

# Identifying and Meeting Consumer Needs

Real-world examples for SECC's  
2020 State of the Consumer themes

WHITE PAPER • MAY 2020



# INTRODUCTION

The Smart Energy Consumer Collaborative (SECC) is dedicated to helping smart energy stakeholders — including consumer advocates, electricity providers, technology companies and regulatory agencies — better understand residential energy consumers across the United States and Canada. This involves learning and analyzing what motivates consumers to engage with their electricity providers and the products, programs and services that can help them meet their personal energy goals.

To better understand consumer motivations, expectations and behaviors, SECC conducted four consumer surveys in 2019 on topics including alternative rate design and distributed energy resources. With the *2020 State of the Consumer* report<sup>1</sup>, published in January 2020, SECC synthesized the findings from these studies — along with case studies about leading consumer programs and the consumer-focused components of a U.S. Department of Energy report<sup>2</sup> — into five key themes.

THEME  
**1**

**Consumers are more ready than ever to engage on energy**

THEME  
**2**

**Segmentation remains essential in a digital world**

THEME  
**3**

**Energy engagement is fundamentally a journey for both society and individuals**

THEME  
**4**

**Consumer expectations are shaping the future**

THEME  
**5**

**Education remains a clear, strategic opportunity to increase energy engagement**

This white paper explores those five themes and how they can help stakeholders deliver the value of smart energy programs, products and services into the hands of consumers by illustrating impactful, real-world examples of who is getting it right. Examples are sourced primarily through SECC's case studies and the Best Practices Awards program<sup>3</sup> and highlight electricity providers from across the United States, including investor-owned utilities, municipal utilities and utility cooperatives.

1 Download SECC's "2020 State of the Consumer" report at [www.smartenergycc.org/2020-state-of-the-consumer-report/](http://www.smartenergycc.org/2020-state-of-the-consumer-report/).

2 The Department of Energy's report can be found at [www.smartgrid.gov/document/VOE\\_Leveraging\\_AMI\\_Networks\\_Data.html](http://www.smartgrid.gov/document/VOE_Leveraging_AMI_Networks_Data.html).

3 Learn more about SECC's awards program at [www.smartenergycc.org/2020-best-practices-awards-results/](http://www.smartenergycc.org/2020-best-practices-awards-results/).



## THEME 1:

# Consumers are more ready than ever to engage on energy

Across SECC's primary research<sup>4</sup> over the past year, consumer interest in smart energy programs, technologies and services – whether it is a time-varying rate, a demand response program or a smart thermostat – continues to grow. While consumer adoption of many such programs and products is often relatively low, a lack of interest from residential consumers is typically not one of the top barriers.

For example, SECC's *Rate Design: What Do Consumers Want and Need?* report found most consumers prefer a time-of-use rate over a traditional flat rate when given the option. In the *Consumer Pulse and Market Segmentation – Wave 7* study, 74 percent expressed interest in receiving bill credits for reducing their energy usage during peak demand, and 31 percent stated they were likely to purchase a smart thermostat within the next year.

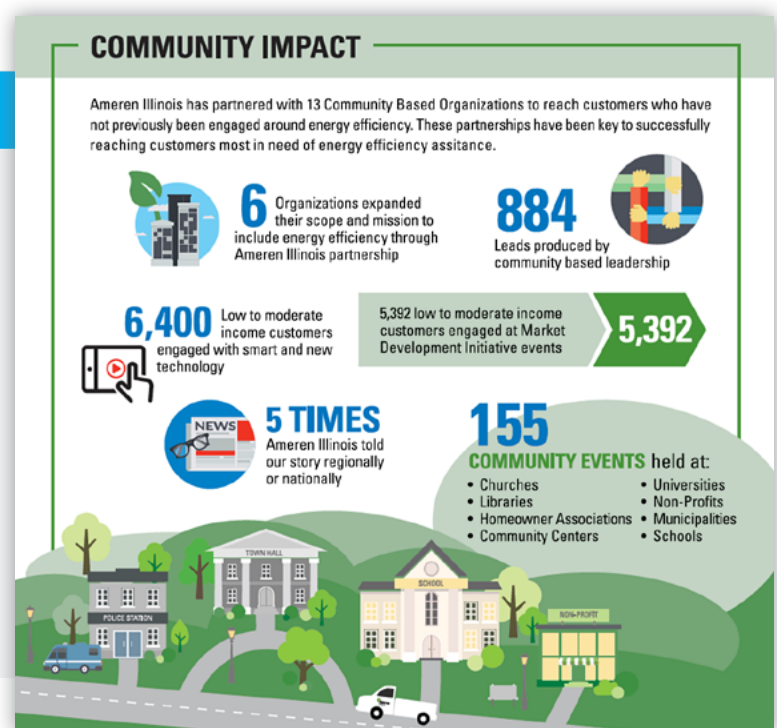
Some electricity providers and other stakeholders across the United States and Canada have responded to this rising interest by offering innovative programs, services and products that meet consumers' growing expectations and help them reach their energy goals, whether it is saving money or reducing their carbon footprint.

