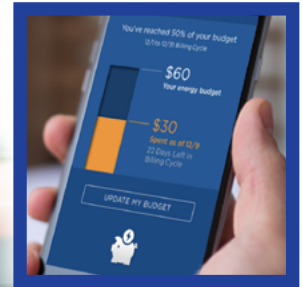


WHITE PAPER: **OPTIMIZING CONSUMER ENGAGEMENT**

Real-world examples for SECC's 2019 State of the Consumer themes

MAY 2019



Introduction

The Smart Energy Consumer Collaborative (SECC) is dedicated to helping smart energy stakeholders better understand consumers. This involves learning and analyzing what motivates consumers to engage with their energy providers and utilize products and services being offered to encourage smart use of energy resources.

In 2018, SECC conducted research to determine how knowledge of a consumer's unique situation can make the difference in whether an offer is ignored or accepted and leads to deeper engagement. This research was summarized through five key themes from SECC's *2019 State of the Consumer* report.¹

This white paper explores those five themes and capitalizes on the takeaways that cover emerging opportunities for customers – including both residential consumers and small-and-medium businesses (SMBs) – by illustrating impactful, real-world examples of who is getting it right.

THEME 1

Return-on-investment information helps consumers understand programs and drives participation.

THEME 2

The time is now for technology-based solutions like those offered in other industries.

THEME 3

The already engaged consumers are ready for the next step.

THEME 4

Upfront costs are a hurdle for many consumers – not only those with lower incomes.

THEME 5

Consumers will enroll and participate if it's easy and convenient for them to do so.

¹ Members are able to download the full report at smartenergycc.org/2019-state-of-the-consumer-report. If interested in SECC membership, visit smartenergycc.org/about/why-join.



THEME 1:

Return-on-investment information helps consumers understand programs and drives participation

With ongoing consumer shifts toward more personalized and digital offerings and experiences, a refined and targeted customer strategy is often required to boost and sustain consumer awareness and participation. A key component of a targeted customer strategy is the need to provide relevant information to consumers showing how a specific decision or investment will directly impact their bottom line and future experiences. The challenge is how best to do this. Today, many energy service providers are prioritizing efforts to accomplish this, knowing that key bottom line information for consumers can lead to successful delivery of beneficial program and offerings.

For NB Power, an electricity provider to over 750,000 residents in New Brunswick, Canada, consumer engagement has been the guiding principle as it reworked and revamped its energy efficiency programs in recent years. This effort has had a positive impact for customers in New Brunswick. In 2018, NB Power customers collectively saved approximately 18 GWh, totaling \$1,965,412 in energy savings. The utility's expanded portfolio included the revitalization of the energy efficiency brand, a new personalized approach to all marketing elements and the launch of a number of new programs for customers. One program was the Total Home Energy Savings Program which provided incentives for customers to upgrade items in their home such as heating systems and insulation. Another program was a Small Business Lighting Program which addressed specific needs of small business owners with incentives for lighting upgrades.

NB Power

Energy Efficiency Programs

- Reworked and revamped energy efficiency work
- A clear ROI for consumers with the Total Energy Savings and Small Business Lighting Programs
- Customers collectively saved approximately 18,014,777 KWh, totaling \$1,965,412 in energy savings

NEW HOME ENERGY SAVINGS PROGRAM

Get comfortable with savings

BUILDING A NEW HOME?
Now's the perfect time to:

- Save money
- Save energy
- Make your home more comfortable

Register online:
nbpower.com/newhome
or call: 1 800 863-6172

• TAKE ADVANTAGE OF INCENTIVES AND ENJOY THE COMFORT, PEACE OF MIND, AND LONG TERM SAVINGS OF AN ENERGY-EFFICIENT HOME.

• THE NEW HOME ENERGY SAVINGS PROGRAM

There are three incentive levels to which you can model your home. With each level, the efficiency and incentive are higher. Build a net zero home to reach the highest level and get the biggest incentive.

Prescriptive Approach: Building requirements for each level are outlined. You can choose which level you would like to build your home to.

OR

Performance Approach: Incorporate the energy efficiency measures into your home that you want, then have it modeled to see how it compares against the reference house (your home built to code). The incentive level you achieve will be based on how your home compares to the reference house.

