

WHITE PAPER | FEBRUARY 2021

Racial Disparities Among Lower-Income Energy Consumers



ACKNOWLEDGEMENTS: The Smart Energy Consumer Collaborative (SECC) would like to thank Erick Jones, a researcher with the Texas Energy Poverty Research Institute, for his assistance writing this white paper. Erick is currently a PhD student in Operations Research and Industrial Engineering at the University of Texas at Austin. In his research, Erick develops integrated assessment tools to analyze how energy systems, water resources, supply chains, urban space and transportation networks operate in concert to influence economic and environmental well-being. SECC would also like to acknowledge Autry Warren, vice president of customer operations at Oncor, for taking the time to review and provide feedback on a draft of the paper, as well as its public relations partner [Interprose](#).

maru/matchbox

This white paper was developed with Maru/Matchbox, a global consumer intelligence firm enabling leaders to make timely decisions with confidence. We focus on providing actionable and insightful outcomes to utilities, industry associations and other energy-focused organizations. We manage hundreds of insight communities to help understand what motivates consumers and influences markets. Our industry-leading Springboard America community represents the views and opinions of more than 250,000 Americans across numerous demographic and consumer attributes.



Working for consumer-friendly, consumer-safe smart energy

SECC's mission is to serve as a trusted source of information on consumer's views of grid modernization, energy delivery and usage, and to help consumers understand the benefits of smart energy.

[Join @ www.smartenergycc.org](http://www.smartenergycc.org)

TABLE OF CONTENTS

Introduction	4
The Underserved and Their Personas	6
Racial Differences	7
Greater Financial and Household Struggles	7
Higher Concern about Climate Change and the Environment	8
Electricity Provider Contact and Sources of Electricity Program Information	9
Interest in Smart Energy Technologies	11
The Effect of COVID-19 on These Needs	13
Obstacles for Adoption of Smart Energy Technologies	15
Conclusion and Recommendations	16

Introduction

Smart energy technologies are transforming the energy sector; they lower costs, reduce emissions and improve the quality of electricity in the home. However, mainly the affluent benefit from them¹, while lower-income communities, including People of Color (POC) and Black households, are often left out. Previous SECC studies show that lower-income households, who bear the brunt of the negative environmental and air quality impacts², want to use smart energy technologies for the environmental benefits, improved air quality and long-term savings; yet adoption remains low. We commissioned this study to find out why these disparities exist and how energy industry stakeholders can combat them.

We analyzed the differences between POC households and White households because of historic inequalities in American life and wanted to see if these inequalities presented themselves in the electric utility sector as well. This is especially important because of the ongoing energy transition; making sure these groups are able to participate equitably is of the utmost importance. Furthermore, due to historic inequalities specific to Black communities³, we further dive into the data to examine whether discrepancies exist between these consumers and POC households as a whole. We find that inequalities exist and have highlighted where they happen, developed reasons for why and listed possible solutions.

We conducted this research using a quantitative approach that combined conscious evaluations with unconscious motivators to understand customer decision-making. We sampled 1,000 customers who are part of either a low-income household, based on the U.S. Federal Poverty Guidelines for income and household size, or a moderate-income household, defined as higher than the poverty threshold and below \$50,000 of annual income. We asked consumers for various demographic and socioeconomic data, such as race, gender and housing tenure⁴. The survey asked respondents:

- How and when they engaged with their electricity providers.
- Whether they were aware of or participated in financial assistance programs.
- Where they typically received information on saving electricity.
- What they think about climate change and the environment.
- How the COVID-19 pandemic has impacted their households and more.

We then used Implicit Association Testing (IAT) to understand implicit smart energy technology associations and Key Driver Analysis to understand what attributes attract customers to various smart energy technologies, such as smart thermostats, rooftop solar, smart lighting and energy management technology.

Our results show that POC households⁵ and especially Black households have greater financial and household struggles, which include being more likely to be low-income, live in a rented, multi-family unit and have children, and that these have been amplified by COVID-19. As a result, POC households and especially Black households are more worried about their energy bills in the short-term and environmental impacts in the long-term than White households. Since POC households worry about their energy bills more than White households, most of their interactions with utilities are about their energy bills rather than utility outages (as is the case with White households), and they are much more interested in payment plans and deferments than White households.

1 "California's Clean Energy Programs Are Mainly Benefiting the Rich, Study Finds." *Los Angeles Times*, June 25, 2020, www.latimes.com/environment/newsletter/2020-06-25/will-the-rich-continue-to-be-the-main-beneficiaries-of-californias-clean-energy-future-boiling-point.

2 "Disparities in the Impact of Air Pollution." American Lung Association, www.lung.org/clean-air/outdoors/who-is-at-risk/disparities.

3 Auffhammer, Maximilian. "Consuming Energy While Black." Energy Institute Blog, UC Berkeley, June 22, 2020, <https://energyathaas.wordpress.com/2020/06/22/consuming-energy-while-black/>.

4 The data analyzed in this white paper is from SECC's *Understanding Lower-Income Consumers and the Smart Energy Future* report, which can be accessed at www.smartenergycc.org/research.

5 In this white paper, the POC data includes the sample of Black consumers along with other minority groups.

However, because of POC households' greater concern for the environment, they are more likely to not only have an interest in smart energy services but also an awareness of how smart energy technologies work, a willingness to share energy data with interested parties and a knowledge of utility and government incentives for smart energy technologies. Like White households, POC households receive most of their information about energy technologies and programs from utilities, but they also receive information from community organizations, government agencies and nonprofits, increasing their knowledge and interest in smart energy technologies. Yet, they face barriers like high upfront costs, income thresholds for financial assistance and excessive red tape for how to translate interest in smart energy technologies into installed smart energy technologies. This shows that POC households represent an enormous opportunity for stakeholders interested in increasing the adoption of smart energy technologies for efficiency, energy demand reduction or emissions-related reasons if stakeholders address the problem these communities face in accessing the programs that would benefit them.

POC households have higher bills so smart energy technologies would have a larger impact for them; they are more willing to share data so utilities could implement new programs and fine tune what works and what doesn't; and they are more likely to know about and participate in programs they qualify for allowing utilities to implement tailored programs. While all households prioritize household comfort and affordable bills, POC households and especially Black households also prioritize environmental concerns, and stakeholders can help them learn about programs and services that fulfill these values, such as community solar and smart home technologies.

