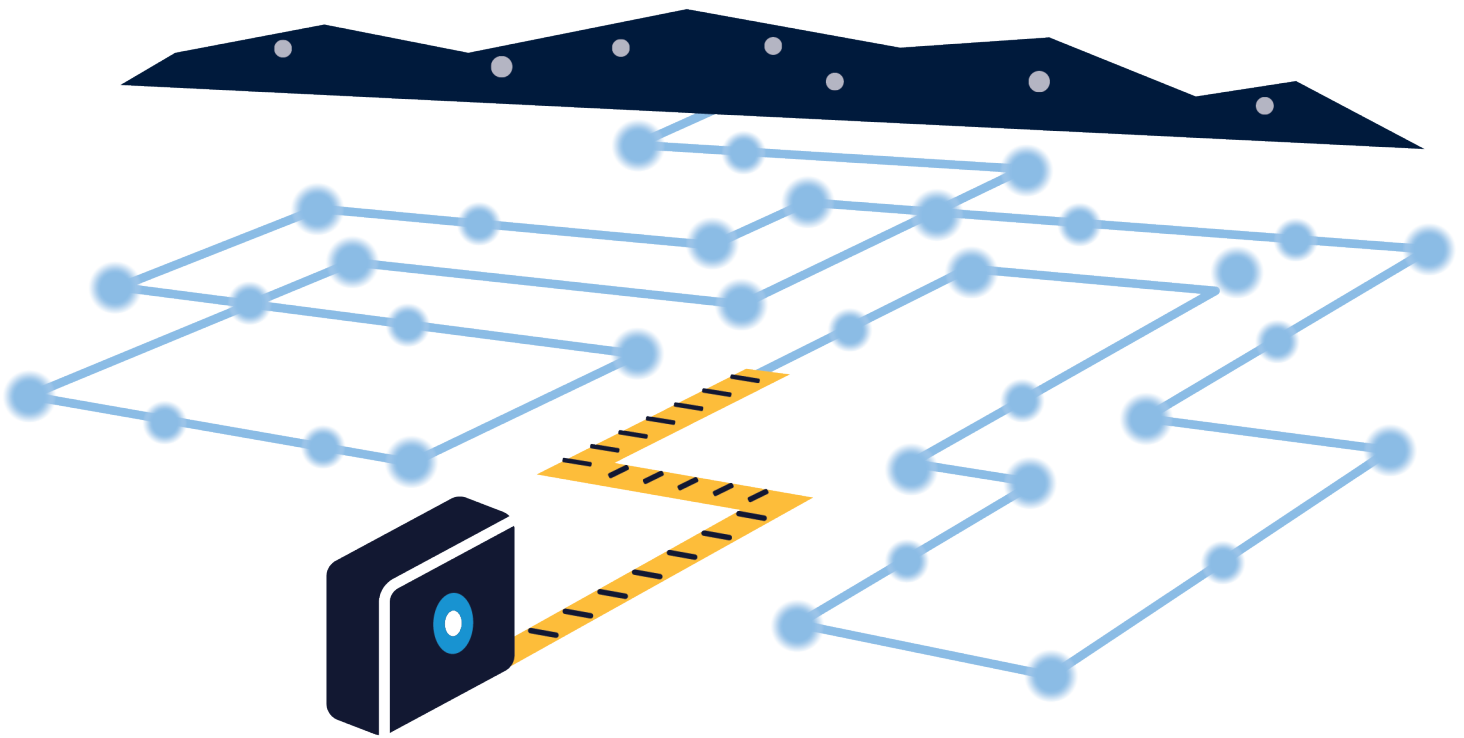




Marketing, Education & Outreach Effectiveness Assessment: 2021 Annual Performance Report

Final Report

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Table of Contents

1. Executive Summary	6
2. Introduction	10
3. Summary of Research Activities and Results	14
3.1 Residential Tracking Survey.....	14
3.2 Diary Study.....	34
3.3 Web Usability Study.....	36
3.4 Website Effectiveness Assessment.....	38
3.5 Assessment of Partnerships with Community-Based Organizations.....	43
4. Conclusions and Recommendations	52
Appendix A. Data Collection Instruments	57
Appendix B. Diary Study Report.....	58
Appendix C. Web Usability Study Report.....	59
Appendix D. Flex Alert Tracking Survey Reports	60

Table of Tables

Table 1. Mentions of Keep it Golden and EUC in Unaided Brand Awareness Responses over Time	21
Table 2. Description of Metrics Used to Assess Website Effectiveness	38
Table 3. Count of Clicks for Top EUC Website CTA Buttons (February-August 2021).....	40
Table 4. Overview of Data Collection Activities.....	43

Table of Figures

Figure 1. Examples of Key 2021 EUC Campaign Assets	11
Figure 2. Summary of EUC Performance Across Key Metrics.....	16
Figure 3. Unaided Awareness of EUC Over Time	18
Figure 4. Aided Awareness of EUC Relative to Other Energy Brands Over Time	19
Figure 5. Aided Awareness of EUC and Flex Alerts.....	20
Figure 6. Respondents’ Familiarity with the EUC Brand	20
Figure 7. Percentage of Respondents Who Recognize Keep it Golden and EUC Logos.....	22
Figure 8. Keep it Golden Logo Salience Among those Aware of Keep it Golden.....	23
Figure 9. Need for EUC, Relevance of EUC Mission, and Trust in EUC (Showing ‘A great deal/Quite a bit’)....	23
Figure 10. Respondents’ Concern Over Managing Their Energy Use	24
Figure 11. Respondents’ Perceived Importance to Do Their Part to Make California Energy Efficient.....	25
Figure 12. Respondents Who ‘Strongly Agree’ with Social Norms Statements	26
Figure 13. Respondents’ Energy Self-Efficacy.....	27
Figure 14. Opportunity for Home Energy Efficiency Upgrades.....	28
Figure 15. Opportunity for Energy Efficiency Behavior Changes	28
Figure 16. Likelihood of Making Home Energy Efficiency Upgrades.....	29
Figure 17. Likelihood of Making Energy Efficiency Behavior Changes	29
Figure 18. Percentage of Respondents Who Could Change ‘A lot of things’ or ‘Some things’ to Make Their Home More Energy Efficient	30
Figure 19. Percentage of Respondents Who Could Change ‘A lot of things’ or ‘Some things’ about Their Day-to-Day Actions to Save Energy	30
Figure 20. Percentage of Respondents Who are ‘Extremely likely’ to Make Their Home More Energy Efficient in the Next 12 Months.....	31
Figure 21. Respondents Who are ‘Extremely likely’ to Change their Day-to-Day Energy-Use Behavior.....	31
Figure 22. Respondents’ Frequency and Future Likelihood of Sharing Energy-Saving Tips	32
Figure 23. Respondents Who Live in Ways that Reduce Energy Use	33
Figure 24. Respondents Who Take EUC-Targeted Actions ‘Almost Always’	33
Figure 25. EUC Website Visitors and PA Conversions by Month (April 2020-August 2021)	40
Figure 26. EUC Website and “Join the Movement” Metric (February–August 2021).....	41
Figure 27. Count of Unique Page Views for Top EUC Web Pages by Month (February 2021–August 2021) ..	42
Figure 28. Percentage of Site Visitors by Device Type.....	43

Figure 29: CBO Activities to Provide EUC Messaging to Constituents45

Figure 30: Example of Social Media Post Included in CBO Newsletter47

Figure 31: Frequency of the Most and Least Helpful EUC Resources (n=10).....49

1. Executive Summary

This report presents results from the three-year Marketing, Education & Outreach (ME&O) Effectiveness Study conducted by Opinion Dynamics to evaluate the performance of the Energy Upgrade California (EUC) Campaign in meeting its stated objectives and program performance metrics. In 2012, the CPUC established EUC as the brand for statewide ME&O activities to increase ratepayer awareness of energy efficiency (EE), demand response, and distributed generation, and to offer ways for consumers to better manage their energy use. The results presented in this report focus on the 2021 campaign year. As 2021 marks the end of the five-year EUC Campaign cycle, Opinion Dynamics also provides data points and an interpretation of results prior to 2021 where available to provide a better picture of how the EUC Campaign has performed over time.

Methodology

The findings from this study are based on the following research activities conducted throughout the 2021 campaign year:

- Monthly **residential tracking surveys** of 500 Californians fielded using a YouGov web panel¹ to measure EUC performance across established key metrics including customer awareness of the overall EUC brand, the EUC Keep it Golden slogan, EUC and Keep it Golden logos, as well as customer attitudes, motivations, and intent to make energy-efficient home upgrades and behavior changes.
- A **web usability study** of the EUC website with a purposive sample of 10 Californians to assess EUC website effectiveness against its goals of (1) creating strong brand connection through educating and motivating customers to take energy-saving actions; (2) housing current and evergreen content including educational materials and tools; and (3) lead generation by referring interested Californians to program administrator (PA) sites. Study participants navigated the website and completed a series of open-ended exploratory tasks to reveal website performance against objectives.
- An **assessment of EUC website performance** which included reviewing and analyzing the website performance metric data (e.g., visitation, engagements, pageviews) with a focus on the period from February to August 2021 to offer insights on the role and effectiveness of the website in driving users to take energy-saving actions.
- An in-depth online qualitative **diary study**, to understand the underlying nuanced relationship Californians have with energy and characterize motivations for energy conservation in Californians' everyday lives and in times of crisis. For this study, 24 participants provided their thoughts on energy conservation and messaging over eight days through an online platform.
- An **assessment of partnerships with community-based organizations (CBOs)** including interviews with CBO staff, observations of CBO events, and a content analysis of newsletters sent to CBOs to document how CBOs engaged with EUC, understand CBO perceptions of EUC resources and partnering with EUC, and provide recommendations for engaging with CBOs to support future statewide ME&O messaging.

¹ YouGov, a public opinion polling firm, maintains a US panel of 2 million respondents. YouGov used non-probability opt-in methods to ensure the respondents selected to complete the residential tracking surveys were representative of the California population based on gender, age, race, homeownership, education, whether the respondent is Spanish-speaking, and income. For more information on YouGov's panel, please visit: <https://today.yougov.com/about/about-the-yougov-panel/>.

Summary of Results

Opinion Dynamics synthesized key findings from the five research activities to identify several recommendations for the CPUC and the Campaign implementer, Doyle Dane and Bernbach (DDB), to consider. Given that the EUC campaign ended in 2021, Opinion Dynamics also highlighted lessons from this research that can be applied to the Flex Alert Campaign designed to encourage conservation during periods of peak demand on hot days in the summer and other future ME&O efforts. These key findings and recommendations are summarized below.

- **Key Finding:** EUC branding, including the campaign slogan, Keep it Golden, has achieved growth in aided awareness as 41% of Californians reported recognizing the Keep it Golden slogan in September 2021—a substantial increase from 12% in June 2019 when EUC began using Keep it Golden branding. At the same time, less than 40% of Californians that recognize the Keep it Golden slogan, associate it with energy conservation which indicates there is room to better educate Californians about what the brand represents.
- **Key Finding:** EUC Campaign performance metrics related to general energy conservation have stayed constant in recent years, while there is a more urgent need to educate and communicate with Californians about Flex Alerts, Public Power Safety Shutoffs (PSPS) due to wildfire risks, and other energy-related emergencies. High percentages of Californians think it is important to do their part to make California more energy efficient, believe that saving energy is the right thing to do, and live in ways that reduce their energy use. Results for these attitudinal and behavioral metrics have remained consistent over the past two years. These findings make sense given that California has been a leader in energy efficiency for decades and Californians have been exposed to energy conservation calls to action since the 1970's. Conversely, results from the Flex Alert tracking surveys demonstrate that Californians have low awareness and understanding about topics related to Flex Alerts and California electricity reliability. For example, over half of Flex Alert tracking survey respondents (55%–61%, depending on wave) incorrectly believe that innovations in battery storage have made it possible to store enough energy generated by solar panels when the sun is shining to completely power the electricity grid when it gets dark.
 - **Recommendation:** Marketing best practices suggest that consistent branding helps to build customer awareness and brand loyalty. As such, after the EUC Campaign focused on energy conservation sunsets, we recommend that the CPUC develop the EUC and Keep it Golden brands into a one-stop-shop for energy information that can evolve with the needs of customers and the California energy system. Clearly communicating the purpose of this new one-stop-shop EUC in future marketing assets may also help address Californians' confusion about EUC and build trust in the brand.
 - **Recommendation:** In the near term, consider focusing future Statewide ME&O funding on efforts that help Californians understand and react to current topics that affect their safety and electricity system reliability including Flex Alerts, PSPS, and emergency preparedness efforts.
- **Key Finding:** There is a need for one centralized resource which Californians can use to understand the real-time status of energy and emergency related issues. Diary Study participants described wanting information to prepare for outages or emergencies (such as wildfires) but needing to visit multiple websites to find information, only receiving vague information about the length and timing, or not receiving any notification.
 - **Recommendation:** Consider creating a centralized website that describes outage, wildfire, and other energy- and weather-related risks, searchable by zip code or region.

- **Recommendation:** Consider developing nuanced messaging efforts that clearly explain what Flex Alerts, PSPS, and Time of Use (TOU) rates are and the differences between them, where appropriate. The CPUC could help facilitate the dissemination of this information by creating infographics and other content that communicate the differences between these interventions for organizations such as the PAs and CBOs to share with their constituents through emails, bill inserts, and social media.
- **Key Finding:** Diary study participants report their nightly routines and habits make it hard to shift use during peak periods and/or during Flex Alerts, and they are leery of allowing their appliances and air conditioners to be remotely controlled by their utility. Certain demand response actions such as shifting energy-intensive meal prep and leisure activities from the peak periods of 4 p.m. to 9 p.m. are likely to be disruptive to Californians' evening routines. However, Californians perceive other tasks to be easier to shift to off-peak times, such as doing laundry and washing dishes.
 - **Recommendation:** Use a three-pronged strategy for communication about demand response actions: 1) Promote the adoption and use of technologies that allow customers to respond to demand response events in an automated fashion; 2) To reduce customer burden and fatigue, consider minimizing requests for demand reduction activities that are part of common evening routines including watching TV, cooking, and using exercise equipment; 3) Promote actions that are not perceived as difficult to change such as using appliances like washing machines and dishwashers and unplugging power strips and devices.
- **Key Finding:** Customers prefer to receive information from different sources in emergency and non-emergency situations. Diary study results showed that local communication sources were most trusted during a crisis including participants' local utility, local government, and local news. Participants prefer to be notified via text message if a power outage occurs. Similarly, Flex Alert survey respondents prefer to be notified about a Flex Alert via text messages over emails or phone calls and are most commonly hearing about Flex Alerts from local news sources. For non-emergency related issues, utility bills are the preferred way to receive energy-saving information.
 - **Recommendation:** Capitalize on Californians' use of cell phones and partner with local organizations to communicate with customers during energy-related emergencies.
 - **Recommendation:** Consider using app-based resources to encourage customers to think about energy-related topics as they complete their daily routines.
- **Key Finding:** Partnerships with CBOs effectively spread the EUC message to Hard-to-Reach (HTR) audiences, but these CBOs would need financial support to ensure energy conservation messaging stays a priority after EUC sunsets.
 - **Recommendation:** The CPUC should continue to offer grant support to CBOs through DDB for the Flex Alert Campaign and other future energy-related ME&O campaigns.
- **Key Finding:** The EUC website was identified as an important resource across multiple research efforts. Web usability study participants identified the site as educational resource for information about climate change and opportunities to take energy-saving actions and CBOs appreciate that the website is available in multiple languages.
 - **Recommendation:** Continue to maintain and support the EUC website as an evergreen resource after the EUC Campaign sunsets.
- **Key Finding:** Despite being a focal point of the 2021 EUC Campaign, a relatively small proportion of website visitors are signing up to receive Join the Movement emails and even fewer are signing up to receive Goldie text message alerts. Of the 2 million EUC website visitors from February to August

2021, 36,000 signed up to receive “Join the Movement” emails and 11,000 signed up to receive Goldie text alerts.

- **Recommendation:** Consider conducting further research to understand which marketing channels are most effective for delivering different types of energy related information.

2. Introduction

In 2012, the California Public Utilities Commission (CPUC) established Energy Upgrade California (EUC)² as the brand for Statewide Marketing, Education, and Outreach (SW ME&O) activities to increase ratepayer awareness of energy efficiency, demand response, and distributed generation, and to offer ways for consumers to better manage their energy use. The marketing firm, Doyle Dan Bernbach (DDB), has designed and managed the EUC Campaign since 2017.

The 2021 calendar-year marked Year 5 of a five-year EUC Campaign cycle. The goals of Years 1–3 were to build awareness of EUC’s energy efficiency movement and influence Californians’ intent to take energy-saving actions. Year 4 marked the launch of the first Phase of the Community Action Plan (CAP), which had an overarching shift in focus from inspiring intent to save energy to priming all Californians to take energy conservation actions and fight climate change by re-introducing the Keep it Golden Movement. DDB pivoted focus in Year 4 to promote the COVID-19 Customer Support Campaign which delayed the rollout of Phase 1 of the CAP until Q4 2020.

Given the Year 4 delay, the focus of the Year 5 Campaign was to execute and expand upon the strategies laid out in Year 4 with the overarching objective of “inspiring and empowering communities to Keep California Golden through collective energy action.” DDB launched Phase Two of the CAP in April 2021. Phase 2 of the CAP builds on Phase 1 priming efforts by providing Californians with a direct means of taking action. Key calls to action include urging customers to sign up to join the Keep it Golden Movement on the EUC website and spread the movement to conserve energy to others. Key CAP Campaign assets and strategies included (1) Promoting the Manifesto video³ featuring Californians proclaiming they can take action to save energy and stop climate change; (2) Updating the “Join the Movement” page of the EUC website to serve as a hub for EUC; (3) Encouraging Californians to take direct action by signing up for “Goldie,” an opt-in platform that sends Californians weekly text challenges or signing up to receive monthly “Join the Movement” emails with energy-saving tips; and 4) Running the Rename California sweepstakes, which gave Californians the opportunity to win a chance to rename select locations in California by signing up for Goldie. Figure 1 includes examples of these key campaign assets.

² All product or company names that may be mentioned in this publication are tradenames, trademarks or registered trademarks of their respective owners.

³ <https://www.youtube.com/watch?v=sbDb1yEwNug>

Figure 1. Examples of Key 2021 EUC Campaign Assets



In 2021, DDB also continued to work with the public affairs firm, DDC, to engage community-based organizations (CBOs) as campaign partners with the goal of reaching critical customer groups that are typically harder to reach or involve in the EUC Campaign through other channels.

Notably, the role of EUC has expanded to promote topics beyond general energy conservation in recent years. In 2018, DDB and the CPUC began using EUC branding to support a statewide campaign designed to educate Californians about Time of Use (TOU) rates and residential rate reform.⁴ In 2020, California faced an increased risk of electricity supply shortages and associated blackouts during times of peak demand on hot summer days. In response, the CPUC and DDB positioned EUC as a resource to encourage customers to save energy during heat waves. In March 2021, CPUC released an Order of Intended Rulemaking (OIR)⁵ to prepare California for potential extreme weather and electricity reliability threats in the summers of 2021 and 2022. The OIR directed the IOUs to allocate \$12 million per year for a paid media campaign to raise awareness and understanding of Flex Alerts, which are statewide calls to save energy during periods of peak demand in the summer. DDB began executing the Flex Alert Campaign under the EUC umbrella brand in June 2021. Concurrently, Opinion Dynamics began assessing the effectiveness of the Flex Alert Campaign through a separate study; however, we designed select 2021 EUC evaluation activities to focus on the themes of emergency preparedness and encouraging customers to shift their energy use to off-peak times to provide additional insight in support of Flex Alert Campaign efforts.

⁴ <https://energyupgradecommunity.org/wp-content/uploads/2018/05/RRR-TOU-MEO-Blueprint.pdf>

⁵ <https://docs.cpuc.ca.gov/publisheddocs/published/g000/m373/k745/373745051.pdf>

The Year 5 EUC Campaign strategy has also been built around the understanding that EUC paid media efforts will end at the end of 2021. In response, DDB and the CPUC will develop assets and products that are evergreen in nature in late 2021, meaning this content will provide enduring energy conservation action reminders for the CPUC to use outside of paid media supported efforts for years to come.

Given that 2021 marks a period of transition for EUC, our evaluation includes both retrospective and forward-looking components. To understand EUC Campaign performance in 2021, we continued fielding the Residential Tracking Survey on monthly intervals to measure campaign performance against key metrics and we assessed EUC website visitation data to gauge performance. In addition, we conducted two qualitative studies—a web usability study, and a diary study—to further contextualize campaign effectiveness results and provide a forward-looking understanding of what Californians need from evergreen content and future ME&O efforts. Finally, our assessment of CBO effectiveness includes both retrospective and forward-looking components. Holistically, our 2021 research efforts are designed to help the CPUC understand how they can best leverage ME&O to engage customers in California's clean energy future moving forward.