For example, **Ameren Illinois** has seen considerable engagement in its low-income energy efficiency programs, demonstrating that interest in energy programs, services and technologies is not limited to more affluent consumers. Ameren Illinois tailored its existing programs and messaging to better reach low- and moderate-income consumers and offered cash incentives to help these customers make energy-efficient upgrades – a major hurdle for participation. The utility also partnered with 13 community-based organizations to reach customers who have not previously been engaged around energy efficiency.

## Ameren Illinois

### *Energy Efficiency for All Market Development Initiative*

- Aims to reduce the financial barriers to energy efficiency, while creating opportunities for minority-owned businesses.
- Partnered with 13 community-based organizations to reach customers who have not previously been engaged around energy efficiency.
- 6,400 low- to moderate-income customers engaged with smart and new technology.



<sup>4</sup> Access past SECC's research reports at [www.smartenergycc.org/research/](http://www.smartenergycc.org/research/).



These initiatives have made a significant impact on lowering the energy burden of lower-income consumers while helping them engage in energy programs and technologies. Ameren Illinois provided 5,400 smart thermostats at no cost to these customers and reduced their annual energy usage by an estimated 2.5 million kWh and 270,000 therms. In addition, Ameren Illinois distributed more than 3,400 free energy efficiency kits at customer assistance events and 9,000 kits in schools. These efforts demonstrate that lower-income consumers are also ready to engage – if programs meet their needs and their top barriers to engagement are addressed by stakeholders.

Detroit-based **DTE Energy** developed the SmartCurrents program, which combines variable peak pricing and smart thermostats, and has seen high customer engagement since its inception. The program motivates residential customers to enroll in a variable peak rate and adds the ability to better control energy usage through the provision of a free ecobee smart thermostat. The more electricity a customer shifts to off-peak hours, the more the customer can save – and customers can save even more when critical peak events occur.

By offering a welcome kit and a free ecobee smart thermostat upon enrollment, DTE Energy helped customers understand how technology can enable them to benefit from making smarter energy decisions. Consumers have responded positively to the SmartCurrents program, and DTE Energy received over 14,000 program applications and doubled the number of active customers with ecobee smart thermostats in 2019. In addition, customers saved an estimated 1 kW on average per household during critical peak events.

The high interest and engagement in these programs demonstrate that residential consumers are more ready than ever before to engage in energy – if electricity providers and other stakeholders listen to consumers' needs and tailor programs and messaging to effectively address them. Meeting consumers where they are is more important than ever before.


## DTE Energy

### SmartCurrents Program

- Motivated residential customers to enroll in a variable peak rate by including a free ecobee smart thermostat.
- Nearly doubled the number of active customers with ecobee smart thermostats in 2019.
- Estimated 1 kW of savings on average per household during critical peak events.

**SmartCurrents™**

DTE Energy's SmartCurrents™ program combines the benefits of a smart thermostat with a smart electricity rate to help lower your electric bill. SmartCurrents customers receive a FREE Wi-Fi enabled ecobee3 lite Smart Thermostat, a \$169 value.



**How it works**  
When you sign-up for SmartCurrents, you'll also enroll in DTE's Dynamic Peak Pricing rate, which varies the price you pay for electricity by time of day – giving you more control over your electric costs.

**SmartCurrents Benefits**

- **FREE Wi-Fi Enabled thermostat (\$169 value):** When you enroll in SmartCurrents, DTE will mail you an ecobee3 lite Smart Thermostat, at no cost to you.
- **Cheaper Nights and Weekends:** SmartCurrents customers receive DTE's [Dynamic Peak Pricing](#) rate. This means, the cost of your electricity will vary by the time of day you use it.
- **Automatically reduce costs:** During Critical Peak events, DTE will automatically increase the temperature settings on your thermostat to help lower your air conditioning costs.

Supplies are limited, so enroll today!

[Enroll Now](#)

More Questions?  
Check out our [FAQs](#) or call our hotline at 888.871.0348.



## THEME 2:

# Segmentation remains essential in a digital world

One challenge the utility industry continues to face is consumer engagement. What we can learn from online retailers, rideshare companies and even the travel industry is that targeted, personalized messages are not only expected by consumers, they provide a valuable invitation for engagement. In today's digital world, information on consumers' behaviors, values and motivations is more readily available than ever, and this can be used by stakeholders to develop effective segmentation frameworks.