We recommend that stakeholders spend the effort to reach out to underserved communities, especially POC communities, and cultivate their interest in smart energy technologies with tailored messaging and educational materials. These communities need tailored programs for their specific needs and qualification requirements, and by establishing relationships with local stakeholders like community organizations and landlords, these programs can be implemented in a way that addresses the communities' needs and concerns.

SINCE POC HOUSEHOLDS WORRY ABOUT THEIR ENERGY BILLS — AND MOST OF THEIR INTERACTIONS WITH UTILITIES ARE ABOUT THEIR ENERGY BILLS — THEY ARE INTERESTED IN PAYMENT PLANS AND DEFERMENTS.

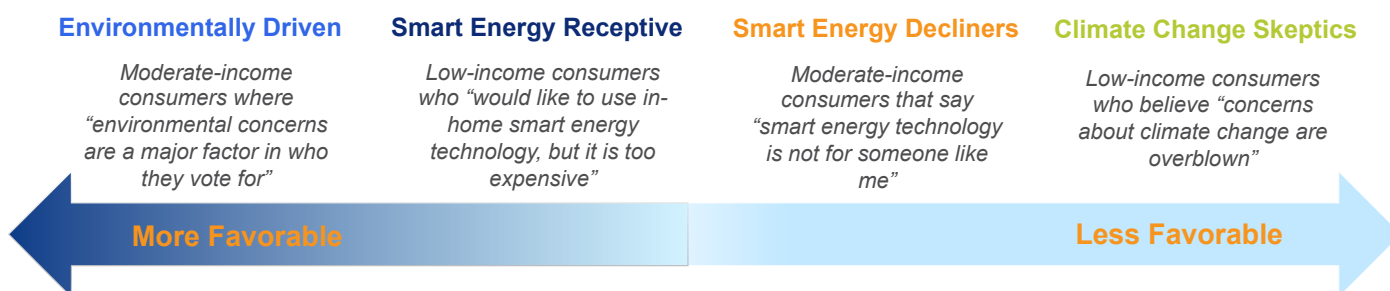


The Underserved and Their Personas

For those who make under \$50,000, our definition of lower-income consumers, the primary driver of their energy decision-making is cost or saving money. Household comfort and environmental concerns come in second and third respectively as the most important energy decision drivers. These findings hold for all races and genders. However, the extent to which these concerns drive interest in smart energy technologies and energy and emissions savings in general varies based on the “persona” of the consumer.

We analyzed the survey data that examined the differences between people’s attitudes and values towards energy and created four personas⁶ based on whether the customer was low- or moderate-income and their implicit agreement to attitudinal attributes. (Figure 1) These personas help categorize the individual attitudes of each customer based on their responses, which helps us identify what is important to each customer and how to tailor programs that meet their needs.

Figure 1: Four Personas Describing Lower-Income Consumers



Customers with Environmentally Driven and Smart Energy Receptive personas favor more environmentally friendly and energy-efficient appliances either for air quality, CO2 emission or other environmental concerns. These personas are mainly differentiated by income, where the low-income Smart Energy Receptive personas are more likely to say that smart energy technologies are desirable but too expensive than the moderate-income Environmentally Driven.

On the other hand, consumers with Smart Energy Decliner or Climate Change Skeptic personas do not favor environmentally friendly or energy-efficient appliances, because they either do not believe it benefits them or they think that concerns around climate change are overblown. These personas are also differentiated by income, where low-income customers are more likely to believe that smart energy technologies wouldn’t benefit them and moderate-income customers are more likely to believe climate change itself is overblown.

Based on these personas, POC households and especially Black households more frequently have the characteristics of the Environmentally Driven and Smart Energy Receptive personas. They tend to be more environmentally sensitive but also tend to have lower incomes. Understanding the personas of these groups and how different types of households fall into these personas can help advocates and other stakeholders tailor programs and educational materials for them in the future.

⁶ Consumer personas are groups of consumers who are threaded together by common attitudinal, behavioral and demographic attributes. They are built by strategically observing and extracting key themes and patterns in the data. By observing trends in the data, a profile can be built for each persona. Personas are different from a segmentation, which are built through statistical techniques, such as cluster analysis.

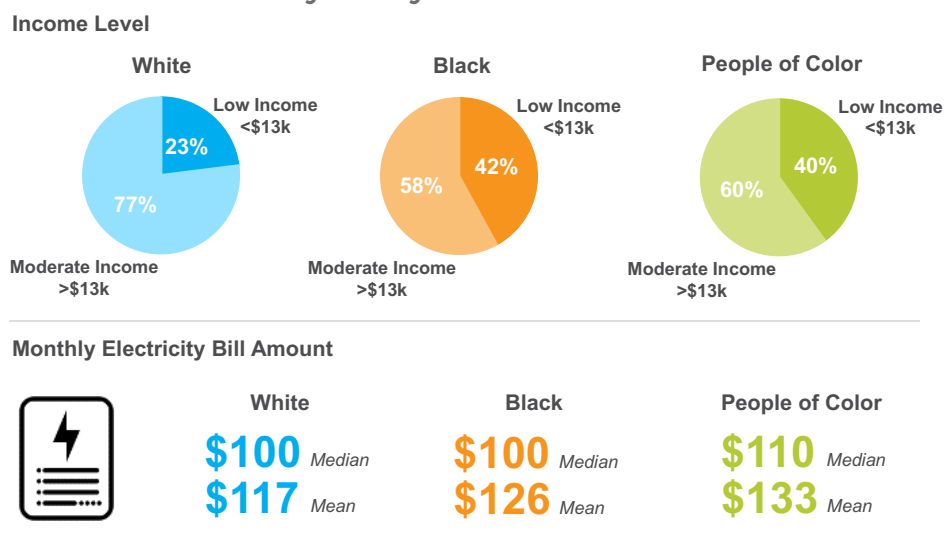
Racial Differences

Greater Financial and Household Struggles

POC households, which in this study also includes Black households, have greater financial and household struggles. These consumers are more likely to be low income, live in a rented, multi-family unit and have children, and these struggles have been amplified by COVID-19. As shown in *Figure 2*, 23% of White survey participants were low income, but that number shoots up to 42% and 40% for Black and POC households, respectively.

Figure 3 shows that while only 35% of White consumers rent their homes, 72% and 64% of Black and POC households do. They are also much more likely than White households to live in multi-family buildings, limiting their ability to control their energy usage. This is reflected in the average energy bills where the overall mean for White households is \$117/month but is \$126 and \$133 for Black and POC households, respectively. (*Figure 2*). Among POC consumers, Black households trend even more low income and are more likely to rent, but they generally pay less for electricity than the POC group as a whole. Simply finding a way to lower POC households' energy bills to the overall average would save these communities millions of dollars and substantially decrease their stress and discomfort over their energy bills.

