

Inspire Us: Best Practices from Community-Facing Home Electrification Campaigns

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ABSTRACT

What does it take to create an electrifying social movement? This paper explores how building electrification awareness campaigns transform knowledge into power and power into action through consumer and community education. A key takeaway concerns the relationship between public education efforts and consumer marketing tactics. In order to advance equitable home electrification, these consumer education campaigns are “community facing” insofar as they address people as community members rather than individuals sorted by purchasing power. In doing so, these campaigns acknowledge lived experiences as expertise and empower communities to advocate for what they need to improve their lives, whether or not those solutions align with a campaign’s stated goals. This paper details best practices for building community-facing consumer campaigns by synthesizing the learnings from case studies of three representative home electrification consumer marketing and community awareness campaigns. In doing so, this paper offers an analysis of the opportunities and challenges for consumer and community-facing home electrification campaigns.

Introduction

Social movements have many theories of change. One of the most enduring theories of change is that awareness leads to action. Climate change, however, has revealed the contradictory logic behind this premise. Even as scientific data mounts, with each Intergovernmental Panel on Climate Change (IPCC) report more catastrophic than the last, our global, national, and local policies remain woefully ill-equipped to solve the accumulating challenges of climate change. Even the framing of the most recent IPCC report has shifted from prevention to “risk management” and “adaptation,” indicating that we are well past preventing climate change and are in the stage of mitigating its effects (Begum and Lempert 2021). In other words, though we have had the knowledge of the problem for quite some time, an adequate response has yet to be enacted.

This paper reconsiders the awareness-to-action relationship by reframing what we mean by both awareness and action. When we consider climate change at the scale of the individual actor, it’s easy to see how individual behavior changes are not sufficiently substantial in reducing the risk of climate catastrophe in any form. Many individuals are discouraged by the limited impact their behavior changes have when set in comparison to major actors like fossil fuel companies; in fact, one report estimates that one hundred companies have been the source of

more than 70% of the world's greenhouse gas emissions since 1988 (Axelrod 2019). Beyond that is the argument that fossil fuel companies themselves are behind the narrative of individual accounting—that a public relations firm hired by British Petroleum was responsible for devising the “carbon footprint” calculator to detract from corporate responsibility (Solnit 2021).

And yet, we cannot deny both the need for individual behavior change, both from a psychological standpoint and a social and political one. However, rather than reinforcing the framework of the isolated individual “carbon footprint,” many consumer campaigns today are contextualizing individual behaviors within community-level impacts. In other words, these campaigns aim at the individual as a community member to remind them that behaviors have an impact on those around them and that one's position within a community gives one the ability to amplify seemingly small actions and help create community-scale change.

When we situate individuals within their communities, we see how *people power*—both in terms of knowledge sharing and behavioral influence—multiplies exponentially. On the other side of the equation, we see how the minor changes an individual makes in their living space can have an outsized and multiplying effect on their household's well-being. While one person swapping out their gas stove for an electric one may not make a dent in greenhouse gas emissions, that person's household will still benefit immensely from improved indoor air quality, reduced risk of childhood asthma, reduced probability of carbon monoxide poisoning—all of which have lasting, lifelong effects that cannot be fully quantified for that individual's household. Furthermore, the gas stove is often the last remaining vestige of a home's fossil fuel infrastructure, and so this small change can have an outsized impact on the broader energy ecosystem.

Rather than remaining stuck in the awareness-to-action pipeline, the community-situated approach to awareness articulated by our three case studies reveals a dynamic awareness-to-actors and actors-to-actions grid of change in which people are empowered to shape their community's behaviors.

Consumer Campaigns: From Personal Sacrifice to Personal Comfort

The 1973 OPEC oil embargo and subsequent energy crisis brought into being a new attitude toward energy and conservation. President Carter, wearing his knit cardigan, introduced energy conservation into the national psyche in 1977. In his address to the nation, he told Americans that “the energy shortage is permanent. There is no way we can solve it quickly, but if we all cooperate and make modest sacrifices...then we can find ways to adjust, making our society more efficient and our own lives more enjoyable and productive” (Bakke 2016, 86). By placing individual sacrifice—wearing a sweater instead of turning up the thermostat—at the center of energy efficiency, the idea that personal comfort and energy consumption were at odds with one another began to take root.

Today, with a focus on what *kinds* of energy one consumes in addition to *how much* energy one uses, a new message to consumers is emerging. Whereas historically the argument for energy efficiency came from the context of scarcity, today our plea for energy conservation comes from the context of climate change and carbon emissions. There may be more or less an abundant amount of energy to supply our needs, but not all energy sources are created equal with

regard to their effect on the environment. In theory, renewable sources of energy promise an endless supply of “clean” electricity; however, if end users are still using fossil fuels directly, the carbon-cutting rewards of this electricity cannot be captured. Enter: building electrification, a new way to think about the consumer’s relationship to energy, efficiency, and comfort.