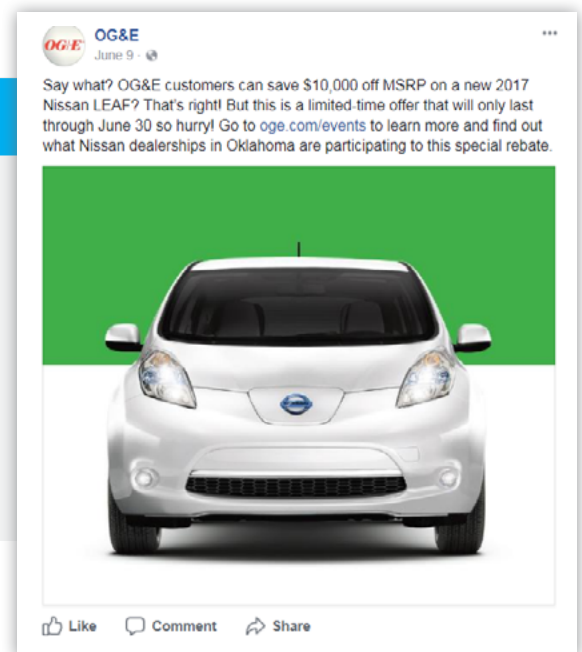
**Oklahoma Gas & Electric Company (OG&E)**<sup>5</sup> did just that when they utilized national electric vehicle (EV) market research studies as a foundation for developing an outreach and education strategy. Identifying the demographic and psychographic profiles of the target niche for EV adoption, OG&E used radio, community events and targeted paid search ads to address common EV barriers and misconceptions. These channels also allowed OG&E to educate consumers about the numerous personal, financial and societal benefits to owning and driving an EV.

This campaign also helped get consumers behind the wheel of an EV for their own test drive. At the company's 2017 Earth Day Ride & Drive event, OG&E conducted over 600 test drives, resulting in more than 20 Nissan LEAFs and other EVs being sold in the area in the weeks following the event. The results of the 2017 campaign have been transformative for EV awareness and adoption within the state. OG&E saw more than three million impressions on EV-related materials in their monthly newsletter, and nearly 450 EVs were registered in Oklahoma from January to December 2017 – compared to 272 total registrations over the same period in 2016.

## Oklahoma Gas & Electric Company

### *Comprehensive EV Outreach Campaign*

- Utilized national EV market research as a foundation for developing an education and outreach strategy.
- Targeted the “Innovators or Enthusiasts” and the “Early Adopters or Visionaries” through radio, community events and paid search to address common EV barriers and misconceptions.
- Nearly 450 EVs registered in Oklahoma from January through December 2017 – a 64 percent year-over-year growth from 2016.



5 A case study on OG&E's EV education can be downloaded at [www.smartenergycc.org/2018-oklahoma-gas-electric-case-study/](http://www.smartenergycc.org/2018-oklahoma-gas-electric-case-study/).

Addressing another growing trend in consumer interest in energy, **Sacramento Municipal Utility District (SMUD)** identified digitally connected families as one of their largest and fastest-growing segments and developed an e-commerce marketplace to meet the segment's needs and interests. SMUD utilized online crowdsourcing/ideation, online customer panels, focus groups, customer interviews, digital surveys and usability testing to truly customize this new platform to deliver value to this tech-savvy segment.

SMUD Energy Store<sup>6</sup> launched in October 2017 with a curated set of customers' most-requested products, including smart thermostats, connected home products, LED lighting, advanced power strips as well as outdoor and water products. Some of the features that were included at launch were single sign-on capabilities, instant rebates, buyer's guides and reviews, and access to customer support via online chat, phone and email.

To increase community awareness, SMUD launched a comprehensive marketing plan that also targeted potential customer segments. For example, SMUD targeted outreach to customers that are on the low-income Energy Assistance Program Rate, leading to more than 2,000 offer redemptions for free or heavily discounted products.

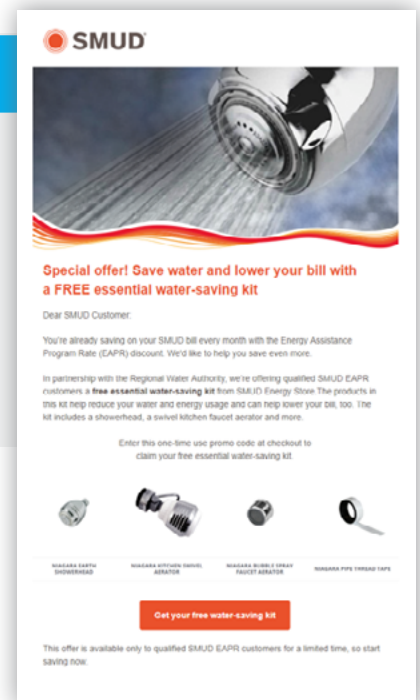
SMUD Energy Store has developed into a one-stop digital platform to help customers meet their energy needs and reports an average customer satisfaction rate of 91 percent. Through September 2019, SMUD sold over \$3 million in gross product, while seeing about 500,000 site visitors.