Figure 2: Breakdown of Income Level and Monthly Electricity Bill by Race

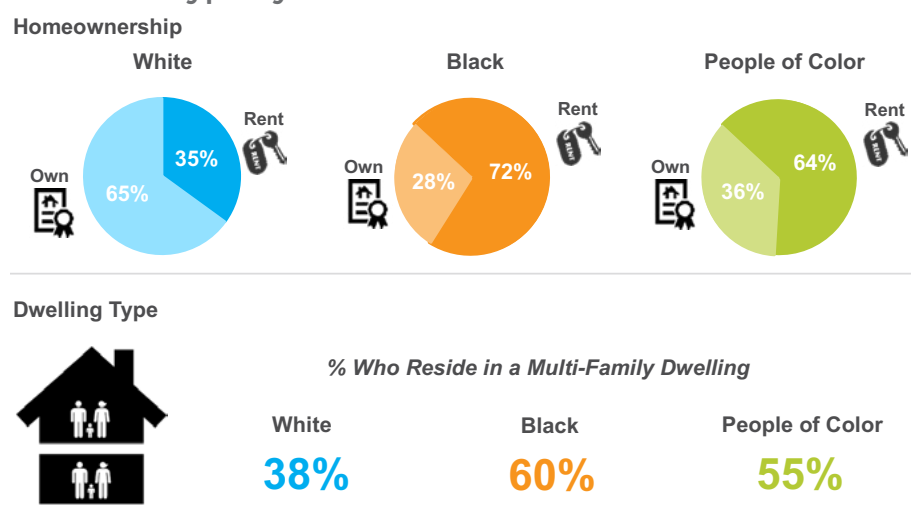


Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)
 Low/Medium Income

Q_BillAmount2. How much is your average monthly electricity bill?

Q_Expenses. Thinking about your current household expenses, which two are you most concerned about being able to pay?

Figure 3: Breakdown of Homeownership and Dwelling Type by Race



Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_HOMEOWNERSHIP. Do you currently rent or own your home?

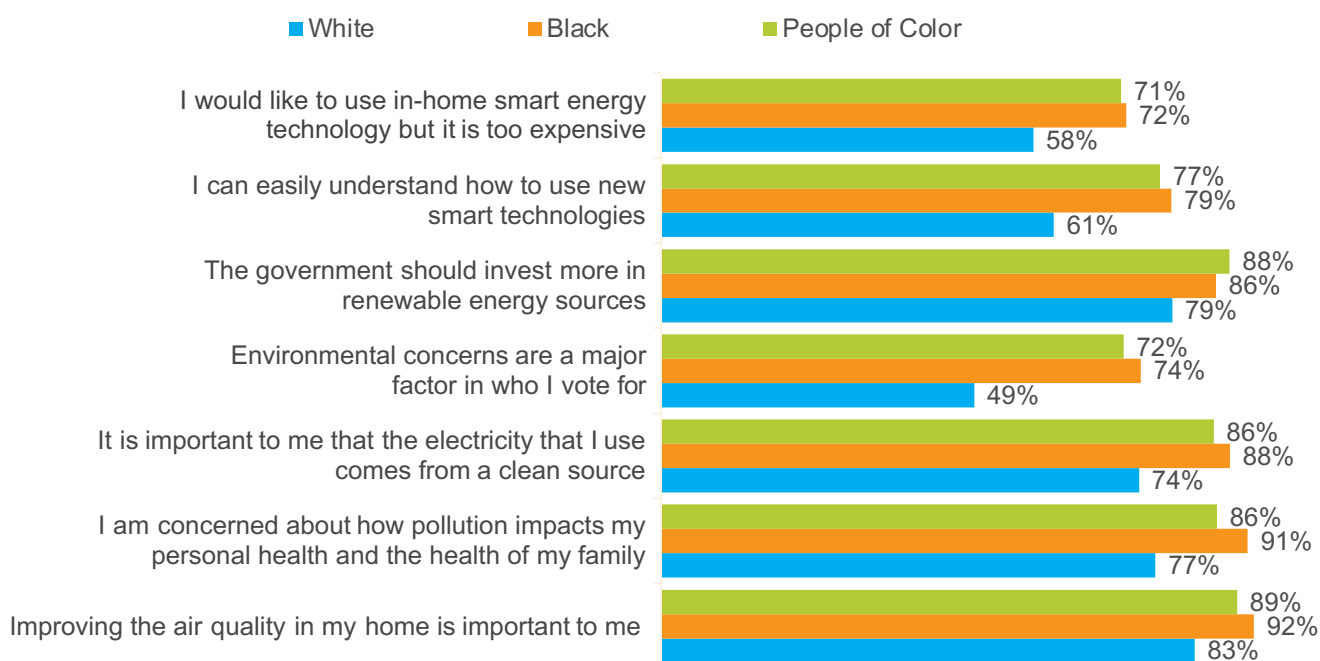
Q_HomeType. Which dwelling type best describes your home?

Q_OtherAge. Thinking about the other people in your household, which the following age categories do they fall into? Please select all that apply.

Higher Concern about Climate Change and the Environment

Even though or maybe because of the fact POC households pay more than White households as shown above, they also are more worried about the environment than White households. Black and POC households are more likely to say the government should invest in renewable energy sources (88% and 86% vs. 79%), vote for representatives based on their environmental concerns (74% and 72% vs. 49%), want electricity from clean sources (88% and 86% vs. 74%), and worry about the health effects of pollution and air quality (91% and 86% vs. 83%). (Figure 4) Further distillation of the data shows that among POC households, Black households are even more environmentally conscious and worried about the negative effects of the environment.⁷

Figure 4: Specific Interests and Concerns of Households by Race



Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_IATEnvironment. ["Agree" Summary] Do you agree or disagree that the statement below describes you?

Generally, lower-income households worry more about the cost of electricity than the environment. However, Black and POC households buck this trend and worry about climate change and the environment in almost equal regards as cost. Since Black and POC households bear the brunt of the negative externalities associated with pollution and are likely to do the same with the negative effects related to climate change⁸, these households are rightly worried. If these sentiments can be harnessed into actionable programs, Black and POC households as a whole could spearhead not just energy efficiency programs but programs designed to lessen the effects of climate change as well.

