



SmartGrid
consumer
collaborative
listen, educate, collaborate

Effective Communication with Consumers on the Smart Grid Value Proposition

Communications Toolkit



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Executive Summary

The Smart Grid Consumer Collaborative (SGCC) has organized a communications toolkit to communicate a consistent narrative on the promise of the smart grid including economic, environmental and reliability benefits to consumers. The package of resources includes key takeaways, consumer messaging and materials supported by industry insight, previous SGCC research, public relations expertise and consumer surveying.

A 2016 survey of American energy consumers reveals that the most effective way to communicate the consumer value proposition (CVP) for smart grid is to use specific, positive words and phrases that are familiar and appealing to consumers in relatively brief statements.

Messages should be short, specific and positive. References to “increasing” benefits rather than “reducing” harmful elements are better received by consumers. When communicating concepts, stakeholders should use short, direct statements composed of plain, familiar language.

The survey’s findings show that consumers want dependable service, quick power restoration after an outage and to save money. They favor energy efficiency and electricity pricing options.

Words and phrases such as “savings,” “saving money,” “economical,” “dependable service,” “energy efficiency,” “better pricing options,” “better service and potential savings,” are well received by consumers. Terms such as “informed,” “choice,” “control” and “flexibility” draw tepid responses. Terms such as “empowerment” and “enablement” do not resonate.

Consumers want to feel “knowledgeable” about their own technology options, but phrases such as “power usage monitors,” “mobile thermostat apps” and “electric vehicles” draw low interest.

Consumers are interested in technology-enabled improvements in service but are less interested in how a utility achieves results. When asked the importance of technology that “restores your power quickly,” “prevents a power outage” and “speeds up repairs from storms,” consumers favor those responses over “limits outages to only those homes near the needed repairs.”

Consumers react more positively to words and phrases such as “manage budget,” “increase reliability,” “promote energy efficiency” and “without sacrificing comfort or convenience.” Lengthy messages that include historical background on how the grid operates or analogies comparing other technologies with grid modernization fare less well.

Power industry stakeholders can put the survey’s findings to immediate use by crafting their consumer-oriented messages accordingly. Sample elevator pitches and a stump speech that incorporate the current survey’s findings are provided in this toolkit.

Though the 2016 SGCC survey on communicating the consumer value proposition provides clear if general guidance on messaging, it also produces questions worthy of further inquiry. SGCC’s research on consumer segmentation reveals five basic consumer categories and further details on engagement opportunities. The 2016 survey discussed here does not delve into how messaging might vary per each of those five distinct consumer segments. Also, though the current survey results reflect the overall appeal to consumers of specific, positive, familiar language and short, declarative sentences, some consumers may wish for more detail and nuance in order to understand the smart grid’s consumer value proposition. The nature of online resources such as FAQs and links, for instance, allow primary messages to be supported by further resources, should a consumer opt to learn more.

Consumers react more positively to words and phrases such as “manage budget,” “increase reliability,” “promote energy efficiency” and “without sacrificing comfort or convenience.”

Consumer Value Proposition Categories

The consumer value propositions embodied in the 2016 survey of American energy consumers were drawn from previous SGCC research. In particular, SGCC's "Smart Grid Economic and Environmental Benefits" (2013) report is a review and synthesis of consumer research on benefits and costs that assist stakeholders in better understanding the economic, environmental, reliability and customer choice benefits of smart grid investments. Equipped with the knowledge of the benefits of the smart grid based on quantitative research, SGCC identified three consumer value proposition categories by answering three basic questions consumers would have:

- 1) What is smart grid and why should I learn about it?
- 2) What's in it for me?
- 3) What's in it for "us"?

Based on nine capabilities resulting from smart grid technology investments, benefits for consumers are grouped in three broad categories, described as follows:

1) Environmental Benefits:

Quantified environmental impact reductions of almost 600 pounds of carbon dioxide equivalent emissions per consumer per year are available from the conservation impact offered by smart grid functionality. Smart grid investments also enable greater amounts of sustainable generation to be integrated despite intermittency and other technical challenges.

2) Economic Benefits:

Returns on smart grid investments are quantified to be \$154 per customer per year, with an ideal return of \$713 if mature consumer engagement is well-used by the consumer population. Various programs that drive overall benefits can add additional economic value to consumers, including time-of-use rates, interruptible load permissions and others as identified in the Smart Grid Economic and Environmental Benefits report. Consumers who participate in time-based rates and shift their usage are likely to receive the most benefits annually, and customers who do not will receive less.

3) Reliability Benefits:

On any given day, the equivalent of 500,000 people in the U.S. are without power for 2 hours or more. Studies have shown that power outages cost the U.S. economy around \$80 billion annually. The smart grid offers significant benefits with improved grid reliability and resiliency. Capabilities such as fault location help repair crews find faults faster, while fault isolation limits the number of customers with sustained outages for any particular service outage. Smart grid investments of automated software solutions, digital sensing devices and other technologies result in shorter-duration outages as well. Potential reliability improvements are quantified at 25 percent or 27.2 reduced outage minutes per year.