Optimizing segmentation frameworks and targeting tactics and messaging, as well as program design to bring value to customer segments, can improve satisfaction and engagement. Customers expect personalized messages and offers from service providers today, and it is essential that electricity providers meet customer needs in this way.

## Sacramento Municipal Utility District

### SMUD Energy Store

- Launched e-commerce platform in October 2017.
- Targeted outreach to low-income assistance rate customers, which led to over 2,000 offer redemptions for free or heavily discounted products.
- Through September 2019, sold over \$3 million in gross product while seeing about 500,000 site visitors.



Low-income customer outreach example from SMUD Energy Store

6 A case study on SMUD Energy Store can be downloaded at [www.smartenergycc.org/2019-smud-case-study/](http://www.smartenergycc.org/2019-smud-case-study/).



### THEME 3:

## Energy engagement is fundamentally a journey for both society and individuals

Historically, electricity providers have focused on a transactional relationship with their customers with limited touchpoints focused around starting/stopping service and bill payment. As consumers become more interested in energy and technology, it is helpful to view engagement as a journey for the customer. This perspective also helps view the customer as they are, constantly changing and evolving – with different engagement interests and levels over time.

SECC's *Consumer Values: Moving the Engagement Needle* report looked at strategies and small steps to increase consumers' energy engagement. This model presents opportunities for small steps that lead to bigger changes, ultimately building a stronger relationship between the consumer and electricity provider. This journey mapping can also be applied to communities and their collective engagement with energy – not just individuals.

### CPS Energy

#### *People First Philosophy*

- Formed a Customer Response Unit to increase community awareness of and enrollment in assistance programs and educate customers about energy efficiency and safety.
- The unit has handled nearly 5,000 cases for CPS Energy customers since its inception.
- They have also participated in more than 4,400 community engagement activities, including speaking at local events.



For example, San Antonio-based **CPS Energy**<sup>7</sup>, the largest municipal electric utility in the United States, has reinforced its focus on enhancing the overall customer experience under President & CEO Paula Gold-Williams' People First philosophy. As part of the People First strategy, the utility formed a Customer Response Unit (CRU) that is dedicated to increasing community awareness of and enrollment in assistance programs. The unit also educates customers about energy efficiency and safety and works directly with customers that have unique needs.

Members of the CRU help connect customers with potentially thousands of dollars in weatherization upgrades and work to educate customers and match them up with the appropriate programs and services. Since its formation in June 2014, the CRU has handled nearly 5,000 cases for CPS Energy customers and has participated in many community events. Customers who have participated in the free weatherization upgrades have saved approximately \$350 annually on energy expenses. Gold-Williams' leadership has demonstrated how a utility can become a trusted partner on energy issues and help relieve the energy burden of those most in need.

<sup>7</sup> CPS Energy received one of SECC's Best Practices Awards in January 2020 for these initiatives. Learn more in the *2020 Best Practices Guide*, which can be downloaded at [www.smartenergycc.org/2020-best-practices-guide/](http://www.smartenergycc.org/2020-best-practices-guide/).



## Hawaiian Electric

### *Project Footprint*

- Encouraged residential customers to reduce their carbon footprints to help meet Hawaii's goal of 100-percent clean energy by 2045.
- Invited customers to take steps large or small – whether that was installing rooftop solar or enrolling in paperless billing.
- Nearly 7,000 consumers participated in some aspect of the campaign, including 373 adding rooftop solar and 130 purchasing an electric vehicle.



In Hawaii, an aggressive goal has the state seeking to achieve 100-percent renewable energy generation by the year 2045. **Hawaiian Electric**, an investor-owned utility that serves most consumers on the Hawaiian Islands, developed the Project Footprint campaign with CLEAResult, a provider of energy efficiency services, in 2018 to engage residential customers in the transition to 100-percent renewable energy.

Project Footprint encourages residential customers to reduce their carbon footprints to help meet Hawaii's clean energy goals. It empowers consumers to stand for something bigger, elevates the conversation toward making a difference and gives people the pride of participation. The project invites customers to take steps large or small to reduce their collective carbon footprint – whether that is installing rooftop solar or simply enrolling in paperless billing.