Evaluation Objectives

The 2021 evaluation was guided by the following objectives and research questions:

- **Objective:** Assess the adoption of EE behaviors
 - Are Californians increasing their adoption of EE behaviors? What EE behaviors are they engaging in?
 - What is the lived experience of Californians as they use energy in their daily lives?
 - What messages and assets elicit the greatest impact on Californians' energy-management behavior and attitudes?
 - What are best practices for communicating with customers during times of crises?
- **Objective:** Assess Californians' perceptions of the importance of reducing energy usage
 - What are Californians' attitudes toward reducing their energy use? How important is it to Californians to reduce their energy use?
 - What messages have been effective in changing Californians' perceptions of the importance of managing their energy usage?
- **Objective:** Assess the effectiveness of the EUC website
 - How can the EUC website be further optimized to support customer usability?
 - How do Californians navigate the EUC website? How do they navigate from the EUC website to sign up for Goldie text alerts and/or emails with energy-saving tips? How do they navigate to websites run by their local IOU, REN, or CCA where they can enroll in clean energy programs?
 - Do they understand what the EUC website is trying to convey?
- **Objective:** Assess how CBOs contribute to the Campaign in 2020 and offer suggestions about how CBOs can be used in the future to achieve the Campaign's goals
 - How are CBOs being used to channel the Campaign's message and is one of these ways more effective than the others?
- **Objective:** Assess the overall performance of the SW ME&O Campaign

- What information and assistance do Californians need to help the State of California achieve its clean energy goals in the next 3–5 years?
- Based on results across all study efforts, has the SW ME&O Campaign been effective in achieving its goals?

3. Summary of Research Activities and Results

The evaluation team leveraged results from monthly residential tracking surveys, a web usability study, assessments of web analytics, a diary study, and partnerships with CBOs to assess EUC effectiveness in 2021. Where relevant, we also reference results from the Flex Alert tracking surveys, which are not part of the EUC Effectiveness Study but still provide helpful context to inform the future direction of the EUC Campaign. Full reports of the Flex Alert tracking surveys are included in Appendix D. The evaluation team recognizes there are multiple potential contributing market drivers that may have influenced Campaign outcomes and it is not always possible to directly measure consumer exposure to ME&O. Accordingly, we utilized a preponderance of evidence approach, which draws on multiple sources and data from different types of research efforts (e.g., quantitative and qualitative), to provide the most comprehensive view of the Campaign's effects possible.

In the following sections we provide a summary of the methods and results from each research activity. We focus on summarizing performance in 2021. Given that 2021 marks the end of the five-year EUC Campaign cycle, we also provide data points and an interpretation of results prior to 2021 where available to provide a better picture of how the EUC Campaign has performed over time.

3.1 Residential Tracking Survey

The evaluation team has conducted ongoing tracking surveys to measure changes in EUC objectives and performance metrics since 2013. In November 2020, due to the frequent swings in public opinion from 2020 socio-political climate, we transitioned from conducting biannual mail-push-to-web surveys of 1,000+ Californians to fielding a monthly pulse survey of 500 Californians to provide more actionable insights in this rapidly shifting landscape. We fielded the monthly surveys using a YouGov web panel of California residents to measure Campaign performance across established key performance metrics including customer awareness of the overall EUC brand, Keep it Golden slogan, EUC and Keep it Golden logos, as well as customer attitudes, motivations, and intent to make energy-efficient home upgrades and behavior changes. These surveys provide the official measures of brand metrics reported in DDB's annual Joint Consumer Actions Plans (JCAPs) and survey instruments are provided in Appendix A.

Within this report, we present findings from monthly surveys conducted between November 2020 and September 2021, as well as findings from previous residential customer surveys conducted in Fall 2017, June 2019, March 2020, and May 2020, which we include for historical context. Of note, previous surveys in October 2017, June 2019, and March 2020 differ from the pulse surveys fielded beginning in November 2020 on several methodological factors including sample source, recruitment strategy, and weighting methods. These methodological differences may contribute to variations in results between surveys prior to May 2020 and subsequent surveys.

In November 2020, we began using a sample from YouGov's non-probability opt-in panel. To help ensure that our sample was representative of California's diverse population, we translated the survey into Spanish. The results are weighted to be representative of the California population based on gender, age, race, homeownership, education, whether the respondent is Spanish-speaking, and income.⁶

⁶ While using YouGov's panel for survey participation, we instituted a six-month lockout period so panelists could only complete one tracking survey within a six-month timeframe. The July 2021 survey was the first to include panelists who had completed the survey six months prior in November 2020. For the July, August, and September 2021 surveys, we compared the survey responses of new and repeat respondents on brand awareness questions because repeat respondents may have been aware of the brand by virtue of their previous survey participation. For any awareness questions where we saw notable differences for between new and repeat respondents, we excluded repeat respondents from our analyses.

Summary of Results

Figure 2 provides a summary of EUC Campaign performance against key metrics from the date when each metric was first measured to September 2021.⁷ Awareness of Keep it Golden continued to increase throughout 2021 as DDB featured the Keep it Golden slogan and logo as the main branding for the EUC general energy conservation Campaign as well as the TOU Campaign and the Flex Alert Campaign.

Overall, attitudinal and behavior change metrics generally held constant throughout 2021. Attitudinal metrics tend to be challenging to move, which may help explain the stable results. More specifically, DDB designed the 2021 EUC Campaign efforts to encourage Californians to make energy-saving behavior changes by sharing a large variety of energy-saving tips through the Goldie texts and the “Join the Movement” email Campaign. This Campaign reached a much smaller group of Californians: only those who signed up to receive energy-saving tips from EUC/Goldie via text or email. As such, the stability in behavior change metrics throughout 2021 is not surprising because it is challenging to detect behavior changes from a smaller group of people (Goldie and email sign-ups) through a general population survey such as the residential tracking survey.

When reviewing results, it should be noted that we observed an unexpected spike in results across many measures in May 2021. We further investigated potential explanations for these findings but identified no relationships across measures or Campaign efforts; thus, we suggest May 2021 results be interpreted as an anomaly in the tracking survey results. The metrics most highly affected by this anomaly include EUC aided awareness, EUC and Keep it Golden slogan recognition, and social diffusion. In addition, small (+/- 3%) fluctuations in results between months are not unusual and these variations can likely be attributed to sampling variation.

⁷ Opinion Dynamics fielded EUC residential tracking surveys from 2015 to 2021. While we worked to keep a standard set of questions across each survey over time, our survey questions also necessarily evolved to keep up with changes in the EUC Campaign. As such, the date when we first began measuring each metric varies by metric and ranges from 2015–2021.

Figure 2. Summary of EUC Performance Across Key Metrics

Metric	Result	Change
Objective: Increase awareness of the SW brand		
EUC Aided Awareness	% of Californians that are aware of EUC: 17% (2012) to 36% (Sept 2021)	Trended upwards until 6/2019 Constant from 2019-2021
EUC Unaided Awareness	% of Californians that are aware of EUC: 2% (2015) to 7% (Sept 2021)	Varied
EUC Familiarity	% of Californians that are extremely or very familiar with EUC: 11% (2017) to 22% (Sept 2021)	Varied
Keep it Golden Slogan Recognition	% of Californians that recognize the Keep it Golden slogan: 12% (2019) to 26% (September 2021)	Trended upwards
Brand Salience	% of Californians who recognize the Keep it Golden slogan that associate the Keep it Golden slogan with energy conservation: 24% (November 2020) to 33% (September 2021)	Varied
Brand Relevance, Need for EUC, and Trust in EUC	% of Californians believe that the people of California need the EUC campaign quite a bit or a great deal: 70% to 68% (2017 to September 2021)	Constant
	% of Californians believe that the EUC campaign is quite a bit or a great deal relevant to them: 53% to 65% (2017 to September 2021)	Varied
	% of Californians believe they can trust the EUC campaign quite a bit or a great deal: 43% to 49% (2017 to September 2021)	Constant
Metric	Result	Change
Objective: Shape perceptions about the importance of reducing energy usage		
Level of Concern about Saving Energy	% that are very concerned about managing their energy use as they go about their daily lives: 32% (Mar 2020) to 32% (Sept 2021)	Constant
Importance	% that believe it is very important to do their part to save energy: 47% (July 2017) to 48% (September 2021)	Constant
Social Norms	% that believe that conserving energy is the right thing to do: 72% to 69% (Nov 2020 to Sept 2021)	Constant
	% that believe most Californians take action to conserve: 15% to 14% (Nov 2020 to Aug 2021)	Constant
Self-Efficacy	Average 3.64 to 3.78 (from 1 'low self-efficacy' to 5 'high self-efficacy') (December 2020 to September 2021)	Constant

Metric	Result	Change
Objective: Increase adoption of energy-efficient behaviors		
Intent	% that are extremely likely to change their behaviors to save energy (20% to 28%) for June 2019 to September 2021	Constant
	% that are extremely likely to make upgrades to their homes (14% to 22%) for June 2019 to September 2021	Constant
Behavior Changes	The following are the percentages of Californians who take each action almost always (all results are for November 2020 to September 2021):	
	Turn off the lights: 70% to 71%	Constant
	Set heat to 68 or lower: 50% to 33%	Declining
	Adjust heat or AC 49% to 35%	Constant
	Wash laundry on cold: 46% to 43%	Constant
	Set devices to energy-saving modes: 45% to 40%	Constant
Behavior Changes	Unplug devices: 32% to 29%	Constant
	% of respondents that live in ways that reduce energy use all of the time: 46% (June 2019) to 41% (Sept 2021)	Constant
Social Diffusion	% of respondents extremely likely to discuss energy saving tips with friends or family: 17% to 16% (Nov 2020 to Sept 2021)	Constant

Note: Percent changes reflect increases or decreases in percentage points.

3.1.1 Objective: Increase Awareness of the EUC Brand

An ongoing objective of the EUC Campaign is to raise awareness of the EUC brand. In considering results related to EUC awareness, it is important to acknowledge that in 2020 and 2021, the Campaign focused more on using the “Keep it Golden” logo, slogan, and branding in Campaign assets in comparison to “Energy Upgrade California” branding. As highlighted in the sections below, this change had a demonstrable impact on results for this metric.

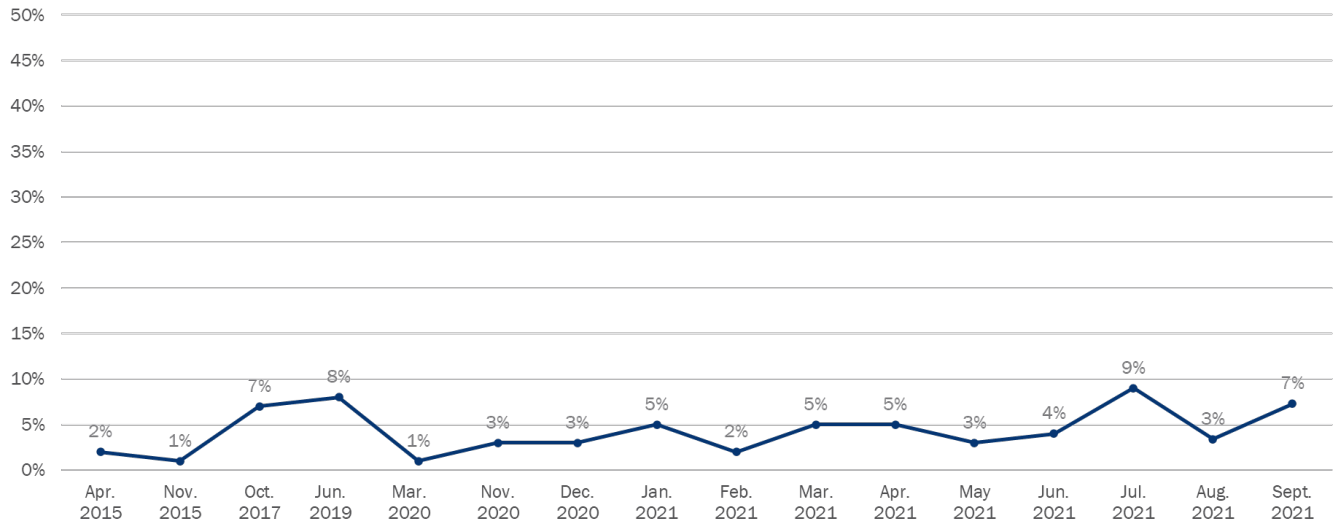
Performance Metrics: Aided and Unaided Awareness

Unaided and aided awareness of EUC have remained relatively constant since we first measured the metric in 2015. Unaided awareness is the gold standard metric for measuring brand awareness as it is the best way to know that a brand is really penetrating the audience.⁸ For unaided awareness, we asked customers for the names of up to five “brands, campaigns, or initiatives that encourage Californians to save energy.” Results indicate that the EUC Campaign has not progressed considerably towards being a “top of mind” energy brand.⁹ Unaided awareness reached a high of 9% in July 2021, which corresponds with the rollout of the CAP Phase 2 Campaign in late June and July 2021, but overall, unaided awareness has remained stable since the start of the Campaign (Figure 3).

⁸ In the summer of 2019, the evaluation team conducted a Delphi Study, where representatives from the Program Administrators and DDB provided input on the objectives, metrics, and success criteria that should be used to measure the success of the EUC Campaign. This statement reflects the consensus opinion from the Delphi Study.

⁹ In addition to specific mentions of EUC, we coded all mentions Keep it Golden or Goldie as being a mention of EUC.

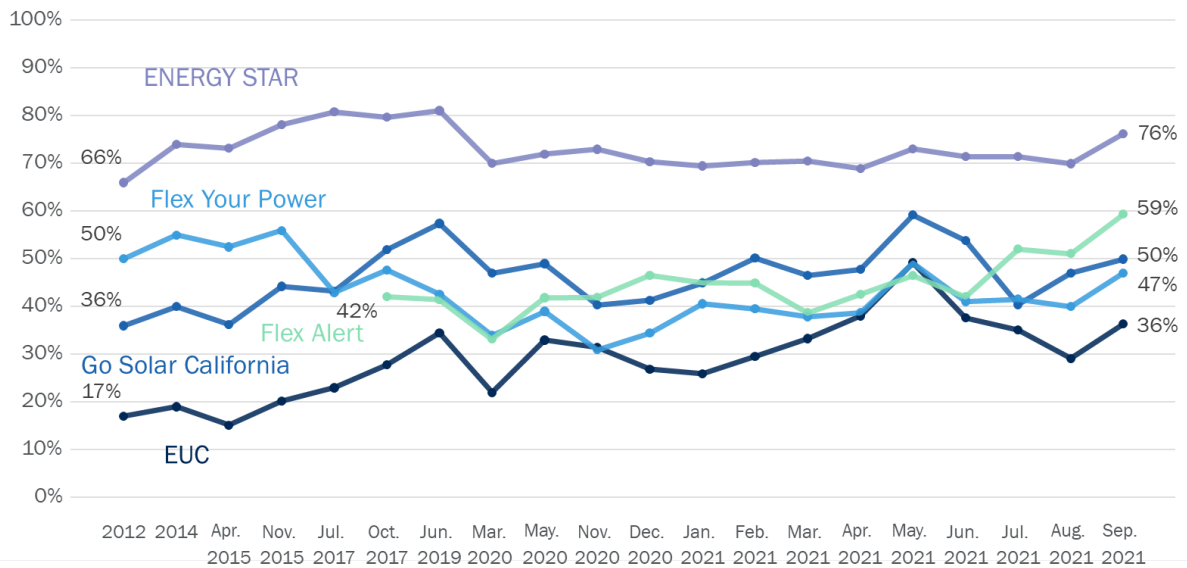
Figure 3. Unaided Awareness of EUC Over Time



For aided awareness, we provided respondents with a list of several different energy brands, including EUC, and asked customers to identify the brands they had heard of prior to taking the survey (Figure 4). Although aided awareness of EUC increased from 17% to 36% between 2012 and September 2021, growth in aided awareness plateaued in 2020 and has remained stable throughout 2021 aside from the anomaly in May.

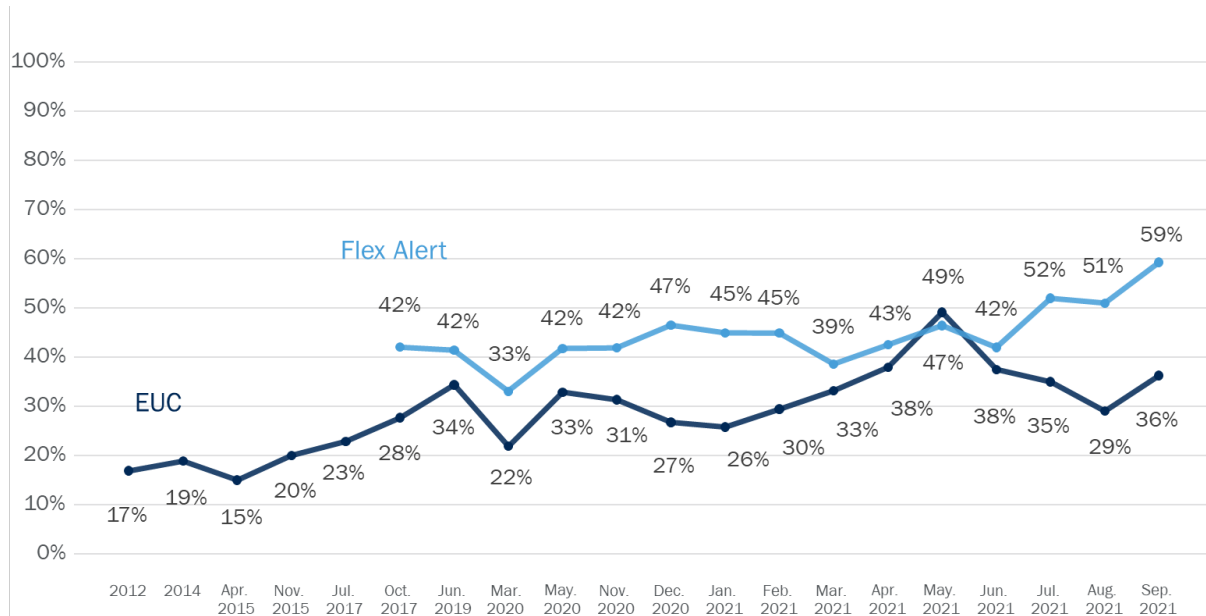
The lack of increase in both aided and unaided EUC awareness from 2020–2021 aligns with expectations, given that the goal of EUC in Years 4 and 5 shifted from building awareness of the EUC Movement to promoting collective action. As stated in the Year 5 JCAP, DDB did not plan to see significant gains in EUC aided and unaided awareness in 2020 and 2021 since the EUC brand was intended to play a more supportive role as Keep it Golden became the primary branding for the Campaign.

Figure 4. Aided Awareness of EUC Relative to Other Energy Brands Over Time



In contrast, aided awareness of the Flex Alert Campaign increased from 42% in June 2021 to a new high of 59% in September 2021 (Figure 5). This increase followed relatively stable awareness levels dating back to when we first measured Flex Alert awareness in 2017. Flex Alerts functioned as an unpaid media campaign between the fall of 2016 and July 2021. In June 2021, the CPUC and DDB launched a paid media campaign to educate customers about the need for Flex Alerts and associated energy-saving actions they should take during a Flex Alert. The increase in Flex Alert awareness starting in June 2021 may be associated with these increased promotional efforts and an increase in media coverage of Flex Alerts during the summer months. Furthermore, Flex Alert Campaign content and messaging may be more salient to Californians because one of the key goals of the Flex Alert Campaign is ultimately to prevent grid-related power outages, which has immediate and sometimes critical implications for California residents. We are continuing to monitor Flex Alert awareness and investigating potential drivers of this increased awareness through a separate monthly Flex Alert tracking survey.