Start by having your plans modeled by a Certified Energy Advisor (\$99 + HST evaluation fee).

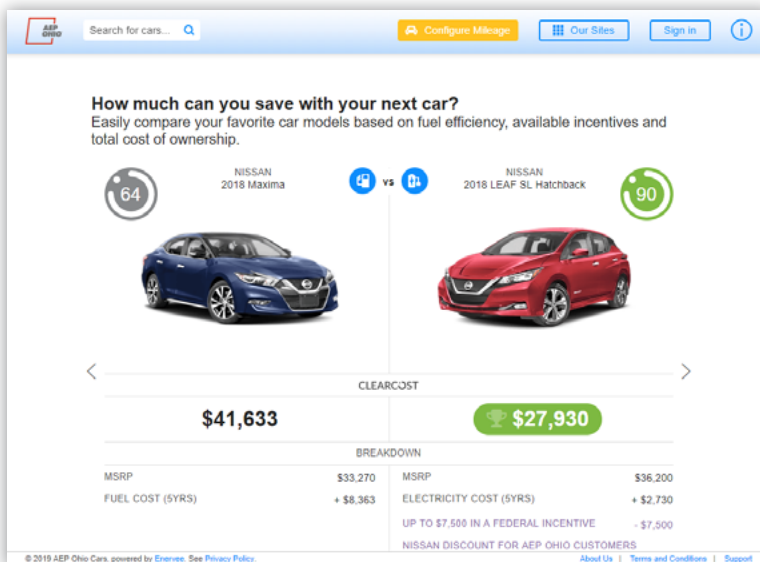
Énergie NB Power

In addition to traditional utility network investments, New York State Electric and Gas Corporation (NYSEG) leveraged the power of direct consumer peers to help bring the message of personalized return-on-investment (ROI) information to consumers. Through its established Energy Smart Community program, NYSEG trained Energy Navigators to conduct direct community outreach to many low- and moderate-income (LMI) customers on key energy efficiency activities that could help decrease overall energy consumption. Leveraging existing smart meter infrastructure, the trained Energy Navigators provided LMI customers with relevant, research-based information and resources through which they could act based on their individual household energy consumption. The Energy Navigators utilized direct install measures, such as faucet aerators, LEDs and other energy efficiency products as examples of existing opportunities. Facilitating these personalized conversations and actions plans for these traditionally hard-to-reach consumers ultimately reduced LMI customers' energy burden.

New York State Electric and Gas Corporation

Energy Navigators Program

- Leveraged power of direct consumer peers to bring the message of personalized ROI information to consumers
- Energy Navigators conducted direct community outreach to many LMI customers
- Highlighted key energy efficiency activities that could help decrease overall energy consumption



And the approach of providing key “bottom line” information to consumers is not limited to energy utilities, as product and service providers are also capitalizing on the power of this message. Enervee, a leading online utility platform provider, makes it simple and compelling for consumers to make better one-time buying decisions, such as residential energy efficiency or an electric vehicle. Their online platforms respect the established search criteria for product shopping (price and reviews) and deliver those results for the user within a new choice architecture (including a mix of heuristic, visual cues — a zero to 100 relative energy efficiency index — and analytical data on energy bill impacts and total cost of ownership) that leads to more efficient purchases. Personalized total cost of ownership information on cars¹ has proven particularly effective at raising awareness, desire and purchases of EVs among people originally in the market to buy an internal combustion engine vehicle. Understanding buying decisions is critical to eliminate barriers that prevent private investment into cost-effective clean energy technologies.²

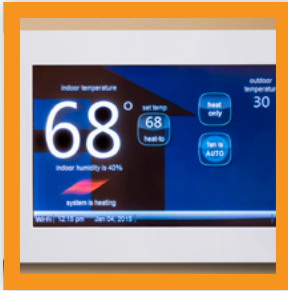
Enervee

EV Online Platform

- Makes it simple and compelling for consumers to make better one-time buying decisions
- Personalized total cost of ownership information on cars
- Raises awareness, desire and purchases of EVs

In short, whether or not consumers choose to participate in a program or service is influenced by the availability and prioritization of clear information. Providing better information on a consumer's own situation and expected impacts on their bottom line is critical.

² See, for example, Con Edison Cars and AEP Ohio Cars.