With a focus on incentivizing and assisting consumers to willingly swap out their fossil fuel appliances for electric ones, consumer-facing building electrification campaigns are shifting public sentiment regarding energy efficiency away from its associations with personal sacrifice and toward more positive associations with personal comfort. For example, because heat pump water heaters are super-efficient, carbon-free appliances, messaging can focus on the inherently clean and efficient nature of the appliance itself rather than the need for consumers to be efficient by restricting their use of the appliance. With renewable electricity and a theoretically ever-greening grid powering these appliances, the consumer does not need to feel guilty about adjusting the thermostat to suit their comfort level. At the same time, the consumer feels secure in knowing that their electric home is contributing to a carbon-free environment.

In addition to shifting focus from sacrifice to comfort, today’s consumer-facing programs grapple with the weight of individual responsibility. Whereas fifty years ago a person might be considered an environmentalist if they recycled, today the standards for effecting meaningful change are much higher: Do you drive an EV?; Do you use public transportation?; How many flights do you take a year?; Do you compost? Author and professor of atmospheric science Michael Mann notes the disconnect between individual and systemic change: “There is a long history of industry-funded ‘deflection campaigns’ aimed to divert attention from big polluters and place the burden on individuals” (Mann 2019). In other words, if an individual were to live a carbon negative life while the factory down the road continues to be powered by coal, who is having the most impact on the climate?

The needle that consumer campaigns must thread, then, is the relationship between personal responsibility and personal culpability as well as the relationship between individual and collective behavior. In shifting the message from sacrifice to comfort, successful campaigns take an affirmative approach to individual lifestyles. However at the same time, they can pair this positive message with an outward-facing perspective, situating the individual within a community that, as a whole, can have a positive impact on the climate. This community-focused individual messaging meets consumers where they are today: aware of the problem but not fully aware of how they can be part of the solution.

Our first two consumer awareness case studies demonstrate approaches that amplify individual consumer choices to the community-scale while adopting a positive “pro-electrification” messaging strategy. Building Decarbonization Coalition’s consumer campaign, Switch Is On, uses volunteer community ambassadors to build awareness of decarbonization in individuals’ communities. By drawing on the knowledge of local actors and empowering them to educate and elevate their local communities, this program empowers individual consumers to act as peer representatives, shifting the burden of decarbonization from isolated households to a broad-based coalition.

The Clean Energy Lives Here campaign run by the Massachusetts Clean Energy Center (MassCEC) centers a “whole home over time” approach to electrification that encourages consumers to take ownership of their choices through a series of simplified guides and tools that

make home electrification accessible. This holistic approach emphasizes long-term payoff as well as immediate benefits in order to orient consumers toward a sustainable way of thinking about their home and its effects on the well-being of their community and their state. MassCEC's organizational approach to sharing accessible assets within the broader community of decarbonization partners models a collaborative approach that amplifies the impact of individual campaigns. Furthermore, in developing an ecosystem of shared assets, the home decarbonization movement as a whole begins to develop a shared strategy on how to reach and educate consumers, amplifying the budgets of any given campaign through cooperation and collaboration.

The Switch Is On

Campaign summary. The Switch Is On (SIO) is a consumer-focused campaign that encourages Californians to swap out their gas-powered appliances for electric ones. This initiative came about as a way for the state of California to meet its 2050 climate objectives by supporting the rapid decarbonization of its building sector. It is run by the Building Decarbonization Coalition (BDC), a membership- and mission-based not-for-profit organization that unites building industry stakeholders with energy providers, environmental organizations, and local governments to power our nation's homes and workspaces with clean energy. It is funded in part by TECH Clean California, a \$120 million initiative designed to help advance the state's mission to achieve carbon neutrality by 2045, as well as additional funding partners: BayREN; East Bay Community Energy; Peninsula Clean Energy; San Jose Clean Energy; Silicon Valley Clean Energy; Marin Clean Energy; Bay Area Air Quality Management District; City of Santa Monica; Central Coast Community Energy; Los Angeles Department of Water and Power; Pacific Gas & Electric Company; Southern California Edison; 3C-REN; and City of Irvine.

The campaign launched in 2020 with a paid media pilot project geared specifically to the Bay Area, with advertising through KQED public radio. Despite significant obstacles due to the COVID-19 pandemic and economic setbacks, the pilot was positively received and set the stage for a statewide campaign.