Through the summer of 2019, the Project Footprint campaign has had a considerable impact in engaging Hawaiians in energy efficiency and renewable energy. Nearly 7,000 consumers have participated in some aspect of the campaign, with 373 adding rooftop solar and 130 purchasing an electric vehicle as a direct result of the campaign. Paperless billing enrollments increased by roughly 50 percent from the summer of 2018 to the summer of 2019, and more than two-thirds of both employees and customers stated that they feel more favorable toward Hawaiian Electric as a result of the Project Footprint campaign.





On the mainland, **Austin Energy**, a municipal utility based in the Texas capital, is fostering an environment that makes learning about and adopting EVs easy through a comprehensive education campaign and programs that are aimed at several different customer segments.

The utility's EVolution education campaign utilizes social media, video, advertisements, in-person events and more to help Austin residents understand the benefits of saying "goodbye to gas." Customers can "Drive Electric. Save with Austin Energy" when they own or lease a new or used electric car and charge for only \$4.17 per month through Austin Energy's Plug-In EVerywhere network.

In addition to the education campaign, Austin Energy launched the EVs for Schools program that brings sustainable transportation infrastructure and curriculum to enable next-generation adoption of EV technology. The program is specifically aimed at promoting the benefits of transportation electrification to students in grades 6-12, including those who are from economically disadvantaged communities.

To address challenges that customers have around charging their EVs, Austin Energy launched a monthly flat-rate subscription for EVs that includes unlimited charging at Austin Energy's public Plug-In EVerywhere stations and unlimited off-peak charging at home. The program has helped customers avoid on-peak charges, and two-thirds of program participants rated the program a 10 out of 10.

## Austin Energy

### EV Education Campaign and Programs

- Utilized social media, video, advertisements, in-person events and more to help Austin residents understand the benefits and opportunities around driving an EV.
- EVs for Schools program aimed at promoting the benefits of transportation electrification to students in grades 6-12.
- Launched a flat-rate subscription for EV charging that included unlimited charging at public Plug-In EVerywhere stations and unlimited off-peak charging at home.



These examples demonstrate how electricity providers can utilize campaigns to reach a wide range of consumers where they are and unite them with community-centered messaging, while still offering a range of engagement options that consumers feel will suit their specific needs.



## THEME 4: Consumer expectations are shaping the future

As consumer expectations transform, technology and public policy are also evolving. What is notable, however, is that all three are evolving simultaneously. Other challenges and opportunities include meeting customer demand for smarter, greener energy that is more resilient and better prepared for severe weather events.

Charlotte-headquartered **Duke Energy**, one of the nation's largest electric utilities, is delivering more options, control and convenience to meet customer expectations. For instance, Duke Energy improved the customer experience by deploying usage and high-bill alerts, outage communications, "choose your own due date" services, new payment options and mobile apps that give customers more ways to manage their accounts and energy usage.

Duke Energy has also made strides in how it approaches sustainability. Fueled by consumers' growing expectations around addressing climate change, Duke Energy's plans include advanced renewable energy, longer-lasting storage, low- and zero-carbon fuels, and effective ways to capture carbon emissions. Duke Energy reduced carbon emissions from electricity generation by an additional eight percent in 2019 from 2005 levels, bringing total reductions to 39 percent. This puts Duke Energy on track to achieve its 2030 goal of reducing carbon emissions from electricity generation by at least half from 2005 levels. Ultimately, they have a goal of net-zero carbon emissions from electric generation by midcentury.

### Duke Energy

#### *Modernized Customer Experience and Services*

- Improved customer experience by deploying usage and high-bill alerts, outage communications, "choose your own due date" services, new payment options and mobile apps that give customers more ways to manage their accounts and energy usage.
- Engaged with customers in a variety of in-person interactions, such as customer "pop-up" meetings, sponsorships and personalized public engagement on key projects.
- Accelerated near-term sustainability goal by cutting its carbon dioxide emissions by half or more by 2030.

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BUILDING A SMARTER ENERGY FUTURE™

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**Evergy**, an investor-owned utility serving customers in Missouri and Kansas, understands that it can be a challenge to implement new rate plan options and market them in a way where customers understand the benefits and actually enroll. To avoid simply having pricing options stored away in regulatory tariffs that customers never read, Evergy launched a new suite of rate plan options under the umbrella messages “Timing is Everything” and “Wait ‘til 8”.

Evergy presented choice to their customers in a way that made sense to them and where they could easily take control of the options. The company invested in rate analysis tools that utilized customers’ interval data and rate pricing information to present personalized rate comparisons. This put the power of choice in the customers’ hands with their own information in a way they could understand.

Evergy sent customers reports presenting their weekly usage and pricing information as well as personalized tips so they could effectively manage their usage on these new plans. Evergy also provided access to their hourly usage data and overlay costs so they could see when they were using energy and how much they were paying for it. Within seven months since the launch, Evergy saw more than 4,700 residential customer enrollments in new rate plans.