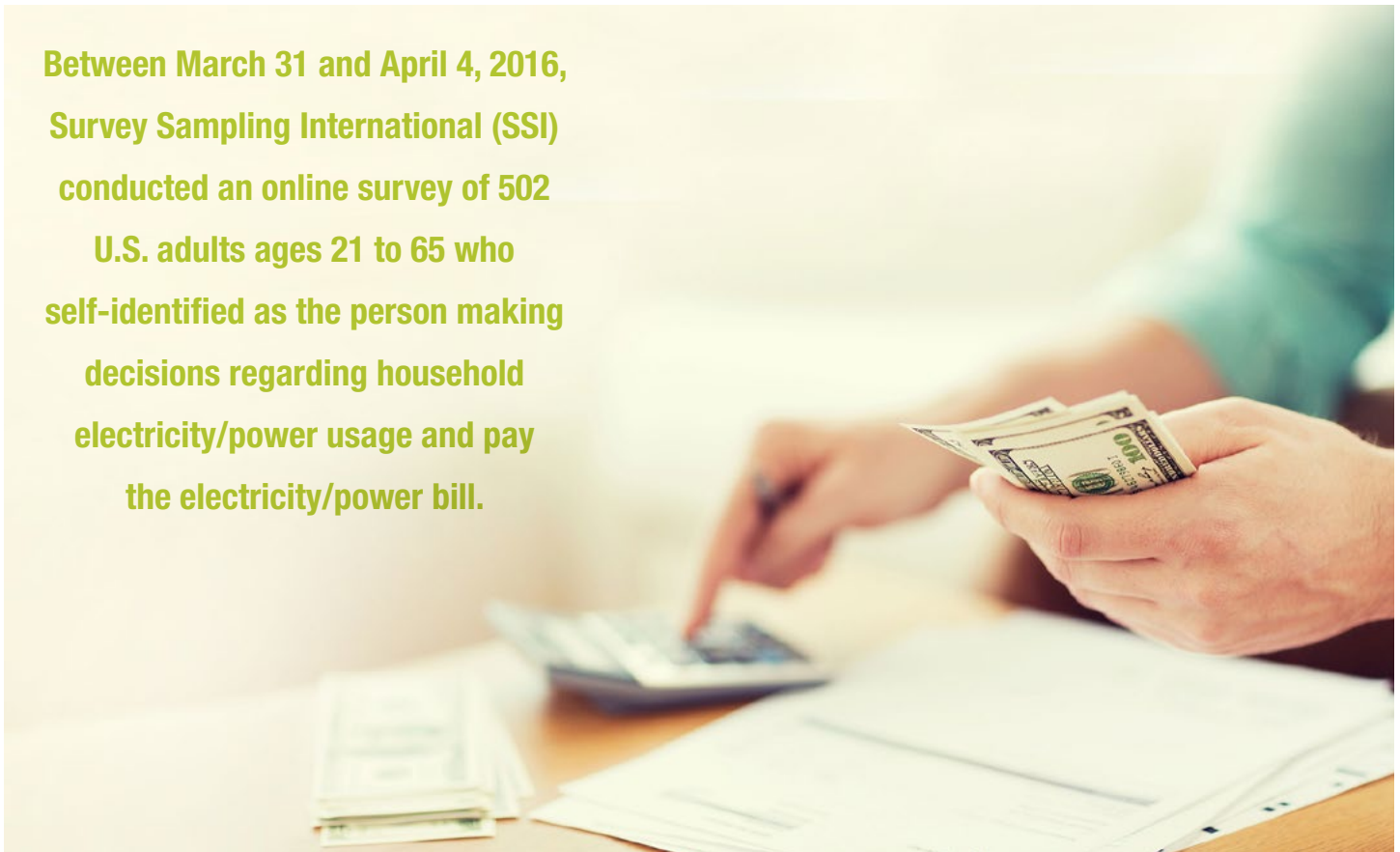
Purpose and Methodology

In early 2016, the Smart Grid Consumer Collaborative decided to learn more about “household electricity decision makers” — henceforth, “consumers” — in the United States and better understand which words, language, statements and messaging resonate best with them concerning the consumer value propositions for smart grid and smart energy use. The survey focused primarily on words, language, statements and messages rather than on the value propositions themselves.

Between March 31 and April 4, 2016, Survey Sampling International (SSI) conducted an online survey of 502 U.S. adults ages 21 to 65 who self-identified as the person making decisions regarding household electricity/power usage and pay the electricity/power bill. For the purposes of the following takeaways, survey respondents are referred to as “consumers.” The survey was a representative sampling of consumers by age, gender and geography that matched the U.S. Census.

The survey did not include respondents if they (or anyone in their household) worked for the news media, an ad agency, a gas or electric utility, or a company involved in providing equipment or technology used in electric power distribution.

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PART I:

Takeaways from the Consumer Survey

In an effort to assist power industry stakeholders in communicating the consumer value proposition of grid modernization, the 2016 SGCC survey asked American consumers to respond to questions on language, statements and concepts to gauge the importance or appeal of various messaging options. The emphasis was on how to communicate the consumer value proposition and consumers were asked to rank various benefits.

The three primary takeaways described in this section attempt to synthesize and simplify the results of the questions in the survey. These takeaways provide language, phrases and pitches that can be put to immediate use in communicating with consumers to elicit positive responses and understanding of smart grid concepts, services and benefits. This set of consumer value propositions and the messaging used to convey them is best used when utilities and key stakeholders are not using a consumer segmentation framework for targeted communications and messages. Consumer segmentation is the best way to communicate programs and services for targeted consumers, but when that is not possible these consumer value proposition messages are the next best strategy.

Takeaway #1

Use specific, positive words and phrases that are familiar and appealing to consumers. The phrases “saving money,” “better pricing options,” “dependable service,” “energy efficiency” and “wind and solar power” all resonate well with consumers and appear to reflect primary consumer concerns.

Consumers say that “saving money and enjoying dependable service” is most important when it comes to overall power usage. In contrast, the statement, “new capabilities allowing me to make better energy choices” ranks low in importance, just above the option deemed least important by consumers, the “ability to choose when and how to use electricity.” *[Appendix Q3]*

Consumers overwhelmingly say “energy efficiency” is most important when thinking about electricity and power usage. Consumers also place high importance on “wind and solar power.” Phrases such as “environmentally friendly power” and “renewable power” draw tepid responses. Phrases that draw the least interest include “clean technology,” “smart meters,” “power usage monitors,” “mobile thermostat apps” and “electric vehicles.” It’s not possible to discern from this survey whether consumers understand that energy efficiency has the highest return on investment of all energy management options. But it would be reasonable to assume that many consumers link “efficiency” and costs, perhaps from the automotive lexicon in which “fuel efficiency” is linked to gas mileage. *[Appendix Q2]*

The phrases “better pricing options” and “better service and potential savings” rank as most important in terms of consumer anticipation of economic benefits from a modernized grid. These two phrases appear to indicate consumer openness to utility programs that offer dynamic pricing options. Consumers have a tepid response to the phrase “tools to lower your electricity bill” and say that “mobile apps that track and manage my energy use” is least important. *[Appendix Q5]*

Consumers would most like to feel “knowledgeable” and “economical” about recent advancements in electricity and power usage technologies. The term “freedom” also resonates with consumers. *[Appendix Q1]*

Words and phrases that do not resonate well with consumers include: “empowerment,” “enablement,” “clean technology,” “smart meters,” “power usage monitors,” “mobile thermostat apps” and “electric vehicles.” [Appendix Q1, 2, 8]

Across several questions in the survey, words and phrases that draw tepid responses include: “informed,” “choice,” “control,” “flexibility,” “environmentally friendly power,” “renewable power,” “tools to lower your electricity bill.” [Appendix Q1, 2, 5]

In the latter two cases of tepid responses, it is possible that consumers generally have not experienced or learned much from their utility beyond what they did as “ratepayers” and that the notion of choices, options, tools and the “customer experience” remain unfamiliar or theoretical.

Key Messages

The 2016 SGCC consumer value proposition survey yielded useful, practical guidance on the words, phrases, ideas, concepts and approaches that resonate well with consumers in general. The following specific messages for consumers were composed based on the survey’s three takeaways articulated above and other, earlier, consumer research findings. These specific messages — or variants of them — may be applied to engage consumers and communicate basic consumer value propositions offered by a smart grid.

Note that the current survey did not test the appeal of the term “smart grid,” though previous SGCC studies reflect relatively low consumer familiarity with the term. But “smart grid” is short and, if imbued with specific meaning, could effectively form the subject of much messaging. In the absence of a better term — and due to the potentially cumbersome and vague nature of terms such as “technology” or “intelligent infrastructure” or “grid modernization”— the term “smart grid” is often employed in the messages offered below. In addition, “smart” is a familiar adjective embraced by other industries and consumers to convey many aspects of improved technology like a “smart phone”. However, for stakeholder who prefer, the term smart grid could be replaced by a term better-known or more appealing to consumers in their service territory or region.

Key Messages for Takeaway #1

Takeaway #1 focuses on using specific, positive words and phrases that are familiar and appealing to consumers. The phrases “saving money,” “better pricing options,” “dependable service,” “energy efficiency” and “wind and solar power” all resonate well with consumers and appear to reflect primary consumer concerns. Thus the following messages and/or others can be constructed to align consumers’ and utilities’ interests in support of a smart(er) grid.

SUGGESTED MESSAGES FOR TAKEAWAY #1:

“A smarter grid supports your desire for dependable service.”

“You want dependable electric service. A smart grid delivers it.”

“You want more dependable electric service. A smarter grid makes that possible.”

“Saving money and dependable service are your top concerns. A smart grid supports both goals.”

“Smart grid supports your desire to save money and have more dependable service.”

“Want dependable electric service? Support investments in a smarter grid.”

“A smart grid supports better pricing options for your electric service.”

“A smart grid supports your desire for greater energy efficiency, and savings.”

“A smart grid can integrate wind and solar power, increase energy efficiency, and save you money.”

“Want wind and solar power? A smart grid makes that possible.”

“You’re knowledgeable and economical/smart and frugal about your energy use. Why not make the grid smart and efficient, too?”