On December 16, 2021 the Switch Is On campaign launched statewide in California. The launch included a formal press release, a launch-day blog post, a promotional video, the unveiling of a new website, the formation of an ambassador program, and a full-scale social media campaign. Next steps include a paid media push in targeted regions with partners, additional assets, and a continuously improved website and content. Some highlights from the launch include:

- **Earned Media**
 - Twelve outlets covered the launch and/or interviewed representatives and ambassadors of the campaign, with more coverage expected
 - Ranges from local outlets like *Palisades Post* to national outlets such as Vox Media, Bloomberg, *LA Times* and CBS
- **Social Media**

- Paid social promotion across LinkedIn, Twitter, and Facebook garnered exceptional engagement and a high value cost-per-view
- Ambassadors engaged across the state to get the word out about the launch
- Website
 - Thousands of new visitors to switchison.org on day one and beyond, resulting in a steady stream of requests for quotes (see Figure 1)
 - Highest traffic pages included “Find Rebates” and “Find a contractor” tools
 - In May 2022, we attribute the significant increase in new visitors (Fig. 1) to our paid media campaign as well as our ambassador program referrals
 - Also in May, we attribute the decline in quotes requested (Fig. 1) to the suspension of TECH incentives, which were depleted much faster than anticipated



Figure 1: Switchison.org internal website analytics, Dec-May 2022.

Campaign objectives. The main purpose of the Switch Is On campaign is to support Californians in switching from gas-powered to electric-powered appliances. Within this overall purpose there are three main objectives.

- **Educate:** *Switch Is On aims to educate people about the benefits and value of electrification.* This goal is accomplished through a multi-tiered approach of grassroots neighborhood advocacy, abundant informational content, paid media promotion, social media campaigns, contractor outreach, and earned media coverage. By explaining electrification and myth busting at each of the tiers mentioned above, consumers are more likely to internalize the benefits of electrification.
- **Inspire:** *Switch Is On aims to help people recognize that electrification is right for them and their communities.* By relying on grassroots advocacy, recruiting ambassadors in a variety of communities, and ensuring equity through our website and all our developed assets, the objective of this campaign is for all Californians to see themselves reflected in the electrification movement. The campaign includes a financing options page to support those who may not have the means to electrify their homes, as well as an incentives tool that showcases incentives for low-income qualified participants. The Switch Is On is also

launching a pilot program with community-based organizations through RMI to better understand electrification needs on a local and community-based level.

- **Support:** *Switch Is On aims to shield consumers from the complexity of electrification and make their experience as pain-free as possible.* The website switchison.org utilizes a variety of tools, including a rebate finder, contractor lookup, and a “Speak to an Expert” widget to help simplify the process of going electric. By providing customized guidance and support and speaking to consumers in accessible languages, this campaign ensures that no homeowner is on their own when trying to electrify.

Messaging. Based on engagement in paid media and sentiment research, the topical approaches that have been most successful in reaching consumers are: health and environment, education, cost, and performance. By focusing on these topics, the campaign is better able to mitigate and counter the common points of friction as described below:

- **Previous Experience / Associations:** When a consumer has had a negative personal experience with an electric appliance, such as an outdated electric stove, they may be resistant to alternative electric technologies like induction. On the other hand, if someone feels a strong attachment to their gas stove, it can be particularly difficult to encourage the switch to electric induction. To overcome this barrier, SIO focuses on community and cultural alignment, demonstrating how the new technology can not only be incorporated into their personal preferences and routines, but can in some cases amplify those connections by creating new, positive experiences.
- **Awareness / Education:** Many consumers are not familiar with technology like heat pumps or do not see the connection between their home fuel choices and their community’s well-being. SIO confronts this challenge through leveled education, providing information through on-the-ground ambassadors, a paid media campaign, a social media campaign, earned media attention, and online resources.
- **“Green” Fatigue:** Many consumers are tired of hearing that they need to jeopardize their personal comfort for the good of society, or otherwise want to avoid feelings of guilt and inadequacy regarding the global climate crisis. By centering movement building through shared community experiences, SIO helps isolated individuals feel that their choices are important and a part of a larger web of influence.
- **Cost:** New appliances can be expensive, costing thousands of dollars up front and requiring additional permitting and electric panel upgrade work for many consumers. By centering whole-home bundling and foregrounding incentives from our partners, SIO helps consumers make cost-effective choices that will pay off in the short and long term.
- **Lack of Urgency:** Consumers tend to wait until their water heater stops working to replace it, leading to a split-second decision about what technology will replace their broken appliance. SIO encourages consumers to plan ahead while also ensuring that heat pump technology is well-stocked and available when it is the time to decarbonize.
- **Intimidation:** Consumers are less familiar with clean technology and can feel intimidated by the changes these appliances may require, such as a panel upgrade or new outlets. By providing technical assistance through the website’s “Find a Contractor” and

“Speak to an Expert” sections, paired with the personalized support of community ambassadors, SIO helps consumers feel like they are not alone in this process and are able to make the switch.