- Evergy**
- Rate Plan Marketing and Education Campaign*
- Branded new time-of-use rates with “Timing is Everything” and “Wait ‘til 8”.
  - Sent coaching reports presenting weekly usage and pricing information and gave personalized tips to effectively manage usage on new plans.
  - More than 4,700 enrollments in new rate plans.

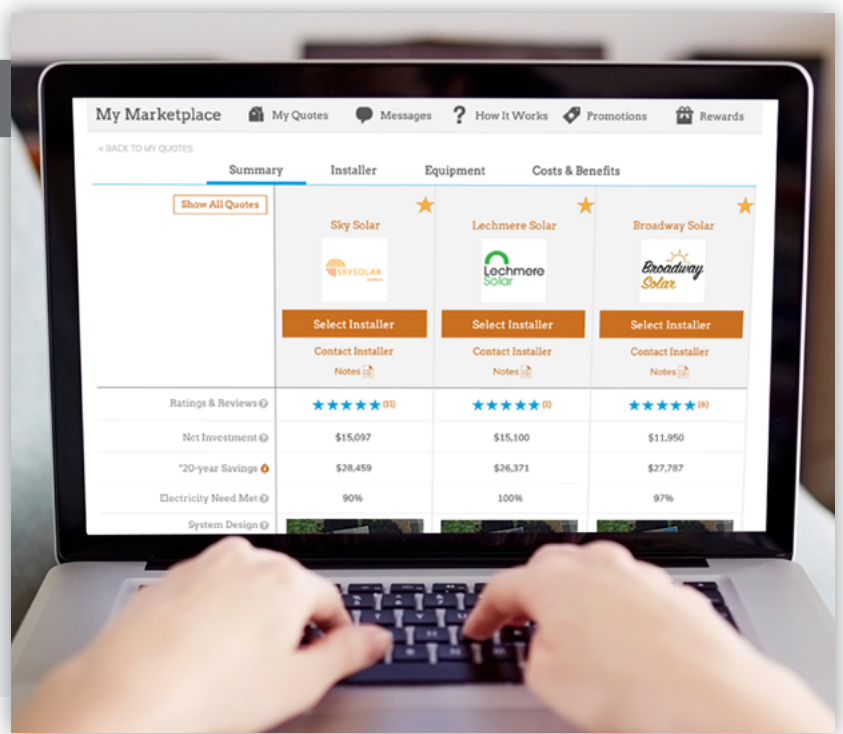




## National Grid

### Solar Marketplace

- Online platform that helped customers better understand their home's solar potential.
- Built on educating customers on the benefits of installing solar PV systems and other resources available to reduce energy costs and increase sustainability.
- Nearly 9,000 customers signed up to receive custom solar quotes from local solar contractors, and 270 customers decided to install solar energy systems on their property after visiting the website.



Finally, consumer expectations around renewable energy have led **National Grid**<sup>8</sup>, an investor-owned utility in the Northeastern United States, to reassess its role in helping residential consumers adopt rooftop solar. In 2016, the utility partnered with EnergySage to create a first-of-its-kind online solar marketplace. This online platform helps National Grid customers better understand their home's solar potential through the education and tools needed to make an informed decision. Once consumers have the knowledge to move forward in their solar journey, they can request and compare quotes from pre-screened installers in their area. The entire process — from education to shopping and buying — can be accomplished online with complete transparency.

The program foundation is built on educating customers on the benefits of installing solar PV systems and other resources available through National Grid to reduce their energy costs and increase sustainability. To date, the program is performing well and is on track to meet its key metrics, including email open rates, number of customers registering to receive quotes for solar PV systems and total sales. Through the end of 2019, nearly 90,000 customers have visited the Rhode Island and Upstate New York program websites. Nearly 9,000 customers have signed up to receive custom solar quotes from local solar contractors, and 270 customers decided to install solar energy systems on their property after visiting the website.

To meet customer expectations now and going forward, utilities need to make strategic, data-driven investments to improve reliability, use more renewable energy and provide intelligent tools customers need to make smart energy choices and save money. These investments will provide benefits today — and in the years to come.

<sup>8</sup> National Grid received one of SECC's Best Practices Awards in January 2020 for their solar marketplace. Learn more in the *2020 Best Practices Guide*, which can be downloaded at [www.smartenergycc.org/2020-best-practices-guide/](http://www.smartenergycc.org/2020-best-practices-guide/).