“Want the freedom to choose pricing options for your electricity needs, and save money? Support a smart(er) grid.”

Takeaway #2

Consumers want dependable service and quick power restoration after an outage, and messaging that links smart grid to dependable service should focus on results, not on how a utility achieves them. Until consumers are better educated about their own possible role in reliable and economical service, they may be confused by language that implies that they have a role.

Consumers' desire for dependable service and saving money has already been established by Takeaway #1. This finding is amplified by a survey question that asked "how important do you feel modern technology is in addressing each of the following statements?" The option most favored is "restores your power quickly," followed by "prevents a power outage" and "speeds up repairs from storms." All three favored options are direct statements of tangible, reliability-related benefits rather than explanations of how those benefits are achieved. Least favored was the option, "limits outages to only those homes near the needed repairs," perhaps supporting the conclusion that consumers want results, not explanations of how results are achieved. *[Appendix Q7]*

Consumers simply want swift power restoration after a storm. It is important to note that storms are the leading cause of power outages in North America and consumers appear to know this intuitively.

In the third survey question, consumers ranked the statement, "new capabilities allowing me to make better energy choices," as low in importance, just above the "ability to choose when and how to use electricity." These responses may support the second sentence in Takeaway #2 — until consumers understand their own role in reliable and economical service, they may be leery of language and messaging that implies they have such a role. *[Appendix Q3]*

The fourth survey question asks consumers to assess and rank three statements based on the consumer's desire to control his/her electricity use. There is little differentiation regarding the rank of the statements, though "empowers you with tools to manage your energy," and "puts the power in your hands" rank slightly higher than "provides information to utilities and you about energy." The lack of clear consumer sentiment on these options may also support the notion that consumers remain unclear as to their potential roles in reliable and economical service. *[Appendix Q4]*

SUGGESTED MESSAGES FOR TAKEAWAY #2:

"Storms can cause power outages. A smart grid restores power more swiftly."

"You dislike outages. A smart grid can prevent them."

"You dislike outages. A smart grid restores power more quickly."

"Nobody likes to be left in the dark. A smarter grid speeds up repairs after a storm."

"If you like dependable service and swift power restoration after a storm-related outage, you'll love a smarter grid."

"Support a smart grid for reliable power, and savings."

"Modernizing the grid means more dependable service, fewer, shorter outages."

"Power out? Support the solution: a smart grid."

"Storms cause the most power outages. Technology is the solution."

"Storms cause outages. Smart grid can prevent them."

"Outages leave you in the dark. Knowledge (and technology) turns on the lights."

"Don't be left in the dark. Be knowledgeable. Support a smarter grid."

Takeaway #3

In pitches promoting the benefits of smart grid, shorter statements are more appealing, particularly those that do not digress to include historical background on the grid or offer analogies with other technologies. Pitches should be short, specific and positive and use the language and phrases identified in Takeaway #1 that appeal to consumers.

Consumers find most appealing a short (30 words long), direct pitch that includes specific, familiar phrases that reflect their priorities, including “manage budget,” “increase reliability,” “promote energy efficiency” and “without sacrificing comfort or convenience.” [Appendix Q8]

Longer pitches that include historical background or technology analogies did not resonate as well with consumers. One such statement (87 words long), “Life got better more than a century ago, when electricity changed the world...” Another such statement (73 words long) began, “ATMs, the Internet, mobile phones and Wi-Fi all lacked understanding and broad use when they first emerged, which frustrated early users and slowed wide adoption.”

The shorter pitch was rated as “very appealing” or received the highest rating by 15 percent and 11 percent more respectively than the longer, more elaborate pitches. In addition, 2 percent to 3 percent found the longer pitches “very unappealing”. The shorter pitch did not receive any “very unappealing” ratings. According to this survey’s findings, short and direct wins.

Takeaway #3 focuses on the appeal of short, specific, positive messages composed of language familiar to and favored by consumers. Consumers find most appealing a brief, direct pitch that includes specific, familiar phrases that reflect their priorities, including “manage budget,” “increase reliability,” “promote energy efficiency” and “without sacrificing comfort or convenience.” Other related words and phrases favored by consumers may be found in Takeaway #1 and Takeaway #2 and integrated here. They include “saving money,” “better pricing options,” “dependable service,” “energy efficiency” and “wind and solar power.” Consumers favor technology that “restores your power quickly,” “prevents a power outage” and “speeds up repairs from storms.”

SUGGESTED MESSAGES FOR TAKEAWAY #3:

“You want reliable power. You want energy efficiency. You need to manage your budget. A smart grid helps you reach your goals.”

“You manage your budget. You expect reliable power. You support energy efficiency. A smart grid delivers on your priorities.”

“Wouldn’t it be great if you could increase power reliability and promote energy efficiency without sacrificing comfort or convenience? Now you can. Support the smart grid.”

“If you support energy efficiency, power reliability and wind and solar power — and you won’t sacrifice comfort and convenience — you already support the smart grid.”

“Got reliability? Get smart (grid)!”

“You need to save money and manage your budget. A smart(er) grid offers better pricing options and more dependable service at no cost to comfort and convenience. What’s not to love?”

“You want to save money, have better pricing options and more dependable service. A smart grid provides all three.”

“Expect reliable power. Expect shorter outages. Embrace the smart grid.”

“A power outage leaves you in the dark, in the cold, with no Internet, TV or fresh food. A smart grid improves reliability and prevents or shortens outages, all without sacrificing comfort and convenience.”

“You want more dependable power and better pricing options. You support energy efficiency and wind and solar power. You want technology that prevents outages or restores power quickly when an outage occurs. So do we [utility’s name here]. We call it the smart grid.”

PART 2:

Elevator Pitches and the Stump Speech

In addition to the consumer appeal of specific language and messaging identified through the survey upon which this toolkit is based, stakeholders have additional means and opportunities to communicate the consumer value proposition of smart grid. Creating a narrative to explain the consumer value proposition enables an organization and its spokespeople to speak to consumers in a single, common voice. The terms “Elevator Pitches” and “The Stump Speech” capture the nature of two commonly used messaging opportunities.

Elevator Pitches, for which samples are provided below, capture and articulate a single powerful idea. They sum up unique aspects and strengths to quickly outline why the CVP is important. These go a step beyond the simple, one-sentence messages offered earlier in this toolkit to include more logic or to link ideas under a single focus. The samples provided below include the language and phrases identified earlier as resonating with consumers.

The Stump Speech refers to a longer talk that a stakeholder and/or trusted community leader might use to address a group of citizens (who are also utility customers) who may have indicated interest in hearing more about what’s driving a local grid modernization project. The use of narrative storytelling can provide an opportunity to go into a measure of depth for consumers and other stakeholders who want to understand context and desire more details. Longer than an Elevator Pitch, it humanizes the complications, promise and payoff of the narrative. The following sample Stump Speech contains many terms, phrases and messaging elements identified by the survey upon which this toolkit is based.

A. Elevator Pitches

Elevator Pitches provide an opportunity to deliver succinct messages short in length, allowing elaboration on key messages for consumers without demanding much of their time.



Save money.

Better pricing options, enabled by smart grid, can provide consumers with potential savings. Smart grid also aids your power utility’s energy efficiency, lowering the overall cost of service.



Dependable service.

Smart grid enables more dependable service every single day. It also helps prevent outages and can restore power more quickly after a storm-related outage.



Maintain comfort and convenience.

Smart grid offers pricing options that help you manage your budget without sacrificing comfort or convenience.



Wind and solar power.

Smart grid helps integrate renewable energy sources, whether they’re owned by the utility or by the customer. If you own solar panels, smart grid enables your utility to support your approach to saving money.