THEME 2:

The time is now for technology-based solutions like those offered in other industries

Over the past decade or more, technology has become a standard feature of our daily lives. From commuting via Lyft or Uber, to ordering household essentials on Amazon and interacting with friends and family through social media, most consumers clearly rely on technology-based solutions throughout the course of the day.

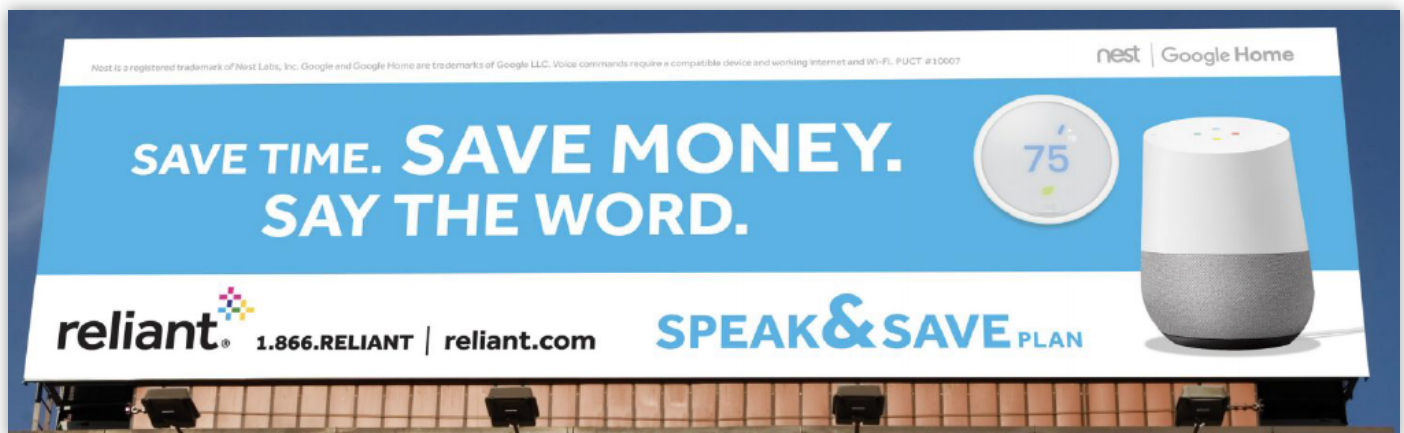
While most consumers are not yet engaging in energy-specific apps and platforms, according to the *2019 State of the Consumer* report, the interest is there – and no longer limited to millennials or tech-friendly early adopters. The vast majority of consumers see that technology can be a means for saving energy around their home, and some electricity providers are beginning to capitalize on this trend in innovative ways.

One example is Reliant, a retail electricity provider in Texas, who partnered with Google and Nest to deliver a cutting-edge smart home experience for their customers. Through this partnership, Reliant developed the Speak & Save plan, whereby participating customers would receive a free Nest Thermostat and Google Home voice assistant by enrolling. The smart thermostat allows customers to more easily and cost-effectively manage the temperature of their homes, and the voice assistant invites customers to ask for information on plan details, account balances and energy usage for the month. The Google Home device also enables customers to integrate smart lighting, smart blinds or other potentially energy-saving smart technologies. First rolled out to customers in early 2018, the Speak & Save plan has proved popular with Reliant customers by increasing customer engagement and making it more convenient for people to check their electricity bills.

Reliant

Speak & Save Plan

- Participating customers received free Nest Thermostat and Google Home voice assistant
- Voice commands provide plan details, account balances and energy usage for the month
- Increased customer engagement and made it more convenient to check electricity bills



Pacific Gas & Electric

Online Utility Marketplace

- Helped customers make better buying decisions, rather than relying on incentives
- In total, shoppers saved between 158.7 and 434.6 GWh of electricity
- Energy savings of 995 kWh and 52 therms on average

Another technology familiar to consumers in other sectors are online platforms like Expedia and Zillow. Enervee pioneered the application of these online platforms in the utility sector, and in 2015, the award-winning PG&E Marketplace was the first to be launched with the explicit intention of generating proven market-based savings by helping customers make better buying decisions, rather than relying on incentives. The PG&E Marketplace helped shoppers save between 158.7 and 434.6 GWh of electricity and 8,221,273 to 22,576,096 therms of natural gas. For each PG&E Marketplace shopper, this translates into an average lifetime savings of up to \$300.