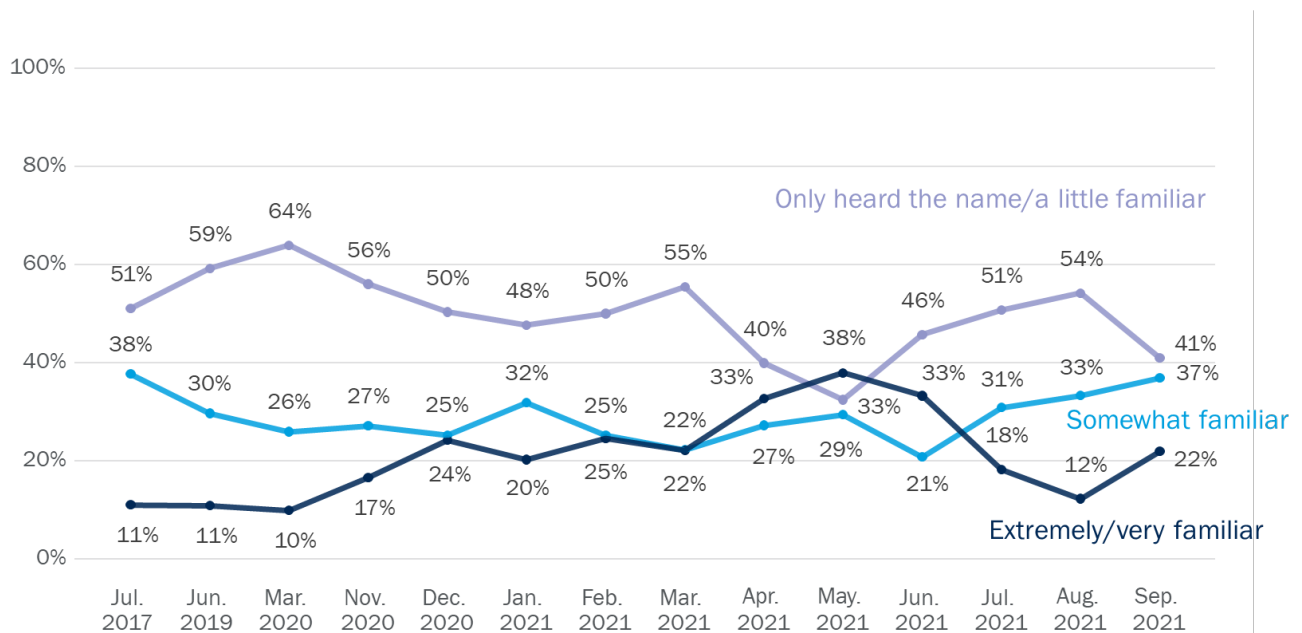
Figure 5. Aided Awareness of EUC and Flex Alerts



Performance Metric: Brand Familiarity

Familiarity of the EUC brand has fluctuated since March 2021. The percentage of respondents who report being ‘extremely familiar’ or ‘very familiar’ with the EUC brand has varied over time. A peak period was observed between April 2021 and June 2021 for respondents who reported being ‘extremely familiar’ with EUC. These percentages subsequently declined from June 2021 to August 2021 to reach a low of 12% (Figure 6).

Figure 6. Respondents’ Familiarity with the EUC Brand



One possible explanation for the decline in EUC familiarity between June 2021 and August 2021 is that Californians may feel like they know less about what EUC stands for as the brand has evolved from primarily featuring EUC branding to Keep it Golden branding in 2021. The brand also expanded to cover more diverse topics including Flex Alerts starting in June 2021, which may also contribute to brand confusion. This is supported by trends in responses provided when we asked respondents to identify the names of up to five “brands, campaigns, or initiatives that encourage Californians to save energy.” As previously mentioned, we coded all references to the EUC brand, including Keep it Golden, as EUC in our analysis of the open-ended responses to this question and we examined these responses at a few key points in time. When we looked deeper at the individual open-ended responses coded as EUC, we found fewer respondents specifically mentioned “Energy Upgrade California” over time (Table 1). Conversely, the proportion of respondents who mentioned “Keep it Golden” increased over time, especially in August 2021, when EUC familiarity dropped. As more Californians are recognizing Keep it Golden as the statewide brand, they may feel they are less familiar with EUC.

Table 1. Mentions of Keep it Golden and EUC in Unaided Brand Awareness Responses over Time

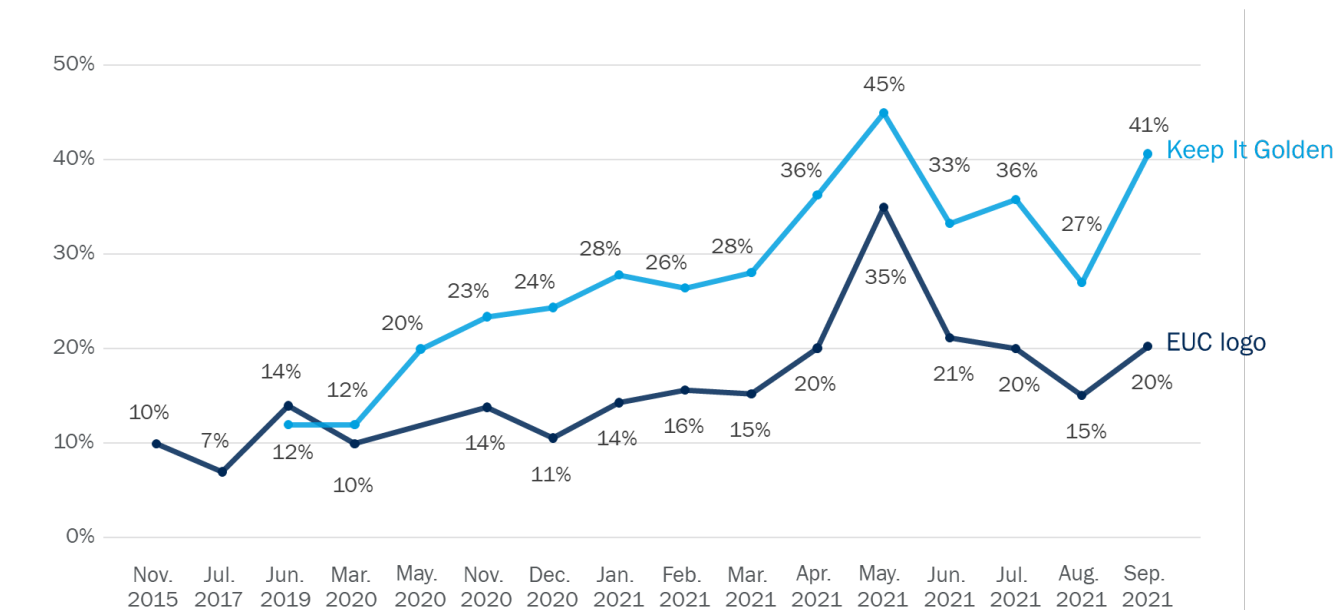
Tracking Survey Date	Responses Referencing “Energy Upgrade California”	Responses Referencing “Keep it Golden”
March 2020	76%	24%
November 2020	50%	50%
August 2021	18%	68%
September 2021	36%	61%

Note: Frequencies may not sum to 100% because some answers were coded as EUC but did not fit squarely in either category.

Performance Metric: Keep it Golden Slogan Recognition

Recognition of Keep it Golden has continually increased since March 2020, which corresponds with the Campaign’s continued focus on promoting Keep it Golden. On the September 2021 survey, 41% of respondents recognized the Keep it Golden slogan—a substantial increase from 12% in June 2019 when EUC began using Keep it Golden branding (Figure 7). The observed spike in Keep it Golden recognition from March 2021 to April 2021 aligns with the launch of the CAP Phase 2 Campaign rollout in April 2021. Again, we observed a spike in May 2021 results and a dip in August 2021 results, which are likely anomalies due to sampling error.

Figure 7. Percentage of Respondents Who Recognize Keep it Golden and EUC Logos



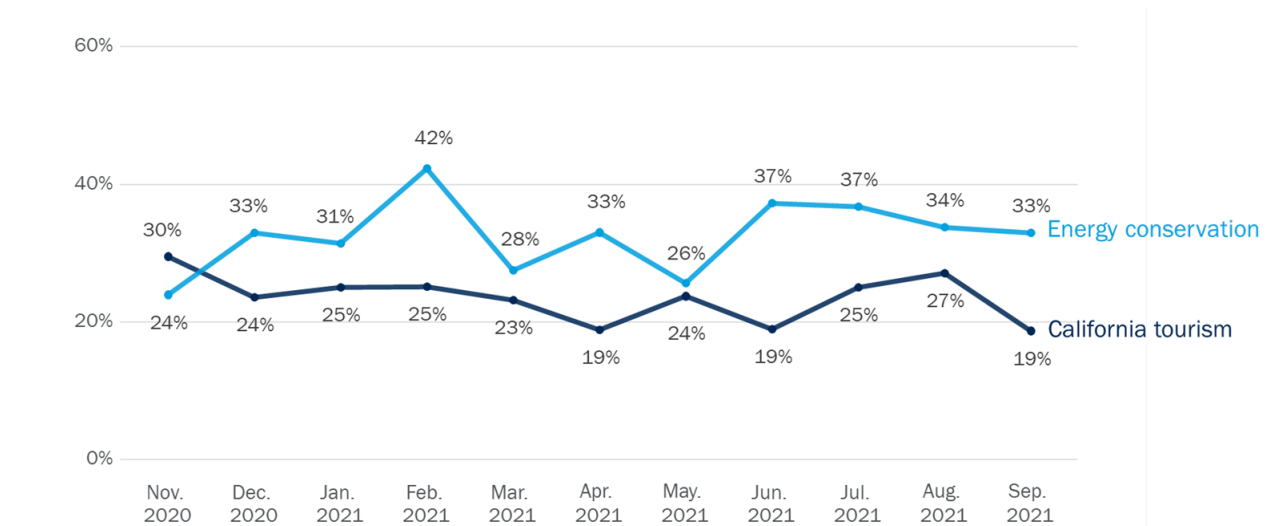
Performance Metric: Brand Salience

Brand salience, or the associations that Californians have with the Keep it Golden slogan, represents another important metric of brand success. Logically, the Campaign is more successful when more Californians correctly associate Keep it Golden with energy conservation. We began measuring brand salience in November 2020 and asked respondents what, to the best of their knowledge, was the mission of Keep it Golden.

Over a third of Californians continue to associate Keep it Golden with energy conservation, but respondents are also still associating Keep it Golden with California tourism. Of respondents who indicated that they were aware of Keep it Golden in September 2021, 33% associated the slogan with energy conservation and 19% associated it with California tourism (Figure 8). While the monthly results show some fluctuations, the overall trend is consistent, indicating that EUC brand salience has remained unchanged over time.

To further understand the association of Keep it Golden with California tourism, we asked respondents who said they recognized the Keep it Golden slogan but believe its mission was related to “California tourism” (38 respondents) why they gave this response on the April 2021 tracking survey. Respondents who provided a valid answer most frequently replied that California is the Golden State and by association, “Keep it Golden” represents the state’s tourism, and others conflated Keep it Golden with California tourism commercials.

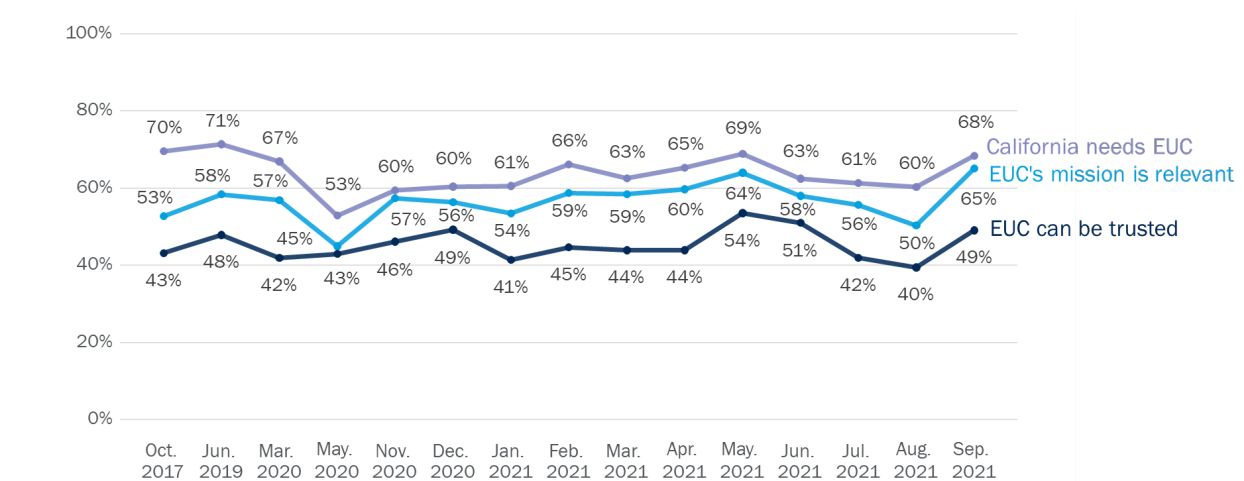
Figure 8. Keep it Golden Logo Salience Among those Aware of Keep it Golden



Performance Metrics: Brand Relevance, Need for EUC, and Trust in EUC

Attitudes toward the EUC brand have remained relatively constant over the course of the Campaign. We asked Californians a series of questions to measure their perceptions of the relevance of, need for, and trust in EUC after reading its mission statement.¹⁰ Although we observed minor fluctuations over time, the most prominent being a short-term dip which occurred in March 2020 and May of 2020, at the beginning of the pandemic, we did not see any noteworthy changes in how Californians perceive the EUC brand.

Figure 9. Need for EUC, Relevance of EUC Mission, and Trust in EUC (Showing ‘A great deal/Quite a bit’)



Note: Responses shown are percentage of participants who selected a great deal or quite a bit when asked about the relevance, need for, and level of trust in EUC.

¹⁰ In November 2020, the EUC mission that was displayed to respondents before questions about brand attitudes was changed to the following: “Energy Upgrade California is committed to empowering and inspiring Californians to save energy to help fight climate change, save money and protect the state for future generations. We’re asking Californians across the state to join together to Keep it Golden by using energy better. We’ll provide you with the tools, knowledge and inspiration to Keep it Golden, as it takes every one of us to keep moving California forward as a smart energy leader. We can’t succeed without you.”

3.1.2 Objective: Shape Perceptions about the Importance of Reducing Energy Usage

A sense of concern and responsibility to conserve energy can be an important predictor of future and lasting behavior change. We asked respondents about their level of concern over managing their energy use as they go about their daily life, and how important they believe it is for their household to do its part in making California more energy efficient to measure these precursors to behavior change.

Performance Metrics: Importance and Level of Concern about Saving Energy

Overall, respondents’ concern over energy management and their belief in the importance of reducing their energy use has remained consistent. The percentage of respondents who are concerned about managing their energy use has remained relatively stable over time, with nearly a third (32%) reporting being ‘very concerned’ (Figure 10). In addition, 48% of respondents indicated that it is ‘very important’ for their household to do their part to make California more energy efficient on the September 2021 survey, with only slight variation since 2017 (Figure 11). The flat trend in these results does not necessarily indicate that the Campaign itself is ineffective at changing respondents’ attitudes, but rather highlights how difficult it can be to influence Californians’ attitudes on these topics, especially when considering other issues that may have been top of mind for Californians during the measurement period. In addition, most Californians were at least moderately concerned about their energy use and believed that saving energy was important when we started measuring these metrics in 2019 and 2017 respectively, which makes it more challenging to achieve large increases in these metrics over time.

Figure 10. Respondents’ Concern Over Managing Their Energy Use

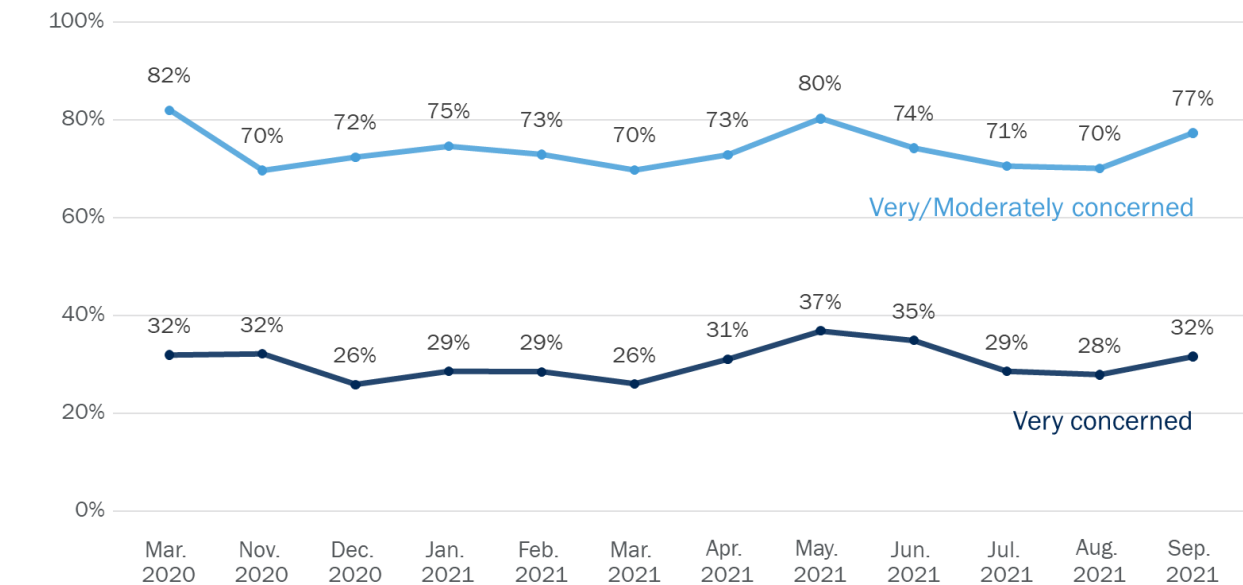
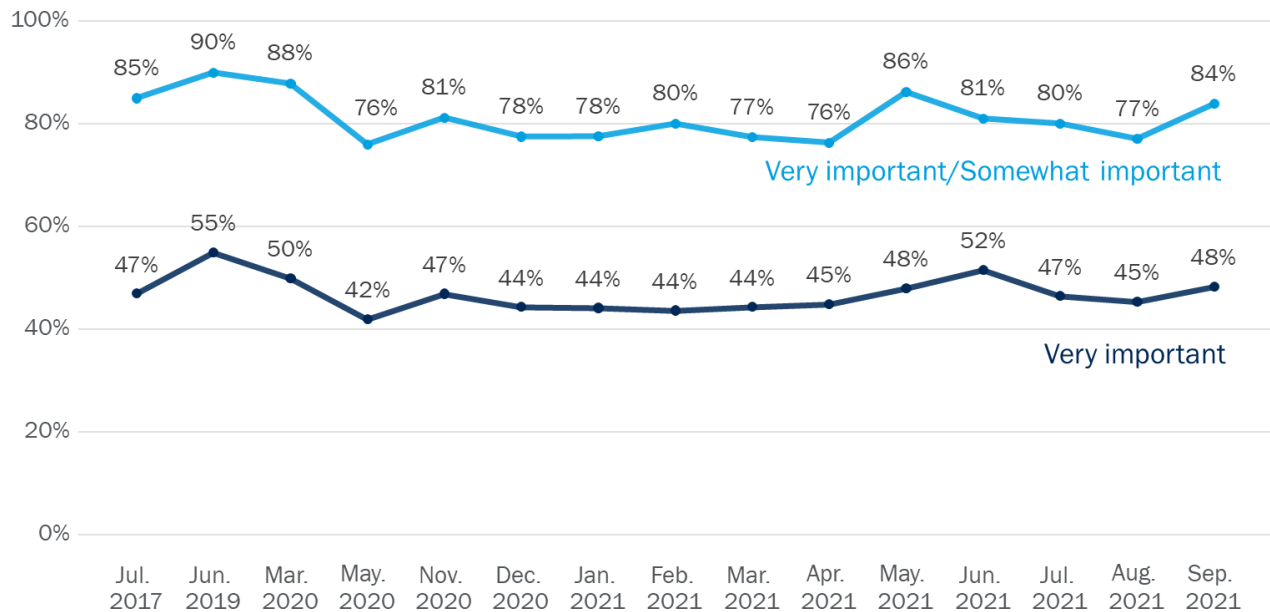


Figure 11. Respondents’ Perceived Importance to Do Their Part to Make California Energy Efficient



Performance Metric: Social Norms

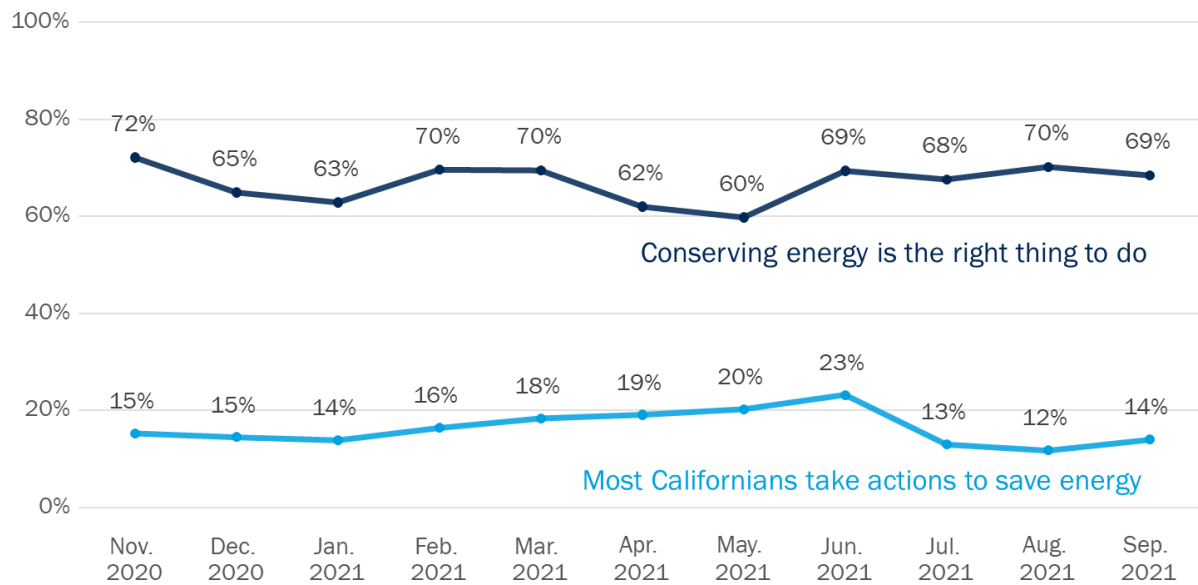
Social norms are influential precursors to behavior change.¹¹ The extent to which people believe an action is socially approved (the injunctive norm) and the extent to which people perceive that an action is commonly taken (the descriptive norm) may influence whether they will choose to take that action themselves. While both injunctive and descriptive norms are part of overall “social norms,” the two are distinct facets with the descriptive norm often being more influential. We began measuring both aspects of social norms monthly beginning in November 2020.