**UNLIKE WHITE HOUSEHOLDS, BLACK AND POC HOUSEHOLDS
WORRY ABOUT CLIMATE CHANGE AND THE ENVIRONMENT
IN ALMOST EQUAL REGARDS AS COST.**

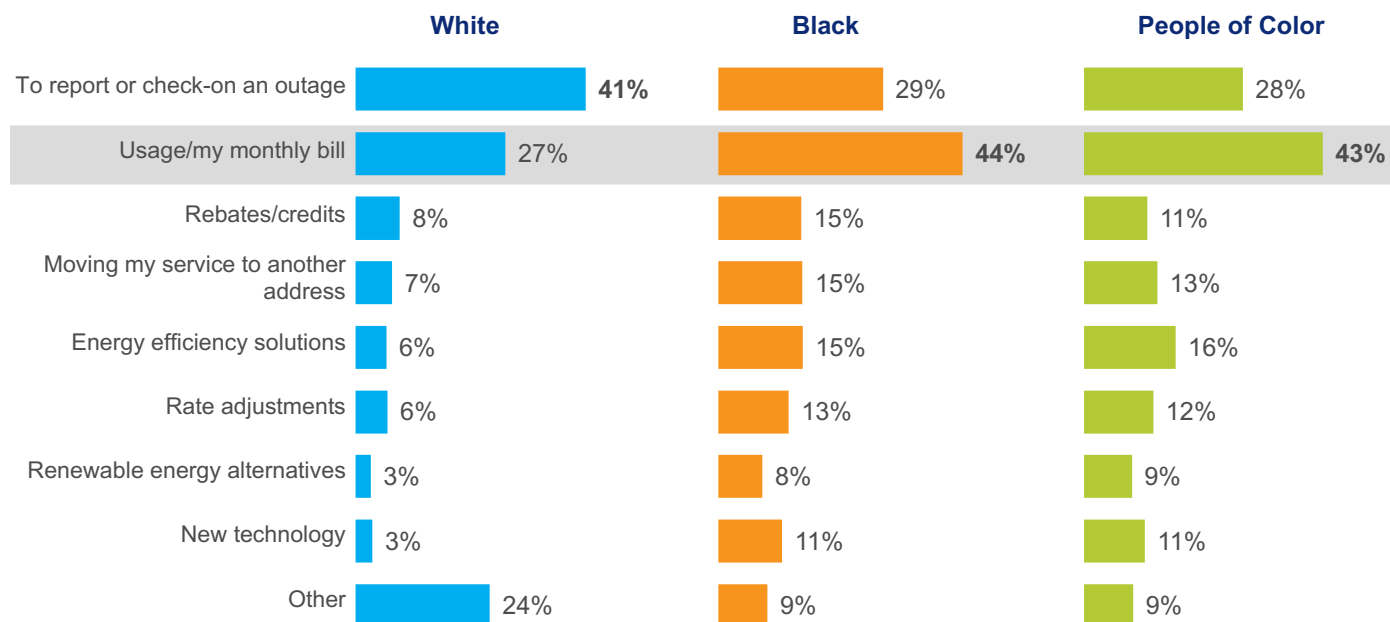
⁷ Note that the POC sample also includes Black consumers.

⁸ McKenna, Phil. "EPA Finds Black Americans Face More Health-Threatening Air Pollution." *Inside Climate News*, March 2, 2018, www.insideclimatenews.org/news/02032018/air-pollution-data-african-american-race-health-epa-research/.

Electricity Provider Contact and Sources of Electricity Program Information

According to our survey data, not only are Black and POC households as a whole more likely to contact their electricity provider than White households, the reasons they contact their electricity provider differ as well. Black and POC households contact their electricity providers more often than White households to inquire about their usage and bill (44% and 43% vs. 27%), rebates (15% and 11% vs. 8%), rates (13% and 12% vs. 6%), energy-efficient solutions (15% and 16% vs. 6%), renewables (8% and 9% vs. 3%), and other new technologies (11% and 11% vs. 3%). (Figure 5)

Figure 5: Reasons for Contacting Utilities by Race



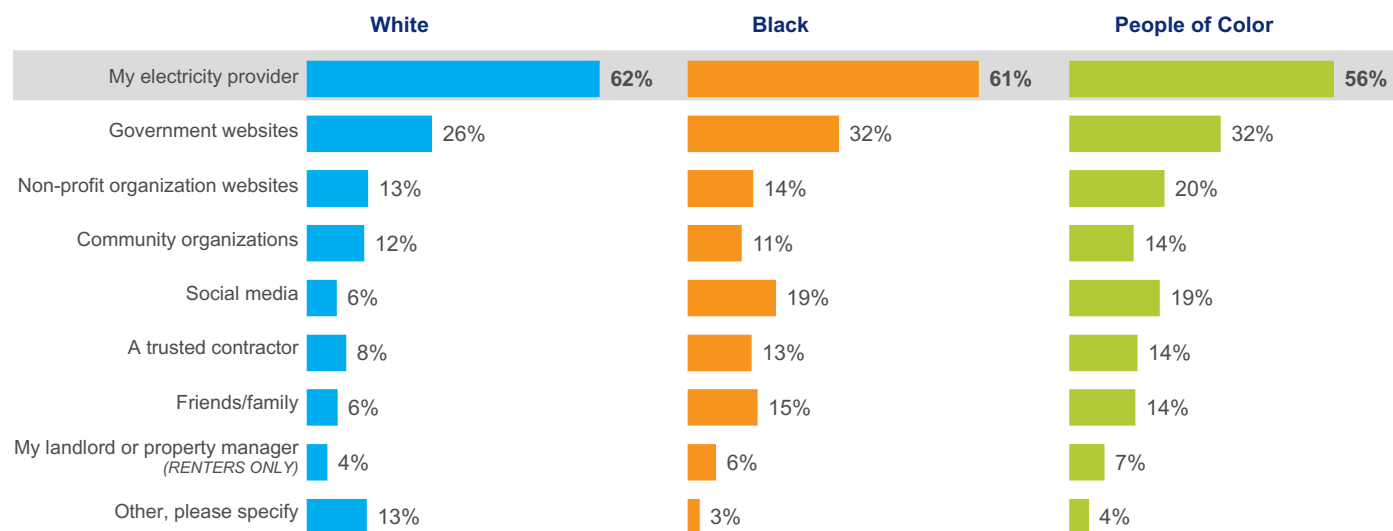
Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_ELECTCO_ENGAGEMENT. And have you had contact with your electricity provider about any of the following in the past two years?