Switch Is On ambassador program. The foundation that supports the growth of this campaign is a community-facing ambassador program. While the purpose of the campaign is to support Californians in their electrification journey, too often that relationship becomes stagnant after the appliances are installed in homes. However, those who have successfully electrified their homes are a valuable resource to this and any consumer- and community-facing campaign. They are the leaders of the electrification movement. These ambassadors are eager to speak with friends, family, and others in their communities about the benefits of electrification.

As of January 2022, more than 100 interested ambassadors from across California filled out the interest form on switchison.org. More than 50 people attended the first two onboarding sessions and are continuing to engage in community forums, online campaigns, and community outreach. And as of June 2022, we have 136 active ambassadors throughout California. These electrification ambassadors participate in the program by posting and sharing on social media, writing blog posts, attending events, offering home tours, speaking with journalists and more. They are the eyes, ears, and voice of the campaign.

While we are looking forward to measuring directly how many referrals these ambassadors produce by the end of 2022, we are also working to measure the less tangible benefits of this program, such as how these ambassadors spread the ethos of electrification in their communities even when incentives are not involved. Anecdotally, we are hearing that individuals are more likely to electrify when they see neighbors, friends, and family members take those steps themselves. One ambassador discusses how influential one’s community can be when making the decision to electrify: “When you get together at your neighbor’s home over wine, cheese, and snacks (and maybe a little local gossip) to discuss changes that benefit the environment, it creates a greater sense of connection than getting a flier in the mail or seeing a commercial on TV. That’s why strengthening local communities is so important to climate initiatives. People are much more likely to take action if they learn about it from peers in their life who are doing the same” (Franks). This community-centered process frames home electrification as more than just an appliance swap and instead a mission-driven experience that provides benefits for their homes and their communities for years to come.

Best Practices

- **Consumer power is multiplied by community involvement.** Individual consumers see their buying power multiplied through their social influence on their communities. Creating a network of consumers who become resources to their communities helps mitigate the pessimism that can accompany the statistically small impact of one person’s lifestyle choice. Under the SIO model, that single choice is amplified by knowledge sharing and community transformation enabled by electrification ambassadors.
- **Share with consumers the value that already exists.** Everyone benefits from better air quality in their homes and less reliance on fossil fuels. When consumers can see the

bigger picture and recognize the vast benefits of decarbonization, they are generally on board. They want the best technology at an affordable price. The job of a successful campaign isn't to create value for consumers—it's to tell them about the value that already exists. If a campaign shares that knowledge and believes in its product, people will too.

- **Partnerships are key to success.** Just as individual consumers can serve as ambassadors for their communities, the partner organizations that contribute to and benefit from the Switch Is On campaign are essential to spreading the message of cost-effective and community-facing solutions to pollution in the built environment. By extending this network of partners, the SIO campaign benefits from input from the best minds in clean energy and consumer awareness while also reducing the duplication of work across aligned organizations, leading to a unified messaging campaign for nearly the entire state of California.

Clean Energy Lives Here

Campaign summary. Clean Energy Lives Here (CELH) is a \$1.3M public awareness campaign that promotes the optimal Massachusetts clean energy home and explains how to achieve it. The campaign launched in April 2020 and is managed by Massachusetts Clean Energy Center (MassCEC) and funded by Massachusetts Department of Energy Resources (DOER). The directive for it was borne out of Massachusetts state climate goals, as articulated by the Massachusetts Clean Energy and Climate Plan for 2020 and the Massachusetts 2050 Decarbonization Roadmap. The state's greenhouse gas reduction goals are 50% reduction by 2030, 75% reduction by 2040, and net zero by 2050 as compared to 1990 levels ("MA Decarbonization Roadmap," 2020). Massachusetts's official endorsement of home decarbonization and electrification as a top strategy to cut greenhouse gas emissions from the building sector enabled MassCEC to infuse the CELH campaign with urgency, leverage the broader discussion in the news media about the state's plans to address climate change, and expand the number of residential clean energy technologies highlighted in the campaign.

Campaign Audience. Massachusetts has approximately 2.6 million residential households and a homeownership rate of 62%, resulting in 1.6 million households that have control of their home improvement choices ("US Census" 2021). These 1.6 million households were selected as the primary audience for the campaign since they are in the position to act on the campaign's message to decarbonize their home. Furthermore, the average home-owning household in Massachusetts lives in the same home for fifteen to nineteen years (Evangelou 2020), meaning they will likely preside over at least eight appliance and home system decisions while they own that residence.