Californians continue to have a strong belief that conserving energy is the right thing to do (injunctive norm), but few believe Californians take actions to save energy (descriptive norm). Over two-thirds (69%) of respondents ‘strongly agree’ that conserving energy is the right thing to do. Between February 2021 and June 2021, we saw a gradual increase in the percentage of respondents who strongly agreed that most Californians take actions to save energy (15% to 23%). Starting in July 2021, however, the percentages returned to their previous levels.

To further investigate this difference in Californians’ beliefs, we added a question to the September 2021 tracking survey probing respondents who selected that they agreed that conserving energy is the right thing to do but disagreed with the statement that most Californians take actions to save energy. Respondents gave two primary reasons for the difference in their responses to the two questions: (1) Californians know very few people who actually take action to save energy; and (2) Although they believe conserving energy is the right thing to do, most do not want to give up certain luxuries to do so. To illustrate, one respondent noted “Most Californians only care about themselves. If it is an inconvenience, they will not do it,” and another stated, “I think people realize it’s necessary but aren’t willing to actually take action.”

¹¹ Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026. <https://doi.org/10.1037/0022-3514.58.6.1015>

Figure 12. Respondents Who ‘Strongly Agree’ with Social Norms Statements



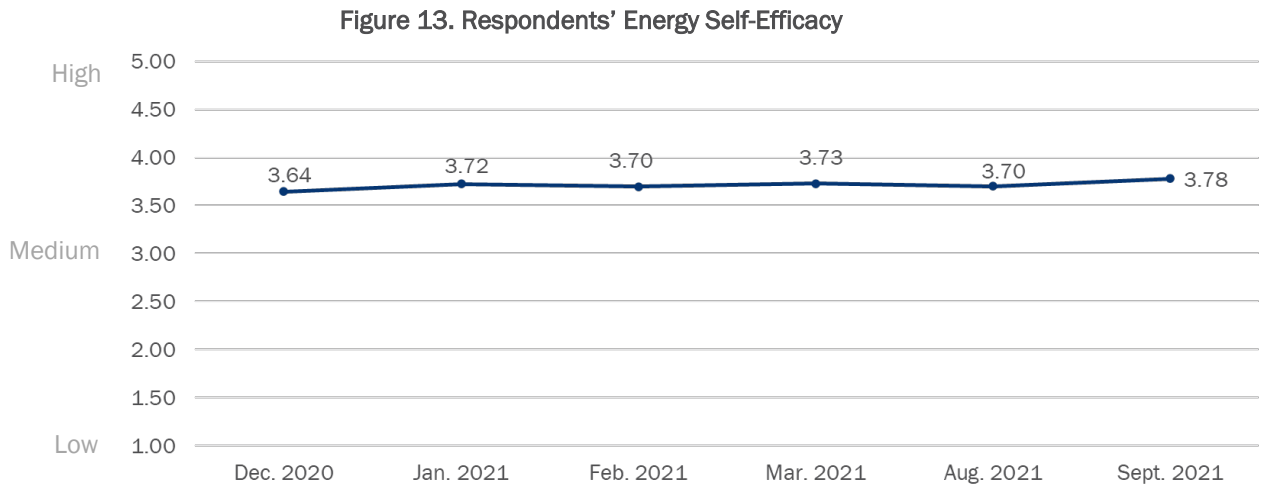
Performance Metric: Self-Efficacy

Self-efficacy is a person’s belief that they can successfully accomplish a given task. According to research in psychology, self-efficacy is often a necessary pre-condition to behavior change; people who believe they can achieve something are more likely to act to achieve it.¹² Self-efficacy may also be a precursor for people to begin taking energy-saving action to curb climate change. People who have higher self-efficacy to make a difference to prevent climate change are also more likely to take action. As such, the EUC Campaign includes assets that include specific messaging to encourage self-efficacy. For example, the EUC “Climate Changed” video is focused on the premise that individual Californians can help fight climate change by sending a single text message to “Join the Movement” and sign up for Goldie text alerts.¹³

Energy self-efficacy has remained in the moderate range since December 2020. Self-efficacy scores have consistently stayed in the moderate range from December 2020 through September 2021 (Figure 13). As we noted in the 2020 Annual Performance Report, in a media environment where people are often told that climate change is occurring and that it will be challenging to stop, it is possible, even expected, that people would become disheartened about their potential to mitigate climate change. As a result, self-efficacy could decline. The finding that self-efficacy scores have remained stable since December 2020 could indicate, however, that many Californians believe there is still something that can be done about climate change.

¹² Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>

¹³ <https://www.youtube.com/watch?v=7C2MEW1-Rvw>



3.1.3 Objective: Increase Adoption of Energy-Efficient Behaviors

In Years 4 and 5, the EUC Campaign transitioned from a focus on shaping EUC awareness, energy management attitudes, and behavioral intentions to encouraging Californians to take energy-saving actions and motivating others to save. In 2021, EUC launched CAP Phase 2, which built upon CAP Phase 1 efforts by providing direct examples of actions that Californians can take to save energy through the Join the Movement Campaign, which encouraged Californians to sign up to receive weekly energy-saving challenges and tips by text or email.

Measures of intent are useful proxy variables for measuring behavior changes. Before customers can act, they must recognize opportunities to make changes. To assess Californians' intent to take action, we first asked respondents how many changes they could make to their homes or day-to-day actions to better manage their energy use. We then asked respondents who recognized opportunities to make changes about their likelihood of making these changes. We considered those who said they had already done all they can do, and hence did not recognize any additional opportunities, to be extremely unlikely to make behavior changes.

Performance Metric: Intent

Californians' perceptions of their opportunities to make home energy efficiency upgrades and opportunities to change their behavior to save energy have remained stable since 2019. Though we see some slight monthly fluctuations, the percentage of respondents who indicated that there are 'a lot of things' they can change to make their home more energy efficient, as well as the percentage of respondents who indicated they can change 'a lot of things' about their day-to-day behaviors to save energy have stayed consistent over time (Figure 14 and Figure 15).

Figure 14. Opportunity for Home Energy Efficiency Upgrades

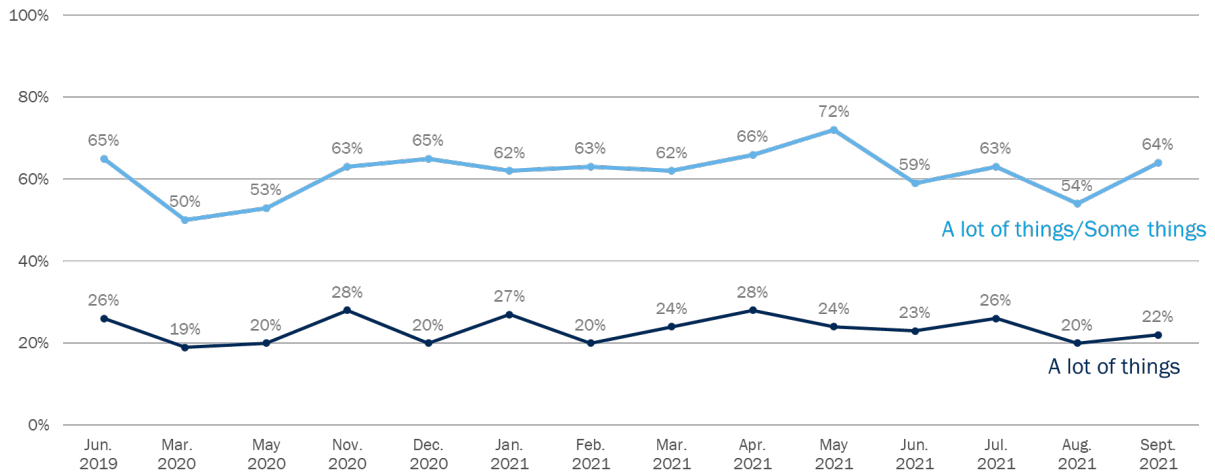
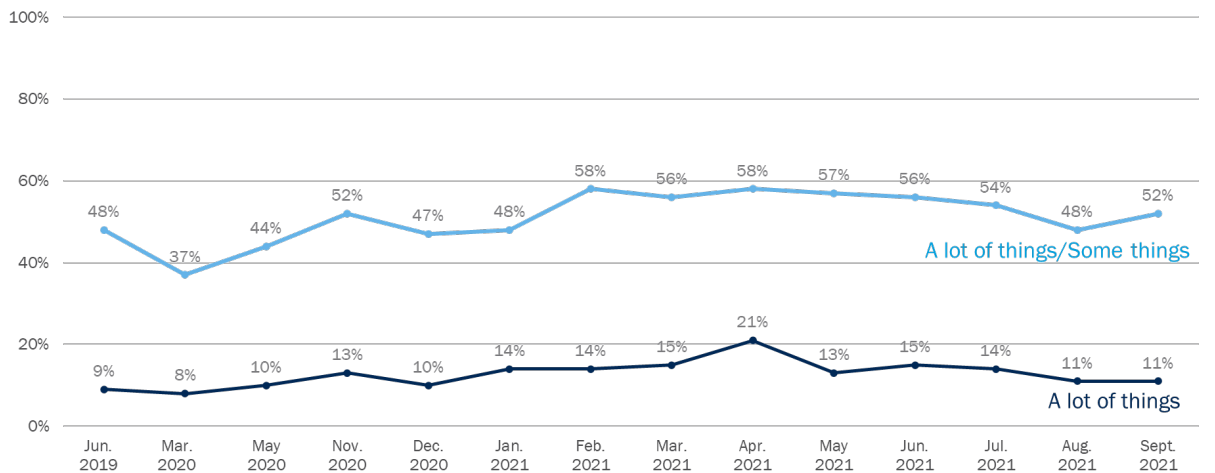


Figure 15. Opportunity for Energy Efficiency Behavior Changes



Similarly, Californians’ likelihood of making home energy efficiency upgrades and likelihood of making energy efficiency behavior changes have largely remained steady since June 2019, although respondents’ likelihood of making energy efficient behavior changes recently increased in September 2021. We observed a large increase in respondents’ stated likelihood to make behavior changes to save energy in September 2021, with 83% of respondents reporting they are either ‘extremely likely’ or ‘somewhat likely’ to make energy efficient behavior changes. Given the relatively stable results prior to September and the magnitude of the increase, without survey data from future months, it is hard to discern whether this result is part of an ongoing trend or it is an anomaly (Figure 16 and Figure 17).

Figure 16. Likelihood of Making Home Energy Efficiency Upgrades

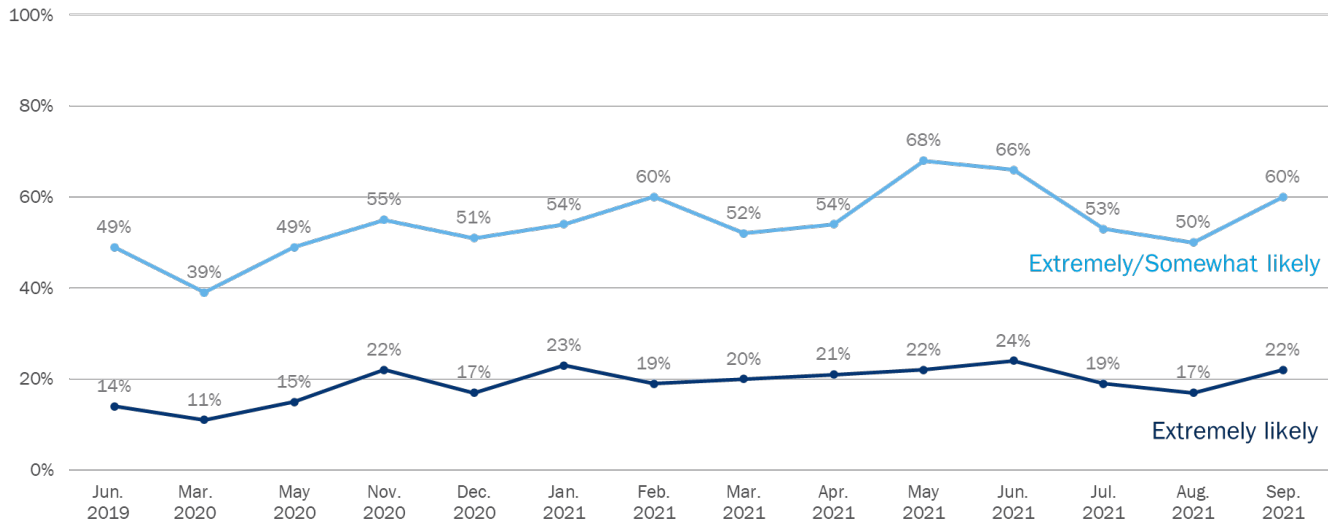
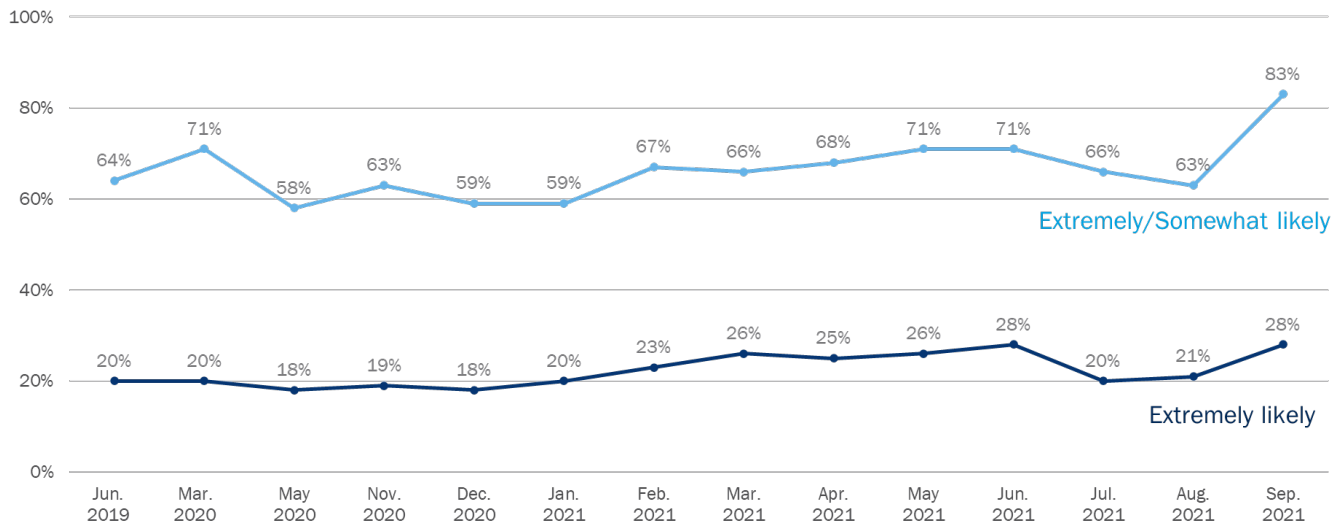


Figure 17. Likelihood of Making Energy Efficiency Behavior Changes



Because renters do not own their homes, they have a different decision calculus for whether to make energy efficient upgrades to their homes compared to homeowners. Furthermore, not all renters pay their own energy bills which can have impacts on their decisions to make energy efficient behavior changes. As such, we examined differences in the likelihood and perceived opportunities to make energy efficient upgrades and behavior changes between renters and owners.

Renters consistently believe there are more opportunities to make energy efficient upgrades to their home and changes to their behavior to save energy compared to owners. The percentage of renters who believe that they could change ‘a lot’ or ‘some things’ to make their home more energy efficient has remained fairly stable overall with a slight increase since 2019 (Figure 18). Further, the percentage of respondents who believe there are ‘a lot’ or ‘some things’ they can do to change their day-to-day actions has slightly increased for renters

(65%) and owners (54%) since 2019 (Figure 18 and Figure 19). Renters generally have less control over the upgrades they can make to their homes which may help explain why they believe there are more energy efficient upgrades that can be made to their homes than owners

Figure 18. Percentage of Respondents Who Could Change ‘A lot of things’ or ‘Some things’ to Make Their Home More Energy Efficient

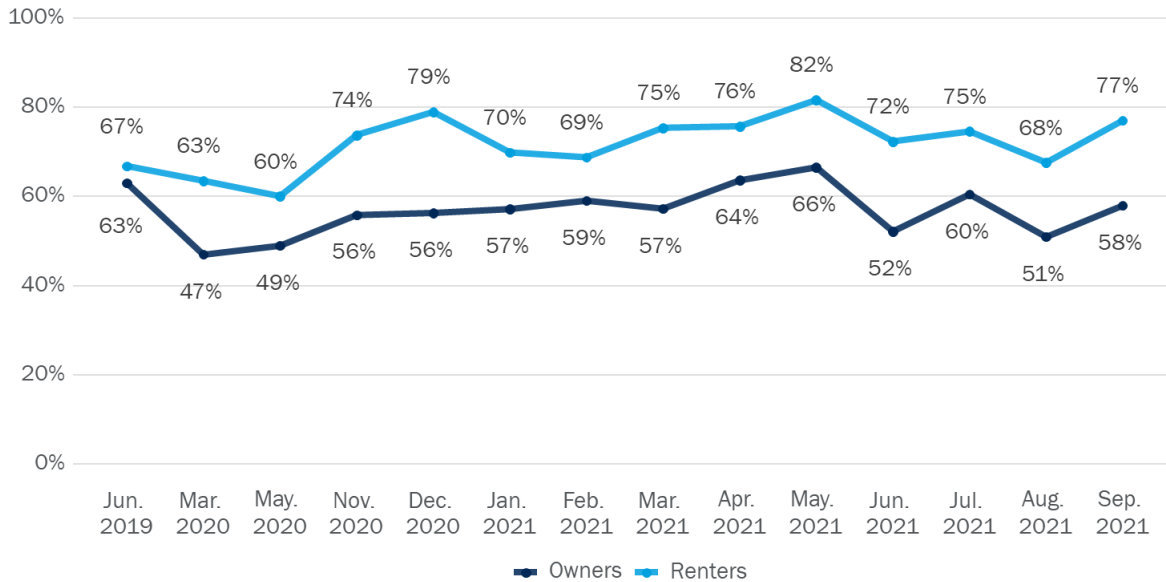
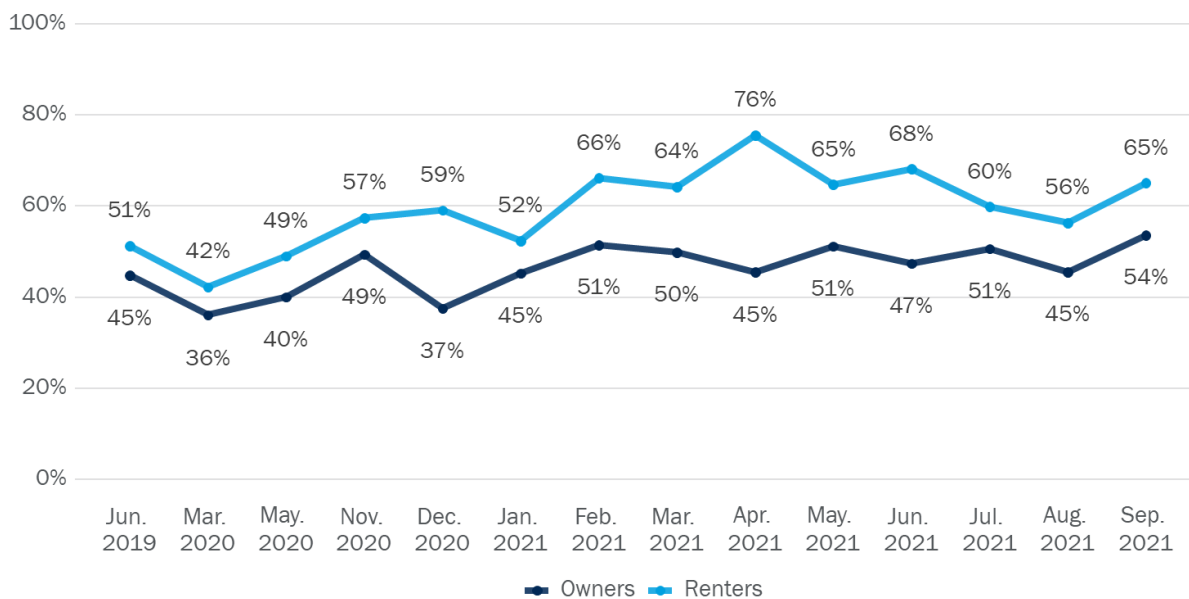


Figure 19. Percentage of Respondents Who Could Change ‘A lot of things’ or ‘Some things’ about Their Day-to-Day Actions to Save Energy



More renters continue to report that they are likely to make energy efficient home upgrades and behavior changes than owners, but the gap between them is closing. The percentage of respondents who reported being ‘extremely likely’ to make energy efficient home upgrades and those who reported they are ‘extremely likely’ to make behavior changes to save energy fluctuated month-to-month, with larger variations observed over time for renters (Figure 20 and Figure 21). The long-lasting gap between owners’ and renters’ likelihood to make changes closed in August 2021 but widened again in the most recent September survey. It is possible the August result was an anomaly given the reemergence of a gap between renters and owners in September.