B. The Stump Speech

In the 21st century, the electric power grid must evolve to meet the changing needs of society and consumers. Just as everyone has come to rely on digital technology such as mobile devices and the Internet, the grid must now rely on digital technology as well. Modernizing the grid through the use of digital technology is known as “smart grid,” and it can enable your utility to offer you valuable service options to meet your needs.

A smart grid can offer better electricity pricing options that enable you as an individual to manage your budget and potentially save money. A smart grid can support system-wide energy efficiency and more dependable service, saving the nation some of the tens of billions of dollars in annual, productivity-related losses. It can better prevent outages and, when outages occur, enable swifter power restoration. It can support the integration of wind and solar power, including utility-scale resources and consumers’ rooftop solar panels. And a smart grid can enable your utility to avoid the high cost of meeting peak power demand without sacrificing your comfort and convenience.

How are all these new advances possible? The simplest explanation is that digital technology can provide grid operators with more control over how the grid operates and behaves. These improvements have positive implications for the system as a whole and for you as an individual customer.

Smart grid optimizes grid operations, making it more energy efficient. It provides a degree of flexibility in how the grid operates, which makes it better able to resist power outages. When outages inevitably occur, a smart grid restores power more swiftly by isolating a fault, routing power around it and minimizing its impacts on customers. Fewer and shorter outages, in turn, mean less disruption to your digital lifestyle and less economic disruption to society. Optimal controls also make the grid more flexible in meeting 21st century consumer and market demands for the integration of wind and solar power, automated buildings, electric vehicles, smart thermostats and other home energy management options.

This shift in how power utilities manage the grid and interact with customers — a category which includes consumers, businesses and industry — marks a departure from the past, when “ratepayers” were often all treated the same. Utilities are investing in advanced technologies to better visualize the grid and understand outages as well as send electricity more efficiently down the lines to your home. A utility’s knowledge and understanding of its customer base, combined with smart meter-generated energy use data, can enable it to provide each individual customer with service and pricing options to meet their needs. Research shows that when a consumer has access to and knowledge of his or her own energy use data, they tend to use less and better manage their budgets potentially saving money. The same technology will enable utilities to offer their customers better electricity pricing options that give them the freedom to make smart choices.

These potential advancements are among the most visible and practical that consumers will see for themselves. As utilities are enabled by smart grid capabilities to offer programs that engage consumers and participation in those programs increases, so will the benefits outlined earlier. And consumer engagement will be easier and more convenient, based on consumers’ digital lifestyles. In the past and in some cases the present, utilities depended on its customers to use a telephone to notify them of outages. In the 21st century the majority of utility customers use mobile devices and social media to communicate, and utilities have upgraded their communications technologies to both receive and report outage information to customers as well as other types of alerts and notifications.

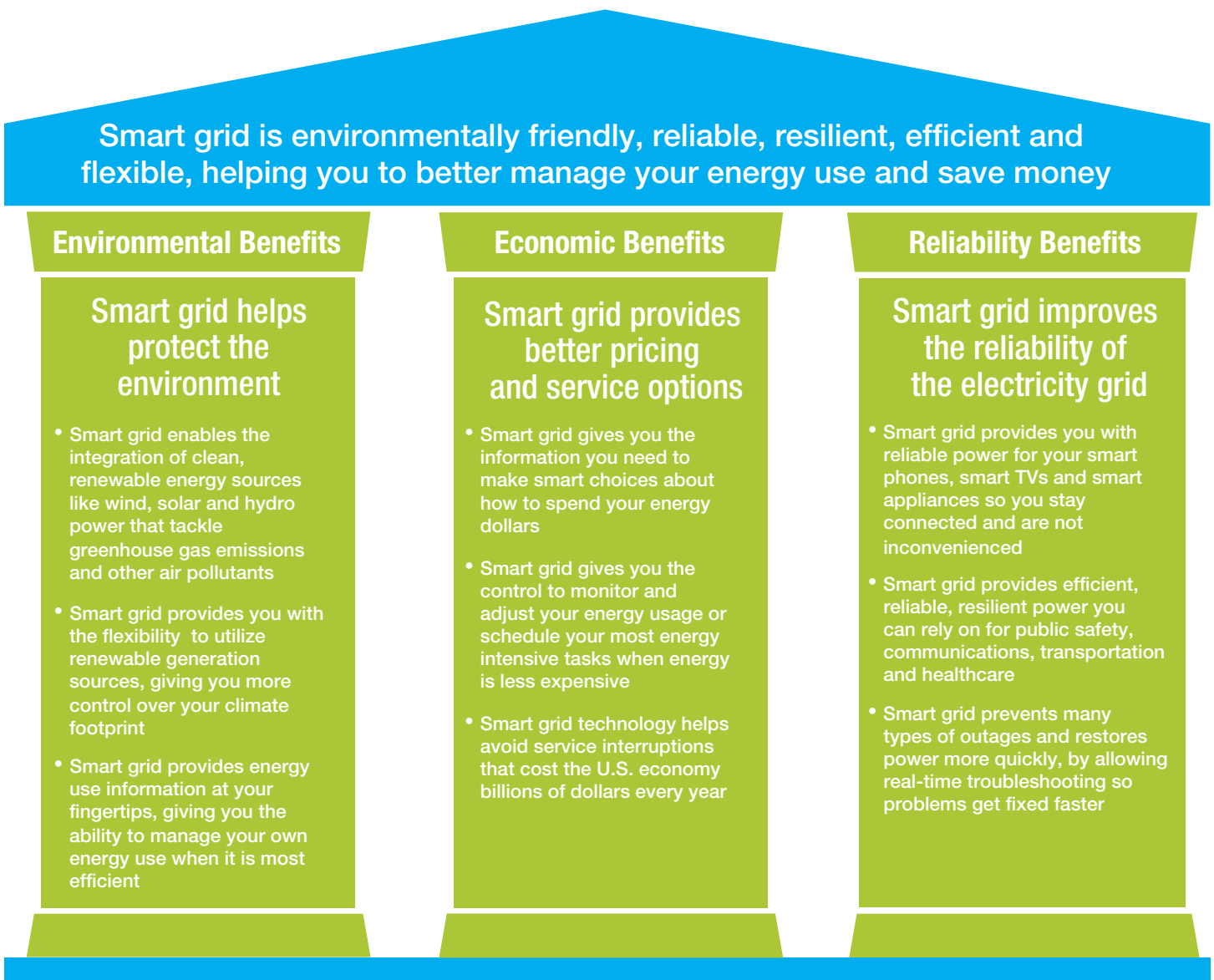
Consumers live in exciting, transformative times. Technology impacts every aspect of their lives. They wake up to sleep-tracking alarms, use GPS to avoid traffic jams, use smart phones to connect with friends and watch movies on tablets when traveling. No matter where they are, they are always connected. And, of course, this constant connectivity is changing the way businesses operate, including utilities. As the connected consumer moves to the front and center of the utility business model, stakeholders in the energy space must engage consumers in new ways. Every individual consumer — and society as a whole — can reap the benefits of a smart grid, which is our shared basis for comfort, convenience and economic prosperity.

PART 3:

Message House

Message Houses provide a consistent narrative for communications by providing a clear structure for messages. This Message House incorporates the survey findings and core consumer value proposition categories — environmental, economic and reliability — into an Umbrella Message and three Pillars on the promise of the smart grid.

The Umbrella Message or roof of the structure summarizes the overall message. The three Pillars support the Umbrella Message by detailing the consumer benefits of the smart grid. Their foundation contains value statements that justify each of the detailed benefits.



REASONS TO LOVE A SMARTER GRID

1

A smarter electric grid utilizes clean energy sources, like renewable wind and solar.