A significant challenge that these homeowners confront is related to the age of the building stock. Massachusetts has the second-oldest housing stock in the country, at a median age of 56 years old (Zhao 2021). This presents a unique challenge in that many homes need weatherization and electric service upgrades from 60-100 amps to 200 amps, which add to the complexity and cost of a clean heating system or additional electric appliances in the home. The

MassSave program provides weatherization, home heating, and water heating incentives as well as financing and works in conjunction with homeowners who are drawn in through the CELH campaign. MassSave has also started offering qualified customers incentives and financing for weatherization barriers, such as removal of asbestos and vermiculite, amplifying the “whole home” approach of the program.

Customer Journey. Home systems and appliances have a multi-year lifecycle. The home systems and appliances that need to be decarbonized for Massachusetts to reach its net zero by 2050 goal will only be up for replacement two to three times between now and 2050. Figure 2 shows the expected replacement schedule of systems and appliances associated with the median-age home in Massachusetts, which is 56 years old. Roofs are included because new roofs are ideal for solar PV installations. Cars are shown because an EV replacing a gas-fueled vehicle greatly reduces a household’s overall greenhouse gas emissions.

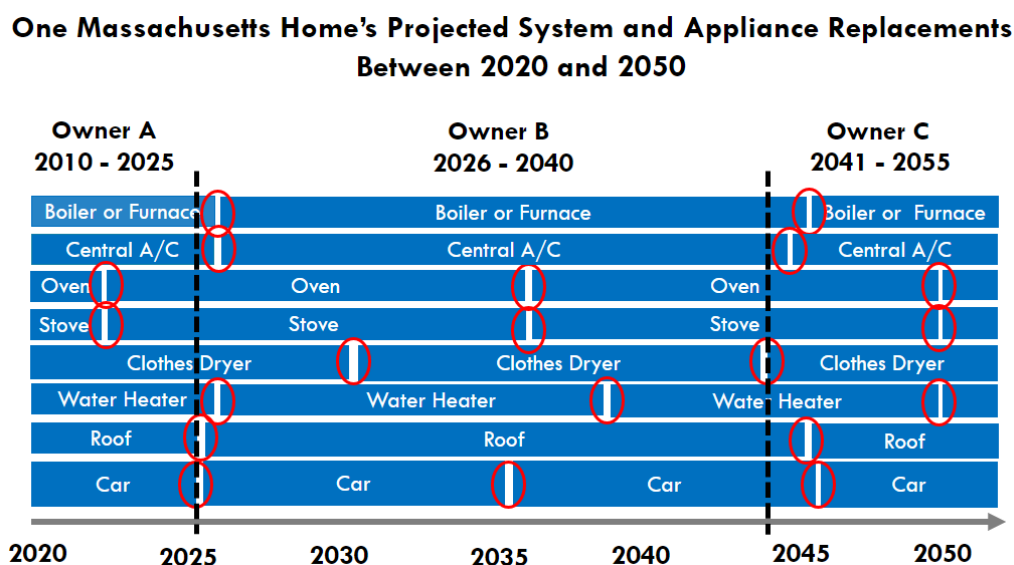


Figure 2. The energy-related updates that affect the median MA home, using average replacement cycles for home systems and appliances. *Source:* MassCEC analysis, available for shared use upon request.

There is a customer journey for each one of these home systems, but the journey is also influenced by fuels already being used and the unique characteristics of the home. The CELH campaign builds awareness of low-carbon alternatives so that they can be considered when the replacement of an appliance or home system is on the horizon. This customer-journey-driven approach attempts to meet homeowners where they are, anticipate questions, and describe home energy concepts in basic, straightforward terms.

Clean Energy Lives Here campaign assets.

- **Website:** The main asset of the CELH campaign is its website: goclean.masscec.com. It highlights fourteen clean energy technologies with commonsense definitions and descriptions of how each technology works, why to consider it, what type of home it’s

ideal for, and a brief video about the technology. The site also provides general price estimates and explains the greenhouse gas impact of electrifying aspects of a home that was previously fossil fueled. Illustrated, accessible guides for every electric technology, from battery storage to induction cooking, are also available for download.