Figure 20. Percentage of Respondents Who are ‘Extremely likely’ to Make Their Home More Energy Efficient in the Next 12 Months

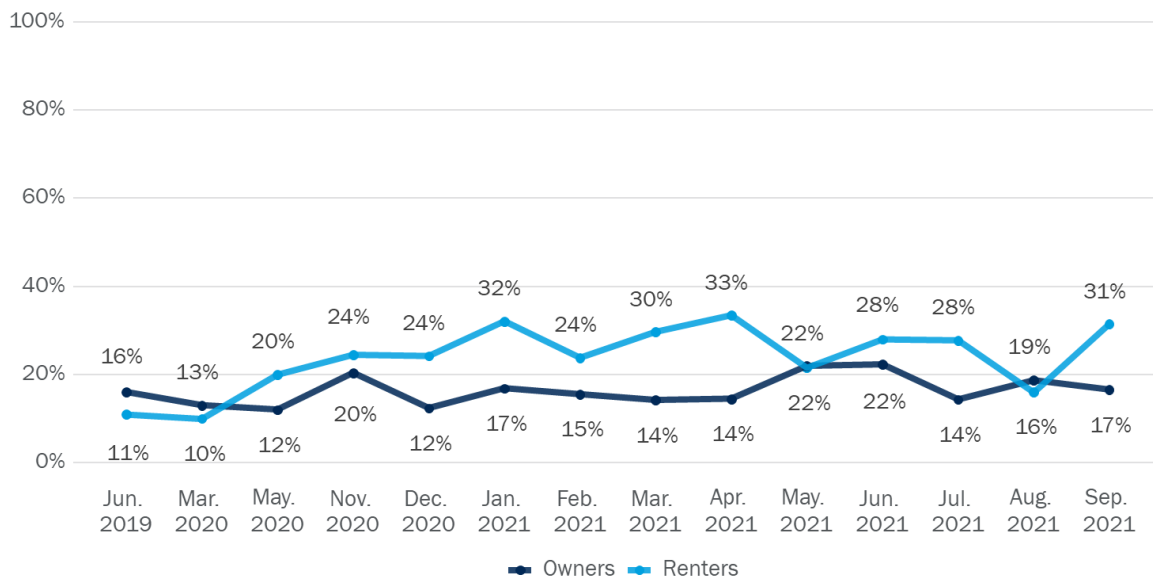
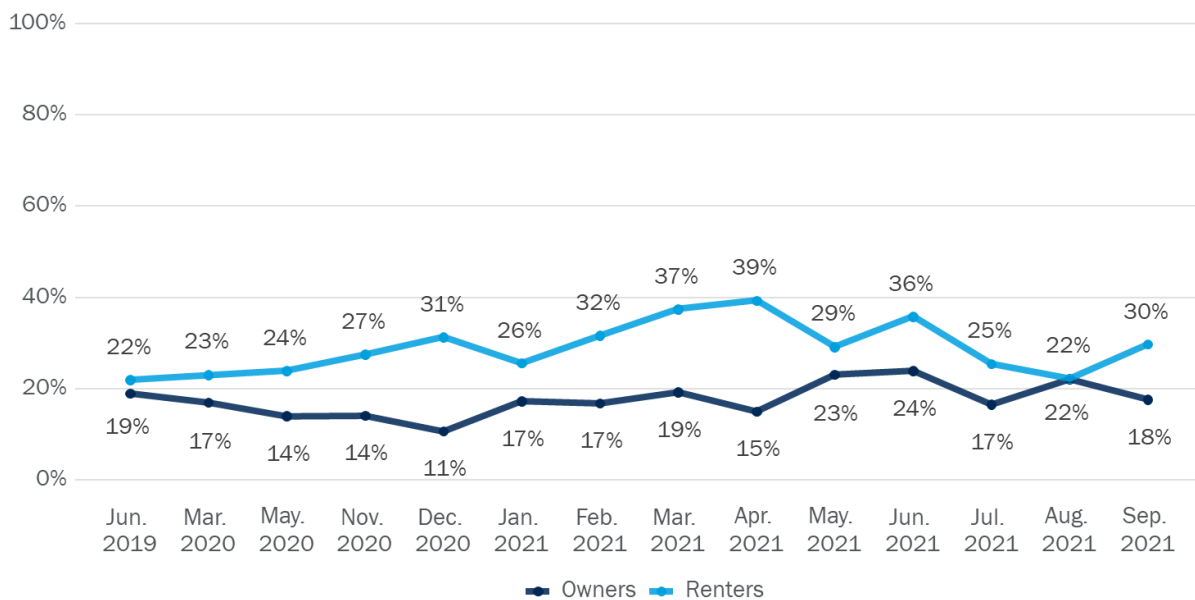


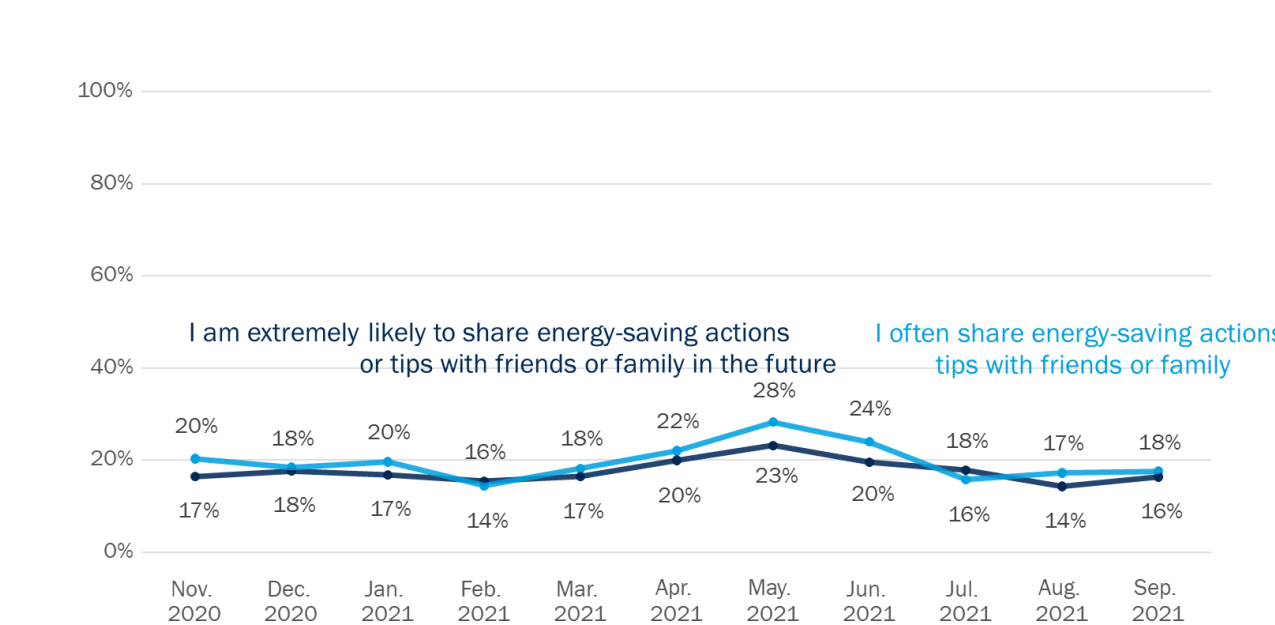
Figure 21. Respondents Who are ‘Extremely likely’ to Change their Day-to-Day Energy-Use Behavior



Performance Metric: Social Diffusion

Social diffusion, a metric we started measuring in November 2020, has remained mostly constant with about one in five respondents sharing energy-saving tips with friends and family. We operationalized social diffusion as the extent to which Californians share energy-saving tips with friends or family. The percentage of respondents who indicate that they often share energy-saving tips with friends or family has remained largely constant from November 2020 to September 2021, with a slight increase in May 2021 (28%), which as previously noted has been observed as an anomaly across many measures (Figure 22). Similarly, the overall percentage of respondents who indicate that they are extremely likely to discuss energy-saving actions or tips with friends or family in the future has largely remained stable since November 2020.

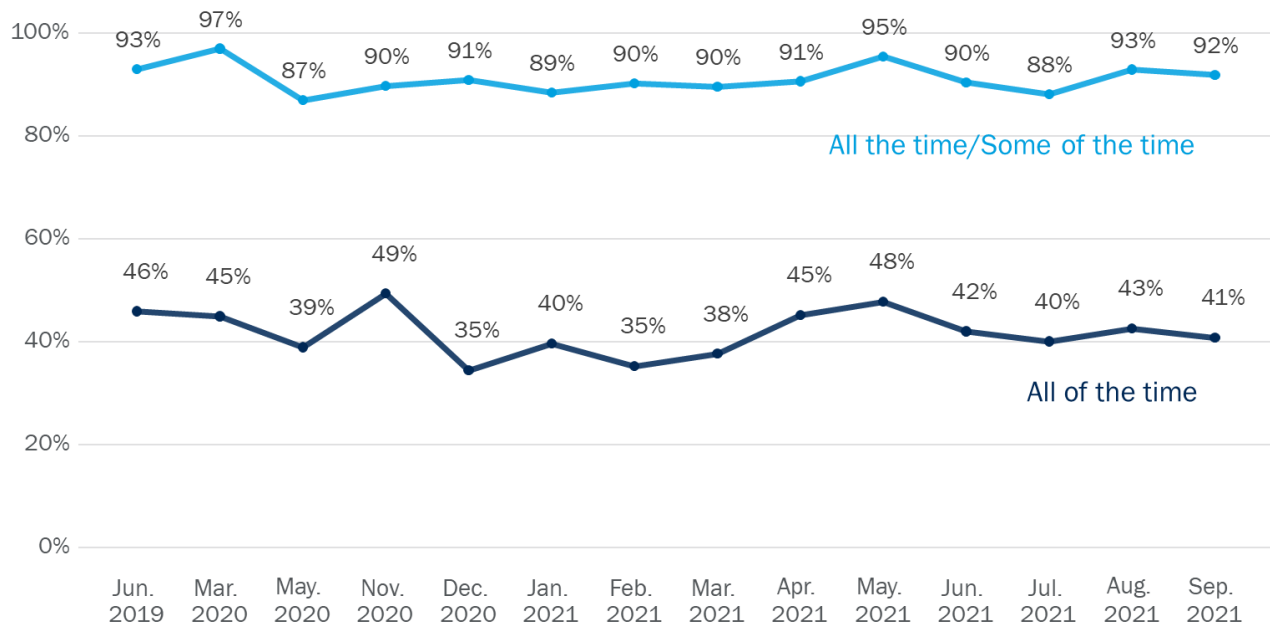
Figure 22. Respondents' Frequency and Future Likelihood of Sharing Energy-Saving Tips



Performance Metric: Behavior Changes

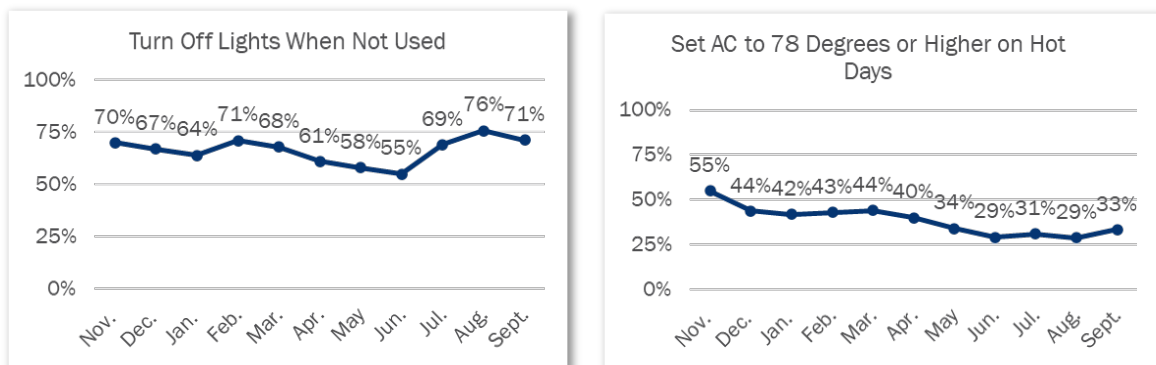
The percentage of respondents who indicate that they live in ways that reduce energy use 'all the time' has remained constant since June 2019. Aside from the anomaly we observed in May 2021, the percentage of respondents who say they live in ways to reduce energy use has remained fairly constant over time, with 41% reporting they live in ways to reduce energy all of the time in September 2021. Nearly all respondents (92%) attempt to live in ways that reduce their energy use at least some of the time (Figure 23). Again, this would have been a challenging metric to see movement on as 93% of respondents already noted they live in ways that reduce their energy use at least some of the time when we started fielding the survey in June 2019.

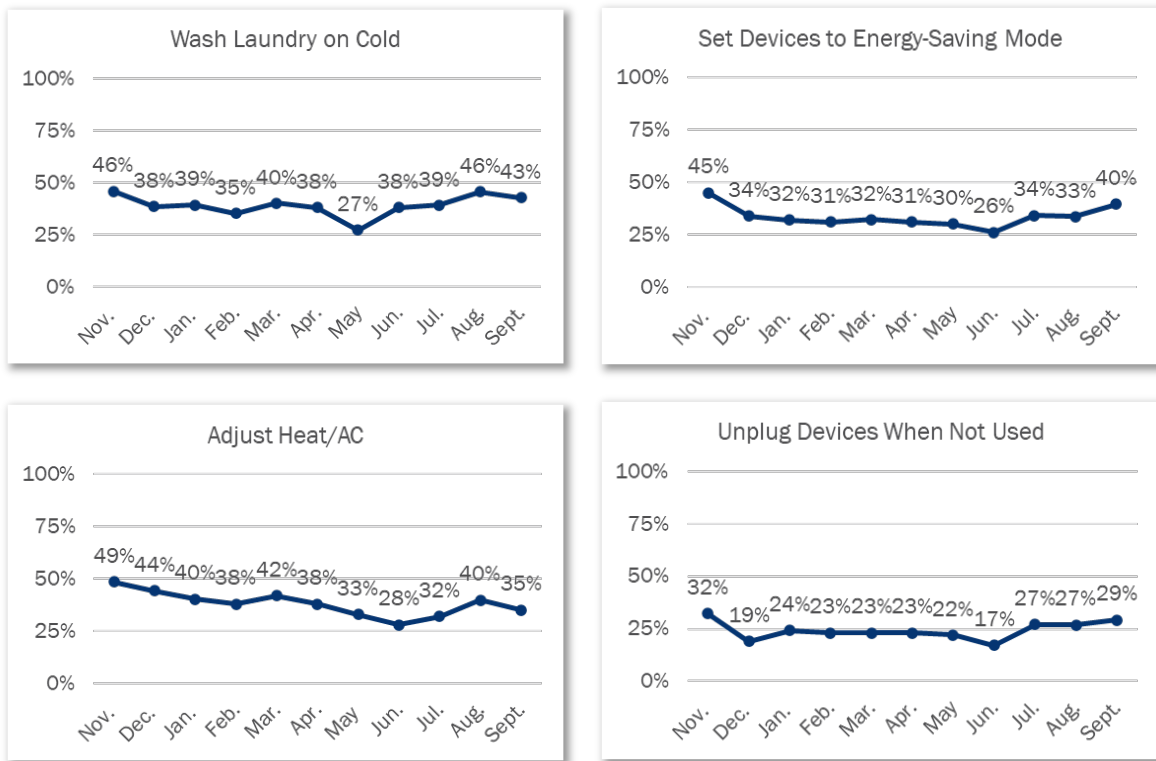
Figure 23. Respondents Who Live in Ways that Reduce Energy Use



The relative frequency with which Californians take specific EUC-targeted actions has remained stable over time for most target actions. We asked respondents the frequency with which they engage in actions commonly promoted by the EUC Campaign, ranging from ‘never’ to ‘almost always’ (Figure 24). Overall, the percentage of respondents who reported taking each action ‘almost always’ stayed constant from November 2020 to September 2021 with a few exceptions. The share of respondents that set their AC to 78 degrees or higher on hot days showed a declining trend over time. In addition, several actions showed upward trends from June 2021 to September 2021. It is important to note that in 2021, EUC focused on sharing a large variety of energy-saving tips to a smaller group of Californians through the Goldie text campaign and “Join the Movement” emails. A general population survey like the residential tracking survey is unlikely to detect changes resulting from these more targeted campaigns.

Figure 24. Respondents Who Take EUC-Targeted Actions ‘Almost Always’





We varied the action for setting the thermostat seasonally, so in the winter we asked respondents if they would be willing to set the heat to 68 degrees or lower on cool days and in the summer, we asked respondents if they would be willing to set the heat to 78 degrees or higher on hot days.

3.2 Diary Study

The evaluation team conducted a qualitative diary study to provide additional context around the trends seen in the residential tracking survey and the Flex Alert tracking survey from a qualitative perspective, in addition to adding rich insights to overall ME&O efforts. The specific objectives of the Diary Study were to (1) understand the underlying nuanced relationship Californians have with energy and (2) characterize motivations for energy conservation in Californians’ everyday lives and in times of crisis.

We conducted the eight-day diary study online, fielding from June 8, 2021, through June 17, 2021, excluding the weekend. We recruited 25 participants through the vendor Customer Opinion Services with the target of having 20 participants complete the study. Twenty-four participants began the study on Day 1 and all 24 participants completed the full duration of the study. Each day, participants were asked to complete an activity or respond to a series of prompts that aligned with a general theme. The themes by day were

- Day 1: Get to know you;
- Day 2: Energy on my mind;
- Day 3: What energy messaging have you seen;
- Day 4: Power outages;
- Day 5: Energy-savings actions;

- Day 6: Flex Alerts;
- Day 7: Energy-efficient appliances; and
- Day 8: Energy conservation perceptions.

Participants received a \$250 incentive for completing all eight days of the online activities.

Final study results appear in a separate report delivered to the CPUC in September 2021 and are available in Appendix B of this report. The following presents a snapshot of our primary findings.

Participants have routines and habits that made it difficult for them to shift use during peak periods or Flex Alerts. These habits included preparing meals, taking care of children and pets, leisure activities after work, and wanting to be comfortable in their homes. Tasks such as laundry and dishes were more flexible and were reported to be easier to shift.

All participants reported that they felt that Californians should do their part to reduce energy on hot days when demand is predicted to exceed supply and potentially cause an outage, and a majority (19 of 24) said that Californians should reduce energy use during peak times to prevent an outage, even if it's an inconvenience. However, those perceptions do not seem to influence how they feel about a utility remotely adjusting their AC, as 58% said they would never let their utility remotely adjust their AC, even if there was a threat of an outage. Understanding customers' preferences for having different types of devices within their home remotely adjusted is an area ripe for further exploration.

Participants prefer to receive alerts via text messages and prefer different messaging strategies depending on the context. Upon waking, many participants check the weather on their phones and/or on the news. If a power outage were to occur, 79% of participants prefer to be notified of the outage by text message (we did not specify the cause of outage in our questioning). Furthermore, participants want to know when and where the outage is occurring, as some would want to leave their homes. For Flex Alerts, participants overwhelmingly liked the graphics used on the CAISO Flex Alert webpage to alert Californians that a Flex Alert had been called, as they were simple and easy to understand, and they appreciated the clear communication around timing. When the text from a prior 2020 Flex Alert press release was shown to participants, they indicated that they disliked a lot of text and unfamiliar words but liked the phrases that stressed the voluntary nature of the alert and positive outcomes. Participants also indicated that during a crisis, local communication sources such as local utility, government, and news, were most trusted. We also found that in general, financial considerations were top of mind in daily life whereas family and community considerations were top of mind during crises.

Participants take action to prepare for outages but misperceptions about gas appliance use during outages may exist. Additionally, there is a need for a centralized informational resource for energy and emergency related issues. All participants had experienced a power outage while living in California. Those who experienced them relatively frequently either purchased items and/or made behavioral changes to prepare for and reduce the impact of the next outage, such as purchasing power banks, small solar-powered items, and/or generators.