While all households get the vast majority of their energy-saving information from their electricity providers, Black and POC are more likely than White households to receive electricity savings information from the government websites (32% and 32% vs. 26%), nonprofits (14% and 20% vs. 13%), social media (19% and 19% vs. 6%), friends and family (15% and 14% vs. 6%), or a trusted contractor (13% and 14% vs. 8%) as shown in Figure 6 below. Interestingly, Black households receive less information from nonprofits than other POC households. Nonetheless, the extra contact POC households have with their electricity providers and their varied sources of information might help make them more knowledgeable about energy-saving or smart energy technologies than the average household.

It's important to note here that Black and POC consumers appear to rely on their personal networks more heavily than White consumers. As these consumers are more likely to look to social media and friends and family, stakeholders can use testimonials, social media posts and other methods to boost awareness and participation in programs and services.

Figure 6: Source of Electricity Program Information by Race



Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)
 Q_EESources. When looking for ways to save money on electricity, where do you typically go for information?



BLACK AND POC CONSUMERS ARE MUCH MORE LIKELY TO LOOK TO SOCIAL MEDIA FOR INFORMATION ABOUT SAVING ELECTRICITY AT HOME COMPARED TO WHITE CONSUMERS.

Interest in Smart Energy Technologies

Black and POC households have a higher interest in every smart energy technology tested in the survey than the average household. As shown in *Figure 7*, Black households, because of their increased focus on their electricity bill, are especially interested compared to White Households in technologies that manage their energy usage (42% vs. 20%), smart leak protection (42% vs. 26%), and surge protection (45% vs. 33%). POC households, who are also worried about their energy bills, are especially interested compared to White households in smart surge protection (46% vs. 33%), rooftop solar (41% vs. 30%), and community solar (42% vs. 25%). Furthermore, Black and POC consumers are also more interested than White households in smart technologies like smart thermostats (39% and 36% vs. 21%) and smart lighting (37% and 35% vs. 17%). The figure below measures only the households that are “very interested”, and even more Black and POC households are “somewhat interested” in these smart energy products.

Figure 7: Interest in Smart Energy Products by Race

% Very Interested	Smart Thermostat	Smart Appliances	Smart Lighting Controlled via Phone	Rooftop Solar Panels	Community Solar	Smart Leak Protection	Smart Surge Protection	Technology to Manage Your Energy Usage
White	21%	20%	17%	30%	25%	26%	33%	20%
Black	39%	35%	37%	35%	38%	42%	45%	42%
People of Color	36%	33%	35%	41%	42%	39%	46%	38%

Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

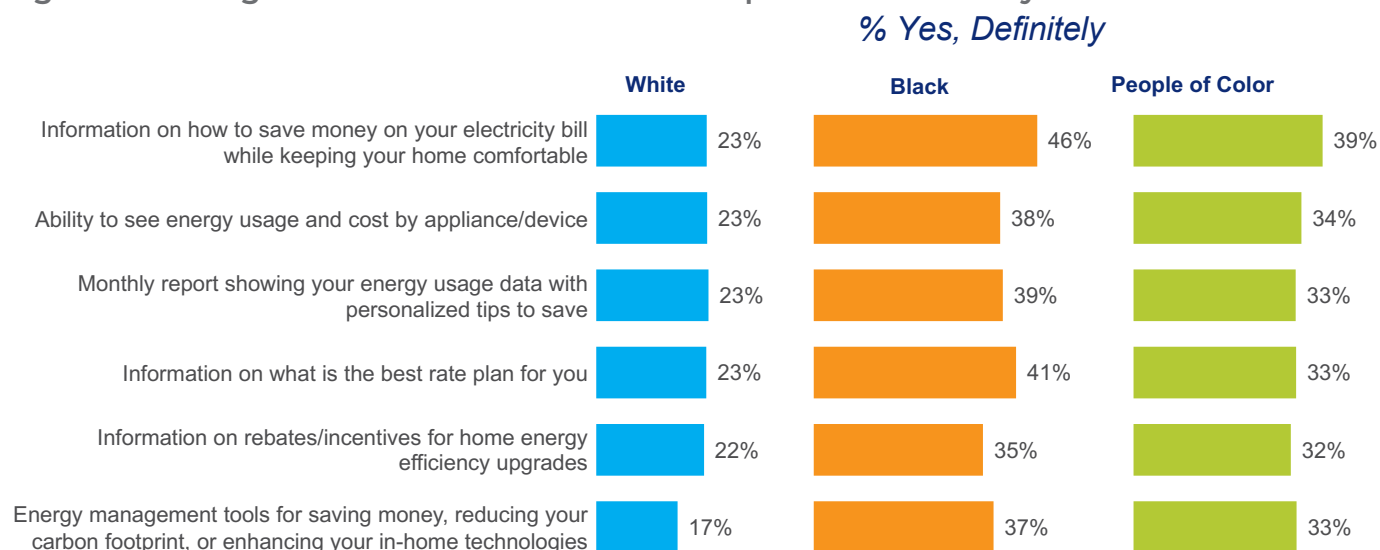
Q_ELECTRO_INTEREST. And how interested are you in the following products and services if you were to receive financial assistance from your electricity provider?

BLACK AND POC CONSUMERS ARE SIGNIFICANTLY MORE INTERESTED THAN WHITE CONSUMERS IN TECHNOLOGIES LIKE SMART THERMOSTATS AND SMART LIGHTING.



Both Black and POC households have a much higher willingness to share energy data with interested parties than White households, especially information on how to save energy while keeping their homes comfortable (46% and 39% vs. 23%). (Figure 8) Black and POC households are especially interested compared to White households in shared rate plan information (41% and 33% vs. 23%) and information on rebates and incentives (35% and 32% vs. 22%). Even with the higher interest among POC households as a whole, Black households stand out with their willingness to receive information on how to save energy (18% more likely than POC households) and information about the best rate plans (24% more likely than POC households). These differences among POC households might explain why Black households who are more likely to have lower incomes and rent pay less for their electricity than POC households as a whole.

Figure 8: Willingness to Share Information for Specific Benefits by Race

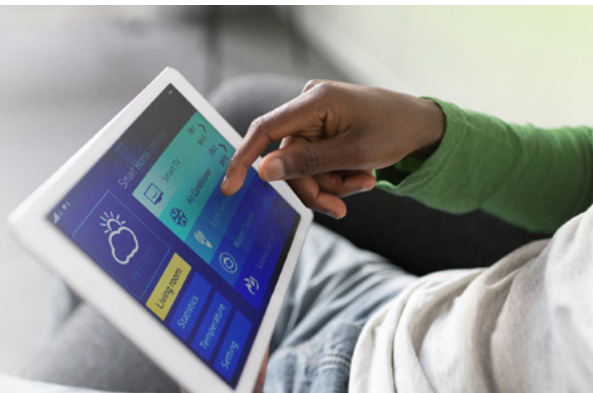


Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_DataSharing. Would you be willing to allow your electricity provider to share your usage information with a company that analyzes energy usage information if you were to receive each of the following in return?