- **Guides:** Beyond technology-specific guides, CELH’s website offers overall educational resources, such as: a “Guide To The Clean Energy Home,” which explains how clean energy technologies may fit together in a particular residence. This “beginner’s ebook” introduces consumers to the concepts of residential greenhouse gas emissions and home decarbonization. Another guide, the “Clean Energy Home Plan,” encourages homeowners to document the age and condition of their current home systems/appliances and plan for their replacement with efficient, low-GHG alternatives before the point of appliance failure.
- **Pledge:** Initially, the CELH campaign foregrounded a call-to-action on the landing page—a pledge to decarbonize one’s home. However, after discovering that this page led to a high bounce rate for the website, the CELH team decided to adjust the pop-up to lead to an email subscription form (currently, the campaign has captured 1,664 email addresses). Hypothesizing that the pledge was alienating customers who did not yet have the knowledge or ability to make such a promise, the campaign foregrounded education and relationship building before introducing the pledge, thereby repositioning it as a “mid-funnel” activity as opposed to a “top-funnel” activity. After making the pledge less prominent and stopping the ad messaging that led people to enter the website on the pledge page, the website’s bounce rate was reduced by 15%.
- **Diagrams:** CELH uses custom diagrams to explain the aspirational clean energy home and complex technologies like heat pumps (Figure 3). Before this campaign, manufacturer-agnostic illustrations and diagrams were not available. Enabling potential customers to understand from the inside-out how these technologies work has aided in moving them from awareness to action. CELH has also been able to share these valuable diagrams with other consumer awareness programs around the country to support their aligned goals of consumer education.

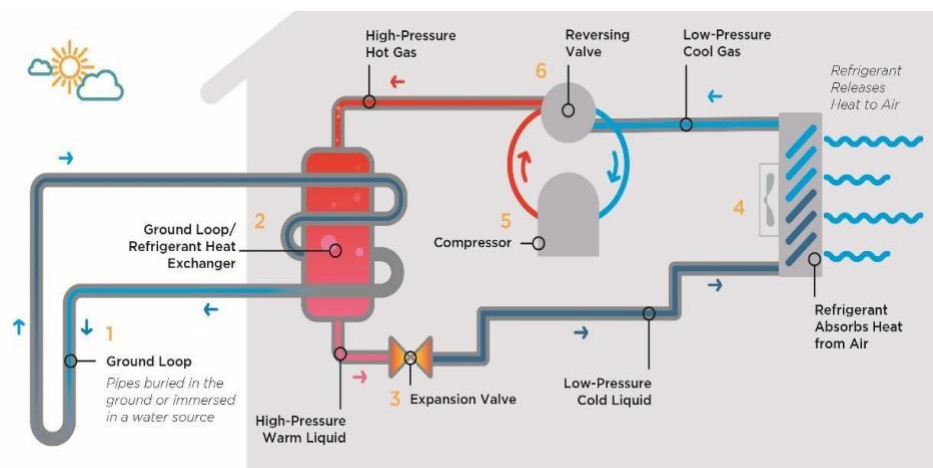


Figure 3: Sample diagram. Featuring a ground-source heat pump in summer mode, providing cooling.
Source: MassCEC campaign materials (<https://goclean.masscec.com/resources/>)

Campaign outcomes. During the four-year period of planning and executing the Clean Energy Lives Here campaign, there were significant barriers in terms of the market, starting with the COVID-19 pandemic. Prior to the pandemic, the campaign invested in out-of-home advertising that assumed normal commuting patterns in Boston. Like many cities, however, downtown Boston was largely deserted during most of 2020, requiring the campaign to recalibrate how it was going to drive traffic to the website. Later that year, CELH shifted its out-of-home advertising to focus on billboards along major roadways in other parts of MA, adapting its outreach to the new patterns of communal life.

In terms of digital advertising, search ads served as the most efficient way to create engagement with the campaign website, though the effectiveness of these ads is due in part to people seeing CELH ads in other channels that would then prompt them to search for particular clean energy products or topics. Overall, advertising has been critical in driving visits to the campaign website. For example, in a week without advertising, the site may see 600 users a week, whereas a week with advertising averages 2,500 – 3,500 users.

To determine the overall effectiveness of the CELH campaign in reaching its target consumer audience, a survey of 1,600 randomly selected homeowners from all areas of the state was conducted during Summer-Fall 2021. The campaign achieved 17% name recognition amongst the homeowners surveyed with the budget shown below:

- Year One Spending, 2020-2021:
 - Advertising: \$367,000 (ad placement costs and commission for April 2020-February 2021)
 - Content: \$232,000 (Including website creation, digital banner/social/out-of-home creative development)
 - Survey: \$57,000
- Year Two Spending, 2021-2022, YTD:
 - Advertising: \$230,000 (costs and commission for July 2021 – March 2022)
 - Content: \$47,000 (Website updates, organic social, YouTube Ad creation)
 - Survey: \$32,500

The campaign was also successful in educating homeowners on the relationship between up-front costs vs. operational savings, cultivating a long-term perspective on costs and benefits (see website page on cost: <https://goclean.masscec.com/benefits-savings/>). For example, heat pump technology may currently cost more to install, however the lifetime savings paired with the ongoing environmental benefits far outweigh the initial costs. As the CELH website explains, the up-front vs. operational savings varies significantly depending on whether a home is converting from heating oil, electric resistance, or natural gas. According to the survey, future-focused messaging resulted in a 16% increase in respondents who said they were very willing or somewhat willing to make the switch for operational savings and a 12% increase in those who said they were very willing or somewhat willing to make the switch for environmental reasons.