Finally, some electricity providers are working on ways to use technology to engage traditionally hard-to-reach subsets of consumers. For example, Con Edison, the electricity and natural gas provider for all of New York City and one neighboring county, is promoting its energy-saving programs through an existing smartphone app from a Brooklyn-based start-up Propel FreshEBT. The app helps SNAP recipients budget their benefits through a free digital platform. Low-income customers receive energy-saving information and assistance participating in the Smart AC demand response program. This includes free technology to make window A/C units “smart” which allows customers to control their A/C unit remotely, participate in demand response events and have the ability to earn bill credits.

Con Edison

Propel FreshEBT Energy-Saving App Partnership

- Promoted energy-saving programs through an existing smartphone app
- Provided energy-saving information and empowered participate in Smart AC demand response program
- Able to participate in demand response events and earn bill credits

As the energy industry continues its shift towards the end consumer, it's clear that technology will play, and needs to play, a central role in the transformation. Consumers of all types are already utilizing smart-home products, mobile apps, online platforms and more in their daily lives. These and other similar technologies have the potential to drive unprecedented engagement in energy. The three programs highlighted here from Reliant, PG&E and Con Edison are exceptional for today but will likely become the norm for electricity providers in the years ahead.



THEME 3:

The already engaged consumers are ready for the next step

Consumers who have already taken steps to improve energy efficiency or address environmental concerns may be interested in new ways to save on utility bills or otherwise address their values. This is true of both residential and SMB customers. For utilities looking to advance their consumer relationships, mining segmented customer data, structured educational programs and targeted marketing have shown good results.

Analyzing data about customer preferences, coupled with offerings tailored to specific customer segments, is a sure strategy to boost engagement. Entergy, an investor-owned energy company serving nearly three million customers in four southern states, did just that with a multi-year strategy for improved product and service delivery.

Beginning in 2016, the utility started three new organizations focused on customer analytics, products and services, and customer product engineering. The first step in the process used customer analytics to gain a better understanding of what customers want from their utility. The next was determining the impact of a product offering, relating to factors like adoption rates, environmental benefits, load curve reduction and customer satisfaction. The analytics effort has already seen a large return on investment from initial use cases, but more importantly, it has helped feed the creation of a range of product and service options for payment, energy efficiency and distributed energy resources. Entergy was able to uncover critical insights about what customers are looking for and deliver innovative solutions that better meet those needs.

Education is a big part of helping interested and engaged consumers find ways to continue energy management activities. Austin Energy, a municipal utility which serves the city of Austin and parts of the surrounding county, developed a program to assist homeowners interested in residential solar. The program was developed in response to the utility scaling back solar incentive programs due to falling prices and a growing backlog of projects. But the utility still saw a need to help consumers navigate the choices being offered by photovoltaic (PV) installers.

Austin Energy

Solar Education Incentive Program

- Assisted homeowners interested in residential solar
- Training courses that covered a variety of topics related to costs, options and expectations for solar deployments
- Given access to a \$2,500 incentive toward a qualified PV installation

The resulting Solar Education incentive program requires the customer to participate in a training course that covers a variety of topics related to costs, options and expectations for solar deployments. Once the course is complete, the consumer takes a short exam and receives a \$2,500 incentive toward a qualified PV installation. Consumers have seen a reduction by 85 days in the life-cycle times of incentivized installations.