These inclinations make Black and POC households excellent candidates for programs that encourage smart energy technologies, especially ones that lower their energy bills. Not only would they be more willing to participate in these programs and adopt smart energy technologies, they also would be more willing to share their information with utilities. This information could be used to further refine and tailor the programs utilities create — information that is hard to come by in existing programs. Stakeholders who want to increase smart energy adoption and utilities who want more information on how to improve their programs would be wise to leverage the enthusiasm of Black and POC households for smart energy technologies.

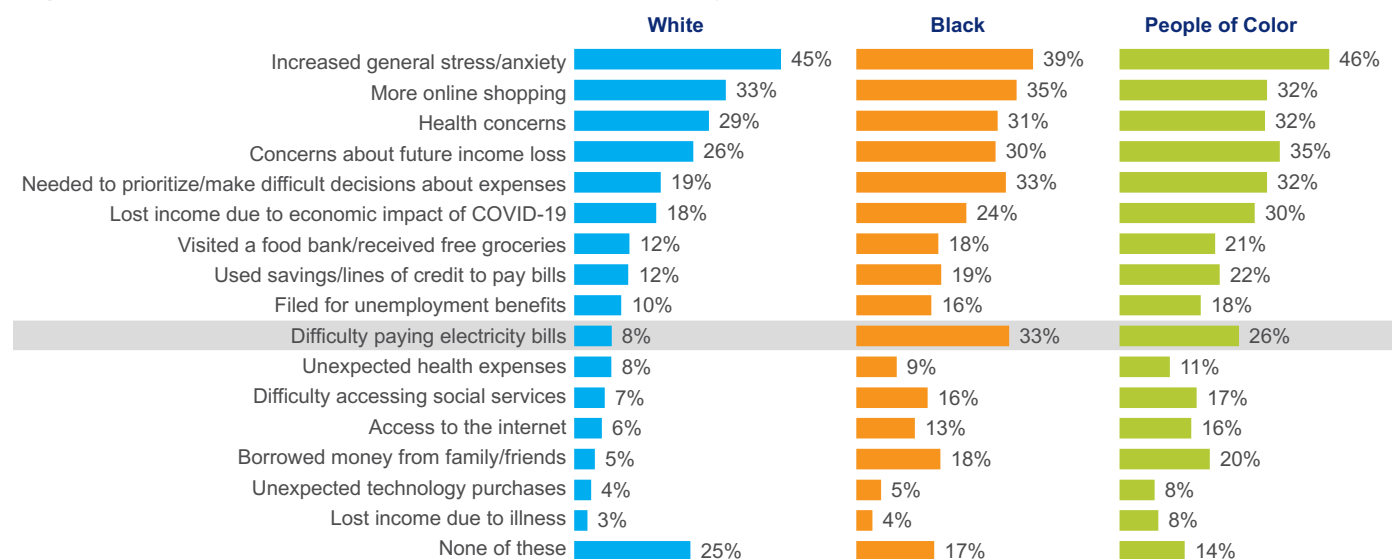
**BLACK AND POC HOUSEHOLDS
HAVE A MUCH HIGHER WILLINGNESS TO
SHARE ENERGY DATA WITH INTERESTED
PARTIES THAN WHITE HOUSEHOLDS.**



The Effect of COVID-19 on These Needs

As shown in *Figure 9*, the COVID-19 pandemic has increased general stress and anxiety in all households and forced them to make difficult choices. All households have increased concerns about their health, income and savings. However, Black and POC households are especially concerned compared to White households with paying their electricity bills (33% and 26% vs. 8%), and Black consumers are 27% more likely to be concerned than all POC. Both Black and POC consumers are more likely to have filed for unemployment benefits (16% and 18% vs. 10%) or to have borrowed money from family and friends (18% and 20% vs. 5%). Interestingly, even though Black households are slightly less likely than POC households to have filed for unemployment or to have asked to borrow money from their family or friends, they are much more likely to have had difficulty paying bills.

Figure 9: Impact of COVID 19 on Household by Race

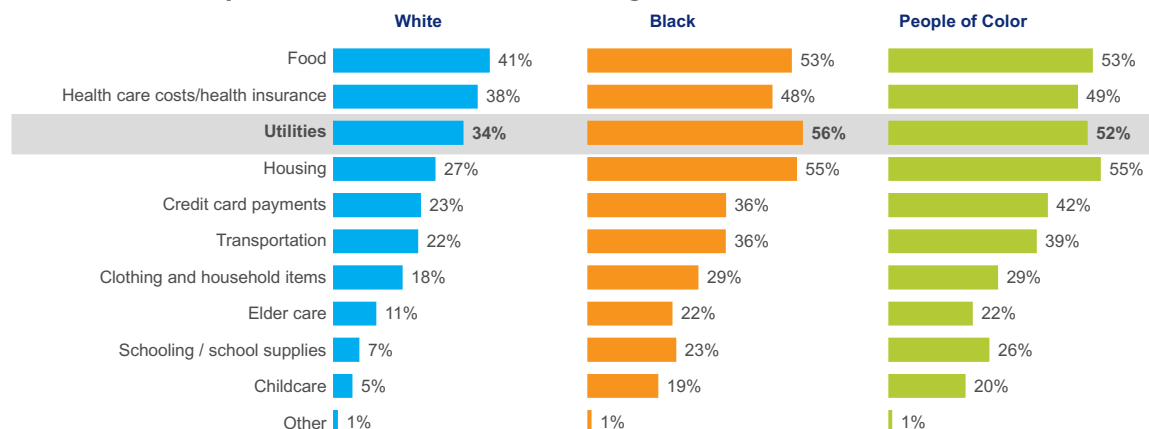


Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_CovidImpact. And has COVID-19 impacted you and your household in any of the following ways? Please select all that apply.

The pandemic has increased all households' concerns about a variety of expenses, including food, health, care and housing. (*Figure 10*) However, Black and POC households are significantly more concerned with their utility bills compared to White households (56% and 52% vs. 34%), which may be due to their higher energy burdens⁹.