We also discovered that misperceptions around natural gas appliance use and efficiency may exist, as some of the participants believed that natural gas appliances would use less energy in general and could also be used during outages. Some participants described wanting relevant information to prepare for outages as well as emergencies but unfortunately needed to visit multiple websites to find that information, or worse, not receiving any notification at all or only receiving vague information about length and timing.

Appendix B provides a more detailed reporting of these results and other key insights from this study.

3.3 Web Usability Study

The EUC website played a critical role in 2021 EUC Campaign efforts as the main objective of the CAP Phases 1 and 2 was to direct customers to the EUC website so they could sign up to “Join the Movement” and receive emails or text alerts with tips for saving energy.

We conducted a web usability study to assess the EUC website and its impact on customer engagement.¹⁴ The primary objective of the web usability study was to assess the EUC website effectiveness against its goals of (1) creating strong brand connection through educating and motivating customers to take energy-saving actions; (2) housing current and evergreen content including educational materials and tools; and (3) lead generation by referring interested Californians to program administrator (PA) sites. In assessing these effectiveness parameters, the evaluation team paid special attention to content related to home energy efficiency, climate change, the Keep It Golden movement, as well as content featured on the home page. Further, we assessed the Keep It Golden Join the Movement sign-up process to identify opportunities to streamline the process and encourage participation.

For this study, we recruited ten California residents using YouGov’s web panel from which the evaluation team developed a purposive sample using several demographic parameters.¹⁵ Participants included four smartphone users and six computer or tablet users. Notably, participants’ average web usage also varied, ranging from one to ten hours per day spent online or on a smartphone. None of the ten participants had previously visited the EUC website.

Based on website goals, we developed open-ended exploratory tasks, which may or may not have a correct answer, and specific close-ended tasks that were focused and had a correct answer. For example, participants were asked to navigate to content areas or pages from the homepage, such as finding the amount of climate credit for which they were eligible (close-ended). Or they were asked for their impressions of a page or what they found to be most interesting about a page (open-ended). We fielded sessions from June 9, 2021 through June 24, 2021 through WebEx. This allowed participants to share their screens with the research team so we could see how they were navigating the pages and also allowed us to record the screen and audio content. Participants were offered \$100 as a thank you for their time upon completion.

Final study results appear in a separate report delivered to the CPUC in August 2021, which is available in Appendix C. The following presents a snapshot of our primary findings.

Overall, participants found the EUC website home page visually appealing. Eight participants reported they liked the visual design and layout of the home page, particularly the color scheme (n=4), the font (n=2), and the availability of several language options (n=2). Among the content available on the home page, respondents indicated they were primarily motivated to explore the Energy Saver Quiz (n=5), the Home Energy Efficiency content (n=4), and the California Energy Goals content (n=3). None of the participants reported they were specifically motivated to explore the Goldie-related content on the home page. The Goldie graphic featured on the home page did, however, emerge as polarizing in its appeal with four people reporting they liked the graphic while another four people did not. Those who did not like the graphic reported that it was mismatched with the rest of the homepage and/or seemed too simple or juvenile.

¹⁴ While other research methods may reveal what customers think (e.g., surveys, focus groups) or what outcomes are achieved (e.g., “click-through rate” with website analytics), web usability testing is a diagnostic method that identifies potential issues and improvements in the user interface and its content. It provides valuable information on how customers use and interpret information on a website.

¹⁵ Demographic parameters considered in developing the purposive sample for the web usability study included self-reported age, gender, race, family income, and geographic region.

Respondents easily navigated to the Climate Change webpage. The climate change section of the EUC website features educational content on how climate change is affecting the state of California, including information about rising outdoor temperatures and sea levels, wildfires, and climate credits. We focused our efforts on climate change content to assess the usefulness and navigability of the available resources. Eight participants could find the main climate change webpage, and all ten participants had an overall positive reaction to the layout and available content. Notably, seven people appreciated the interactive graphics on increased temperature, rising sea levels, and wildfires. A few opportunities emerged to improve the graphics, including improving their readability on a smartphone (n=2), adding temperature data specific to the Central Valley region (n=1), enlarging the size and color of graph axes (n=1).

Participants navigated to the main Home Energy Efficiency webpage with ease, though they demonstrated difficulty finding more detailed information. The Home Energy Efficiency content offers resources and tools aimed at identifying and implementing residential energy efficiency opportunities in an affordable way. The research team evaluated this section to assess consumer interest and need for these resources. While nine participants could find the main Home Energy Efficiency content, eight required several attempts to reach information specific to energy-efficient appliances. In particular, when searching for information on energy-efficient appliances, some participants navigated to the “Home Improvements” section and ended up with content related to financial assistance programs for energy bills. Once they arrived at the Home Energy Efficiency page, six of seven participants could easily navigate to their Program Administrator (PA)¹⁶ website to find information on available rebates for energy-efficient appliances.

Overall, the sign-up process for the Keep It Golden Movement was straightforward. The Keep It Golden section provides educational information on the Keep it Golden Movement and an option to sign-up to receive weekly energy saving challenges via text or monthly tips via email. This was of particular interest because driving sign-ups for these options was identified as a priority of the CAP in 2021. Eight out of nine participants described the sign-up process as easy overall with a few opportunities for improvement. Computer users indicated confusion with the terms-of-service checkbox and its intent (n=3), the “challenges” terminology in the sign-up description (n=2), and the need to provide an email address for a text-only messaging service (n=1). Two respondents also initially interpreted the process as a sign-up for weekly emails rather than text messages. Despite the aforementioned confusion, four participants opted to sign up for the Keep it Golden Movement during their session, and each of the four said they would read future Goldie text messages.

Respondents demonstrated familiarity with available energy-savings tips. In the Keep it Golden section, there was also information about various energy-saving tips. Respondents demonstrated familiarity with several of these featured energy-saving tips, with the most commonly used tip being “Cover the Floor” (n=5). Six participants expressed confusion with the “Lower the Heat” tip, citing they did not understand whether it was targeted for heat or air conditioning, and they do not regularly use or keep their system set lower than 68 degrees.

After spending time reviewing the website throughout their session, participants reflected that they liked the overarching website experience and were able to adequately identify its intended purpose. Nine respondents reported they liked the visual design and layout and the site navigation. Most people also indicated they would recommend the EUC website to others (n=8). One of the primary goals of the EUC website is, “creating strong brand connection through educating and motivating customers to take energy-saving actions.” When asked to define the website purpose, participant descriptions aligned with the primary objectives. Participant definitions identified the purpose as geared toward “building collective action,” “providing Californians with

¹⁶ The term PA includes the California IOUs, Community Choice Aggregators (CCAs), and Regional Energy Networks (RENs)

solutions to make their personal lives more energy efficient,” and “encourage people to save energy, and teach people small-scale steps, accessible means of saving energy.”

Appendix C provides a more detailed reporting of these results and additional key insights from this study.

3.4 Website Effectiveness Assessment

To provide another perspective on the role of the EUC website in driving customer engagement and action, we worked with DDB to access to the EUC Campaign’s web analytics information.

We reviewed and analyzed the web analytics data to offer insights on the role and effectiveness of the website in driving users to take energy-saving actions. Previously, we analyzed EUC website data from Q1 of 2020 through January of 2021 which provided insight on the effectiveness of the COVID-19 Customer Support Campaign and other Year 4 EUC Campaign efforts. We summarized these results in the 2020 Annual Performance Report. To further understand EUC performance towards promoting collective energy action in Year 5, we continued analyzing EUC website user data and behavior on the site from February 2021 through August 2021. Notable Campaign events during the evaluation period include the rollout of the CAP Phases 1 and 2. CAP Phase 1 efforts were designed to set the stage to prime Californians to take action and sign up to “Join the Movement” and DDB launched these efforts in November 2020. The CAP Phase 2 Campaign launched in April 2021 with the goal of encouraging visitors to visit the “Join the Movement” page of the EUC website and sign up for the Goldie Text Challenge. The Goldie text program full rollout occurred in July 2021.

Where possible, we supplemented 2021 web analytics data with 2020 data to show the impact of the Campaign’s shift from the COVID-19 Customer Support Campaign to paid media efforts designed to encourage Californians to take collective energy action by visiting the Join the Movement landing page on the EUC website and signing up for the Goldie Text Challenge and Join the Movement emails.

To analyze the website data as it related to the EUC Campaign objectives, we reviewed key performance metrics split into two categories: website performance and user behavior. Measures of website performance include page views, page completion, site visitor analysis, and new vs. returning user comparison. We assessed user behavior by examining metrics that included counts of the number of times EUC site visitors exit directly from the EUC website to their local energy Program Administrator (PA) website (PA conversions), call-to-action (CTA) button clicks, and Join the Movement and Goldie Text Challenge sign-ups. All of these metrics work together to inform the effectiveness of the EUC website in achieving the goals laid out for Year 5 of the JCAP. We describe key metrics in further detail as they relate to the goals of the evaluation in Table 2.

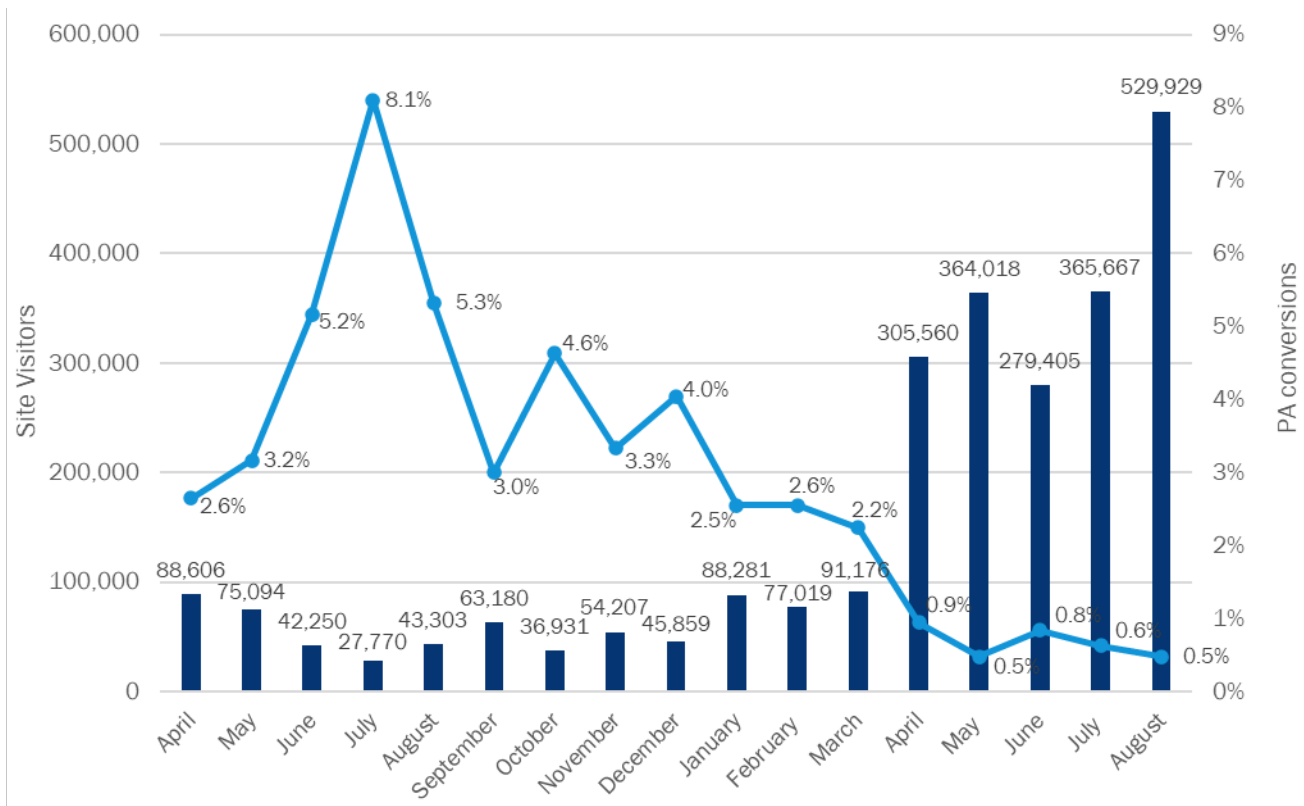
Table 2. Description of Metrics Used to Assess Website Effectiveness

Metric	Description
Page Views	A page view can be defined as a single view of a specific page within the website. Every time a site visitor looks at a web page, it counts as a unique view. We compare page views between high traffic pages to measure exposure and media Campaign performance.
Page Completion Rate	Through website analytics, we can track how far down a web page site visitors are scrolling. This allows us to evaluate how much content they are being exposed to during their visit. In this evaluation, page completion rate is measured by observing clicks on homepage CTA buttons that were moved further down the page over time. By looking at CTA button clicks, we know that site visitors scrolled through at least enough page content to reach the CTA button.

Metric	Description
PA Conversions	While individual website data cannot track how users act once they leave the site, we can monitor where users are exiting, a point called a conversion, to get an idea of their motivations for leaving. Throughout the EUC website there are callout boxes directing site visitors to take direct action with their Program Administrator (PA). The EUC site tracks every time a site visitor clicks their PA website link and leaves the EUC site to find out how to take direct action with their energy provider. When an EUC site visitor exits directly from the EUC website to their local PA website this is described as a PA conversion.
Call to Action (CTA) Clicks	CTA buttons are clickable text box buttons that are intended to catch the eye and drive users to a different landing page or key site content. The homepage of the EUC site includes “Join Now,” “Do More,” and “Learn More” call-to-action (CTA) buttons which lead to the Keep it Golden Join the Movement landing page. In evaluating website performance, we tracked the number of site visitors that followed these CTA buttons to the Keep it Golden movement compared to those that sign-up with their phone number or email, showing their drive to adopt energy-efficient behaviors.

EUC website traffic increased dramatically in alignment with the CAP Phase 2 efforts designed to drive customers to the EUC website to sign up for the Goldie Text Challenge and “Join the Movement” emails. Paid social and media assets, the largest drivers of web traffic, were paused repeatedly throughout 2020 due to COVID-19 and other extenuating circumstances, resulting in a drop in site visitors. In November 2020, DDB resumed paid media efforts with the CAP Phase 1 efforts and CAP Phase 2 paid social efforts launched in April 2021. EUC website traffic more than tripled from March 2021 to April 2021 in alignment with the CAP Phase 2 social media launch. EUC website visitation continued to increase through the summer of 2021 in alignment with DDB’s ongoing rollout of CAP Phase 2 efforts across TV, radio, digital media, paid search, and print newspapers from July 2021 to August 2021. In August 2021, the site reached an all-time high of over 500,000 visitors. Most of the site visitors during the evaluation period (February 2021–August 2021) came from new visitors (77%).

Figure 25. EUC Website Visitors and PA Conversions by Month (April 2020-August 2021)



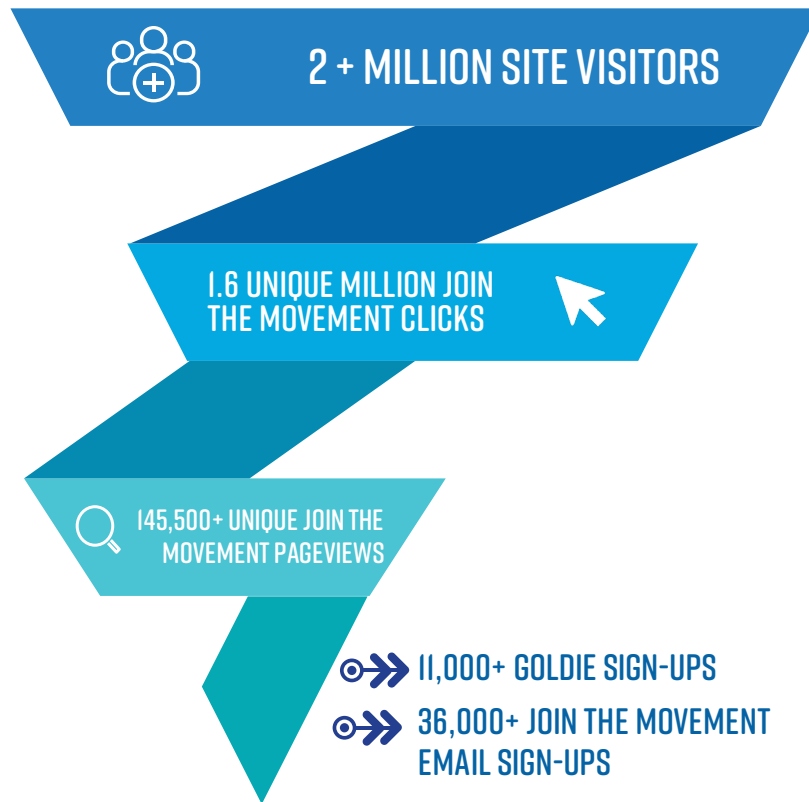
The Keep it Golden Join the Movement CTA button drew the most interactions from February 2021 to August 2021. The Join the Movement homepage CTA button drew the most clicks of any CTA button on the EUC site, accounting for 50% of all homepage CTA button clicks (Table 3). This result is expected as the goal of the CAP Phases 1 and 2 was to drive Californians to sign up to “Join the Movement.” It is also important to note that the Keep it Golden “Learn More” CTA button is also the first piece of content that visitors see when they land on the website, and this could also help explain the high share of CTA clicks. The TOU content “Do More” button drew the next largest number of clicks, making up for nearly a fourth of all homepage CTA clicks in the 2021 evaluation period. CTA clicks on the “Learn More” button redirecting to the Home Energy Efficiency page drew the fewest clicks, only 2% of total homepage CTA clicks in 2021 so far, an interesting finding as the web usability study found that home EE content was some of the most sought-after information.

Table 3. Count of Clicks for Top EUC Website CTA Buttons (February-August 2021)

CTA Button	Total Clicks	Unique Clicks
Join the Movement (“Learn More” Button)	1,683,529	1,596,432
Time of Use (“Do More” Button)	784,053	740,877
EUC Home Page (“Do More” Button)	388,662	351,279
Flex Alert (“Do More” Button)	309,829	280,608
Home Energy Efficiency (“Learn More” Button)	64,684	53,008

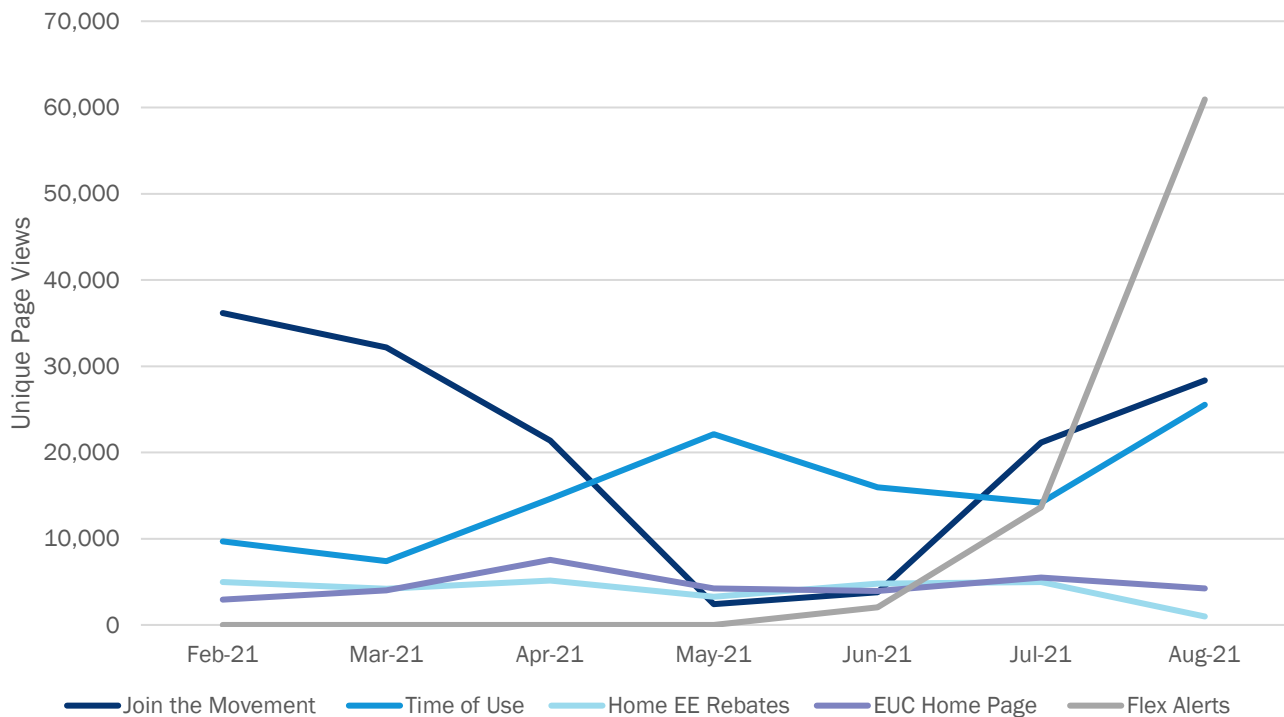
Units of measurement are the cumulative number of total and unique clicks from February 2021 to August 2021

Figure 26. EUC Website and “Join the Movement” Metric (February–August 2021)



Similarly, the Keep it Golden Join the Movement landing page consistently had the most traffic from February 2021 to August 2021. The Join the Movement landing page on the EUC website went live in November 2020 and was the most visited web page on the EUC site from February 2020 to April 2021 and again in July 2021. The Join the Movement landing page had the highest number of total and unique pageviews from February 2021 to August 2021 (Figure 27. Count of Unique Page Views for Top EUC Web Pages by Month (February 2021–August 2021)Figure 27). Again, this trend is expected, as directing traffic to the Join the Movement sign up page was the key focus of the paid digital and search efforts in 2021 and it is the first page visitors see when they visit the website. In May 2021 and June 2021, the TOU rates and home efficiency rebates and incentives pages had more traffic than the Join the Movement page. In August, the Flex Alert page had more traffic than the Join the Movement site, in alignment with the rollout of the Flex Alert Campaign. The majority of site traffic month over month was driven by paid digital content as well as paid search.