Clean Energy Lives Here offers a model of how other states can amplify relatively modest campaign budgets to have far-reaching, community-wide effects. By creating shareable assets and cultivating a sense of community within the building decarbonization sector, MassCEC demonstrates how collaboration, not competition, increases the return on investment for individual campaigns. The power of states and campaigns working together multiplies both

the individual choices that consumers make and the individual campaigns that each organization runs.

Best Practices

- **Pivot ads to match emergent community patterns.** When the unexpected happens, like COVID-19, or when the traffic patterns of a community change for other reasons, pivot advertising to follow new community configurations.
- **Cultivate long-term, future-focused thinking in customers.** While it's important to focus on first costs and installation, CELH also demonstrates the importance of communicating the long-term benefits of electrifying one's home by focusing on how many house system decisions the average homeowner will make over the course of their time in their home. This cumulative thinking helps cultivate a future-focused perspective in the homeowner, who is able to see how their individual choices add up to have a significant impact on both their home and their community.
- **Simple, shareable, well-made visuals are essential to transforming awareness and action.** Accessible assets that are openly shared within other organizations in the building decarbonization movement can advance consumer education quickly and effectively. Most consumers will not want to read an in-depth technical manual about how a heat pump works, but they may respond positively to a simplified graphic that allows them to feel comfortable with what was before an unknown technology. Sharing these assets with like-minded campaigns will help quickly increase the baseline of consumer knowledge.

Community Awareness Campaign: Elevating Equity Through Education and Advocacy

While Switch Is On and Clean Energy Lives Here demonstrate two approaches to educating consumers about the benefits of electrification and amplifying consumers' spending power through their context in communities, Physicians for Social Responsibility represents an approach to decarbonization that focuses on educating communities to inspire and inform them about the dangers of fossil gas and how they might protect themselves and advocate for change on a broader level. Community awareness campaigns such as these tend to focus less on convincing someone to buy a new appliance or apply for a rebate and more on general awareness about the problem that their community is facing while also offering solutions that do not necessarily cost money. Community awareness campaigns are typically run by nonprofits with smaller budgets for advertising and materials, and thus do not have access to the same metrics for evaluating success. Rather than creating friction with consumer campaigns, we contend that the alignment and layering of consumer campaigns with public awareness campaigns can more fully address the needs, concerns, and desires of community members and instill a more equitable approach to building electrification—one that doesn't rely on one's ability to purchase a new appliance or own a home.

Physicians for Social Responsibility–Colorado

Background. Physicians for Social Responsibility (PSR) is a network of health professionals who seek “to protect human life from the gravest threats to health and survival” (“About PSR”). Originally founded in 1961 to protest nuclear weapons and the harmful byproducts of radiation and fallout, PSR has been integral to educating the broader population on the health effects of energy and industry and has been instrumental in realizing major policy. While still addressing the byproducts of nuclear weapons, the organization has since developed its focus to include many other forms of environmental harm, including but not limited to the toxins and byproducts of fossil fuel production and combustion. Today, there are chapters of PSR throughout the world, each of which attunes its mission of addressing nuclear weapons and climate change to the specific concerns of its local communities.

In addition to addressing the lasting effects of the Rocky Flats Weapons Factory, Physicians for Social Responsibility-Colorado (PSR-CO) has attuned itself to the proliferation of fracking wells and fossil fuels across the state. Their recent initiative, “Healthy Electric Homes,” seeks to educate vulnerable communities about the health effects of fossil fuel combustion in their homes. However, PSR-CO does not simply educate communities about the harms of methane and pollution, inspiring fear in those who do not have the means to change the circumstances of their living conditions; instead, they educate while providing accessible solutions to help immediately reduce the harmful health effects of gas until broader policy solutions and incentive programs make electric technology available to every income level.

Campaign Summary. PSR-CO’s Healthy Electric Homes (HEH) program supports legislation, regulations, and other efforts that reduce the burning of fossil fuels, including promoting high efficiency appliances for homes. The campaign was conceived in early 2021 when PSR-CO learned that the general public did not consider “natural” gas to be a fossil fuel, let alone that “natural” gas was associated with health risks, especially within poorly ventilated dwellings. In order to reach those who were most vulnerable to these health risks, PSR-CO organized a far-reaching media campaign paired with a local community-based awareness campaign.