2

During storms, a smarter grid helps prevent power outages or limits the area of an outage.



3

After a storm, power can be restored more quickly to you.



4

Smart grid aids energy efficiency, lowering overall cost of service, helping you save money.



5

A smarter grid offers reliable service every day, enabling efficient repairs.



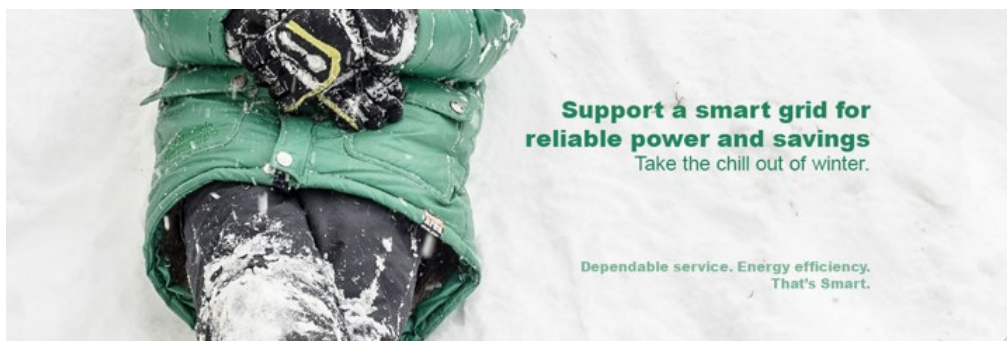
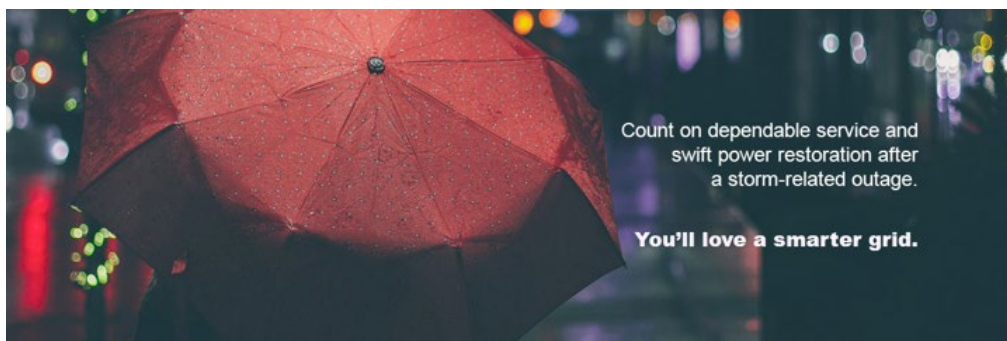
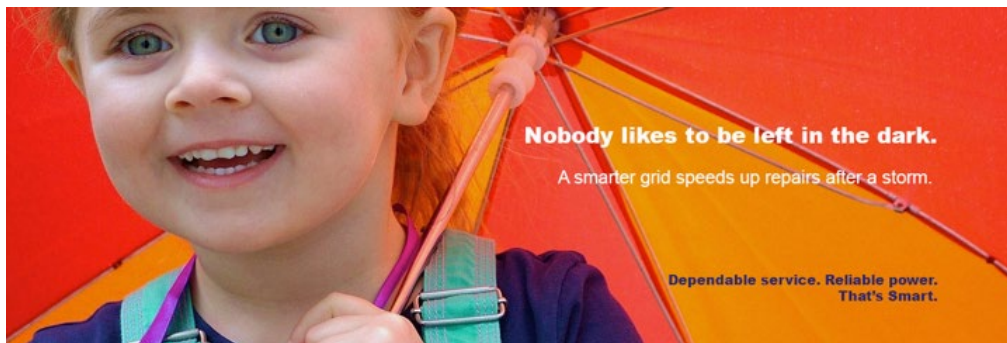
6

The best reason to love a smarter grid is the potential savings and better pricing options you can experience without sacrificing your comfort or convenience.



By choosing when and how to use electricity enabled through modern technology, you can better manage your budget, enjoy increased reliability and promote energy efficiency without sacrificing comfort or convenience.

Sample Banner Ads

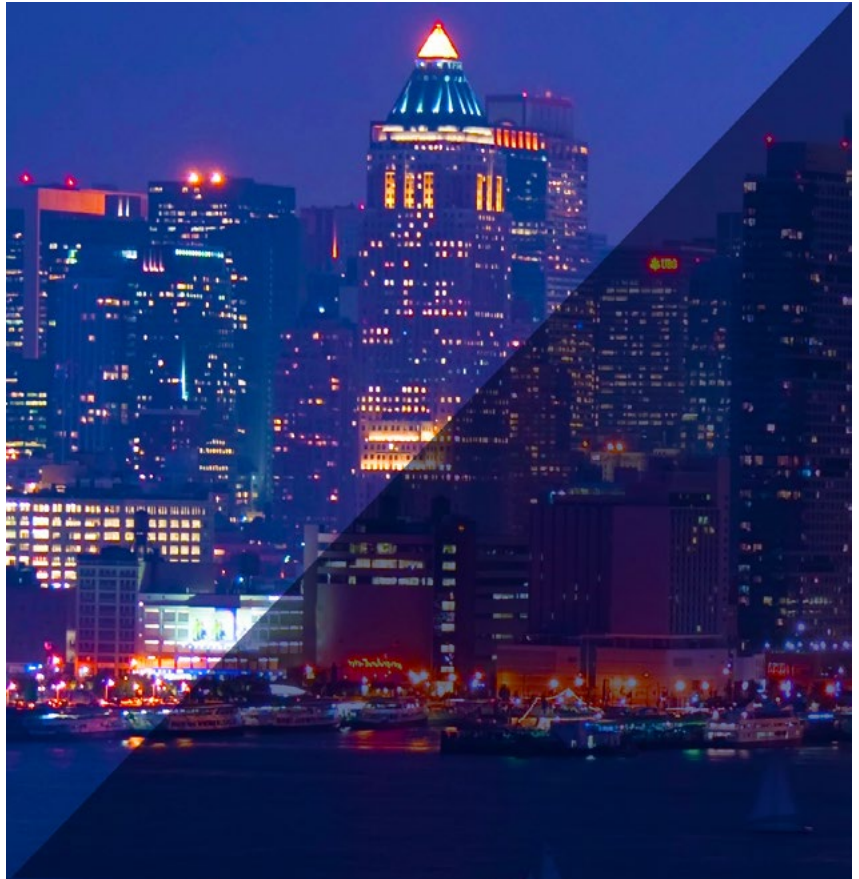


Conclusion

This toolkit's takeaways, messaging, elevator pitches, stump speech and visual elements are intended for SGCC members and power industry stakeholders to use to communicate the smart grid consumer value proposition with consumers. Together, these pieces have the power to steer all forms of communication and content in multiple channels. This approach is based on the assumption that when industry stakeholders use common messages and messaging approaches across different communication platforms and methods to convey the value of grid modernization projects, consumers are more likely to hear those messages and grasp the value proposition.

It is the job of power industry stakeholders to help consumers understand the smart grid, the resulting benefits and why they should matter to them — whether the benefits are lower costs, reduced environmental impacts or increased reliability. As an industry, we should let consumers know that in the smart grid era they have access to their energy use data, more advanced communications from their utilities, as well as other benefits. Stakeholders can inform consumers about how energy use data can help grid reliability, reduce energy-related costs, avoid outages and speed up power restoration after a storm. This requires stakeholders to listen, educate and collaborate with consumers.

SGCC's vision is that most consumers will have an informed grasp of the benefits of a modern grid. Engaged consumers are better informed and are more likely to have a positive experience with energy technology. This toolkit can assist power industry stakeholders in moving consumers along a continuum of engagement, education and participation.