Figure 27. Count of Unique Page Views for Top EUC Web Pages by Month (February 2021–August 2021)



Note: We selected the campaigns that had the highest visitation overall for February 2021- August 2021 to display over time. Within a given month other web pages not shown here may have ranked within the top five page views for a given month but are not included in this figure.

A small proportion of website visitors are signing up to “Join the Movement” emails and even fewer are signing up to receive Goldie text message alerts. According to the September EUC Monthly Stakeholder Meeting Slide Deck, the cumulative number of Californians that signed up to receive monthly emails with energy-saving tips and the number of Californians that were signed up for the Goldie Text Challenge was 36,783 and 11,780 respectively as of August 2021. These results indicate that despite Join the Movement and Goldie sign-ups being the main focal point of the CAP Phase 1 and 2 Campaigns and achieving high click-through rates, a relatively small share of website visitors followed through and signed up for these two initiatives. It is also important to acknowledge the Join the Movement Campaign was designed to have a smaller reach, aiming to achieve a stronger energy-saving impact among the Californians that did sign up.

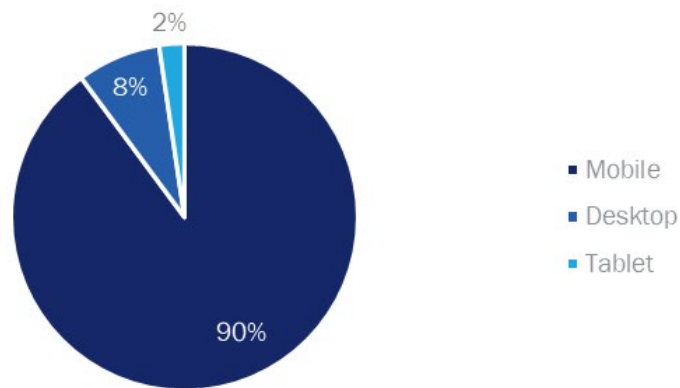
PA conversions declined during the CAP Phase 2 Campaign, showing an inverse trend to EUC website traffic. PA conversions showed a downward trend from a peak of 8.1% in July 2021 to 2.2% in March 2021, right before the CAP Phase 2 launch and then remained below 1% from April 2021 to August 2021 (Figure 26). The vast majority of PA conversions, clicks on PA content that leads to a conversion from the EUC site to a PA webpage, came from organic or paid search, accounting for an average of 77% of all PA conversions from February 2021 to August 2021, which is consistent with results from April 2020 to February 2021, when visitors from these sources accounted for an average of 78% of PA conversions per quarter. Users that come to the site through a direct search channel are more likely to be looking for specific information and they may be more likely to navigate directly to their PA website to find it. One possible explanation for the decline in PA conversions from December 2020 to August 2021 is that some customers may enter the website seeking to

find ways to save energy at home, and after finding the Join the Movement webpage, they may choose not to navigate further to find energy saving opportunities from their local PA.

The site continues to be utilized by a wide range of age groups. Eighty-seven percent of users were 25 years or older and were spread evenly across age groups (25–34 years old, 35–44 years old, 45–54 years old, 55–64 years old, and 65+ years old) with an average of 17% of site visitors coming from each age group. The fewest visitors were 65 or older representing only 12% of site visitors. There was an even split among female- and male-identifying site visitors, 50% from each group visiting the EUC webpage. The demographics of EUC website visitors stayed consistent from 2020 to 2021.

While there was a fairly even split among age and gender demographics of those visiting the site, a vast majority (90%) of all visitors used their mobile device to access the site, a nearly 30% increase from 2020 data (Figure 28). As early as Q1 of 2021, mobile site traffic increased 9% compared to the previous quarter, accounting for 68% of total site traffic. At the same time, desktop users continue to drive more PA conversions than any other device type. These results indicate that there may be opportunities to streamline the process of channeling customers to PA websites, so that it is more mobile-friendly.

Figure 28. Percentage of Site Visitors by Device Type



3.5 Assessment of Partnerships with Community-Based Organizations

CBOs partnerships continued to be a key outreach strategy for the EUC Campaign in 2021 and the EUC Campaign also began engaging CBOs to support Flex Alert efforts in 2021.

The evaluation team conducted several research activities to assess the role of CBO partnerships. These activities included interviews with CBO staff, observations of CBO events, and a content analysis of the newsletters DDC sends to the CBOs for distribution (Table 4).

Table 4. Overview of Data Collection Activities

Research Task	Description
CBO Staff Interviews	Conducted interviews with ten CBOs involved with EUC to learn about their experience with the EUC Campaign and what resources they need to continue energy messaging independent of EUC.
CBO Event Observations	Observed five virtual events held in collaboration with CBOs to promote EUC to their constituents.

Research Task	Description
Newsletter Content Analysis	Analyzed the content of six EUC newsletters sent to CBOs between October 2020 and March 2021.

We conducted interviews with ten staff at participating CBOs in May 2021 and June 2021. The interviewed CBO organizations represented a variety of classifications, including those serving small businesses, people with disabilities, environmental interests, faith-based communities, and students. In the interviews, we explored CBOs’ experience with the EUC Campaign, opinions about EUC resources, use of grants funds, and interest in and capacity to continue energy messaging long term. The evaluation team also assessed the extent to which CBOs are helping the EUC Campaign meet its objectives by observing five online events in the first half of 2021. During each event, the observer completed an observation rubric and took notes on the presentation and audience questions. (See Appendix A for all data collection instruments.)

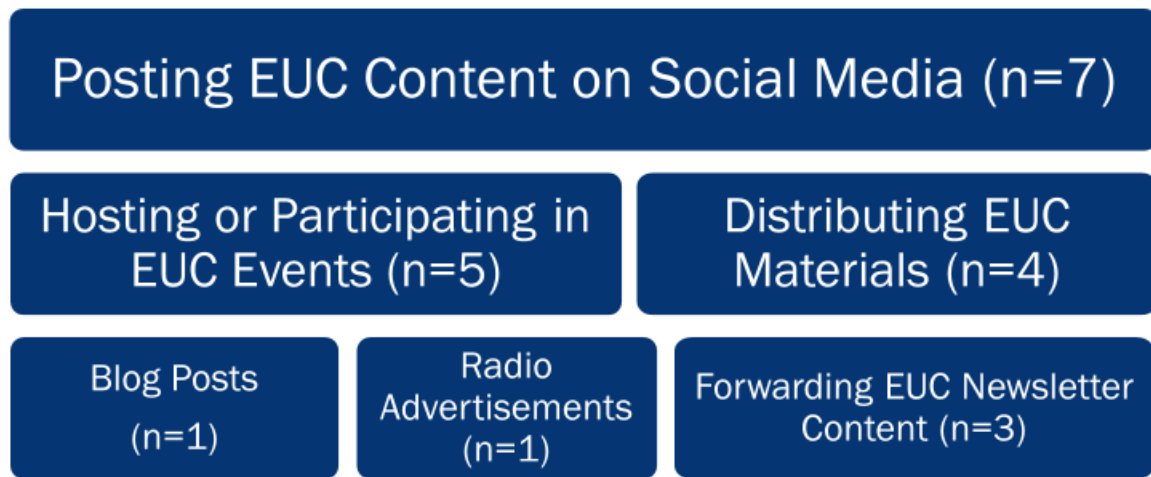
Finally, we conducted a content analysis of six CBO newsletters to understand the content and messaging that DDC provides to the CBOs to forward to their constituents. DDC developed eight separate versions of each newsletter, each tailored to a different classification of CBO based on area of focus (environmental, small business, faith-based, etc.) and we reviewed each version of each newsletter.

Overview of CBO Activities

In the following section, we discuss how the CBOs use EUC resources and deliver energy-saving messaging to hard-to-reach (HTR) audiences.

CBOs primarily engaged with EUC through their grant-funded projects, but also provide EUC messaging to their constituents through pre-made content and events. Posting on social media was the most common activity, with seven of ten CBO representatives reporting they post EUC messaging on their social media accounts. The pre-made social media posts EUC sent in the monthly newsletter were very helpful for CBOs who may not have their own communications staff to develop social media posts for them. As one CBO representative put it, “they have some really great social media content.” CBOs also hosted or participated in EUC events both in person and virtually, distributed EUC-branded materials such as palm cards or flyers, and some forwarded content from the EUC newsletter to their constituents. One CBO representative indicated their organization has not yet done any activities to promote EUC to their constituents as they had just started their grant project at the time of the interview. Figure 29 lists activities CBO staff conduct as EUC partners.

Figure 29: CBO Activities to Provide EUC Messaging to Constituents



Note: The size of each box corresponds to the frequency of activities reported during our interviews with CBO staff.

Grant-Funded Projects

Grant-funded projects are another way the EUC Campaign engages CBOs to serve hard-to-reach audiences. DDB issued a grant solicitation for the EUC Campaign in February 2021 with two funding tiers; Tier 1 grants provide organizations up to \$20,000 to create an energy messaging program for five months or longer while Tier 2 grants provide up to \$3,000 to organizations supporting shorter term programs.

CBOs have plans for innovative and engaging projects using EUC grant funds. Nine of the ten CBOs we interviewed had some grant activity, including five Tier 1 grant recipients and four Tier 2 grantees. The Tier 2 grant projects typically included events or additional outreach efforts to communities. Two of the Tier 2 grant projects focus on disseminating TOU rates messaging to communities and schools. The other two Tier 2 projects are focused on outreach to underserved communities through events and digital marketing. One small business-focused Tier 2 grantee used the grant funds to launch a text messaging campaign that sends information to its constituents efficiently. This organization also conducts a webinar every month and targets specific individuals and community members who they believe would benefit most from EUC resources and information. Another Tier 2 grantee focused on providing services for people with disabilities plans to use the funds to sponsor partner organizations at their annual convention. This CBO representative reported, “It allowed us to become a beneficiary—and an integral part of helping people meet their shortfalls in the ADA [Americans with Disabilities Act] community.”

Tier 1 projects provide a way for CBOs to expand upon their typical energy conservation messaging and provide their constituents with engaging content and activities for several months. For example, one CBO is planning on holding an energy efficiency challenge with small businesses; the business that comes up with the most innovative energy efficiency concept will receive promotion from the CBO on social media. Another CBO is using the Tier 1 grant to create a social media campaign that captures stories of energy conservation from elders in their communities. This CBO hopes to spark an energy efficiency dialogue in their community through the lens of their elders and their history.

CBO Events

CBOs have partnered with EUC on nearly 1,000 events throughout the EUC Campaign. In the first three years of the EUC Campaign, CBOs hosted their own events or attended community events to engage with and provide resources to their constituents. However, 90% of CBOs moved entirely to digital community engagement efforts in 2020 due to the COVID-19 pandemic and events remained largely virtual in 2021. As of July 2021, CBOs have partnered with EUC on 972 events in total.

Based on our observations of CBO events, we found CBO events to be a dynamic way for EUC to engage with HTR communities and they provide easy, inexpensive strategies for people to save energy and money. During the presentations we observed, the EUC representative explained what EUC is, why energy efficiency is important, and provided tips and resources to help the targeted audience save energy. The tips are almost always low- or no-cost, which is especially important for vulnerable communities in an economy still reeling from the COVID-19 pandemic. During one event we observed, which included representatives from the local government, EUC, and the local CCA, the EUC representative highlighted no-cost tips such as washing laundry with cold water and utilizing natural light. The other representatives focused on more expensive changes such as adding insulation to a home. At this event, the EUC representative also provided information on rate plans for eligible households including California Alternative Rates for Energy (CARE) and medical baseline. At another event aimed at homeowners, the EUC representative shared a do-it-yourself home energy audit.

Some online events were networking events in partnership with chambers of commerce or business groups. In these cases, the EUC representatives did not give formal presentations but attended the virtual networking portion where they could engage in small group settings with attendees.

Newsletters

One of the primary ways EUC engages with CBOs is by providing them newsletters to send to their constituents. EUC distributes electronic newsletters via email on a monthly basis. The newsletters are consistently structured and EUC tailors each to fit the current season and the CBO's classification. The newsletters also contain action items and additional resources for CBOs to pass on to their constituents.

Each monthly newsletter contained eight versions, tailored for the eight different classifications of CBOs. Each newsletter contained

- An attention-grabbing headline and introductory paragraph tailored to the CBO classification.
- Two images and captions to be posted on social media, along with posting instructions.
- Two to three seasonal energy-saving tips.
- A community spotlight highlighting an active CBO working to promote EUC within their community. The featured CBO is also tailored to the classification of CBO that received the newsletter.

Of the six newsletters we reviewed, most also contained a new member spotlight, which highlighted a CBO that had recently joined the EUC Campaign (n=4). The new member spotlight promoted the featured CBO's mission and how they incorporate energy efficiency and EUC messaging into the services they provide to their constituents.

Figure 30: Example of Social Media Post Included in CBO Newsletter



The newsletters provided a few action items for the CBOs to complete.

- Each newsletter includes an image and caption for a social media post related to an upcoming cultural moment, such as Native American Heritage Day, Small Business Saturday, and Black History Month. All CBOs receive the same social media posts and captions, regardless of their classification. The CBO representative can refine the EUC message for their constituents by tailoring the caption provided for the social media posts but cannot tailor the image. CBOs then post these images to promote EUC and energy efficiency to their online followers. In July 2021, CBOs made a total of 34 social media posts.
- The February 2021 newsletter included a request for proposals for EUC grants. CBOs could apply for one of two tier grant levels.
- Both the February 2021 and March 2021 newsletters included a link that CBO staff and their constituents could use to sign up for the Goldie text message and “Join the Movement” emails.

Based on our content analysis of the EUC newsletters, the energy-saving tips featured in the newsletters were tailored to fit the season and/or any upcoming holidays. For example, the November tips related to heating and storing food, one of the December tips was to purchase energy-efficient holiday gifts, and the March tips included cooling your home naturally by opening windows. The energy efficiency tips in the October, November, and December newsletters were useful and creative, while the tips in the January, February, and March newsletters seemed like standard actions most people already perform, such as turning lights off when not in use or using natural light when available.

The newsletters reviewed also occasionally provided energy efficiency resources. The October newsletter provided a link to a do-it-yourself home energy audit in the introductory text for all CBO classifications. All but one newsletter included a link to the EUC website in one of the social media posts. The February and March newsletters also provided a link for CBO constituents to sign up for Goldie and receive energy saving tips and challenges by text or email.

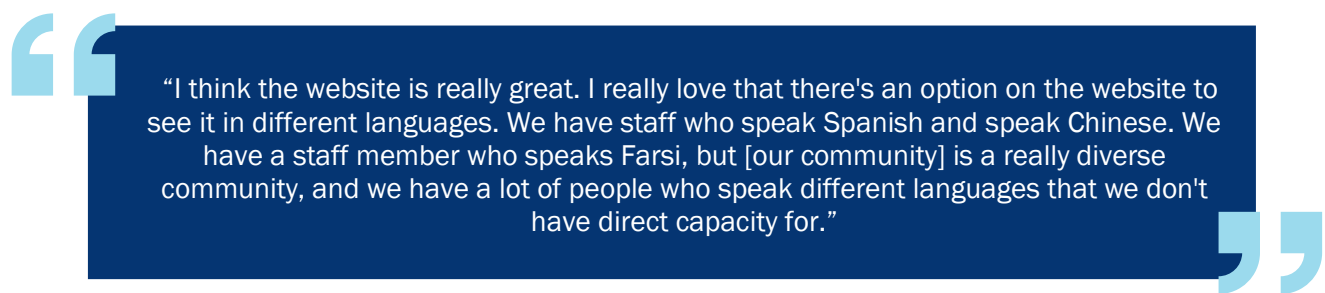
The newsletters provide a variety of information and resources at a regular cadence, but EUC may need to encourage more CBOs to distribute it to their constituents. It seems a majority of CBOs may not be distributing the newsletter to their constituents. The results of the short online survey we conducted in February 2021 with

21 CBOs found just over one-third (n=8) of CBOs distributed the EUC newsletter to their constituents and only two of those eight found it 'very' or 'extremely effective' at helping their constituents know how to manage their energy use. Part of the problem is in getting CBOs to open the newsletter. DDC reports that the newsletter with the highest open rate during the evaluation period was only opened by 37% of CBOs.

CBO Perception of EUC Resources

CBOs found most EUC resources to be helpful, and the available resources help the CBOs reach a wide audience; however, CBOs were split on the usefulness of physical materials. The CBO representatives we spoke with were split on the helpfulness of physical EUC materials (such as palm cards, flyers, or EUC-branded items), with four reporting they were helpful and five reporting they were not. The CBOs that started working with EUC during the pandemic and have not had the opportunity to host in-person events did not find the physical materials to be helpful. A couple of interviewed CBO staff also noted the flyers were text heavy with lots of information. They expressed that some of their constituents were not fully literate and that pictures would serve them better. They felt that when there was too much text on the flyer, it might not get read or it could make it difficult to pull out what was most relevant for the reader. Other CBO representatives mentioned the television commercials and the tips included in the Goldie text messaging system were not particularly helpful for their organizations. CBOs who found the physical materials to be useful noted that EUC flyers and palm cards are easy for the CBOs to hand out at events or to clients while conducting intake for services, and EUC-branded items such as pens and tote bags promote the EUC brand to people who cannot read information from the website or a flyer.

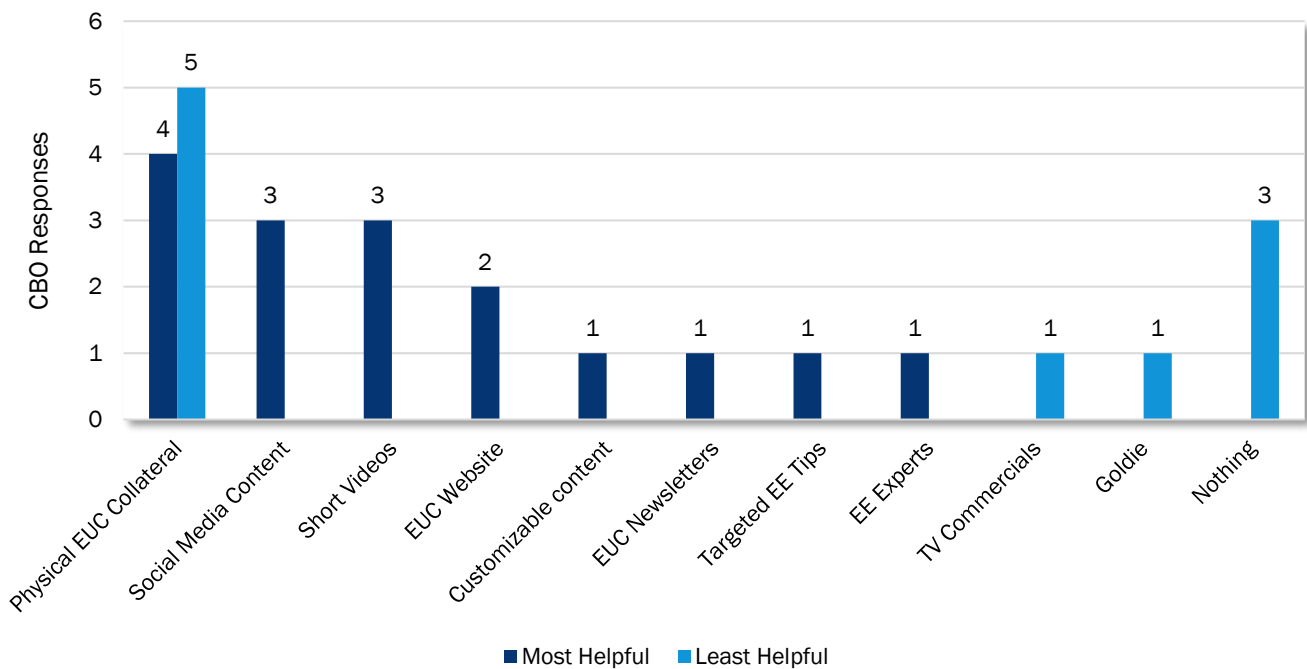
CBO staff also found the social media content, short EUC videos, newsletters, and sector-specific tips helpful. Three CBOs were also able to feature their own constituents in short educational videos that promoted the EUC message and highlighted the work of the CBO. In the interviews, they praised the Campaign for providing access to customizable materials and experts they could speak with if they had any questions. Two CBO representatives found the EUC website to be the most helpful resource. The EUC website hosts resources such as a home energy audit, energy-saving tips, and links to the IOU websites. Since the website is translated into five different languages, it allows the EUC message to reach people who may not have otherwise been exposed to EUC if its materials were in English only. As one CBO staff member put it,



“I think the website is really great. I really love that there's an option on the website to see it in different languages. We have staff who speak Spanish and speak Chinese. We have a staff member who speaks Farsi, but [our community] is a really diverse community, and we have a lot of people who speak different languages that we don't have direct capacity for.”