The media campaign, Electric4Health (electric4health.org), consisted of a commercial focusing on the health effects of gas stoves, a thirty-second ad that was created in collaboration with grassroots non-profit, Colorado Rising. The campaign ad ran for five weeks on Denver’s NBC affiliate during the 2021 Tokyo Olympics. Along with the commercial, PSR-CO appeared segments during two daytime programs on 9 News (KUSA), which included a tour of an all-electric house and an interview with a PSR-CO member Dr. Jessica Miller, a pediatrician who discussed the harmful byproducts of gas stoves. Finally, PSR-CO reiterated these messages on Spanish radio and on social media to support the commercial and build off the momentum of these news segments. While budget constraints prevented PSR-CO from doing follow-up opinion surveys similar to those that prompted the campaign, they did see an increase in visits to the website in the month following the campaign ad. One of the challenges of being a community-based non-profit is not necessarily having the funding structure to produce campaign assets as well as the resources to access the effects of that campaign. When choosing between the two,

focusing on the actual campaign rather than an assessment after the campaign was considered to be the priority.

In order to address renters and other residents who may have less control over their living conditions, PSR-CO paired the broad awareness campaign with a local community education campaign called “T.O. B.R.E.A.T.H.E.” (Figure 4). The easy-to-remember acronym “To Breathe” offers a set of steps one can take to mitigate the health impacts of gas even when they cannot replace their gas appliances.



Figure 4. Image of “To Breathe” fridge magnet from Electric4Health campaign by PSR-CO. In English, “STILL GOT GAS? To reduce the risks to your family’s health from gas cooking.” In Spanish, ¿TODAVÍA TIENES GASOLINA? Para reducir los riesgos para la salud de su familia de cocinar a gas.” Source: Electric4Health.org

Colorado has a large Hispanic population and many of these residents live in communities that are disproportionately located by polluting industries and are therefore negatively affected by fossil fuel emissions inside and outside of their homes. After consulting with local activists, PSR-CO was advised that distributing refrigerator magnets in Spanish and English would be an effective way to reach these communities. PSR-CO distributed the magnets to local clinics and health care facilities, as well as at conferences and gatherings of public health professionals to give to their patients. In this way, doctors can help prescribe manageable environmental changes that will positively impact their patients’ health. Rather than inspiring fear and hopelessness by educating vulnerable populations about yet another health risk without offering solutions, PSR-CO foregrounds the small actions anyone can take to protect themselves and their families, even if they are not able to purchase new appliances or change where they live.

PSR-CO’s community awareness campaign demonstrates how to balance the local needs of community members with impactful messaging that reaches a broad swath of the population. Oscillating between these broad-reaching and demographically targeted messages help address

communities at the macro and micro scale, ensuring that no one is left behind in the movement toward healthy homes and communities.

Best Practices

- **Provide manageable solutions for everyone.** Scare tactics aren't always ethical. While it is essential to educate the public about the negative health impacts of fossil fuels, especially when it comes to indoor air quality, many people are not in a position where they can buy a new stove or even install ventilation. In order to educate people without causing them an undue amount of anxiety over the situations they cannot control, PSR-CO offers manageable actions that anyone can take to protect themselves and their families.
- **Match campaign assets to community demographics.** PSR-CO's consultation with community activists ensured that their message would reach vulnerable populations by producing accessible materials in Spanish and English.
- **Combine far-reaching awareness with targeted community education.** By pairing a regional Superbowl ad with a targeted awareness campaign, PSR-CO was able to spread their message broadly while also ensuring that they were accessing harder-to-reach communities, ensuring that everyone had equitable access to critical information.

Conclusion

Switch Is On, Clean Energy Lives Here, and Physicians for Social Responsibility—Colorado each model different ways to balance individual- and community- facing messaging for building electrification. Decarbonizing the built environment is not a problem that any single household is responsible for or that any single household can solve. Rather than placing the burden of responsibility on already-burdened individuals, these campaigns strike a balance between empowering people to make decisions that can benefit themselves and helping communities make decisions that can benefit everyone. Rather than reiterating the individual choice versus systemic problem binary, in which individual actions are derided as statistically insignificant or unethical due to the climate impacts and culpability of global corporations and institutions, this approach builds people power by empowering individuals to share their knowledge, skills, and benefits with those around them. Furthermore, by aligning energy efficiency with personal comfort rather than personal sacrifice, these programs offer an affirmative approach to decarbonization that can encourage people to share their experiences and amplify their individual experience to benefit their community. In this way, electrifying one's home doesn't become a way to alleviate individual guilt regarding one's contribution to the climate crisis, but instead functions as a springboard to get individuals involved in their immediate communities as ambassadors, activists, and educators. This community-facing approach is how awareness creates actors and actors amplify actions, as individual choices are no longer viewed as isolated but people-powering actions.

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