Appendix: Individual Survey Questions and Responses

The preceding toolkit draws three key takeaways from the survey findings. However, we think some stakeholders may wish to review each question and its findings separately. The consumer surveying questions and results are provided here.

Question 1

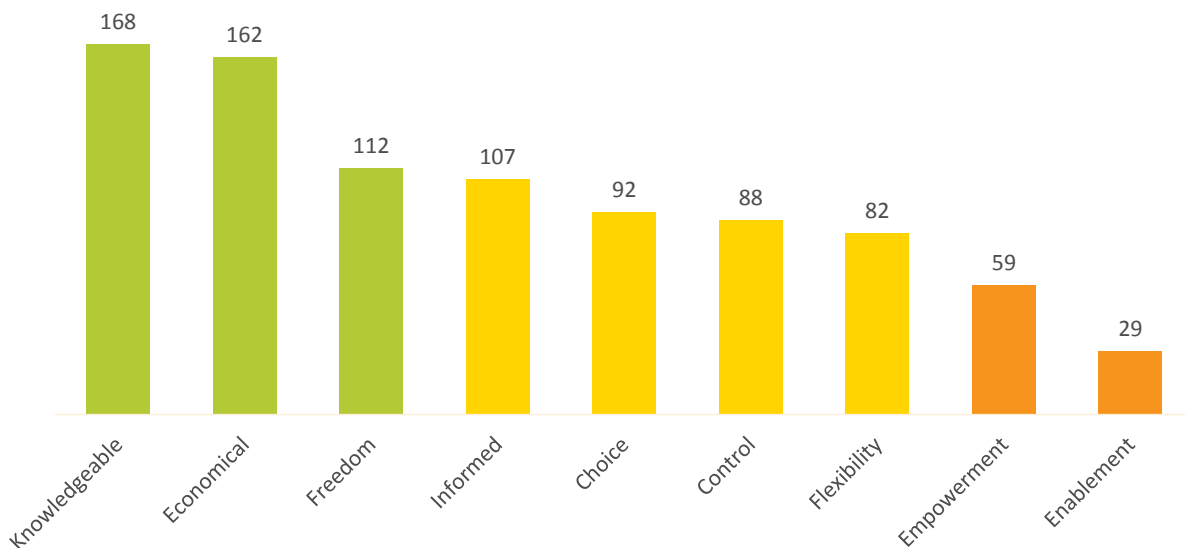
Consumers would most like to feel “knowledgeable” and “economical” about recent advancements in electricity and power usage technologies. The word “freedom” also resonates with consumers.

Words such as “informed,” “choice,” “control” and “flexibility” drew tepid responses and “empowerment” and “enablement” resonate least.

Feelings on Advancements in Technology

- Respondents would most like to feel knowledgeable and economical about recent advancements in electricity and power usage technologies.
- Language emphasizing empowerment and enablement resonates least well with respondents.

Desired Feelings Regarding Technological Advancements



Q1. In the next exercise you will see 8 screens of 4 choices. As you evaluate each one, please think about recent advancements in the technologies regarding electricity or power usage and indicate which is MOST descriptive of your desired feelings regarding these advancements, and which is LEAST accurate in describing your desired feelings.
Base: Total Respondents, n=502

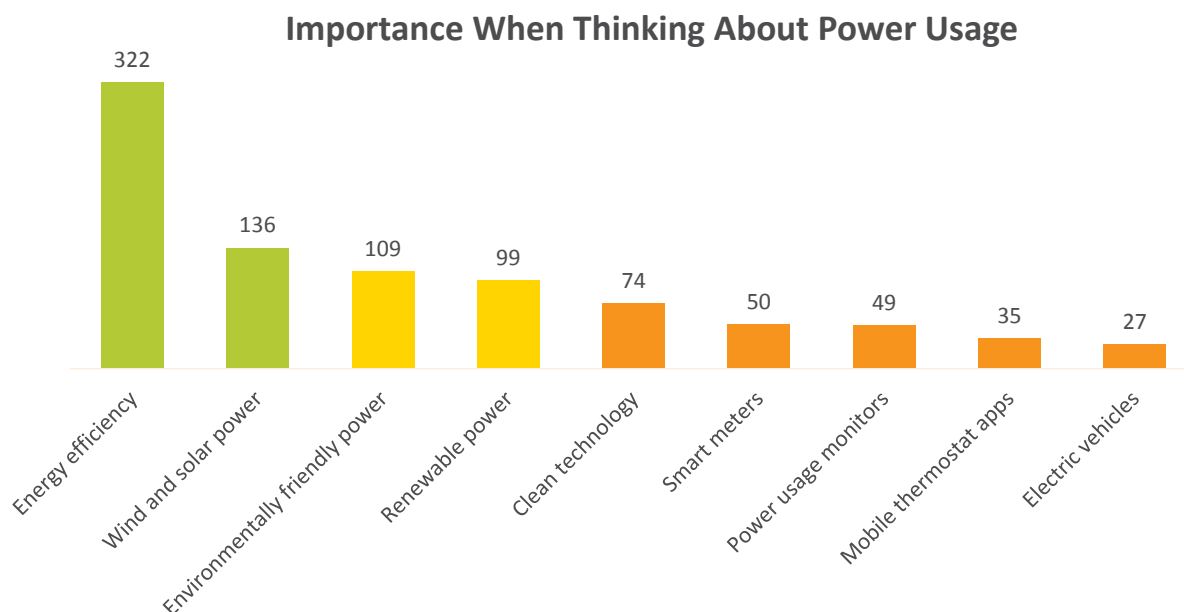
Question 2

Consumers overwhelmingly feel that “energy efficiency” is most important when thinking about electricity and power usage. Consumers also place high importance on “wind and solar power.” Terminology such as “environmentally friendly power” and “renewable power” draw tepid responses. Terms that draw the least interest include “clean technology,” “smart meters,” “power usage monitors,” “mobile thermostat apps” and “electric vehicles.”

This survey was not able to discern whether consumers understand that energy efficiency has the highest return on investment (ROI) of all energy management options. It would be reasonable to speculate, however, that many if not most consumers think that “efficiency” and costs are linked, perhaps from the automotive lexicon in which “fuel efficiency” is linked to gas mileage.

Importance when Thinking about Power Usage

- Respondents overwhelmingly feel that energy efficiency is most important when thinking about electricity and power usage.
- Respondents also place high importance on wind and solar power.



Q6. In the next exercise you will see 8 screens of 4 choices. As you evaluate each one, please indicate which is MOST important and LEAST important when it comes to thinking about your electricity or power usage.

Base: Total Respondents, n=502

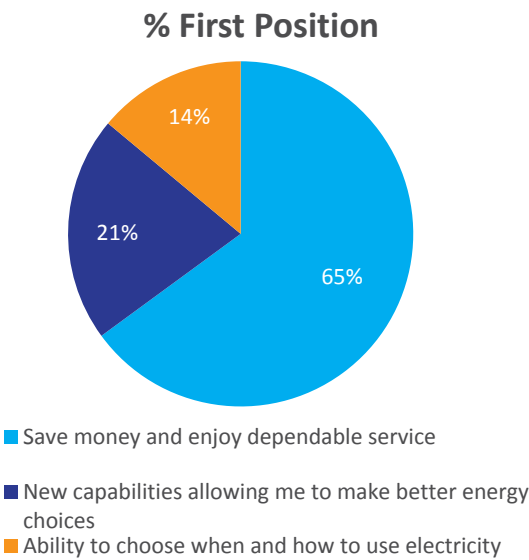
Question 3

Consumers say that “saving money and enjoying dependable service” is most important when it comes to overall power usage. The statement, “new capabilities allowing me to make better energy choices,” ranked low in importance, just above the “ability to choose when and how to use electricity.”