Figure 10: Concerns About Expenses Due to COVID-19 by Race



Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

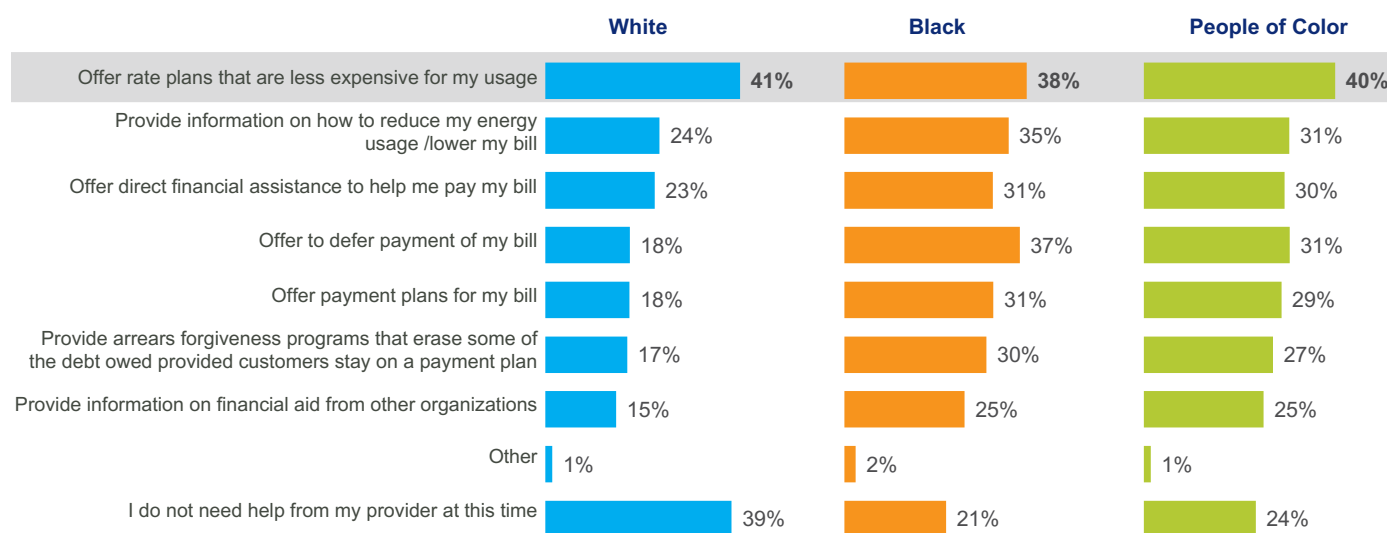
Q_ExpensesCovid. Are you more or less concerned about being able to afford each of the following expenses due to COVID-19?

⁹ "Report: Low-Income Households, Communities of Color Face High 'Energy Burden' Entering Recession." ACEEE, Sept. 10, 2020, www.aceee.org/press-release/2020/09/report-low-income-households-communities-color-face-high-energy-burden.

Interestingly, *Figure 11* shows that Black and POC households are less likely to believe that electricity providers providing plans with lower rates will help than White households (38% and 40% vs. 41%). Nonetheless, they are much more interested in financial assistance either through payment plans (31% and 30% vs. 23%), deferments (37% and 31% vs. 18%), or forgiveness (30% and 27% vs. 17%) than White households. Black and POC households are also much more likely to be interested in information on how to reduce their energy usage (35% and 31% vs. 24%).

Diving deeper into the data, Black households are more interested in assistance than POC households as a whole; in particular, they are 20% more likely to be interested in deferments than POC households. Utilities should be mindful of these concerns, how they affect different communities and how they will affect both consumers and utilities in the future.

Figure 11: How Electricity Providers Can Help by Race



Base: All Respondents (n=1307); White (n=758), Black (n=210), People of Color (n=549)

Q_CovidHelp. What, if anything, can your electricity provider do to help during this time? Please select all that apply.



BLACK AND POC HOUSEHOLDS ARE SIGNIFICANTLY MORE CONCERNED WITH THEIR UTILITY BILLS COMPARED TO WHITE HOUSEHOLDS, WHICH MAY BE DUE TO THEIR HIGHER ENERGY BURDENS.

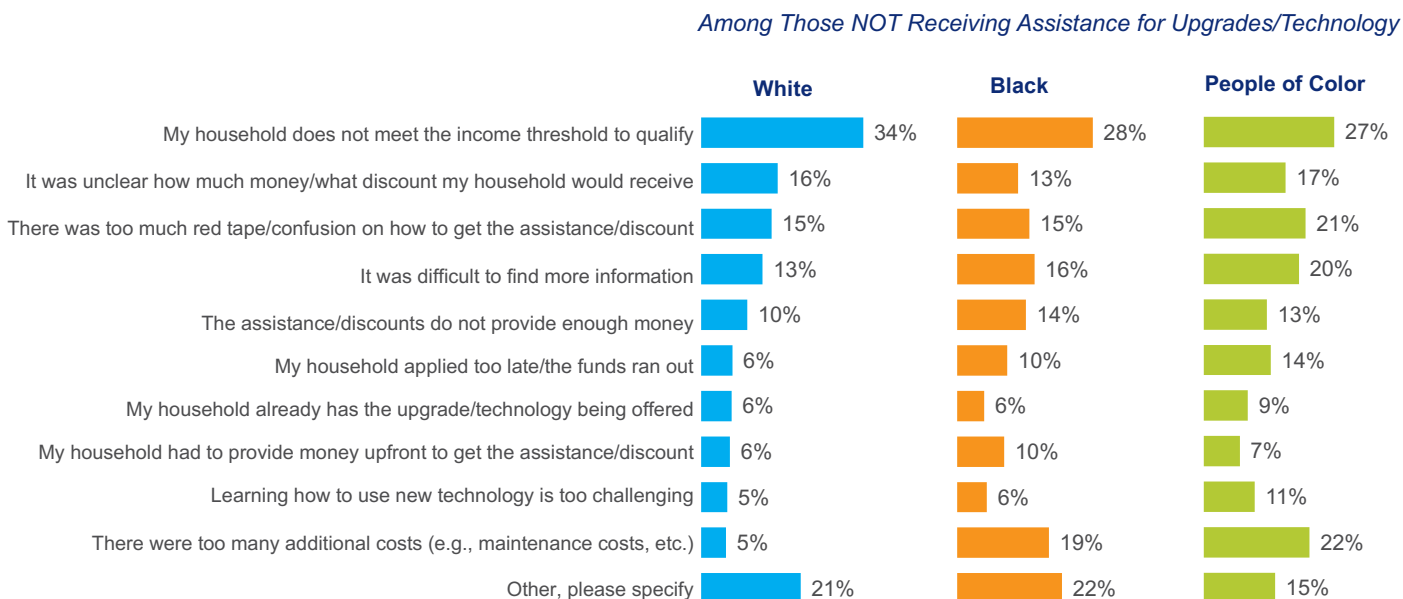
Obstacles for Adoption of Smart Energy Technologies

Since Black and POC households skew lower income, they are much more likely to be aware of financial assistance programs and to participate in those programs. As mentioned earlier, they also are more likely to contact their utilities about energy bills and rates, so it follows that they would be more likely to be aware of and use financial assistance programs. However, they still face barriers in adopting smart energy technologies.