Figure 31 summarizes the most and least helpful resources as cited by CBO staff.

Figure 31: Frequency of the Most and Least Helpful EUC Resources (n=10)



Note: Multiple responses allowed.

CBOs cited actionable tips and messaging that underscores how energy efficiency can personally benefit their constituents as additional ways EUC can help their constituents save energy. Eight out of ten interviewed CBOs reported that additional resources from EUC may be helpful to their organization. Of these eight, three reported actionable information in an easy-to-understand format would be useful, and three reported that underscoring how energy-saving behaviors can have a tangible benefit for individual CBO constituents would be helpful as well. Providing examples of an action’s benefits would make the messaging more impactful, according to these representatives. As one CBO representative put it, "I feel like if something's in it for them, they're going to be more open to the greater message."

Small business–focused CBOs also reported the importance of rebates and incentives aimed specifically at the small business community. One CBO representative pointed out that while incentive programs for small businesses exist, utilities focus on customers that use the most energy rather than customers who need energy efficiency the most. This CBO staff person said, "it means our small businesses get passed up for all of those rebates, even though they pay for them on their energy bill."

CBO Perceptions of Partnering with EUC

Through our interviews with CBOs, we also explored how well the CBOs’ missions align with EUC and the benefits and challenges of their partnerships with EUC.

All interviewed CBO staff agreed that their missions align well with the mission of the EUC Campaign, even if it may appear that their organization has little to do with energy efficiency. Each CBO seeks to improve the quality of life for their constituents by providing resources, information, and assistance. The CBO staff saw the EUC messaging as one way to help them reach their objectives. The energy-saving tips and information about energy programs, energy-efficient appliances, and TOU rates provided by the EUC Campaign add to the

beneficial resources the CBOs can provide to their constituents. Some CBO staff also found that the EUC messaging aligns with and reinforces the messaging their CBO was already providing, amplifying its impact. CBO staff appreciated how the EUC mission of saving energy will help their constituents save on their energy bills, which they found very helpful. One CBO staff person reported,



“The Energy Upgrade California program synchronizes very well with our overall mission, especially under our community development side of our mission. It helps us to continue to serve families and strengthen neighborhoods, especially dealing with the whole issue of climate change.”



In one case, the CBO was able to help EUC target its messaging to a segment of HTR audiences. This CBO staff person noted that the EUC tips they had seen were geared toward the “general public.” The CBO staff, which focused on small businesses, helped EUC develop targeted, specific, and actionable recommendations for these businesses. They described this two-way relationship as a “good partnership,” and this example demonstrates how the CBO relationships help the Campaign extend its reach and provide salient messaging to HTR audiences.

CBOs experienced multiple benefits as a result of partnering with EUC and many are now a trusted resource for energy information among their constituents. Half the interviewed CBOs found that partnering with EUC allowed them to more effectively reach their constituents or reach more people than they would have otherwise. CBO representatives also praised EUC for being a flexible and supportive partner and three interviewed CBO staff provided unprompted praise for the EUC staff with whom they had worked. CBO interviewees also found other aspects of their partnership with EUC to be beneficial, including the assistance they received in the form of marketing support, grant funds to implement their project ideas, and increased credibility in their communities and among their constituents. Although many of the CBOs’ core work was outside the energy sector, nearly all believed that due to their involvement with EUC, their constituents now see their organization as a trusted resource for energy information. Only one interviewed CBO did not feel their constituents view them in this way because they do not typically focus on energy issues or issue-based advocacy.

While CBOs reported an overall positive experience working with EUC, some CBOs had trouble receiving materials on time. Although the pandemic greatly reduced in-person activities, some CBOs still relied on physical materials from EUC to connect with vulnerable communities who are less likely to access digital resources, such as the elderly. They noted that paper resources are important for that audience because they like to stick reminders on a bulletin board or their fridge. A few CBOs mentioned receiving a sufficient quantity of EUC-branded materials (pens, notepads, etc.) was a struggle, and another reported they had to copy Spanish EUC flyers themselves because they could not get enough from the Campaign. CBO staff also mentioned the EUC materials and website could be better tailored to specific groups, such as the Black community or people with disabilities. One CBO representative said, “I think it would be super attractive if there were some actual mention[s] on the website of things that are specific to people with disabilities when it comes to energy, something like charging your wheelchair.”

The Future of CBOs and Statewide Messaging

CBOs are interested in continuing energy efficiency messaging to benefit their constituents and funding would allow it to stay a priority for the CBO.

The CBOs have the structure and staff in place to continue messaging but would need financial support to ensure it stays a priority. Interviewed CBO staff are highly interested in continuing energy messaging in the future, only one CBO representative was not interested in providing energy messaging to their constituents absent EUC support.

For CBOs to continue energy messaging, they require pre-made content they can distribute and funding to hold community events or conduct projects. Interviewed CBOs reported that disseminating information to their constituents about ways to save energy would not be a problem if they received materials or other content they could send via email or hand out in person. Developing materials themselves requires funds and other resources the CBOs often do not have. Interviewed representatives said the materials that would be most helpful to them include tips and social media posts in addition to what they have already received, non-English materials, and links to energy-related resources such as rebates for efficient equipment for small businesses. Additionally, CBO representatives find it easier to provide energy messaging on an ongoing manner, rather than only at critical times like during heat waves. CBOs are not typically nimble organizations, and they may find it difficult to provide emergency energy messaging if they do not have adequate time to prepare.

While most CBO representatives are interested in continuing to provide energy related messaging to their constituents, eight of ten CBO representatives indicated their organization would need additional funding to distribute energy-saving tips and messaging independent of EUC. Funding ensures energy efficiency stays a priority for the CBOs and would allow them to distribute additional energy related content to their constituents more easily. As one CBO representative put it, "...the funding is very important because it allows us to do everything that we want to do, maybe through the events, maybe through the videos." CBOs may find generating and distributing content to their constituents to be difficult without additional funding.

A representative from DDC agrees the CBOs likely will not continue energy efficiency activities when they stop receiving funding. There are a number of ongoing issues and events that may be more relevant to CBOs and their constituents in the near future, including wildfires, COVID-19, and social justice issues. However, the constituents served by CBOs are at risk for being the most adversely affected by energy-related issues such as Public Power Safety Shutoffs (PSPS) and potential power outages resulting from electricity supply shortages during periods of peak demand. These issues may not be a high priority for CBOs and constituents until they experience negative impacts. The representative from DDC said, "The CBOs will likely focus in on that which is top of mind for their constituents, people never think about energy until the lights go off."

4. Conclusions and Recommendations

We synthesized key findings from the residential tracking survey, diary study, web usability study, web analytics assessment, and assessment of CBO partnerships to identify several recommendations for the CPUC and DDB to consider. As previously discussed in the introduction, the EUC Campaign will end in 2021 and the State of California will continue to support paid media efforts for Flex Alerts and Time of Use rates.¹⁷ As such, our recommendations are focused on identifying opportunities for the CPUC to leverage SW ME&O efforts to provide support around energy-related topics after the EUC Campaign sunsets. We summarize these key findings and recommendations below.

Recommended Future SW ME&O Focus

- **Key Finding: EUC branding, including Keep it Golden, has achieved growth in aided awareness over time and is positively perceived by most Californians but there is room to better educate Californians about what the brand represents.** Aided awareness of both EUC and Keep it Golden have increased since the Campaign launched to achieve moderate levels of aided awareness (36% and 41% respectively). In addition, most Californians believe EUC is relevant and needed, and nearly half trust EUC as a source of information for energy-related issues. At the same time, less than 40% of Californians that recognize the Keep it Golden slogan, associate it with energy conservation. Furthermore, familiarity of EUC declined in the period when the brand expanded to cover more topics including TOU rates, heat wave warnings, and Flex Alerts, which may be causing some confusion about the purpose of the brand. Californians also began to name Keep it Golden more frequently than EUC when asked to name energy conservation brands in California which may also be contributing to brand confusion.
- **Key Finding: EUC Campaign performance metrics related to general energy conservation have stayed constant in recent years, while there is a more urgent need to educate and communicate with Californians about Flex Alerts, PSPS, and other energy-related emergencies.** We found that high percentages of Californians think it is important to do their part to make California more energy efficient, believe that saving energy is the right thing to do, and live in ways that reduce their energy use. Results for these attitudinal and behavioral metrics have remained consistent over the past two years. These findings make sense given that California has been a leader in energy efficiency for decades and Californians have been exposed to energy conservation calls to action since the 1970's. Conversely, results from the Flex Alert tracking surveys demonstrate that Californians have low awareness and understanding about topics related to Flex Alerts and California electricity reliability. For example, over half of Flex Alert tracking survey respondents (55%–61%, depending on wave) incorrectly believe that innovations in battery storage have made it possible to store enough energy generated by solar panels when the sun is shining to completely power the electricity grid when it gets dark. Results from the diary study highlight a desire for more resources and messaging around emergency preparedness as some participants reported not being able to find the information they needed or needing to go to multiple websites to find relevant information.
- **Recommendation: Consider leveraging EUC as a “one-stop-shop” for information about customer energy-related issues in California and clearly define and communicate the role of the expanded brand.** California statewide energy branding efforts have gone through several branding changes in recent decades from Energy360 to Flex Your Power to EUC. EUC branding slogans have also evolved from “The Power of One,” to “Do your thing,” to “Keep it Golden.” Marketing best practices

¹⁷ We will continue to assess EUC Campaign performance against key objectives through September 2021 and we plan to submit an additional report summarizing Campaign performance from March 2021 to September 2021 in the fall of 2021.

suggest that consistent branding helps to build customer awareness and brand loyalty. As such, after the EUC Campaign focused on energy conservation sunsets, we recommend that the CPUC develop the EUC and Keep it Golden brands into a one-stop-shop for energy information that can evolve with the needs of customers and the California energy system. Clearly communicating the purpose of this new one-stop-shop EUC in future marketing assets may also help address Californians' confusion about EUC and build trust in the brand.

- **Recommendation: In the near term, consider focusing future SW ME&O funding on efforts that help Californians understand and react to current topics that affect their safety and electricity system reliability including Flex Alerts, PSPS, and emergency preparedness efforts.** While targeted general energy conservation ME&O is still valuable in certain contexts, our research holistically demonstrates that Californians would likely be receptive to SW ME&O efforts focused on electricity system reliability and personal safety in comparison to general energy conservation efforts.

Given this overall finding, we provide several more detailed key findings and recommendations to guide the development of future ME&O efforts focused on safety and electricity system reliability.

- **Key Finding: There is a need for one centralized resource which Californians can use to understand the real-time status of energy and emergency related issues.** Diary Study participants described wanting information to prepare for outages or emergencies (such as wildfires) but needing to visit multiple websites to find information, only receiving vague information about the length and timing, or not receiving any notification.
- **Recommendation: Consider creating a centralized website that describes outage, wildfire, and other energy- and weather-related risks, searchable by zip code or region.** This resource could help support Californians with obtaining the information they need to prepare for outages, wildfires, and other emergencies, sign up for alerts, and take demand response actions. The central website could also link to relevant external websites, such as each utility's PSPS page, EUC's Flex Alert webpages, Cal Fire's weather watch and wildfire incidents map, etc. This "energy and climate risk" website should be separate from the EUC website. If the mission of EUC shifts to serving as a one-stop-shop for energy-related information, raising awareness of the "energy and climate risk" website may be a worthwhile focus for future EUC promotional efforts.
- **Recommendation: Consider developing nuanced messaging efforts that clearly explain the different calls to action for Flex Alerts, PSPS, and TOU rates where appropriate.** Although, the drivers behind the need for PSPS, Flex Alerts, and TOU rates are interrelated, the specific need for each intervention and the associated "ask" or call to action for Californians is unique.¹⁸ As a one-stop-shop resource, the CPUC and EUC are well-positioned to continue to lead efforts to educate Californians about each intervention and the differences between them. We recognize that explaining these concepts requires space and only certain media channels will be appropriate for communicating this detailed information. The CPUC could help facilitate the dissemination of this information by creating infographics and other content for organizations such as the PAs and CBOs to share with their constituents through emails, bill inserts, and social media.

¹⁸ Emergency messaging for PSPS should address the need to prepare for an imminent outage with clear communication around length, timing, and location of outage. Demand shifting energy conservation messaging (like Flex Alerts) should address the perceived barrier of need for AC through clear communication around pre-cooling for comfort, in addition to consistent messages around conserving energy during 4 p.m.–9 p.m. on hot days. Time of Use rates should emphasize that in addition to times of crisis, there is an ongoing need for Californians to shift their electricity use to off-peak times on a daily and seasonal basis to support regular grid needs and they may be able to save money by doing so.

- **Californians’ nightly routines and habits make it hard to shift use during peak periods and/or during Flex Alerts, and they are leery of allowing their appliances and ACs to be remotely controlled by their utility.** Certain demand response actions such as shifting energy-intensive meal prep and leisure activities from the peak periods of 4 p.m. to 9 p.m. are likely to be disruptive to Californians’ evening routines. However, Californians perceive other tasks to be easier to shift to off-peak times, such as doing laundry and washing dishes. In addition, most Californians indicated they would not be willing to have their utility adjust their AC under any conditions.
- **Recommendation: Use a three-pronged strategy for communication about demand response actions:**
 1. Promote Automated Demand Response—Set it and forget it. Automated demand response technologies can be an effective strategy for encouraging customers to save energy during DR events because they reduce the amount of effort required to respond to an event.¹⁹ However, our research across multiple studies has shown that California utility customers have concerns about letting their utility control energy-consuming technologies in their home such as their EVs, ACs, and water heaters. As such, building customer acceptance of automated response technologies could be a fruitful area of future focus for California SW ME&O efforts. Exploring the multiple reasons why customers have concerns about automated demand response technology could also be an important area of future research.
 2. To reduce customer burden and fatigue, consider minimizing requests for demand reduction activities that are part of common evening routines including watching TV, cooking, and exercise equipment.
 3. Instead, promote actions and items things that are not perceived as difficult to change such as shifting laundry and dishes and unplugging power strips and devices.
- **Key Finding: Customers prefer to receive information from different sources in emergency and non-emergency situations.** Diary study results showed that local communication sources were most trusted during a crisis including participants’ local utility, local government, and local news. Participants prefer to be notified via text message if a power outage occurs. Similarly, Flex Alert survey respondents overwhelmingly preferred to be notified about a Flex Alert via text messages over emails or phone calls and are most commonly hearing about Flex Alerts from local news sources.²⁰ For non-emergency related issues, utility bills are the preferred way to receive energy-saving information. Diary study participants mentioned energy comes to mind when they check the weather in the morning and when they care for their pets.
- **Recommendation: Capitalize on Californians’ use of cell phones and partner with local organizations to communicate with customers during energy-related emergencies.** For emergency energy communication, continue to build out text messaging programs that notify customers about critical situations including power outages, Flex Alerts, and PSPS. Explore opportunities to partner with local governments including those in the in the Local Government Partnership program for emergency messaging.
- **Recommendation: Consider using app-based resources to encourage customers to think about energy-related topics as they complete their daily routines.** Consider partnering with weather apps so that Flex Alerts and other energy-related advisories show up as notifications within the app. Ideally these advisories would appear alongside National Weather Service alerts and air quality

¹⁹ https://are.berkeley.edu/sites/are.berkeley.edu/files/job-candidates/paper/JMP_Gillan_most_recent_draft.pdf

²⁰ The share of respondents that prefer to be notified about an upcoming Flex Alert via text message ranged from 61% to 66% annually from August 2021 to June 2021.

warnings. This will help Californians become informed when they check their phones in the morning. In addition, continue to explore opportunities to inform customers about Flex Alert through Nextdoor.com and consider expanding into the topic area of pets (dogs or cats) and/or explore opportunities to inform customers about heat- or energy-related advisories through apps such as Chewy and Rover. Continuing to explore partnerships with local news organizations may be another effective strategy for growing awareness and understanding of Flex Alerts.

- **Key Finding: Partnerships with CBOs effectively spread the EUC message to HTR audiences, but these CBOs would need financial support to ensure energy conservation messaging stays a priority after EUC sunsets.** Some CBOs are now viewed as trusted sources for energy information. Sharing the EUC tips allowed CBOs to strengthen and amplify their messaging designed to help their constituents. CBOs are also interested in continuing EE messaging, but funding would be required to ensure it stays a priority for the organization. Additionally, CBO representatives find it easier to provide energy messaging in an ongoing manner, rather than only at critical times like during heat waves. Although DDC has been able to activate their CBO grantees quickly on Flex Alert days, CBOs are not typically nimble organizations, and they may find it difficult to provide emergency energy messaging if they do not have adequate time to prepare.
- **Continue grant support to CBOs for the Flex Alert Campaign and other future energy-related ME&O campaigns.** If the CPUC and DDB would like to continue to leverage their existing relationships with the group of CBOs that currently support the EUC Campaign for future outreach efforts, it is imperative to provide them with ongoing funding and engagement. In the future, consider focusing the mission of CBO outreach and engagement on helping CBOs build awareness and understanding of what to do during Flex Alerts and energy-related emergencies among their constituents, rather than relying on them to alert their constituents during an emergency. Providing CBO's with pre-made digital media content and materials for distribution at the beginning of the summer, ahead of heat waves and wildfires, could help support this effort.
- **Key Finding: The EUC website was identified as an important resource across multiple research efforts.** EUC website traffic increased in the spring and summer of 2021 in alignment with the CAP Phase 2 efforts designed to drive customers to the EUC website to sign up for the Goldie text and "Join the Movement" emails. Furthermore, web usability study participants were able to adequately identify the purpose of the EUC website, including describing the site as an educational resource for climate change and opportunities to increase energy-efficient behavior. Overall, the participants found the design and layout of the EUC website to be visually appealing and easy to navigate with a few opportunities for improvement. Both CBOs and web usability study participants appreciated that the website is available in multiple languages.
- **Recommendation: Continue to maintain and support the EUC website as an evergreen resource after the EUC Campaign sunsets.** We recommend continuing to offer EUC web pages in multiple languages but prioritize videos and graphics over text heavy materials. Consider updating the website to address the tips suggested in the Web Usability Study Report including making minor adjustments to the home page and the climate credit page and updating headings and descriptions to promote home energy efficiency content, see Appendix C for the full report.
- **Key Finding: Despite being a focal point of the CAP Campaign, a relatively small proportion of website visitors are signing up to Join the Movement and even fewer are signing up to receive Goldie text message alerts.** The EUC website had 2+ million visitors during the evaluation period (February 2021–August 2021) however, only 11,780 Californians were signed up for The Goldie Text Challenge as of August 2021 and Goldie had a 15.6% engagement rate for the same month. The website usability study revealed the sign-up process for Goldie was straightforward for participants; however, some

vocabulary could be refined to improve clarity. Customers may be opting not to receive Goldie Alerts either because they are not interested in the content or do not want to receive more marketing messaging than they do already. Furthermore, there was customer attrition through the sign-up process funnel which includes visiting the website, clicking on the Join the Movement page and providing contact info to sign-up for Goldie Text alerts and monthly emails.

- **Recommendation: Consider conducting further research to understand which marketing channels are most effective for delivering different types of energy related information.** In particular, as text messaging is still a newer campaign channel, consider exploring Californians' appetite for receiving energy information beyond emergency alerts via text message, and, if so, what types of energy information they would prefer to receive through this channel.

Appendix A. Data Collection Instruments



CBO Staff Interview
Guide.pdf



CBO Event
Observation Rubric.pdf



CPUC ME&O_Web
Usability Sessions In



Diary Study
Moderation Guide_I



Residential Tracking
Survey Instrument

Appendix B. Diary Study Report



CPUC Diary Study
Report_FINAL.pdf

Appendix C. Web Usability Study Report



CPUC ME&O Web
Usability Report_FIN

Appendix D. Flex Alert Tracking Survey Reports



Wave 1 Report



Wave 2 Report



Wave 3 Report

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