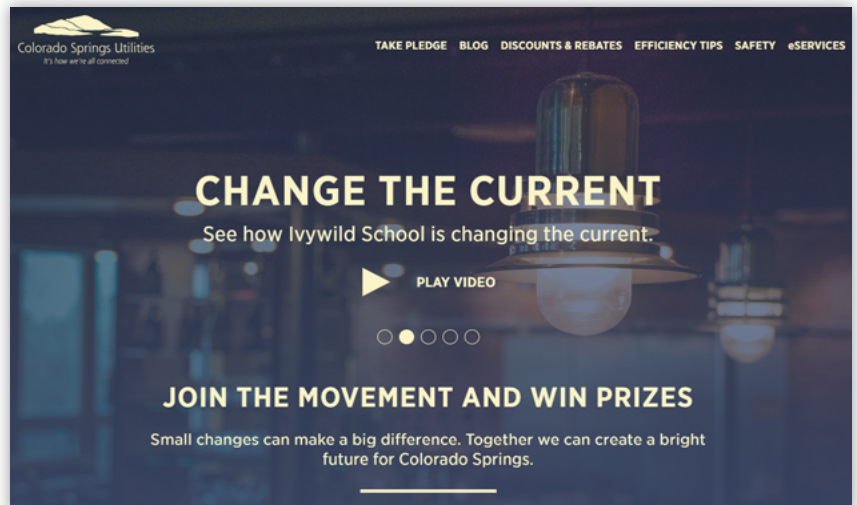
For utilities with a broad base of engaged customers, casting a wider net for both promotion and education can make sense. Colorado Springs Utilities provides service to half a million residents in one the fastest-growing areas in the country for millennials. Millennials are more comfortable with technology and are more likely to respond to digital outreach and community-centered campaigns.

In 2017, the utility began a campaign to encourage energy efficiency while building on the already strong sense of shared community goals for energy and water management. The objectives for the first nine months of the campaign included gathering 5,700 customer and 364 employee pledges to implement a recommended list of energy-saving activities in their home or business. The campaign used the experiences of already engaged customers to influence participation through video case studies shared via dedicated websites, email campaigns and social media.

Not only did participation exceed expectations, but consumers were overall able to realize 50,800 MWh in reduced consumption. The utility is using the experience from this campaign to extend its outreach, field research and customer segmentation efforts.

In addition to programs targeting residential consumers, SMB customers are also being offered new energy saving programs. Often overlooked because of a perceived indifference to energy bills, utilities are finding SMBs can be engaged with the right approaches. SECC found that leveraging segmentation to design programs, marketing and outreach in the SMB sector is no different from leveraging segmentation in the consumer sector.³ And the necessity to “personalize and quantify” the benefits of making an energy efficiency investment are also the same.

In 2015, San Francisco-based PG&E conducted research that confirmed their SMB customers were missing opportunities to save on their energy bill. This research spurred a decision in 2016 to analyze what savings SMB customers could experience if they switched to a better rate plan for their usage patterns. Detailed energy savings were shared with SMB customers from a new program called the Best Rate campaign. The campaign led to an annual \$1 million in customer bill savings.

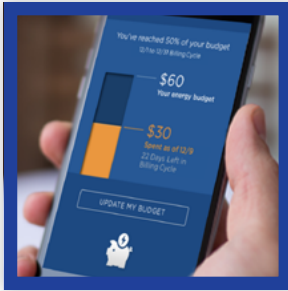


Colorado Springs Utilities

Change the Current Customer Engagement Initiative

- Gathered 5,700 customer and 364 employee pledges to implement a recommended list of energy saving activities
- Already engaged customers influenced non-engaged customers to participate through video case studies, email campaigns and social media
- 50,800 MWh in reduced consumption by consumers

³ To learn more about SMB consumers, access SECC's *Understanding Your SMB Customers: A Segmentation Approach* report at smartenergycc.org/understanding-your-smb-customers-report.



THEME 4:

Upfront costs are a hurdle for many consumers – not only those with lower incomes

When it comes to energy upgrades, upfront costs can be a major hurdle for consumers with low and moderate incomes. But they're not alone. That's why creative ways to finance upfront costs – like on-bill financing or a Pay As You Save program – can encourage participation for consumers of all income levels.

Research has found that consumers want tangible, actionable information to help them make energy investments that affect their bottom line. For example, lighting and appliances are the most common energy-related upgrades among Selectively Engaged consumers, yet the key barrier for consumers in this segment is knowing the upfront costs of upgrades and the monthly savings they could achieve.⁴ By pairing information about the long-term savings along with financing assistance, energy companies can help consumers overcome these hurdles and take action.

