style="list-style-type: none"> <li>- <a href="#">Improve access to information</a></li> </ul>	<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> <li>- Not mission aligned, need financial assistance</li> <li>- Not mission aligned, don't need financial assistance</li> </ul>

### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Offer program enrollment, program status updates, and EV and storage impact calculators</li> <li>- Provide rate scenario tools using customers actual usage and bill history</li> <li>- Show a better, understandable breakdown of customer bill charges</li> </ul>






Funding
<ul style="list-style-type: none"> <li>- Internal</li> </ul>

KPIs & Measurements
Site and app visits, site and app transactions, overall program satisfaction, usability results

# Outdoor Equipment Rebates

Offer rebates for the purchase of electric outdoor lawn and garden care equipment. This program idea, born from the Informant Interviews, would improve affordability.

## Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 New Program or Service	 Mid-Term (next 1-2 years)	 Medium (\$50K - \$250K)	 Market Transformation	 Residential Commercial Empower Community Renter

## SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Electrify transportation &amp; gas-powered equipment</li> <li>- Educate and engage customers, residents, youth, &amp; workforce within our community</li> </ul>

Customer Priorities
<ul style="list-style-type: none"> <li>- Improve affordability</li> <li>- Slow climate change</li> </ul>

Customer Types
<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> </ul>

## Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Support local yard care businesses</li> <li>- Consider rebates for lawn mowers and blowers</li> <li>- Recycle equipment as part of the Appliance Recycle program</li> </ul>

Funding
<ul style="list-style-type: none"> <li>- Internal as this is funded by new revenue from the additional electric load</li> </ul>






KPIs & Measurements
Number of rebates claimed, total rebate funding provided, total net cost per rebate claimed (rebate, admin, marketing costs less net new consumption revenue), overall program satisfaction



## Expanded Electrification Rebates

Expand electrification rebates and make them available to commercial customers. This would increase program participation. Program participation is low according to the Commercial Survey.

### Key Components

Recommendation Type	Recommendation Phase	Budget Size	Program Type	Customer Target
 Change to Current Program	 Short-Term (next 6 months)	 Large (>\$250K)	 Market Transformation	 Residential Commercial

### SCP Alignment Areas

Program Strategies
<ul style="list-style-type: none"> <li>- Accelerate building efficiency &amp; electrification</li> </ul>

Customer Priorities
<ul style="list-style-type: none"> <li>- Improve affordability</li> <li>- Slow climate change</li> </ul>

Customer Types
<ul style="list-style-type: none"> <li>- Mission aligned, need financial assistance</li> <li>- Mission aligned, don't need financial assistance</li> </ul>

### Operational Considerations

Program Design
<ul style="list-style-type: none"> <li>- Capture more of the market early as these choices only happen every 10-20 years</li> <li>- Help contractors gain more experience with the technologies</li> <li>- Consider heat pump HVAC, heat pump water heater, electric panel upgrade, EV charging stations and circuit incentives to small and medium businesses</li> <li>- Consider a turnkey program for larger businesses</li> </ul>

Funding
<ul style="list-style-type: none"> <li>- Internal as this is funded by new revenue from the additional electric load</li> </ul>

KPIs & Measurements
Number of rebates claimed, total net cost per rebate claimed (rebate, admin, marketing costs less net new consumption revenue), overall program satisfaction