Note that the first statement addresses what appear to be two primary consumer concerns, while the second two statements may not make sense to consumers who are unaware of “new capabilities” or the option of “when and how” to use electricity.

Ranking of Power Usage Importance

- Respondents feel that saving money and enjoying dependable service is most important when it comes to overall power usage.
- Respondents rank the ability to choose when and how to use electricity as least important.



Statement	Average Position
Save money and enjoy dependable service	1.5
New capabilities allowing me to make better energy choices	2.2
Ability to choose when and how to use electricity	2.3

Q2. Next, thinking about your overall electricity or power usage, please rank the statements below from most important to least important.
Base: Total Respondents, n=502

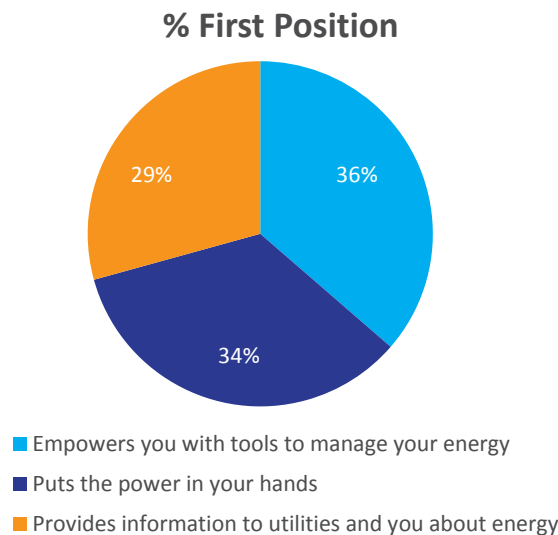
Question 4

The question asks consumers to assess and rank three statements based on the consumer’s desire to control his/her electricity use. There is little differentiation regarding the rank of the statements, though “empowers you with tools to manage your energy,” and “puts the power in your hands” rank slightly higher than “provides information to utilities and you about energy.”

It’s difficult to see a clear takeaway in this question, although 36 percent of consumers favored the first, specific statement and 29 percent favored the last, somewhat vague statement. The takeaway might be the value of specificity.

Ranking of Desire for Control

- There is little differentiation regarding the rank of the statements concerning electricity/power usage control similarly, though provides information to utilities and you about energy performs slightly worse.



Statement	Average Position
Empowers you with tools to manage your energy	1.9
Puts the power in your hands	1.9
Provides information to utilities and you about energy	2.2

Q3. Now, thinking about your desires for your ability to control your electricity/power usage, please rank the statements below from most important to least important.
Base: Total Respondents, n=502

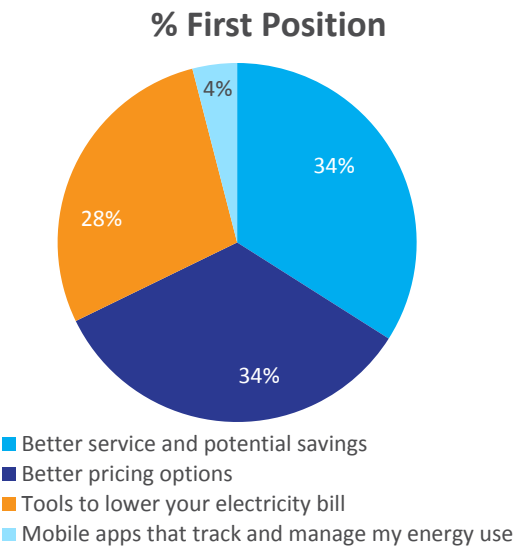
Question 5

This question asks consumers to rank the importance of economic benefits. The statements “better pricing options” and “better service and potential savings” rank as most important in terms of consumer anticipation of economic benefits from a modernized grid. “Tools to lower your electricity bill” ranks a bit lower. The statement consumers deem least important is “mobile apps that track and manage my energy use.”

Again, as in other questions, “pricing,” “savings” and “better service” resonate. Tools and apps the consumer must navigate — and with which consumers may be unfamiliar — do not.

Ranking of Importance of Economic Benefits

- Similar to previous findings, consumers are most interested in learning about better pricing options.
- At this time, consumers are least interested in mobile apps which would allow them to track their energy.



Statement	Average Position
Better pricing options	2.0
Better service and potential savings	2.1
Tools to lower your electricity bill	2.3
Mobile apps that track and manage my energy use	3.6

Q4. And, thinking about future advancements in electricity and power supply, please rank the following from most important to least important in regard to the economic benefits which you would hope to see.
Base: Total Respondents, n=502

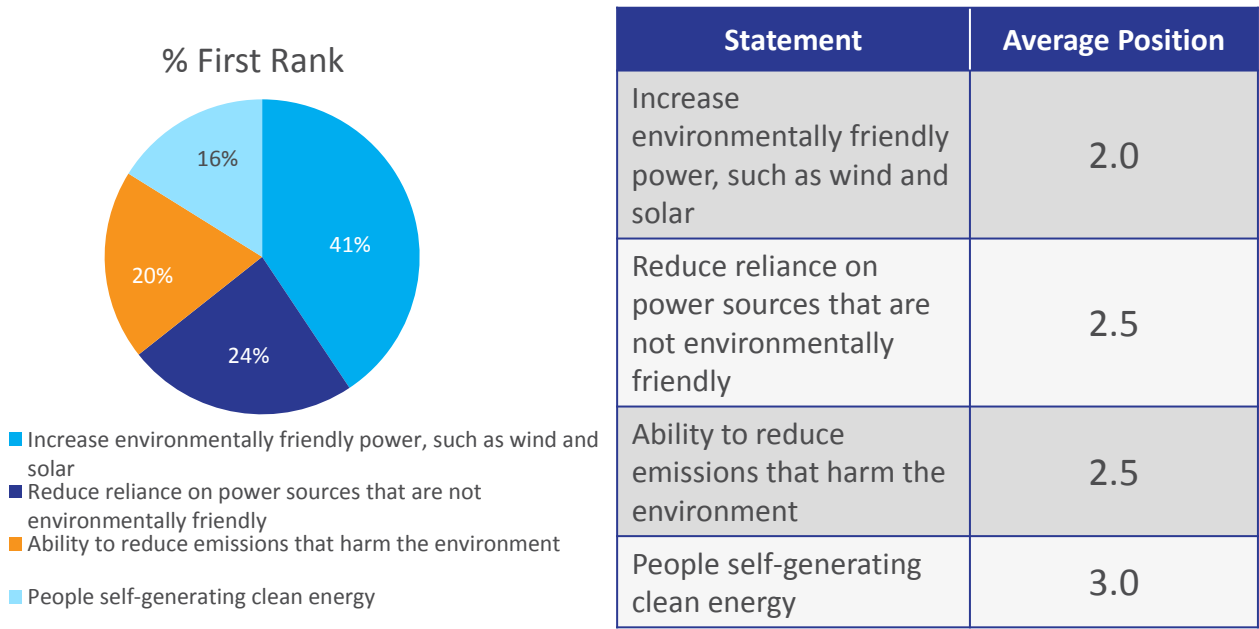
Question 6

Consumers rank “increasing environmentally friendly power, such as wind and solar” as the top environmental impact by a wide margin. Two statements rank second and third: “reduce reliance on power sources that are not environmentally friendly” and “ability to reduce emissions that harm the environment.” Consumers considered the least impactful statement, “people self-generating clean energy.”