Several times a year, at locations throughout its service area in central and southern Illinois, Ameren Illinois holds events to provide support to income-qualified customers. Attendees can receive one-time bill payment grants of up to \$150; they can also meet face-to-face with Ameren Illinois employees to set up payment plans and discuss energy-efficiency strategies to reduce future bills. Setting up a payment plan is often a stressful process. The ability to speak with someone in-person and ask questions can alleviate customers' worries and make it clear that their concerns are being heard and addressed by their energy company. The events usually draw 400 to 500 attendees, with the largest attracting more than 1,200 customers. The face-to-face meetings allow low-income customers to learn how to save money without making expenditures.

Ameren Illinois

Customer Assistance Events

- Events held to support income-qualified customers
- Received one-time bill payment grants of up to \$150
- Face-to-face customer support on setting up payment plans and discussing energy-efficiency strategies

⁴ To learn more about Selectively Engaged consumers, access *SECC's Consumer Values: Moving the Needle on Engagement* report at smartenergycc.org/consumer-values-moving-the-needle-on-engagement-report.

Financing programs can assist commercial customers as well. PSE&G's Hospital Efficiency Program provides upfront funding for energy-efficiency improvements, eliminating the financial burden for healthcare facilities that often do not have the needed capital. The program provides an incentive toward the total cost of the project, and on-bill repayment for the hospital's share of the program costs at zero percent interest. The repayment amount is often offset by the savings realized.



The program incorporates several other innovative features, including a “whole building” approach to energy efficiency. PSE&G does not place a cap on project financing in order to address all cost-effective measures and achieve a deep building retrofit. The money hospitals save on energy costs can be invested in critical areas like emergency rooms, surgical suites and research laboratories, and to offer new programs and services to their communities.

PSE&G

Hospital Efficiency Program

- Upfront funding for energy-efficiency improvements at healthcare facilities
- Repayment amount often offset by the savings realized
- Money saved invested into critical areas like emergency rooms, surgical suites and research laboratories

Education about the benefits of energy efficiency isn't always enough. To help consumers of all income levels take action, energy providers should also connect them with the financial tools needed to make larger investments.

On-bill financing is likely to be welcome assistance. Research has found that consumers who were the most interested in financing assistance were nearly three times more likely to make substantial energy-related home upgrades than those who had only done minor upgrades. When accompanied by information that explains the long-term savings provided by energy upgrades, on-bill financing programs can help remove the barrier of upfront costs for consumers taking their first big steps.



THEME 5:

Consumers will enroll and participate if it's easy and convenient for them to do so

In the world of the “Amazon experience” and online grocery shopping services, customers are demanding more convenient experiences in all aspects of their lives. SECC research demonstrates that although consumers are interested in energy programs, the adoption rate is low. Identifying consumer interests via segmentation is the key to increasing adoption rates, but if segmentation is not possible there are other strategies to increase enrollment. For instance, consumers want simplicity and convenience from the program enrollment process. Ease of access and use is a win-win for the industry and consumers and should be the foundation of new program design.

In Illinois, ComEd utilizes a variety of approaches to educate customers about new programs. Through ComEd's smart thermostat rebates, customers are invited to buy qualifying thermostats through the ComEd customer marketplace, and they can also print coupons or request a rebate after purchasing a thermostat at their retailer of choice. This program provides broad access to devices that help consumers of all incomes afford them and thus have more control over their energy usage. To build upon the smart thermostat program, ComEd uses outreach channels to target smart thermostat users with additional programs such as Hourly Pricing. If a smart thermostat user participates in Hourly Pricing, ComEd has established additional resources such as IFTTT⁵ to build automatic thermostat adjustments based on real-time price signals. Consumers can select pre-built rules like “Set my thermostat for high price” or “When the price comes back down, resume schedule on my thermostat” to allow for hands-off energy management in response to real-time pricing. Smart thermostats and rebates, like those provided by ComEd, can encourage consumer adoption of dynamic pricing programs and lead to further energy efficient behavior and savings. ComEd has given consumers the tools needed to take ownership of their energy usage. When connected by the right technology, smart thermostats and dynamic pricing programs, like Hourly Pricing, can increase value for many types of customers.

ComEd

Smart Thermostat Program Offerings

- Variety of approaches to educate customers about new programs
- Broad access to devices that help consumers of all incomes afford them
- Gave consumers the tools needed to take ownership of their energy usage

⁵ “If This Then That” applets work in various scenarios to help consumers take advantage of energy-saving opportunities. www.comed.com/WaysToSave/ForYourHome/Pages/IFTTTEnergySavings.aspx

conEdison Everything Matters

SAVE MONEY BY SWITCHING TO ENERGY STAR® CERTIFIED LED LIGHT BULBS!