## THEME 5:

# Education remains a clear, strategic opportunity to increase energy engagement

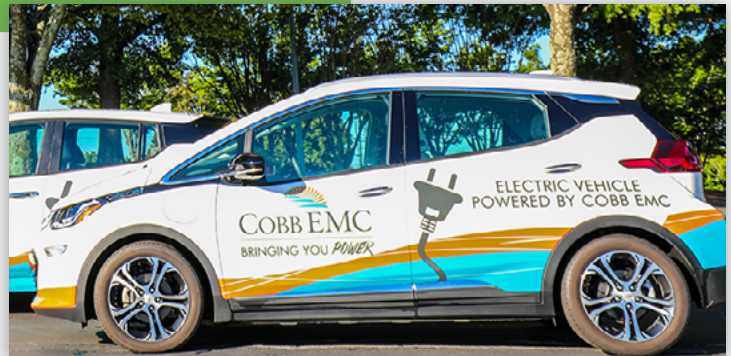
If you are lucky enough to work in the energy sector, you know that the industry is quickly changing, and each day there are more opportunities than ever for consumers to play an active role. One of the most basic challenges is how to engage with consumers and provide them with informative tools to make smart energy decisions. This education is key to the success of energy initiatives from new technologies to rate structures.

Utilities nationwide are developing educational programs — from grassroots ride-and-drive events to mass marketing campaigns and rebates. In Georgia, **Cobb EMC**, an electric cooperative with nearly 200,000 members, has developed a comprehensive EV program that includes an educational campaign, builder rebates for installing EV charging, and a special EV charging rate. In 2018, Cobb EMC utilized consumer research to identify that 37 percent of their customers were somewhat to very likely to consider purchasing an electric vehicle and that 53 percent wanted the utility to offer an EV rate.

## Cobb EMC

### *Multi-Phase EV Education Program*

- Identified that 37 percent of their customers were somewhat to very likely to consider purchasing an electric vehicle and 53 percent wanted the utility to offer an EV rate.
- Comprehensive educational campaign included EV seminars for live educational events, EV experience events with test drives and a check-out program allowing consumers to “check-out” a fleet EV overnight.
- Developed a time-of-use rate, NiteFlex, that offers free overnight home charging (up to 400 kWh) between midnight to 6 a.m.



Seeing a clear community need, Cobb EMC quickly got to work developing a time-of-use rate, NiteFlex, that offers free overnight home charging (up to 400 kWh) between midnight and 6 a.m. Once in place, Cobb EMC utilized a comprehensive educational campaign to connect with consumers and drive adoption. They used multiple channels, including their website, print materials, videos, social media and community outreach, to help drive consumers to cleaner transportation options.

## Fayetteville Public Works Commission

### Time-of-Use Rate Education Campaign

- Utilized extensive social media and monthly radio programming; attending 50+ community events; and developed a Speakers Bureau, reaching over 35 organizations.
- Messages included not only education on what TOU is, but how to shift energy usage to non-peak hours and essential home energy management and conservation tips.
- During the first months, five percent shift in energy use from on peak to off-peak hours when compared to the previous two years of energy usage data.



**Save BIG "Off-Peak" with Time-of-Use Rates**

The time has come! This month, PWC is introducing Time-of-Use Rates for our electric customers. Power will now be billed at higher rates during these Peak Hours which vary seasonally:

**April - October**  
Weekdays from: 5:00 p.m. to 7:00 p.m.  
**November - March**  
Weekdays from: 6:00 a.m. to 10:00 a.m.

Summer Months (April - October) Winter Months (November - March)

Here's how you can save!

- All the power you use during Off Peak Hours is billed at a noticeably lower rate!
- You can save \$10 by adjusting your routines to use less power during Off-Peak Hours and conserving as much as you can during Peak Times.
- You have at least 20 Off-Peak Hours every day (all day on weekends and holidays) to save.

✓ This month through October, remember to do things like laundry, running your dishwasher, etc. before 5:00 p.m. or after 7:00 p.m. on weekdays.

Learn more about conservation at [faypwc.com](http://faypwc.com)

## SAVE WITH SMART TIMING!

"Smart Appliances" can be connected to your smartphone, tablet or computer to give you more control than ever over your power usage. They can make a huge difference in helping you save money, especially when you want to take advantage of off-peak hours!

The typical rate structures of today are not enough to achieve the energy goals of the next 30 years. Instead of traditional flat electric rates for residential customers, utilities are identifying ways to reward smart consumers who help level energy consumption and appropriately recover expensive peak energy costs. In 2018, **Fayetteville Public Works Commission (PWC)**, a municipal utility located in eastern North Carolina, made the decision to transition all residential consumers to a time-of-use (TOU) rate to better match their wholesale power contracts.


PWC has a customer base of more than 80,000 and serves a military population, leading to roughly 20-percent customer turnover annually. With such a dramatic change in how electric was going to be billed, rate education quickly became a key aspect of PWC's consumer engagement and a large contributor to the success of its TOU deployment. Messages included not only education on what TOU is, but how to shift energy usage to non-peak hours and essential home energy management and conservation tips.