While all households' main obstacle for adopting financial assistance is not meeting the income threshold, Black and POC households are much less likely than White Households to have that be a problem (28% and 27% vs. 34%). (Figure 12) Black and POC households are also much more likely to be dissuaded by additional costs like maintenance (19% and 22% vs. 5%) and informational barriers like having a hard time getting information in general (16% and 20% vs. 13%). They also are more likely to be dissuaded by the assistance being too small (14% and 13% vs. 10%), the funds running out earlier than they could apply (10% and 14% vs. 6%), and higher upfront costs (10% and 7% vs. 6%). Interestingly, POC households also ran into learning curve issues (i.e., the challenge of learning how to use new technologies) that were not as prevalent with Black households (11% vs. 6%).

Regardless, Black and POC households want to adopt these technologies but run into a variety of barriers preventing them from doing so. If utilities want their programs to be successful in these communities, they must find ways to tailor them to the needs of these households. In general, reducing red tape and providing clear information would help adoption among all households, especially Black and POC households. However, finding ways to increase assistance and reducing, if not totally eliminating, maintenance and upfront costs is likely to dramatically help consumers adopt new programs that meet their needs.

Figure 12: Barriers to Financial Assistance by Race



Base: Among Those NOT Receiving Assistance for Upgrades/Technology: All Respondents (n=333); White (n=171), Black (n=78), People of Color (n=162)
 Q_SmartBarriers. Why are you not using some of the financial assistance or discounts you are aware of to help pay for energy efficiency upgrades/technology for your home?
 Please select all that apply.

Conclusion and Recommendations

POC households, especially Black households, have specific characteristics and concerns that make them both more amenable to smart energy technology adoption and harder to engage with existing programs. These households trend lower income, are more likely to rent and have children, but are also more likely to be literate in existing financial assistance programs and smart energy technologies. Furthermore, POC households, especially Black households, are much more environmentally conscious and more willing to participate and share data with smart energy technology programs. However, they have low cost tolerances, and any upfront or maintenance costs dissuade them from participating in any energy efficiency or smart energy technology program.

The COVID-19 pandemic has exacerbated the concerns of all households in many areas, but especially electricity bills. Cost-conscious POC households still want to participate in smart energy programs but have been hit hard, especially economically, and are worried about paying their utility bills. These households seek financial assistance in paying their normal bills and have little appetite for investing limited money in smart energy technologies. Nonetheless, stakeholders could help these households invest in smart energy technologies that would help them reduce their energy bills and emissions and improve air quality as well. Since these households are more likely to live in multi-family units, engaging a landlord and providing incentives to improve their appliances could save these households thousands of dollars. Previous SECC research indicates a willingness of consumers to approach landlords with energy efficiency upgrades.

We recommend that utilities and other stakeholders tailor programs with feedback gained from reaching out to underserved communities. In general, lower-income households have lower satisfaction rates with their electricity providers; engaging with this population and tailoring programs for them could increase customer satisfaction for POC and Black households. Furthermore, utilities can also use engagement opportunities to help underserved customers understand the benefits of smart energy technologies, find what information gaps are missing and help them navigate the red tape.

Since POC households are more likely to rent and have a lower cost tolerance (Black households even more so), we also recommend engaging with other stakeholders, such as landlords and community organizations, that could help these struggling households. While low-income households might not have the money to invest in these technologies, stakeholders can work with landlords and community organizations who might be more willing to invest in the initial and ongoing maintenance costs of smart energy technologies, especially if they benefit as well. This would allow POC households who have strong interest in these technologies to benefit from them and for utilities to benefit from the data they are willing to share. We recommend creating pilot programs that split the costs among multiple stakeholders like landlords, community organizations and utilities that allow underserved households the ability to be a part of smart energy technology programs.

We have found through this research and various others that partnerships between utilities and local organizations in underserved communities yield the best results. Underserved communities, POC communities and especially Black households have specific characteristics, needs and wants, and utilities must engage with them to find out how their programs can provide mutual benefit. This study identified these characteristics, needs and desires and provided potential roadmaps for utilities and other stakeholders to follow. We encourage the creation of new programs that increase adoption of smart energy technologies in underserved communities, especially the Black and POC communities, to help them reduce their energy bills, improve their air quality and do their part to help the environment.

Key Takeaways and Recommendations for Stakeholders

Energy assistance programs should be targeted to the challenges faced by Black and POC households.



Black and POC households disproportionately reside in multifamily rental dwellings with children, and these consumers face higher electricity bills and unique challenges due to their circumstances. Energy assistance programs need to incorporate landlords and understand what works for renters in a shared dwelling in order to be successful.

Barriers, such as upfront costs and information, need to be addressed to improve adoption of smart energy programs and technology.



Black and POC consumers have a strong interest in smart energy technology, significantly stronger than White consumers. However, upfront costs and lack of information are barriers faced more often by POC households. Assistance programs need to address these barriers by developing specific pilot programs with incentives/rebates to reduce costs. Local organizations can also help play a role to socialize these programs within the community.

Partnerships should be developed with community organizations, technology companies and landlords to deliver successful programs.



Partnerships are key to delivering successful assistance programs, especially for Black and POC consumers. As mentioned, landlords are important partners due to high rental rates. Community organizations and government are also important. These are central places of engagement and information on assistance programs for POC households. With costs continuing to be a barrier to smart energy technology, it is important for stakeholders to also include technology companies as a part of programs to help reduce costs.



SMART ENERGY
CONSUMER COLLABORATIVE

Working for consumer-friendly, consumer-safe smart energy

SECC's mission is to serve as a trusted source of information on consumer's views of grid modernization, energy delivery and usage, and to help consumers understand the benefits of smart energy.

Join @ www.smartenergycc.org