Better for your wallet. Better for the planet. All it takes is changing a light bulb.

LED (light emitting diode) light bulbs are an easy and environmentally friendly way to lower your energy bill. Not only are they the most efficient type of bulb, they're also versatile and last longer than traditional incandescent bulbs or CFLs.

Energy Efficiency
A standard bulb costs about \$7/year to light, while LEDs will run you just \$1/year to run. Plus, since LEDs last at least 15 times longer than your average light bulb, this can add up to big savings over time—at least \$55/bulb!

Color and Appearance
LEDs are available in a wide range of colors to suit any space and need. Light color is measured on the Kelvin (K) scale. A lower K means warmer light, while a higher K means cooler light.

2700K 3000K 3500K 4100K 5100K 6500K

conEdison Everything Matters

Versatility

LED bulbs come in a variety of shapes and sizes to accommodate your lighting fixtures. You can also find certified bulbs that are dimmable to set the mood in any room.

The Lighting Facts label appears on all LED bulb packaging to help you make an informed decision.

	BULB TYPES				
TABLE AND DESK LAMPS	STANDARD	PAR38	PAR30	PAR20	PAR16
FREESTANDING FIXTURES	STANDARD	PAR38	PAR30	PAR20	PAR16
CEILING FIXTURES	STANDARD	CANDELI			
CEILING FANS	STANDARD	CANDELI			
WALL SCREWS	STANDARD	PAR38	PAR30	PAR20	CANDELI
RECESSED CASES	PAR38	PAR30	PAR20	PAR16	
RECESSED LIGHTING	PAR38	PAR30	PAR20	PAR16	

Lighting Facts For Bulbs

Brightness: 1000 lumens
Estimated Energy Cost: \$1.14
Estimated Life: 25,000 hours
Light Appearance: Cool
Energy Used: 10 watts

Brightness
LEDs also provide the same level of brightness as standard bulbs while consuming far less energy (watts) and producing less heat.

Standard Bulb Wattage	Lumens	LED Wattage
40	400	4-6
60	800	6.5-9.5
75	1,100	8.5-12
100	1,600	12-17
150	2,600	19-23

Why LEDs?

- They use about 80 percent less energy than incandescent light bulbs, which means savings on your energy bill.
- They last at least 15 times longer—saving you major cash in the long run.
- They offer the same brightness and color as incandescent bulbs.
- They help protect the environment.
- They're cool to the touch.

Find a participating retailer at conEd.com/LED

Not every energy savings partnership must be technical in nature. Con Edison is working to help all customers, including underserved communities throughout New York City, access energy-saving programs through strategic partnerships. Throughout 2018, Con Edison developed partnerships with two local food banks to reach customers with ENERGY STAR®-certified LED lightbulbs. This effort reached 50,000 low- and moderate-income consumers with four-packs of lightbulbs plus a flyer promoting additional energy-saving programs that might interest these customer segments. Con Edison also partnered with other retail locations such as Dollar Tree, CVS and Walgreens to discount lightbulbs directly on store shelves within the communities they serve.

Con Edison

Low Income LED Lightbulbs & Energy-Saving Partnerships

- Partnerships with two local food banks to reach customers with ENERGY STAR®-certified LED lightbulbs
- Reached 50,000 low- and moderate-income consumers
- Promoted additional energy-saving programs



As utilities balance internal systems and controls with new programs, we know keeping the customer experience top of mind is important. For program enrollment, this can vary from physically going to where the customers are through strategic partnerships to targeting existing program participants to drive complimentary program adoption. Once a program is adopted, crafting a smooth customer experience similar to Reliant's Speak & Save program mentioned in Theme 2 allows for maximum benefit to the consumer as the utility industry seeks to better understand and engage their customers. From enrollment to execution, convenience and ease-of-access are essential to program success.

In 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 of electrons to an energy services partner. Equipped with the themes and real-world examples provided in this white paper, energy 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 portals or digital retail 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.



Working for consumer-friendly, consumer-safe smart energy

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

Join @ www.smartenergycc.org