Electricity providers hold a wealth of knowledge to assist customers in their evaluation of solar and other distributed energy resources. To partner with consumers and make this information easy to understand and apply to solar decisions, Chicago-based **Commonwealth Edison (ComEd)** launched a solar calculator in December 2018.

## Commonwealth Edison

### Online Solar Calculator Tool

- Free tool that educated customers about solar energy and allowed them to explore their solar options.
- Using customer's address and factors like their roof's pitch and shading, it evaluated their roof's solar potential and the amount of energy their rooftop system could produce.
- Targeted 400,000 consumers with a direct mail marketing campaign.



## READY TO EXPLORE SOLAR?

**Try Our Interactive Calculator**

Using your address and factors like your roof's pitch and shading, you'll learn about your roof's solar potential and the amount of energy your rooftop system could produce.

You'll receive an estimate of:

- Number of solar panels needed
- Upfront installation costs
- Potential incentives and rebates
- Available payback period\*
- Environmental benefits

\*When logged into My Account.

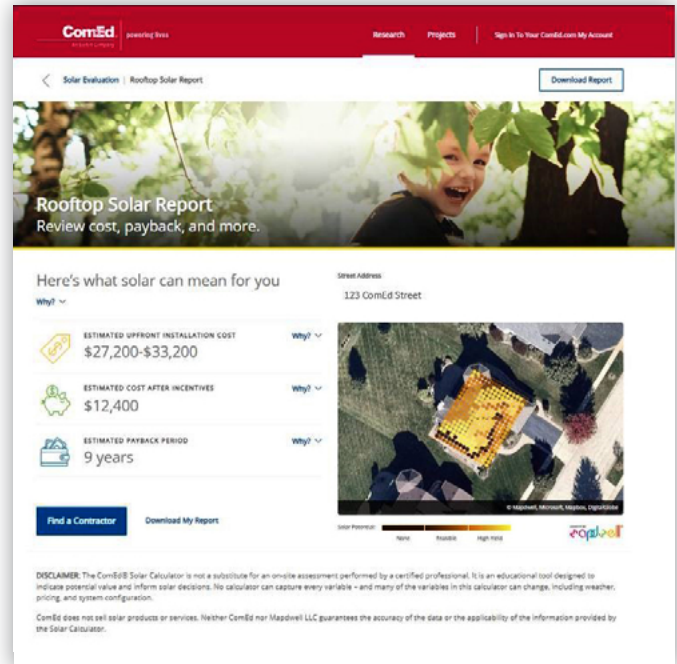
[Get Started](#)



This free, easy-to-use tool educates their consumers about solar energy and allows them to explore the right solar solution for them. In less than five minutes, customers enter their address, identify their average monthly bill (or login for a detailed report based on their account) and can see data and information specific to their home. The custom report educates consumers about their property's solar generation capabilities, cost of installation, available incentives and estimated payback. If the consumer decides that rooftop solar is not the right fit, ComEd provides community solar resources for the consumer.

Knowing that just building the tool was not the end of the education process, ComEd set out to drive participation with consumers. In 2019, ComEd targeted 400,000 consumers with a direct-mail marketing campaign. Additionally, a broader consumer list was targeted with a complimenting email campaign. Initial results drove clickthrough rates above industry benchmarks and a large influx of web traffic to the solar calculator.

The partnership of innovation and education provides an opportunity to engage with customers in new ways and transition to a smarter and cleaner energy future. As energy programs and technologies continue to change, education will play an essential role in consumer adoption, and identifying best practices and industry leaders in this area will accelerate success.



Sample results from the ComEd solar calculator

## CONCLUSION

By making smart energy information widely available and providing thought leadership to the energy industry, SECC strives to help energy stakeholders engage consumers and transition from a commodity provider to an energy services partner. Equipped with the themes and real-world examples provided in this white paper, electricity providers can take that a step further by moving consumers along a continuum of engagement, education and participation.

It is the job of power industry stakeholders to help consumers understand how a smart energy ecosystem benefits them – whether the benefits are financial, reduced environmental impacts or increased reliability. The energy industry can deliver new opportunities for consumers to access their energy data through online tools or digital marketplaces with new products; can offer a variety of advanced communications to consumers; and can provide consumers with a world of new energy services and programs in this exciting digital era.

Please join the Smart Energy Consumer Collaborative as we take the journey towards understanding consumers and assisting energy industry stakeholders to engage and empower their customers. For more information, please visit [www.smartenergycc.org](http://www.smartenergycc.org).



**Working for consumer-friendly, consumer-safe smart energy**

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

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