This result may underscore the power of specificity and familiarity. The first option includes concrete, familiar examples (“such as wind and solar”), while the other three options offer general concepts. Also, the appeal of “increase” clean power over “reduce” harmful emissions may reflect a consumer preference for positive statements rather than negative constructions.

Ranking of Impact on Environment

- Increasing environmentally friendly power was ranked as the top environmental impact by a wide margin.



Q7. Next, please rank the items below based on their overall impact on the environment.
Base: Total Respondents, n=502

Question 7

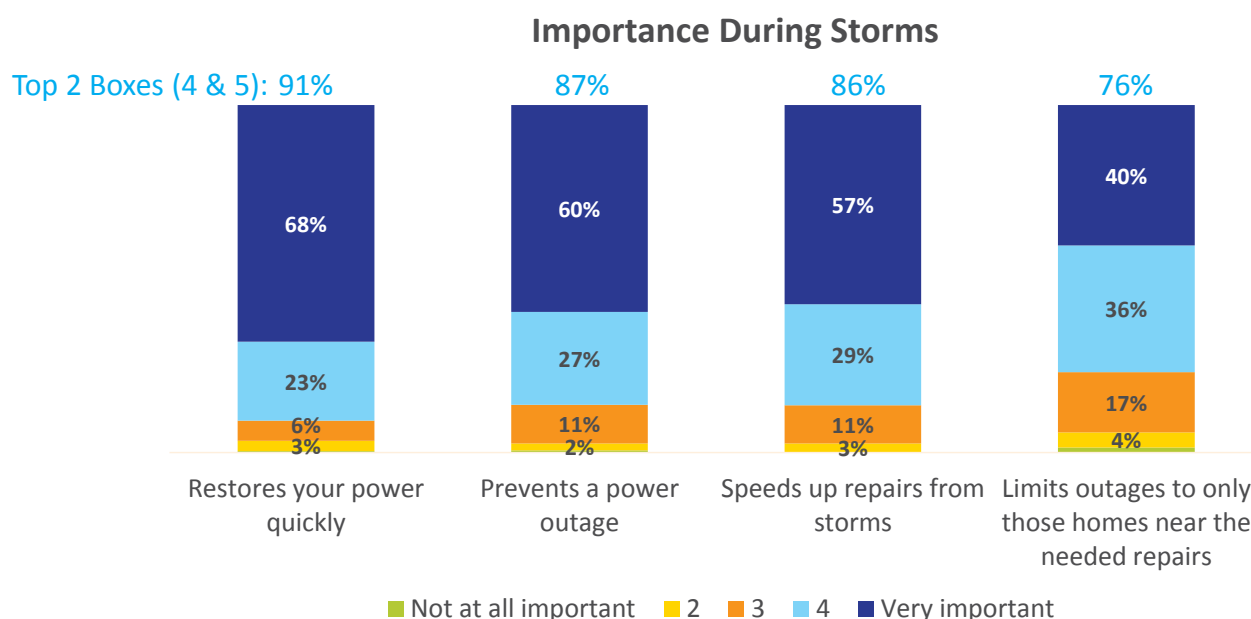
Consumers were asked “how important do you feel modern technology is in addressing each of the following statements?” The options: “restores your power quickly,” “prevents a power outage,” “speeds up repairs from storms” and “limits outages to only those homes near the needed repairs.”

Power restoration after a storm remains consumers’ top priority, probably due to the fact that storms are the leading cause of power outages in North America. Consumers selected “restores your power quickly” as the most important benefit to modern technology and indeed, the second and third options express a similar idea and also receive significant support. Consumer support drops off for the fourth option, which may not be well understood.

Consumers cannot be expected to be familiar with the concept of fault detection isolation and restoration (FDIR), which is the utility application that enables the fourth option here. Consumers just want reliable power and swift restoration after a storm. Perhaps this result suggests that consumers simply want their utility to attain that goal without knowing the details of how it is attained.

Importance During Storms

- Power restoration after a storm remains consumer’s top priority.
- While prevention of outages is a close second, having the grid limit outages should they occur comes in last place. This may indicate a lack of understanding regarding how this technology would/could work.



Q5. Next, thinking about your electricity/power needs during storms, how important do you feel modern technology is in addressing each of the following:
Base: Total Respondents, n=502

Question 8

Relatively brief, direct statements appear to be more appealing than longer statements with historical context or analogies. Consumers were asked to evaluate and rank three statements independent of each other. They favor the following statement of 30 words in length:

“By choosing when and how to use electricity enabled through modern technology, you can better manage your budget, enjoy increased reliability and promote energy efficiency without sacrificing comfort or convenience.”

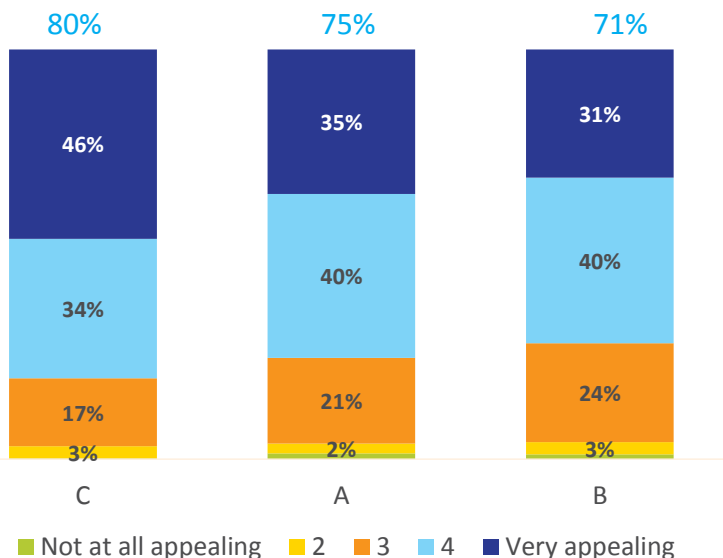
It would appear obvious that this statement’s appeal is based on its brevity and use of concrete terms and phrases that found favor in other survey questions, including “manage budget,” “increase reliability,” “promote energy efficiency” and “without sacrificing comfort or convenience.”

Concept Appeal

- Concept C was the winner among consumers, both in terms of the top 2 boxes combined (4 & 5) and “Very Appealing” (5) ratings.

A	ATMs, the Internet, mobile phones and Wi-Fi all lacked understanding and broad use when they first emerged, which frustrated early users and slowed wide adoption. But once consumers understood the benefits and began adopting them into their lives, the technologies blossomed. Today, we can’t imagine a world without electricity or our smart phones. Modern energy advancements have the same potential to create the same kind of customer experience that these critical technologies do.
B	Life got better more than a century ago when electricity changed the world. But today’s consumer values and needs don’t match up with the electricity grid first built in the 1880s. Historically, the consumer had little choice but to pay the monthly electric bill, without having much information about usage and costs. Simultaneously, utilities have stuck to the status quo, playing the role of power provider rather than partner. Today, modern technology is changing this relationship dynamic for the better. For individuals. For businesses. For the environment.
C	By choosing when and how to use electricity enabled through modern technology, you can better manage your budget, enjoy increased reliability and promote energy efficiency without sacrificing comfort or convenience.

Concept Appeal



Q8. Finally, on the following screens we would like you to evaluate a few different descriptions of electricity and power supply. Please evaluate and rate each one independently.

Base: Total Respondents, n=502



Working for a consumer-friendly, consumer-safe smart grid

SGCC's mission is to serve as a trusted source of information for industry stakeholders seeking a broad understanding of consumers' views about grid modernization, electricity delivery and energy usage and for consumers seeking an understanding of the value and experience of a modern grid.

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